

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

Introduction

English: basic observations

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

Introduction

English: basic observations

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

Introduction

English: basic observations

conditionals about the past

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

come-PAST

join-PAST

(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

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?**

Introduction

Japanese: some examples

conditionals about the future

- (10) Mary-ga asita ku-reba, kaigi-ni de-ru darō.
 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.'
- (11) Mary-ga asita ku-reba, kaigi-ni de-ta darō.
 Mary-NOM tomorrow come-COND meeting-LOC join-past MODAL
 'If Mary had came tomorrow, she would have joined.'

Introduction

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conditionals about the future

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➡ tense in consequent: {indic, SP subj} vs. PP subj

<i>Japanese</i>	<i>English</i>
NONPAST	indicative SP subjunctive
PAST	PP subjunctive

Introduction

Japanese: some examples

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-ga kinō ku-reba, kaigi-ni de-ta darō.
 M-NOM yesterday come-COND meeting-LOC join-PAST MODAL
 'If Mary **had come** yesterday, she **would have** joined.'

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Japanese: some examples

conditionals about the past

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a. 'If Mary **came** yesterday, she **joined** the meeting.'

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(13) M-ga kinō ku-reba, kaigi-ni de-ta darō.

M-NOM yesterday come-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) *[Mary is not likely to come to the office tomorrow.]*
- a. If M **came** tomorrow, she **would** join the meeting.
 - b. #If M **had come**, she **would have** joined the mtg.
- (15) *[Mary is dead.]*
- a. #If M **came** tomorrow, she **would** join the meeting.
 - b. If M **had come**, she **would have** joined the mtg.

Fake Past

Distinctions

difference between SP and PP

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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

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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.

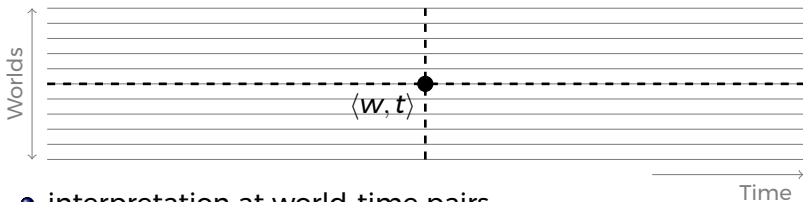
Past-as-Past approach

- 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.

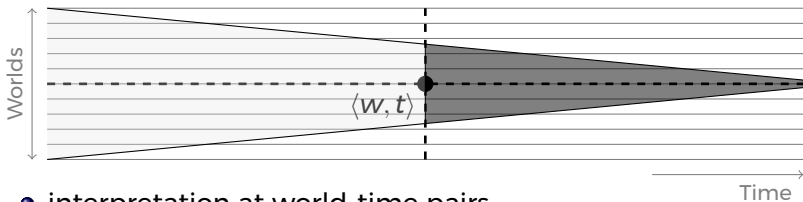
Fake Past

Approaches



Fake Past

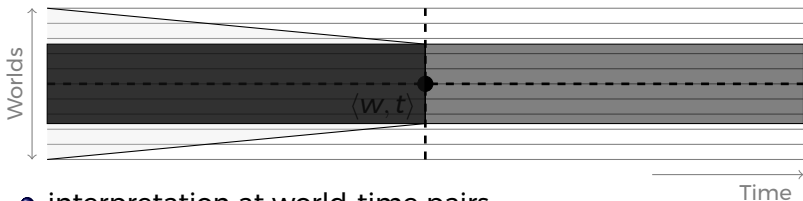
Approaches



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

Fake Past

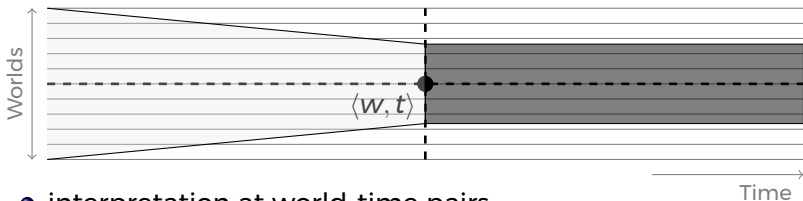
Approaches



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

Fake Past

Approaches

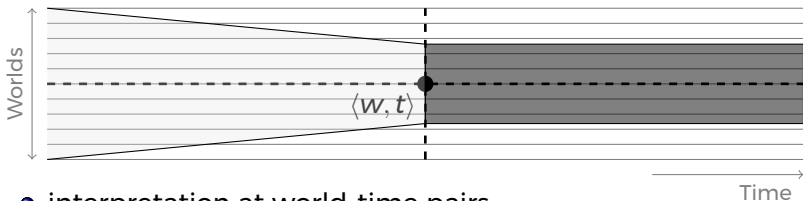


- interpretation at world-time pairs
- history of w proceeds by shedding alternatives
- alternatives at $\langle w, t \rangle$:
 - same up to t ➡ one possible past
 - diverse after t ➡ many possible futures
- 'if A , WOLL C ' is true at $\langle w, t \rangle$ iff at all relevant* $\langle w', t' \rangle$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



