

Internal Past, External Past, and Counterfactuality: Evidence from Japanese

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Goal: This paper shows that there are two different types of counterfactuality, which are overtly represented in Japanese by adding the past either to the main verb or to the modal. In Japanese, *if*-clause (1a) can be followed by (1b) or (1c). In (1b), the past tense morpheme is added to the main verb [Internal Past]. In (1c), the past is added to the modal [External Past]. Both of them have a counterfactual reading (as well as an epistemic reading):

- (1) a. *Zyon-ga aite nara,*
John-NOM opponent COPULA.NONPAST.if
'If John had been (his) opponent,'
b. *Ken-wa kyoo-no siai-de make-ta kamosirena-i.*
Ken-TOP today-GEN game-DAT lose-PAST may/might-NONPAST
'Ken might have lost today's game.'
c. *Ken-wa kyoo-no siai-de make-ru kamosirena-katta.*
Ken-TOP today-GEN game-DAT lose-NONPAST may/might-PAST
'Ken might have lost today's game.'

Observations: The counterfactuality of Internal Past counterfactuals cannot be canceled, while the counterfactuality of External Past can be canceled when the proposition is concerned with the past or the present. First let us observe that the proposition is counterfactual in External Past, like Internal Past. Assume that under the situation in (2a), Tom utters (2b) on Monday. Although the possibility that John is Ken's opponent is arguably available in the past (i.e. on Monday), Tom cannot utter (2c) on Tuesday. On Wednesday after the game, Tom can felicitously utter (2d). These data suggest that the speaker knows that the proposition is counterfactual in External Past, when s/he utters the sentence felicitously:

- (2) a. Situation: Ken is joining a chess tournament. His next game is scheduled for next Wednesday. Ken's friend Tom does not know who Ken's opponent is, but Tom believes that John is stronger than Ken is.
b. (1a), *Ken-wa tugi-no siai-de make-ru kamosirena-i.*
Ken-TOP next-GEN game-DAT lose-NONPAST may/might-NONPAST
'If John is (his) opponent, Ken might lose the next game.'
c. (1a), *Ken-wa tugi-no siai-de make-ru kamosirena-katta.*
Ken-TOP next-GEN game-DAT lose-NONPAST may/might-PAST
'If John had been (his) opponent, Ken might have lost the next game.'
d. (1a), (1c)

Further observe that Tom can utter (2c) on Tuesday if the situation in (3) is provided. This suggests that if the speaker knows that the proposition is counterfactual in the future of the utterance time, sentence (2c) is felicitous. Note that it is odd to utter (2c) on Tuesday under the situation in (4), where the proposition is factual in the future of the utterance time:

- (3) Situation: On Tuesday, Tom hears that John decided not to participate in the tournament.
(4) Situation: On Tuesday, Tom hears that John becomes Ken's opponent.

The counterfactuality of External Past can be canceled, according to the context. Tom can utter (2d) and (5) after Wednesday’s game, where the point of view is shifted into the past:

- (5) *Sorede kaeri-no sitaku-o si-tei-ta. Jissai Zyōn-ga aite*
 So return-GEN packing-ACC do-PROG-PAST. Actually John-NOM opponent
dat-ta.
 be-PAST

‘So (I) was packing for (our) return. John was actually (Ken’s) opponent.’

Proposal: These data suggest that when the proposition of the *if*-clause is counterfactual in the future of the utterance time (i.e. situations (6a-c) but not (6d)), External Past counterfactuals are felicitous. Unlike Internal Past, the counterfactuality can be canceled when it is concerned with the past or the present, as observed in (5):

- (6) a. Situation: John is not Ken’s opponent at/before the utterance time. (see (2d))
 b. Situation: John is not Ken’s opponent after the utterance time. (see (3))
 c. Situation: John is Ken’s opponent at/before the utterance time. (see (5))
 d. Situation: John is Ken’s opponent after the utterance time. (see (4))

Following Iatridou (2000), I assume that the past tense morpheme has an exclusion feature. For Internal Past, I appeal to Ogihara (2008) and for External Past, I appeal to Condoravdi (2002) and Ippolito (2003). I propose their semantics in (7) and (8) (Topic (T, P_t, c) stands for Topic Time, *c_{time}* stands for context time (i.e. utterance time), Topic (W, p, c) stands for Topic World, and *c_{world}* stands for context world (i.e. actual world), following Ogihara):

- (7) In sentence ((1a) and (1b)), the past tense morpheme is employed to exclude the context world. The presupposition is $c_{world} \notin \text{Topic}(W, p, c)$, where Topic (*c_{world}*) is characterized as $\{w \mid w \text{ is closest to } c_{world} \text{ among those worlds in } \{w_1 \mid \llbracket \text{John-ga aite na (John is (his) opponent)} \rrbracket^{w_1, \text{Topic}(T, P_t, c)} = 1\} = 1$. If this presupposition requirement is satisfied, $\llbracket \text{sentence ((1a) and (1b))} \rrbracket^{c_{world}, c_{time}} = 1$ iff $\llbracket \text{kyoo-no siai-de make ((Ken) loses today’s game)} \rrbracket^{w_2, \text{Topic}(T, P_t, c)} = 1$ for some $w_2 \in \text{Topic}(W, p, c)$.
- (8) In sentence ((1a) and (1c)), the past tense morpheme is used to exclude the context time. The presupposition is that $\{w_1 \mid w_1 \text{ is an epistemic alternative of the speaker in } c_{world} \text{ at } c_{time}\} \cap \{w_2 \mid \text{There is a time } t \text{ such that John is (his) opponent in } w_2 \text{ at } t, \text{ where } t > c_{time}\} = \emptyset$. If this presupposition requirement is satisfied, $\llbracket \text{sentence ((1a) and (1c))} \rrbracket^{c_{world}, c_{time}} = 1$ iff $\{w_3 \mid w_3 \text{ is a metaphysical alternative of } c_{world} \text{ at Topic}(T, P_t, c)\} \cap \{w_4 \mid \llbracket \text{John-ga aite na (John is (his) opponent)} \rrbracket^{w_4, \text{Topic}(T, P_t, c)} = 1\} \cap \{w_5 \mid \llbracket \text{kyoo-no siai-de make ((Ken) loses today’s game)} \rrbracket^{w_5, \text{Topic}(T, P_t, c)} = 1\} \neq \emptyset$.

Conclusion: There are two different types of counterfactuality, where the past is added to the main verb or to the modal. They are similar in that the proposition of the antecedent is counterfactual when the speaker utters the sentence felicitously. The difference is that the proposition is counterfactual at the utterance time in Internal Past, while it is counterfactual in the future of the utterance time in External Past. The counterfactuality of External Past can be canceled when it is concerned with the past or the present.

References: Condoravdi, C. (2002). Temporal interpretation of modals: modals for the present and for the past. In D. Beaver et al. (Eds.), *The construction of meaning* (pp. 59-87). Stanford: CSLI Publications. Iatridou, S. (2000). The grammatical ingredients of counterfactuality. *LI*, 21, 231-270. Ippolito, M. (2003). Presuppositions and implicatures in counterfactuals. *NaLS*, 11, 145-186. Ogihara, T. (2008). The semantics of *-ta* in Japanese subjunctive conditionals. Ms., University of Washington.