# Shifty *if*'s iffy shifts

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## Overview

Temporal expressions can have special interpretations in conditionals.

➼ Do they have different meanings in conditionals?
Or do conditionals create special environments?

How widespread is this phenomenon across languages?

## Outline

# English
Indicatives – Observations

**predictive**

(1)    If Mary <u>arrives</u> on time, she will text you.

**non-predictive**

(2)    If Mary <u>arrived</u> on time, she will text you.

- ▶ antecedents, stand-alone:

  - (3)    Mary <u>arrives</u> on time.
  - (4)    Mary <u>arrived</u> on time.

- ▶ (3) has a <u>scheduling reading</u>; the antecedent of (1) does not.
- ▶ no scheduling reading in (4) or the antecedent of (2).

➡ (1) is <u>predictive</u> and (2) is <u>non-predictive</u> on their most salient reading.

# English
Indicatives – Observations

**predictive**                                     [antecedent not decided at speech time]

(1)    If Mary arrives on time, she will text you.

**non-predictive**                                 [antecedent decided at speech time]

(2)    If Mary arrived on time, she will text you.

**Funk (1985):** "In the case of [1] the uncertainty is largely due to the fact that the state-of-affairs described and predicated does not yet exist, i.e., is still subject to manifestation (so that it cannot be affirmed or denied—it is unverifiable) at the moment of the sentence being uttered. In [2], however, the state-of-affairs *does* exist at the time of speaking (either in the positive or negative sense—it is 'manifested' and could thus be verified), but the speaker has not got enough information (or is otherwise not disposed) to be sure about it and hence to affirm or deny it. Accordingly, the meaning of the conditioning frame can be said to vary from 'if it happens that . . .' to 'if it is true that . . .' "                                     (375–376)

# English
Indicatives – Observations

**predictive**                                    **[antecedent not decided at speech time]**

(1)    If Mary <u>arrives</u> on time, she will text you.

*[We will find out tomorrow if Mary can make it to our meeting.]*
(2)    If Mary <u>arrived</u> on time, she will text you.

**non-predictive**                               **[antecedent decided at speech time]**

(2)    If Mary <u>arrived</u> on time, she will text you.

*[I don't know Mary's itinerary for tomorrow, but she can tell us.]*
(1)    If Mary <u>arrives</u> on time, she will text you.

> ▶ both forms can be used either way
> ➡ a semantic distinction, not a grammatical one.

# English
Indicatives – Observations

**past in the future**

(5)   If I come out smiling, the interview <u>went</u> well.

(6)   If the interview <u>went</u> well, I will come out smiling.

(7)   The interview <u>went</u> well.

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► (5) and (6) can be about a future interview; (7) cannot

# English
Indicatives – Observations

**interactions**

(8)  a.  If Mary arrives tomorrow, we will book her a room today.
     b.  If Mary arrives tomorrow, we will book her a room (then).

- ▶ antecedent of (8a) must have scheduling reading
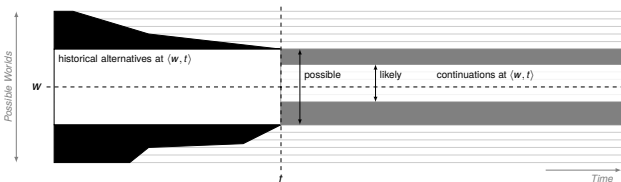- ▶ antecedent of (8b) need not

similarly:

(9)  a.  If I come out smiling, the interview went well.
     b.  If I come out smiling, the interview will go well.

➥ antecedent and consequent constrain each other's temporal
   interpretation

# English
Indicatives – Analysis



**filter-funnel model**

► interpretation at world-time pairs

► history of world *w* proceeds by shedding alternatives

► alternatives at $\langle w, t \rangle$:
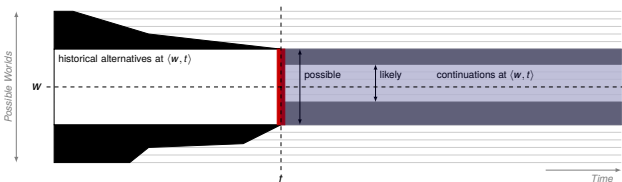
   – same up to *t*        ➡ one possible past

   – diverse after *t*       ➡ many possible futures

**nb:**

► Thomason (1984); Kaufmann (2005, to appear); Kaufmann et al. (2006)

► ignoring epistemic modality for simplicity

9 / 53

# English
Indicatives – Analysis



**simple sentences**

(10)   Mary will join the meeting.

