Past-as-Past in Japanese Counterfactuals

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Outline

1. Introduction
   - English: basic observations
   - Japanese: some examples

2. Fake Past

3. Time and modality in Japanese conditionals

4. Conclusions
conditionals about the future

(1) If Mary *comes* tomorrow, she *will* join the meeting.
   come-PRESENT    WOLL-PRESENT

(2) If Mary *came* tomorrow, she *would* join the meeting.
   come-PAST       WOLL-PAST

(3) If Mary *had come* tomorrow, she *would have* joined.
   come-PAST+PERFECT  WOLL-PAST+PERFECT
conditionals about the future

(1) If Mary comes tomorrow, she will join the meeting.
   come-PRESENT          WOLL-PRESENT
   ▶ predictive indicative

(2) If Mary came tomorrow, she would join the meeting.
   come-PAST             WOLL-PAST
   ▶ simple past subjunctive (SP)

(3) If Mary had come tomorrow, she would have joined.
   come-PAST+PERFECT     WOLL-PAST+PERFECT
   ▶ past perfect subjunctive (PP)

▶ Past / Past Perfect in (2-3) despite future reference
conditionals about the past

(4) If Mary *came* yesterday, she *joined* the meeting.

(5) #If M *came* yesterday, she *would* join the meeting.

(6) If M *had come* yesterday, she *would have joined.*
**Introduction**

**English: basic observations**

**conditionals about the past**

(4) If Mary came yesterday, she joined the meeting.
   
   come-PAST       join-PAST
   
   ➤ non-predictive indicative

(5) #If M came yesterday, she would join the meeting.
   
   come-PAST       woll-PAST

(6) If M had come yesterday, she would have joined.
   
   come-PAST+PERF  woll-PAST+PERF
   
   ➤ past perfect subjunctive (PP)

➤ (4): Past only in indicatives
(6): subjunctives only with Past Perfect
Introduction

English: basic observations

**indicative**

(7)  
  a. If Mary comes tomorrow, she will join.
  b. If Mary came yesterday, she joined / will have joined.

**Simple Past subjunctive (SP)**

(8)  
  If Mary came tomorrow, she would join.

**Past Perfect subjunctive (PP)**

(9)  
  a. If Mary had come tomorrow, she would have joined.
  b. If Mary had come yesterday, she would have joined.

- **Fake Past / Fake Perfect**  
  (Iatridou, 2000)  
  common across languages for counterfactuals or irrealis

- **SP vs. PP**  
  (Ippolito, 2003, 2013)  
  related to the status of the antecedent or its presuppositions

- **How is "fake" Past / Perfect morphology interpreted?**
conditionals about the future

    Mary-NOM tomorrow come-COND meeting-LOC join-nonpast MODAL
   a. ‘If Mary comes tomorrow, she will join the meeting.’
   b. ‘If Mary came tomorrow, she would join.’

    Mary-NOM tomorrow come-COND meeting-LOC join-past MODAL
‘If Mary had came tomorrow, she would have joined.’
conditionals about the future

Mary-NOM tomorrow come-COND meeting-LOC join-nonpast MODAL
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Mary-NOM tomorrow come-COND meeting-LOC join-past MODAL
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> tense in consequent: {indic, SP subj} vs. PP subj

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONPAST</td>
<td>indicative</td>
<td>SP subjunctive</td>
</tr>
<tr>
<td>PAST</td>
<td></td>
<td>PP subjunctive</td>
</tr>
</tbody>
</table>
conditionals about the past

(12)  
M-ga kinō ki-tei-reba, kaigi-ni de-ta darō.  
M-NOM yesterday come-TEI-COND meeting-LOC join-PAST MODAL  
a. ‘If Mary came yesterday, she joined the meeting.’  
b. ‘If Mary had come yesterday, she would have joined.’

(13)  
M-NOM yesterday come-COND meeting-LOC join-PAST MODAL.  
‘If Mary had come yesterday, she would have joined.’
conditionals about the past

M-NOM yesterday com-TEI-COND meeting-LOC join-PAST MODAL
a. ‘If Mary came yesterday, she joined the meeting.’
b. ‘If Mary had come yesterday, she would have joined.’

M-NOM yesterday com-COND meeting-LOC join-PAST MODAL.
‘If Mary had come yesterday, she would have joined.’