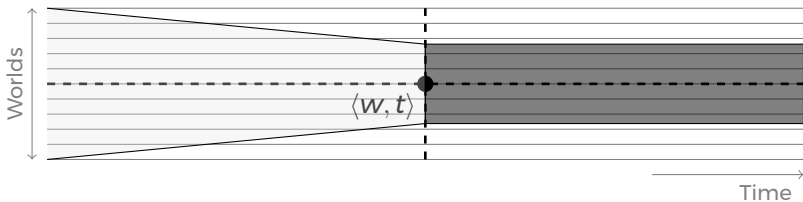
- interpretation at world-time pairs
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challenges:

- ensuring that A -worlds are reachable
- getting the temporal reference right

Fake Past

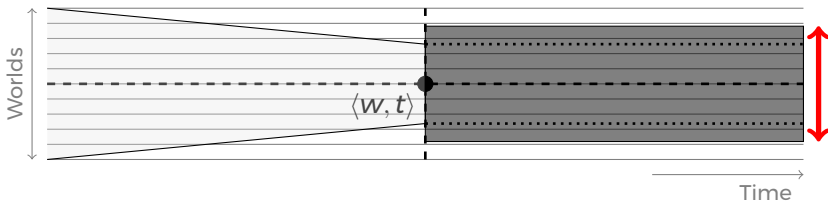
Approaches



ways to include A-worlds

Fake Past

Approaches



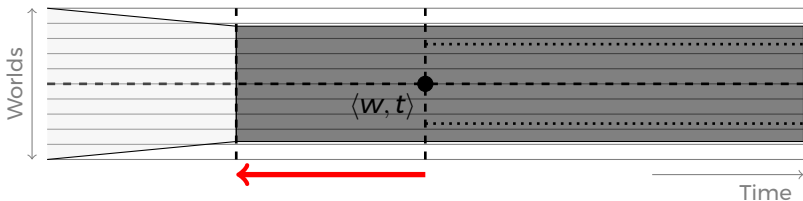
ways to include A-worlds

- expand accessible worlds

[Past-as-Modal]

Fake Past

Approaches



ways to include A-worlds

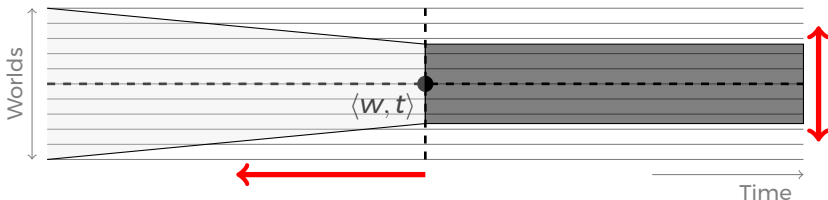
- expand accessible worlds
- shift back in time

[Past-as-Modal]

[Past-as-Past]

Fake Past

Approaches



ways to include A-worlds

- expand accessible worlds
- shift back in time

[Past-as-Modal]

[Past-as-Past]

- 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 Schulz (2014)
- both are temporal: SP one step, PP two steps Ippolito (2013)

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

Time and modality in Japanese conditionals

Ogihara (2014) about future counterfactuals

Past-as-Modal in counterfactuals about the future

- (i) $-ta_{[+excl.context\ time]}$ → indicative about the past
- (ii) $-ta_{[+excl.context\ world]}$ → 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

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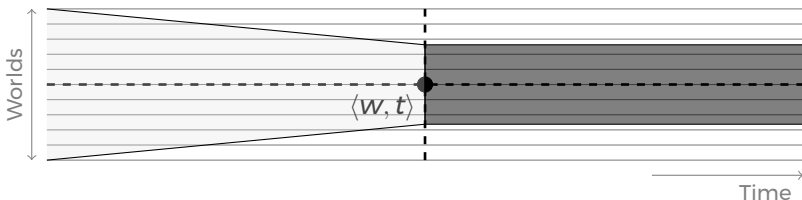
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Mary-NOM tomorrow come-COND meeting-LOC join-PAST MODAL
'If Mary **had come** tomorrow, she **would have** joined.'

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

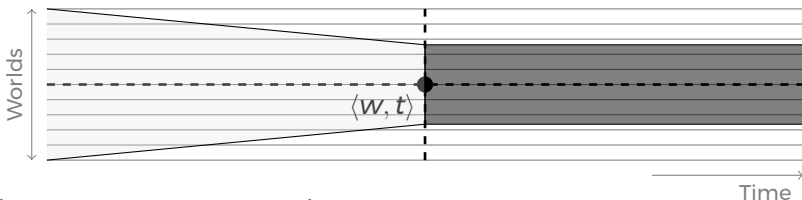


gist of our proposal

- 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

Time and modality in Japanese conditionals

Our proposal



inner tense: no backshift

$$(17) \quad [[[\text{RAD}_A] (\text{ASP}_A)] \text{COND}] \left[[[\text{RAD}_C] (\text{ASP}_C)] \text{TENSE} \right]$$