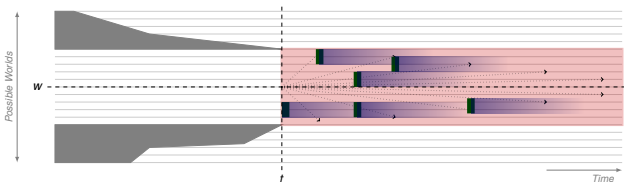'WILL[mary join]' is true at $\langle w, t \rangle$ iff

a.   for all relevant alternatives $\langle w', t \rangle$
b.   there is some $\langle w', t' \rangle$ no earlier than $t$
     at which 'mary join' is true.

➡ **two components.**

–   modal: *all relevant* alternatives for 'woll' | *all* alternatives for bare tense;
–   temporal: *no earlier* for 'pres' | *earlier* for 'past'

# English
Indicatives – Analysis



**indicative conditionals**

(11)    If Mary arrives, she will join the meeting.

$\text{WILL}_{\text{PRES[mary arrive]}}[\text{mary join}]$ is true at $\langle w, t \rangle$ iff

a.    for all relevant $\langle w', t' \rangle$ in the red area
b.    at which 'PRES[may arrive]' is true,
c.    there is some $\langle w', t'' \rangle$ no earlier than $t'$
        at which 'mary join' is true.

➡ **two effects on the modal component of the main clause.**

  – forward expansion from line to area
  – restriction to those points at which the antecedent is true

Overview
○

English
○○○○○○○○○○●○○○○○○○○○○○

Japanese
○○○○○○○○○○○○○○○○○

Serbian
○○○○○○○○

Conclusions
○○○

References

# English
Subjunctives – Observations

**subjunctives about the future**

(12)    If Mary <u>came</u> tomorrow, she <u>would</u> join the meeting.
             come-PAST              woll-PAST
        ➡ **simple past subjunctive (SP)**

(13)    If Mary <u>had come</u> tomorrow, she <u>would have</u> joined.
               come-PERF+PAST              woll-PERF+PAST
        ➡ **past perfect subjunctive (PP)**

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➡ Past / Past Perfect in (12-13) despite future reference

# English
Subjunctives – Observations

**subjunctives about the past**

(14)   ??If Mary <u>came</u> yesterday, she <u>would</u> join the meeting.
         come-PAST                         woll-PAST

(15)   If Mary <u>had come</u> yesterday, she <u>would have</u> joined the meeting.
         come-PERF+PAST                         woll-PERF+PAST

   ➡ **SP subjunctive**        'if it were the case that M has come ...'
   ➡ **PP subjunctive**        'if it had been the case that M comes ...'

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➡ (14): simple Past only in indicative

   (15): subjunctive only with Past Perfect; potentially SP and PP

# English
Subjunctives – Observations

**SP subjunctive**

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

**PP subjunctive**

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

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▶ Fake Past / Fake Perfect                      (Iatridou, 2000)

      common across languages for counterfactuals or irrealis

▶ SP vs. PP                             (Ippolito, 2003, 2013)

      *possibly* related to the status of the antecedent or its presuppositions

➡ What drives the choice, and what does fake Past/Perfect mean?

# English
Analysis – PaM vs. PaP
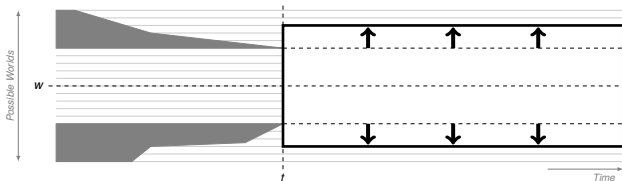


**Past-as-Modal approach**

- ▶ non-temporal interpretation of Past
- ▶ abstract notion of <u>remoteness</u> transferred from the temporal domain to the domain of possible worlds

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

# English
Analysis – PaM vs. PaP
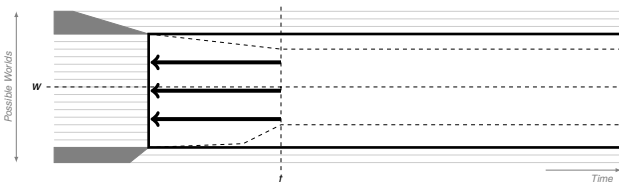


**Past-as-Past approach**

- ▶ temporal interpretation of Past
- ▶ non-actual states of affairs made accessible via <u>backshift</u> in a branching time model.