- “Real Past” in (12) ➤ indicative or SP subjunctive
- “Fake Past” in (13) ➤ PP subjunctive
Outline

1. Introduction

2. Fake Past
   - Distinctions
   - Approaches

3. Time and modality in Japanese conditionals

4. Conclusions
Fake Past

Distinctions

difference between SP and PP

(14)  \[\text{Mary is not likely to come to the office tomorrow.}\]
a. If M \text{ came} tomorrow, she would join the meeting.
b. If M \text{ had come}, she would have joined the mtg.

(15)  \[\text{Mary is dead.}\]
a. If M \text{ came} tomorrow, she would join the meeting.
b. If M \text{ had come}, she would have joined the mtg.
Fake Past
Distinctions

difference between SP and PP

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[Mary is not likely to come to the office tomorrow.]
   a. If M came tomorrow, she would join the meeting.
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(15)  
[Mary is dead.]
   a. #If M came tomorrow, she would join the meeting.
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- presuppositions of the antecedent (Ippolito, 2006, 2013)
  satisfied in (14); violated in (15)

- epistemic status of antecedent worlds (Schulz, 2014)
  possible (though unlikely) in (14); impossible in (15)
Fake Past

Distinctions

difference between SP and PP

(14) [Mary is not likely to come to the office tomorrow.]
   a. If M came tomorrow, she would join the meeting.
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- presuppositions of the antecedent (Ippolito, 2006, 2013)
  satisfied in (14); violated in (15)
- epistemic status of antecedent worlds (Schulz, 2014)
  possible (though unlikely) in (14); impossible in (15)
- either way, antecedent-worlds must be made accessible
Fake Past
Approaches

Past-as-Modal approach

- non-temporal interpretation of Past
- abstract notion of remoteness transferred from the temporal domain to the domain of possible worlds

Palmer (1986); Fleischman (1989); Iatridou (2000); Schulz (2014); a.o.

Past-as-Past approach

- temporal interpretation of Past
- non-actual states of affairs made accessible via backshift in a branching time model.

Dudman (1983, 1984); Condoravdi (2002); Ippolito (2006, 2013); Kaufmann (2005); Romero (2014); a.o.
Fake Past

Approaches

- interpretation at world-time pairs
Fake Past

Approaches

- interpretation at world-time pairs
- history of $w$ proceeds by shedding alternatives
Fake Past

Approaches

- interpretation at world-time pairs
- history of $w$ proceeds by shedding alternatives
- alternatives at $\langle w, t \rangle$:
  - same up to $t$  ➔ one possible past
  - diverse after $t$  ➔ many possible futures
Fake Past

Approaches

- interpretation at world-time pairs
- history of $w$ proceeds by shedding alternatives
- alternatives at $\langle w, t \rangle$:
  - same up to $t$ $\Rightarrow$ one possible past
  - diverse after $t$ $\Rightarrow$ many possible futures
- ‘if A, WOLL C’ is true at $\langle w, t \rangle$ iff at all relevant* $\langle w', t' \rangle$ in the dark rectangle** at which A is true, C is true.

*modulo ordering source  **i.e., such that $wRw'$ and $t \leq t'$
Fake Past

Approaches

- interpretation at world-time pairs
- history of \( w \) proceeds by shedding alternatives
- alternatives at \( \langle w, t \rangle \):
  - same up to \( t \)
  - diverse after \( t \)  
    - one possible past
    - many possible futures

- ‘if \( A, WOLL\; C \)’ is true at \( \langle w, t \rangle \) iff at all relevant* \( \langle w', t' \rangle \) in the dark rectangle** at which \( A \) is true, \( C \) is true.

**challenges:**
- ensuring that \( A \)-worlds are reachable
- getting the temporal reference right
Fake Past
Approaches

ways to include A-worlds
Fake Past

Approaches

ways to include A-worlds
- expand accessible worlds

[Past-as-Modal]
Fake Past Approaches

ways to include A-worlds
- expand accessible worlds
- shift back in time

\[ \langle w, t \rangle \]

[Past-as-Modal]
[Past-as-Past]
Fake Past

Approaches

ways to include A-worlds
- expand accessible worlds
- shift back in time

which of these happens?
- English: possibly different for SP vs. PP
- what role does temporal morphology play?
  - Japanese: what does -ta do?
Fake Past
Approaches