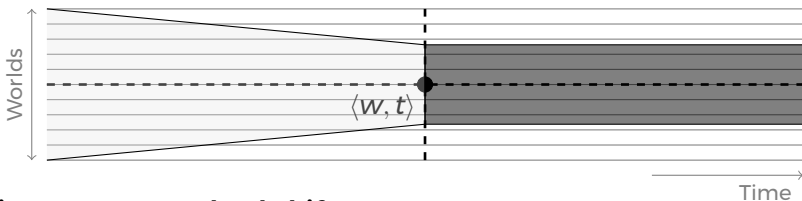
true at $\langle w, t \rangle$ iff at all points in the dark rectangle

at which $[[\text{RAD}_A] (\text{ASP}_A)]$ is true,

$[[\text{RAD}_C] (\text{ASP}_C)] \text{Tense}$ is also true

Time and modality in Japanese conditionals

Our proposal



inner tense: no backshift

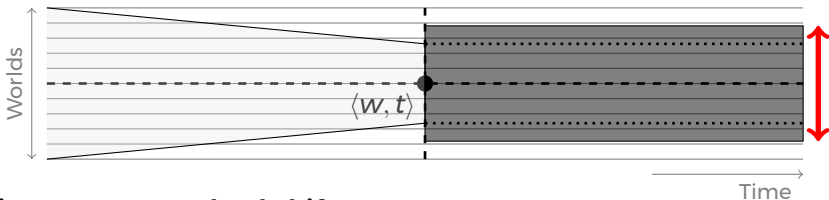
$$(17) \quad [[[\text{RAD}_A] (\text{ASP}_A)] \text{COND}] \left[[[\text{RAD}_C] (\text{ASP}_C)] \text{TENSE} \right]$$

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

Time and modality in Japanese conditionals

Our proposal



inner tense: no backshift

$$(17) \quad [[[\text{RAD}_A] (\text{ASP}_A)] \text{COND}] \left[[[\text{RAD}_C] (\text{ASP}_C)] \text{TENSE} \right]$$

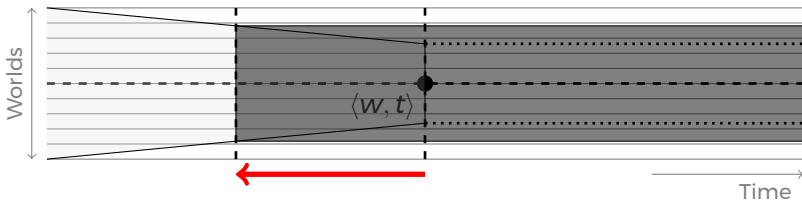
true at $\langle w, t \rangle$ iff at all points in the dark rectangle
 at which $[[\text{RAD}_A] (\text{ASP}_A)]$ is true,
 $[[\text{RAD}_C] (\text{ASP}_C)] \text{Tense}$ is also true

- *-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



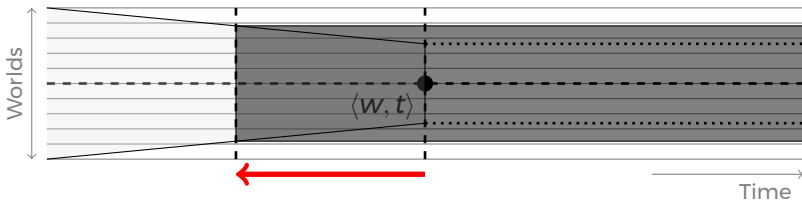
outer *-ta*: backshift

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

true at $\langle w, t \rangle$ iff at all points in the dark rectangle
 at which $\left[\left[\text{RAD}_A \right] (\text{ASP}_A) \right]$ is true,
 $\left[\left[\text{RAD}_C \right] (\text{ASP}_C) \right]$ is also true

Time and modality in Japanese conditionals

Our proposal



outer *-ta*: backshift

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

true at $\langle w, t \rangle$ iff at all points in the dark rectangle
 at which $\left[\left[\text{RAD}_A \right] (\text{ASP}_A) \right]$ is true,
 $\left[\left[\text{RAD}_C \right] (\text{ASP}_C) \right]$ is also true

- *-tei-* not required for past reference
- *-ta* has temporal interpretation

Time and modality in Japanese conditionals

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

Time and modality in Japanese conditionals

Predictions

“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

Time and modality in Japanese conditionals

Predictions

status of the antecedent

(23) *[Mary is not likely to come to the office tomorrow.]*

- 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.'
- 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.'
- 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.'

Time and modality in Japanese conditionals

Predictions

cancellability of counterfactuality

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

(25) Mary-ga ki-tara, kaigi-ni de-ru daroo.

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.'

Time and modality in Japanese conditionals

Predictions

cancellability of counterfactuality

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

(25) Mary-ga ki-tara, kaigi-ni de-**ru** daroo.

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 come 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

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