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

# English
Analysis – SP vs. PP

**what drives the choice?**

(18)    *[Mary is not likely to come to the office tomorrow.]*
    a.   If M <u>came</u> tomorrow, she <u>would</u> join the meeting.
    b.   #If M <u>had come</u>, she <u>would have</u> joined the mtg.

(19)    *[Mary is dead.]*
    a.   #If M <u>came</u> tomorrow, she <u>would</u> join the meeting.
    b.   If M <u>had come</u>, she <u>would have</u> joined the mtg.

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▶ presuppositions of the antecedent?        (Ippolito, 2006, 2013)
    satisfied in (18); violated in (19)

▶ epistemic status of antecedent worlds?        (Schulz, 2014)
    possible (though unlikely) in (18); impossible in (19)

▶ BUT there are problems with both.    (Schulz, 2017; Kaufmann, to appear)

# English
Analysis – SP vs. PP

**contra presuppositions**

*[John was training for the Boston Marathon last summer when he unexpectedly died.]*

(20)   a.   #If John <u>ran</u> the BM next spring, he <u>would</u> win.
       b.   If John <u>had run</u> the BM next spring, he <u>would have</u> won.

<div align="right">Ippolito (2013)</div>

(21)   a.   If John <u>ran</u> the BM next spring, that <u>would</u> be a miracle.
       b.   #If John <u>had run</u> the BM next spring, that <u>would have</u> been a miracle.

➡ same antecedent, different consequents, judgments reversed

# English
## Analysis – SP vs. PP

**contra presuppositions**

*[John was training for the Boston Marathon last summer when he suddenly fell ill. His health deteriorated gradually, as did his prognosis. Finally no hope was left, and he passed away.]*

(22)   a.   If John <u>ran</u> the BM next spring, that <u>would</u> be a miracle.
         b.   If John <u>had run</u> the BM next spring, that <u>would have</u> been a miracle.

➡ same conditionals, different context,
   (22b) much improved

➡ not clear that the antecedent's presuppositions are key

# English
Analysis – SP vs. PP

**contra epistemic status**

"ahistorical" conditionals

(23)   a.   If nine <u>were even</u>, it <u>would</u> be divisible by two.
        b.   #If nine <u>had been</u> even, it <u>would have</u> been divisible by two.

- ▶ no uncertainty as to whether 9 is even (not an empirical question)
- ➡ not clear that epistemic status of antecedent is key

# English
Analysis – SP vs. PP
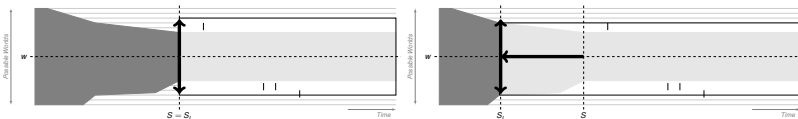


**time of Intervention**

- ▶ counterfactuals generally require a departure from reality
    - miracle (Lewis, 1979); intervention (Pearl, 2000)
- ▶ counterfactual events in the future may call for a departure in the future or in the past
- ➡ SP vs. PP is a matter of context / construal / world knowledge

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- ▶ PP subjunctives for past interventions
- ▶ SP subjunctives for non-past interventions

    see also Schulz (2017); Kaufmann (to appear)

# English
Analysis

**English**

- ▶ modal in SP           Schulz (2014)

- ▶ temporal in both SP and PP have past accessibility time; PP also has past presupposition time

  Ippolito (2013)

- ▶ modal in SP; temporal in PP (marking time of intervention)    Mizuno and Kaufmann (2018)

**Japanese**

- ▶ fake '-ta' is modal           Ogihara (2014)
- ▶ fake '-ta' is temporal       Mizuno and Kaufmann (2018)

# English
Analysis – doxastic backshift

**special case: PP subjunctive with no (obvious) backshift.**

(24)    If English had been a transparent *ought* language, it would have had
*would* on *have to*, and (62b) would have meant (62c), which it does not . . .
von Fintel and Iatridou 2022, p. 33

**depends on the (con-)text.**
Imagine *Prolegomena'*, which at that point has not yet mentioned
'ought'-languages:

(25)    *[We now turn to the topic of transparent 'ought'-languages.]*
    a.  #If English had been a transparent ought language, it would have had
        *would* on *have to* and (62b) would have meant (62c):. . .
    b.  If English were a transparent *ought* language, it would have *would* on
        *have to* and (62b) would mean (62c):. . . *"*

➥  backshift at the discourse level ("doxastic history")

# English
Summary on English

- ► All subjunctives involve a departure from reality
    - (intervention, miracle, what have you)

    In English, this is expressed by one layer of (fake) Past/Perfect.