**English**
- SP is modal
- both are temporal: SP one step, PP two steps
  - Schulz (2014)

**Japanese**
- fake -\(ta\) is modal
  - Ogihara (2014)
Outline

1. Introduction

2. Fake Past

3. Time and modality in Japanese conditionals
   - Ogihara (2014) about future counterfactuals
   - Our proposal
   - Predictions

4. Conclusions
Past-as-Modal in counterfactuals about the future

(i)  \(-ta^{[\text{+excl.context } \text{time}]}\)  \(\rightarrow\) indicative about the past
(ii) \(-ta^{[\text{+excl.context } \text{world}]}\)  \(\rightarrow\) PP subj; underspecified for time

future reference forces (ii):

(16) Mary-ga asita ki-tara, kaigi-ni de-ta daroo.
Mary-NOM tomorrow come-COND meeting-LOC join-PAST MODAL
‘If Mary had come tomorrow, she would have joined.’
Time and modality in Japanese conditionals
Ogihara (2014) about future counterfactuals

Past-as-Modal in counterfactuals about the future

(i) \(-ta^{[+\text{excl.context time}]}\) → indicative about the past
(ii) \(-ta^{[+\text{excl.context world}]}\) → PP subj; underspecified for time

Future reference forces (ii):
(16) Mary-ga asita ki-tara, kaigi-ni de-ta daroo.
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‘If Mary had come tomorrow, she would have joined.’

Open issues:
- counterfactuals without \(-ta\)
  (glossed as SP, but still.)
- no obvious extension to conditionals about the past
- problems with temporal reference
Time and modality in Japanese conditionals

Our proposal

gist of our proposal

- unified analysis of conditionals
  true at \( \langle w, t \rangle \) iff for all points in the dark rectangle at which antecedent is true, consequent is also true.
  (similar to English – Kaufmann, 2005)

- variation in the size and location of the rectangle
  - determined in part by temporal/aspectual morphology
  - context dependent – no marking of SP/FLV readings

- two scopes for -ta in consequent
  - inner -ta: under conditional; temporal
  - outer -ta: over conditional; backshift
Our proposal

inner tense: no backshift

(17) \[
\[
\text{true at } \langle w, t \rangle \text{ iff at all points in the dark rectangle at which } \exists \langle w, t \rangle \text{ is true, }
\exists \langle w, t \rangle \text{ is also true}
\]
Time and modality in Japanese conditionals

Our proposal

inner tense: no backshift

\[ \text{true at } \langle w, t \rangle \text{ iff at all points in the dark rectangle at which } [ [ \text{Rad}_A ] (\text{Asp}_A) ] \text{ is true, } [ [ \text{Rad}_C ] (\text{Asp}_C) ] \text{ Tense } \text{ is also true} \]

- -tei- in antecedent required for past reference
- TENSE has temporal interpretation
Time and modality in Japanese conditionals

Our proposal

**inner tense: no backshift**

\[(17) \quad [[[[\text{Rad}_A \ (\text{Asp}_A)]] (\text{Cond})] [ [[\text{Rad}_C \ (\text{Asp}_C)]] (\text{Tense})]]

true at \(\langle w, t \rangle\) iff at all points in the dark rectangle at which \([[[\text{Rad}_A \ (\text{Asp}_A)]]\) is true,
\([[[\text{Rad}_C \ (\text{Asp}_C)]\text{Tense}]]\) is also true

- **-tei-** in antecedent required for past reference
- **TENSE** has temporal interpretation
- CF possible; same temporal interpretation (SP)
Time and modality in Japanese conditionals

Our proposal

outer -\(ta\): backshift

\[(w, t)\]

true at \(\langle w, t \rangle\) iff at all points in the dark rectangle

at which \([ [ \text{ Rad}_A \text{ (Asp}_A \text{ )} \text{ Cond} ] [ [ \text{ Rad}_C \text{ (Asp}_C \text{ )} \text{ } ] \text{ } ta]}\)

[ [ Rad\(_C\) (Asp\(_C\)) ] is also true
Time and modality in Japanese conditionals

Our proposal

outer -\textalpha: backshift

(18) \[
\left[ \left[ \left[ \text{RAD}_A \right] (\text{ASP}_A) \right] \text{COND} \right] \left[ \left[ \text{RAD}_C \right] (\text{ASP}_C) \right] \right] \text{ta}
\]

true at \(w, t\) iff at all points in the dark rectangle at which \([ [ \text{RAD}_A ] (\text{ASP}_A) ]\) is true,
\([ [ \text{Rad}_C ] (\text{Asp}_C) ]\) is also true

- \textit{-tei-} not required for past reference
- \textit{-ta} has temporal interpretation
Our proposal

(19) Mosi Oswald-ga Kennedy-wo korosa-naker-eba, ...