- ► This departure (intervention, miracle) may or may not lie in the past.

    In English, this is expressed by the second layer of (real) Past in PP
    subjunctives.

- ➡ Do other languages works similarly?

    If so, we would expect Past/Perfect expressions in (the analog of) PP
    subjunctives, but not so much in (the analog of) SP subjunctives.

# Outline

# Japanese
Simple sentences

[ [ [ SENTENCE RADICAL ] (ASPECT) ] TENSE ]

SENTENCE RADICAL

▶ verb with required arguments; no temporal morphology

(26)    Yōko-ga tuk-
        Yoko-NOM arrive-
        'Yoko arrive'

# Japanese
Simple sentences

[ [ [ SENTENCE RADICAL ]            ] TENSE ]

TENSE

-ru      / -ta
NONPAST   PAST

(27)   Yōko-ga { tuk-u   / tui-ta   }
Yoko-NOM   arrive-NPST   arrive-PAST
'Yoko { will arrive / arrived }.'

## Japanese
Simple sentences

[ [ [ SENTENCE RADICAL ] (ASPECT) ] TENSE ]

ASPECT

-tei-
PERFECT                                                                *[ignoring other uses]*

(28)    Yōko-ga tui-tei-ru
        Yoko-NOM  arrive-TEI-NPST
        'Yoko has arrived.'

(29)    Yōko-ga tui-tei-ta
        Yoko-NOM  arrive-TEI-PAST
        'Yoko had arrived.'

# Japanese
Conditionals

[ (MOSI) [ [ RAD ] (ASP) ] COND ] [ [ RAD ] (ASP) ] TENSE (MODAL)

CONDITIONAL CONNECTIVES

-tara / -reba
COND    COND

(30)    Mosi Yōko-ga tui-tei-reba, kaigi-ni    de-ru    darō.
MOSI   Yoko-NOM arrive-TEI-COND meeting-LOC join-NPST MODAL
'If Yoko has arrived, she will join the meeting.'

## Japanese
Conditionals

[ (MOSI) [ [ RAD ] (ASP) ] COND ] [ [ RAD ] (ASP) ] TENSE (MODAL)

**comments:**

- ► focus on conditional connective '-reba'
    - ('-tara' is only subtly different)
- ► these connectives take only tenseless antecedents
    - (tense *can* be embedded more deeply: '-n(o) dat-tara')
- ► 'mosi' (optional) forces hypothetical interpretation
    - ('-tara' also has a purely temporal use)

# Japanese
Some examples

**conditionals about the future**

(31)  Mary-ga asita  ku-reba, kaigi-ni  de-<u>ru</u>  darō.
Mary-NOM tomorrow <u>come-COND</u> meeting-LOC join-<u>nonpast</u> MODAL

    a.  'If Mary <u>comes</u> tomorrow, she <u>will</u> join the meeting.'

    b.  'If Mary <u>came</u> tomorrow, she <u>would</u> join.'

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

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

| *Japanese* | *English* |
|---|---|
| NONPAST | indicative<br>SP subjunctive |
| PAST | PP subjunctive |
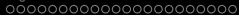
# Japanese
Some examples

**conditionals about the past**

(33) M-ga kinō ki-<u>tei</u>-reba, kaigi-ni de-<u>ta</u> darō.
M-NOM yesterday come-<span style="font-variant:small-caps">TEI</span>-COND meeting-LOC join-<span style="font-variant:small-caps">PAST</span> MODAL

    a. 'If Mary <u>came</u> yesterday, she <u>joined</u> the meeting.'

    b. 'If Mary <u>had come</u> yesterday, she <u>would have</u> joined.'

(34) M-ga kinō ku-reba, kaigi-ni de-<u>ta</u> darō.
M-NOM yesterday come-COND meeting-LOC join-<span style="font-variant:small-caps">PAST</span> MODAL.
'If Mary <u>had come</u> yesterday, she <u>would have</u> joined.'

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▶ "Real Past" in (33)  ➥ indicative or SP subjunctive

▶ "Fake Past" in (34)  ➥ PP subjunctive

# Japanese
Some examples

**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):**

(35)    Mary-ga asita   ki-tara,      kaigi-ni      de-<u>ta</u>   daroo.
        Mary-NOM tomorrow come-COND meeting-LOC join-PAST MODAL
        'If Mary <u>had come</u> tomorrow, she <u>would have</u> joined.'

**open issues:**
- ▶ counterfactuals without '-ta'
       (glossed as SP, but still.)
- ▶ no obvious extension to conditionals about the past
- ▶ problems with temporal reference

# Japanese
Analysis
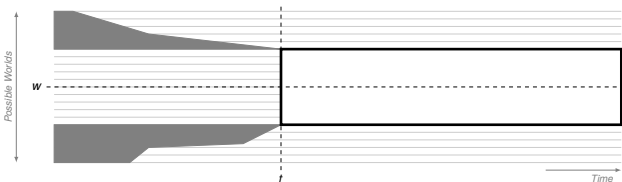


**gist of the proposal**

- ▶ 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

# Japanese
## Analysis



**inner '-ta': no backshift**

(36)   $\left[ \,[\,[\, \text{R}_{\text{AD}_A} \,]\, (\text{A}_{\text{SP}_A}) \,]\, \text{C}_{\text{OND}} \;\middle|\; [\,[\, \text{R}_{\text{AD}_C} \,]\, (\text{A}_{\text{SP}_C}) \,]\, \text{T}_{\text{ENSE}} \right]$

- ► '-tei-' in antecedent required for past reference
- ► TENSE has a temporal interpretation
- ► CF possible, same temporal interpretation                      (SP)
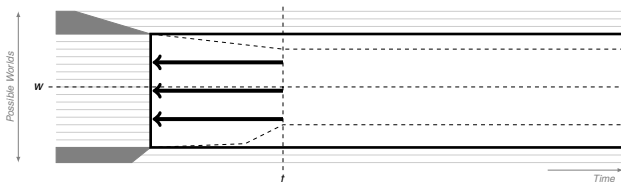
# Japanese
Analysis



**outer '-ta': backshift**

(37) $\left[ \, [ \, [ \, [ \, \text{RAD}_A \, ] \, (\text{ASP}_A) \, ] \, \text{COND} \, ] \, [ \, [ \, \text{RAD}_C \, ] \, (\text{ASP}_C) \, ] \, \right] \, \text{'TA'}$

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

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

$[ \, [ \, \text{Rad}_C \, ] \, (\text{Asp}_C) \, ]$ is also true

- ► '-tei-' not required for past reference
- ► '-ta' has temporal interpretation

## Japanese
Applications

(38) 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**

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▶ no Perfect in antecedent

➥ no reference to times before *S′*
(38a): no backshift – S' not before S
(38b): backshift – S' may precede S

## Japanese
Applications

(39) Mosi Oswald-ga Kennedy-wo korosi-<u>tei</u>-naker-eba, …
MOSI Oswald-NOM Kennedy-ACC kill-<u>TEI</u>-NEG-COND

   a.    tigau hito-ga    koros-<u>u</u> darō.
            other person-NOM kill-<u>NPST</u> MODAL
            'If O <u>didn't</u> kill K, someone else <u>will</u>.'

            ➡ **felicitous between shots and news of K's death**

   b.    tigau hito-ga      korosi-<u>ta</u> {hazu-da / koto-ni naru}.
            other person-NOM kill-<u>PAST</u>    EVIDENTIAL
            'If O <u>didn't</u> kill K, someone else <u>did</u>.'

            ➡ **non-predictive indicative or SP subjunctive; felicitous (and true) now**
                  (nb. evidential in (39b) better than `'darō'` due to "backtracking")

- ► Perfect in antecedent
  - ➡ reference to times before $S'$ possible
    (39a): Nonpast in consequent – only good if K is still alive
    (39b): Past in consequent: K may be dead

## Japanese
Applications

**"timeless" counterfactuals**

(no past time at which the antecedent was possible)

(40)    Mosi kyū-ga gūsū dat-tara, ni-de  warikire-<u>ru</u>.
         MOSI 9-NOM  even  COP-COND 2-INSTR be divisible-<u>NPST</u>
         'If 9 were even, it would be divisible by 2.'