Mosi Oswald-NOM Kennedy-ACC kill-NEG-COND

a. tigau hito-ga koros-u darō.
   other person-NOM kill-NPST MODAL
   ‘If O doesn’t kill K, someone else will.’
   ▶ indicative; was felicitous (and false) until 11/21/1963

b. tigau hito-ga korosi-ta darō.
   other person-NOM kill-PAST MODAL
   ‘If O hadn’t killed K, someone else would have.’
   ▶ PP subjunctive; is felicitous (and false) now

- no Perfect in antecedent
  ▶ no reference to times before S’
  (19a): no backshift – S’ not before S
  (19b): backshift – S’ may precede S
Time and modality in Japanese conditionals

Our proposal

(20) Mosi Oswald-ga Kennedy-wo korosi-tei-naker-eba, ...
MOSI Oswald-NOM Kennedy-ACC kill-TEI-NEG-COND

a. tigau hito-ga koros-u darō.
other person-NOM kill-NPST modal
‘If O didn’t kill K, someone else will.’
▶ felicitous between shots and news of K’s death

b. tigau hito-ga korosi-ta darō.
other person-NOM kill-PAST modal
‘If O didn’t kill K, someone else did.’
▶ non-predictive indicative; felicitous (and true) now

Perfect in antecedent
▶ reference to times before S’ possible
(20a): Nonpast in consequent – K must be alive
(20b): Past in consequent: K may be dead
``timeless'' counterfactuals
(no past time at which the antecedent was possible)

(21) Mosi kyū-ga gūsū dat-tara, ni-de warikire-ru.
    MOSI 9-NOM even COP-COND 2-INSTR be divisible-NPST
    ‘If 9 were even, it would be divisible by 2.’

(22) ??Mosi kyū-ga gūsū dat-tara, ni-de warikire-ta.
    MOSI 9-NOM even COP-COND 2-INSTR be divisible-PAST
    ??‘If 9 had been even, it would have been divisible by 2.’

- (21) preferred; no -ta
- (22) forces a temporal reading
  e.g., ‘if ”9” had been assigned to an even number …’
- similar for English
status of the antecedent

(23)  
[Mary is not likely to come to the office tomorrow.]
     Mary-NOM come-/ meeting-LOC join-NPST MODAL  
     ‘If Mary came, she would join the meeting.’
  b. #Mary-ga kitara, kaigi-ni de-ta darō.  
     Mary-NOM come-/ meeting-LOC join-PAST MODAL  
     ‘If Mary had come, she would have joined.’

(24)  
[Mary is dead.]
  a. #Mary-ga kitara, kaigi-ni de-ru darō.  
     Mary-NOM come-/ meeting-LOC join-NPST MODAL  
     ‘If Mary came, she would join the meeting.’
     Mary-NOM come-/ meeting-LOC join-PAST MODAL  
     ‘If Mary had come, she would have joined.’
cancellability of counterfactuality

[Mary is not likely to come to the office tomorrow.]

Mary-NOM come-COND meeting-LOC join-NPST MODAL
‘If Mary came tomorrow, she would join the meeting.’

Hyottositara ku-ru kamosirenai kedo.
Perhaps come-NPST might though
‘Perhaps she might come, though.’
cancellability of counterfactuality

[Mary is not likely to come to the office tomorrow.]

Mary-NOM come-COND meeting-LOC join-NPST MODAL
‘If Mary came tomorrow, she would join the meeting.’

Hyottositara ku-ru kamosirenai kedo.
Perhaps come-NPST might though
‘Perhaps she might come, though.’

[Mary is dead.]

(26) Mary-ga ki-tara, kaigi-ni de-ta daroo.
Mary-NOM come-COND meeting-LOC join-PAST MODAL
‘If Mary had came tomorrow, she would have joined.’

#Hyottositara ku-ru kamosirenai kedo.
Perhaps come-NPST might though
‘#Perhaps she might come, though.’
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Conclusions

Past is past in Japanese counterfactuals.

- Temporal reference + World-accessibility
- Inner -ta/ Outer -ta
- Past reference / Backshift
- Aspect marker in Antecedent
- New data
References