(41)  ??Mosi kyū-ga gūsū dat-tara, ni-de  warikire-<u>ta</u>.
         MOSI 9-NOM  even  COP-COND 2-INSTR be divisible-<u>PAST</u>
         ??'If 9 had been even, it would have been divisible by 2.'

- ▶ (40) preferred; no '-ta'
- ▶ (41) forces a temporal reading

                       e.g., 'if "9" had been assigned to an even number ...'

- ▶ similar to English

# Japanese
Applications

**status of the antecedent**

(42)   *[Mary is not likely to come to the office tomorrow.]*
- a.   Mary-ga kitara,   kaigi-ni   de-<u>ru</u> darō.
       Mary-NOM come-COND meeting-LOC join-<u>NPST</u> MODAL
       'If Mary <u>came</u>, she <u>would</u> join the meeting.'
- b.   #Mary-ga kitara,   kaigi-ni   de-<u>ta</u> darō.
       Mary-NOM come-COND meeting-LOC join-<u>PAST</u> MODAL
       #'If Mary <u>had come</u>, she <u>would have</u> joined.'

(43)   *[Mary is dead.]*
- a.   #Mary-ga kitara,   kaigi-ni   de-<u>ru</u> darō.
       Mary-NOM come-COND meeting-LOC join-<u>NPST</u> MODAL
       #'If Mary <u>came</u>, she <u>would</u> join the meeting.'
- b.   Mary-ga kitara,   kaigi-ni   de-<u>ta</u> darō.
       Mary-NOM come-COND meeting-LOC join-<u>PAST</u> MODAL
       'If Mary <u>had come</u>, she <u>would have</u> joined.'

| ➦ similar |
| --- |

# Japanese
Applications

### cancellability of counterfactuality

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

(44)     Mary-ga ki-tara, kaigi-ni de-<u>ru</u> daroo.
           Mary-NOM come-COND meeting-LOC join-<u>NPST</u> 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.]*

(45)     Mary-ga ki-tara, kaigi-ni de-<u>ta</u> daroo.
           Mary-NOM come-COND meeting-LOC join-<u>PAST</u> 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.'

---

➠ similar

# Outline

# Serbian
Observations                                          Hammond (2005); Type 2b added (Ðurović, 2019)

**Type 1: 'realizable'**

   'ako + $\text{VERB}_{\text{Indicative}}$, $\text{VERB}_{\text{Indicative}}$'

**Type 2: 'potentially realizable'**

   a.   'ako + $\text{VERB}_{\text{Conditional}}$, $\text{VERB}_{\text{Conditional}}$'
   b.   'da + $\text{VERB}_{\text{Indicative}}$, $\text{VERB}_{\text{Conditional}}$'

**Type 3: 'unrealizable'**   **(strongly counterfactual: entails falsity of antecedent)**

   'da + $\text{VERB}_{\text{Present.Perfect.Indicative}}$, $\text{VERB}_{\text{Conditional}}$'

► interaction between verbal morphology and choice of connective
► Type 2 'potentially realizable': needs revisiting
► Type 3 '$\text{VERB}_{\text{Present.Perfect.Indicative}}$': all-purpose Past
      present indicative of 'be' + perfect participle (Browne and Alt, 2004)
► '$\text{VERB}_{\text{Conditional}}$': aorist of 'be' + perfect participle
► 'da' has other uses
      complementizer with non-factive attitude verbs; purposes clauses;
      directive meaning; ...                          (Kaufmann et al., 2021)

# Serbian
Observations

**Type 1**

(46) Ako me pozovu        na žurku, ići    ću.
AKO me invite.3PL.PRES on party   go.INF will.1SG
'If they invite me to the party, I'll go.'

**Type 2**

(47) Ako bi        me pozvali       na žurku, išla        bih.
AKO be.3PL.AOR me invite.PART.M.PL on party,   go.PART.F.SG be.1SG.AOR

(48) Da me pozovu       na žurku, išla        bih.
DA  me invite.3PL.PRES on party,   go.PART.F.SG be.1SG.AOR
'If the invited me to the party, I'd go.'

**Type 3**

(49) Da su        me pozvali       na žurku, išla        bih.
DA  be.3PL.PRES me invite.PART.M.PL on party,   go.PART.F.SG be.1SG.AOR
'If they had invited me to the party, I'd have gone.'

# Serbian
Fake Past in Type 3

Conditional mood ('bi' + participle) is not (normally) used temporally –
(synchronically) not a fake tense.

Past 'da-' antecedents can be about future events
(somewhat restricted, better with focus, Durović 2019)

(50)  Da sam    prodala     kola SUTRA, bolje bih      prošla.
      DA be.1SG.IND sold.PART.F.SG car  tomorrow better be.1SG.AOR pass.PART.F.SG
      'If I had sold my car TOMORROW, I would've gotten a better price.'

➽ similar to English PP subjunctives

# Serbian
No fake aspect in Serbian

aspectual contrasts have their usual meaning in all three types.

➡ similar to Polish, Russian; unlike Greek etc.

(Iatridou, 2000, 2009; Bjorkman and Halpert, 2017; Halpert and Karawani, 2012)

(51) Da je        Jovan umro,      sahranili    bismo    ga  na planini.
     DA be.3SG.IND Jovan die.PART.M.PFV, bury.PART.M.PL be.1PL.AOR him on mountains
     'If Jovan had died, we'd have buried him on the mountains.'

(52) Da je        Jovan umirao,      sa njim bi      bio      doktor.
     DA be.3SG.IND Jovan die.PART.M.IPFV, with him be.3SG.AOR be.PART.M doctor.
     'If Johan had been dying, the doctor would have been with him.'

# Serbian
Temporal reference in Type 2 (investigation on-going)

- ▶ Type 2 'ako' conditionals cannot be about past events (Type 1 can).

  (53) *Ako bi Miloje otišao na žurku juče, žurka
      AKO be.3SG.AOR Miloje go.PART.M.SG on party yesterday party
      bi uspela.
      be.3SG.AOR succeeded.PART.F.SG
      Int.: 'If Miloje were to have been on the party yesterday, the party
      would've been successful.'

- ▶ 'da' needs Perfect to refer to past events (Type 2 looks like Type 3):

  (54) Da je Miloje otišao na žurku juče, žurka bi
      DA be.3SG.IND Miloje go.PART.M.SG on party yesterday party be.3SG.AOR
      uspela.
      succeeded.PART.F.SG
      'If Miloje had come to the party yesterday, the party would have been
      a success.'

- ➡ similar to English SP/PP about the past(?)

# Serbian
Countermathematicals

Countermathematicals are realized as Type 2 (either version):

(55) Ako bi      9 bio        prost broj,   ne  bi       bio          deljiv  sa 3.
     AKO be.3SG.AOR 9 be.PART.M.SG prime number not be.3SG.AOR be.PART.M.SG divisible with 3

(56) Da je      9 prost broj,   ne  bi       bio          deljiv  sa 3.
     DA be.3SG 9 prime number not be.3SG.AOR be.PART.M.SG divisible with 3
     'If 9 were prime, it would not be divisible by 3.'

Countermathematicals as Type 3 are marked;
require specific events in the past (error, learning,…)

(57) #Da je 9 bio        prost broj,   ne  bi       bio          deljiv  sa 3.
     DA is 9 be.PART.M.SG prime number not be.3SG.AOR be.PART.M.SG divisible with 3
     like #'If 9 had been prime, it would have not been divisible by 3.'

➥ similar to English

# Serbian
Modal expansion vs. back-shift

- ► Type 2 ≈ SP: only modal marking ('da'/verbal conditional mood), tenses have their ordinary meaning
  Supports past-as-modal view of English SP (recently, von Fintel and Iatridou 2022; Schulz 2017; Kaufmann to appear)
- ► Type 3 ≈ PP: past/present perfect
  - − antecedent and consequent can be about past events (but also future, regular conditional forward-expansion).
  - − countermathematicals are marginal.

➡ Suggests: back-shift in Type 3 (past-as-past), no back-shift in Type 2.

## Conclusions

**shifts all over the place**

- ▶ forward shift in indicatives
- ▶ outward shift in SP subjunctives
- ▶ backward shift in PP subjunctives

- ▶ In English as well as Japanese, Serbian
  - − Past morphology for outward shift in SPs seems less common
    here English Past most clearly diverges from its temporal meaning
- ▶ Lots of comparative work to do.

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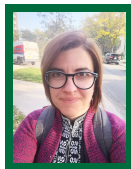


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        (Mizuno and Kaufmann 2018; Mizuno, to appear)
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