Tense in Conditionals*

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Something of a Plan

- Paradise: Nothing to Say

- Indicatives Seem Simple

- The Future Tense Oddity

- Subjunctives

- Is PAST Past? If so, what is it the Past of?

- Upping the Ante: Two Layers of Past

- The Benefits of Watching ESPN

1   Simplicity: Indicatives

Gibbard [15], Dudman [passim]: Tense in "indicative" conditionals is simply tense in the two component sentences, interpreted the usual way.

Examples from Bennett [4]:

(1)   [We were wondering whether Charles had doused the camp fire and I still do not know whether he had.] If he had doused the fire, he had been very quiet about it.

(2)   [I do not know whether it was Charles who made the anonymous gift.] If it was, I have misread his character.

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* These are preliminary notes for a future chapter of a book I am writing, which is going to be a linguistic guide to conditionals. I would be appreciate all the help I can get. I already have Sabine Iatridou and Michela Ippolito to thank, who both know much more about tense and tense in conditionals than I will ever know. I also need to acknowledge my admiration for Jonathan Bennett and his amazingly nutritious *Philosophical Guide to Conditionals*. Lastly, when I was writing my dissertation, Roger Higgins urged me to study the works of Vic Dudman, where I learned a lot – among other things what a scarily complex topic this is.

(3)   If John loves Mary, he has a funny way of showing it.

More examples:

(4)   If the ship leaves at 5am tomorrow, you should pack now.

How come indicatives are so simple, tense-wise?

- Lewis-Kratzer Thesis: the *if*-clause serves as the restriction to a modal quantifier over worlds (Lewis [24], Kratzer [22, 23]).

- Indicative conditionals are epistemic conditionals: the *if*-clause restricts an epistemic modal (see Nolan [27] for a recent defense of the epistemic conditional analysis of indicatives).

- Epistemic modals do not mess with the time reference of their complements:

  (5)   a.   He arrives at 5am tomorrow.
          b.   He must arrive at 5am tomorrow.

- Bare indicative conditionals involve a covert epistemic modal, which messes even less with the time reference of its complement.

2   The Future Tense Oddity

(6)   If he arrives on time, the seminar will start at 4pm.

(7)   #He arrives on time.

(8)   If he is here tomorrow, the seminar will take place.

(9)   #He is here tomorrow.

Not all *will*-conditional involve the funny future reading of the present tense in the *if*-clause:

(10)   If he loves her, then he will marry her. [Thomason & Gupta [35]]

See also this example from Kaufmann [21]:

(11)   [Let's wait for today's decision regarding his travel arrangements.] Then, If he arrives tomorrow, we'll book his room tonight.

We can also have other tenses in the *if*-clause:

(12)   If he left on time, he will be here by 4pm.

Edgington [10] suggests that there is nothing odd going on:

> So I think there is an innocent explanation of the tense oddity: in 'If it rains tomorrow...' we hypothetically (hence the *if*) take as a datum about the future (hence the present tense) that it rains tomorrow. This syntactic feature does not indicate a distinct semantic kind of conditional thought. It is a consequence of (1) the more general phenomenon of present–tense future reference ('The sun sets at 7.03 tomorrow'); and (2) the nature of suppositions.

Some kind of Sequence of Tense?

(13)   He will say that he is on time.

(14)   The seminar will start after he arrives. (not: after he will arrive)

(15)   The seminar will start before he arrives. (not: before he will arrive)

(16)   We will wait until he arrives. (not: until he will arrive)

(17)   Everyone who arrives on time gets/will get a free cookie.

But how can the *will* in the conditional have scope over the *if*-clause?

Other ideas:

- Enç [12] builds future shift into the modal, affecting both the *if*-clause and the matrix clause

- Kaufmann [21] reminds us of an example from Crouch [7]:

  (18)   If I smile when I get out, the interview went well.

  Also:

  (19)   Take a small ball of dough and drop it in a glass of water. If it floats, you did it right.

  (20)   [Next week, find out when the speaker arrived.] If she arrived in the morning, she left the night before.

  Kaufmann builds the future into the meaning of *if*. So this is a separate kind of conditional (since it uses a special kind of *if*).

- Ippolito [19, 20], von Stechow [32]: (optional!) covert FUT inside *if*-clause.

- Somehow licensed by the modal element of the conditional. But this is independent of the licensing of a covert FUT for the complement (consequent). Epistemic *must* does not trigger future shift for its complement but the *if*-clause still undergoes future shift:

  (21)   If he arrives on time, he must be a fast driver.

Dudman: these are conditionals that do not belong together with the "indicatives" (which he calls hypotheticals) but belong together with what are usually called "subjunctive" or "counterfactual" conditionals.

==> Much upheaval in the philosophical literature.

3   Subjunctive Conditionals

3.1   Future Less Vivid Conditionals

Iatridou [18]:

(22)   If he arrives on time, the seminar will start at 4pm.

(23)   If he arrived on time, the seminar would start at 4pm.

(24)   If he is here tomorrow, the seminar will be a success.

(25)   If he was/were here tomorrow, the seminar would be a success.

PAST in both clauses

Abusch: *would* is the PAST tense of *will*

(26)   *will* = PRES (*woll*)
         would = PAST (*woll*)

(27)   She wrote a book. It would later become a bestseller. (future in the past)
         [example from Condoravdi [6].]

The morphology in the antecedent is also PAST, more obviously so (with the exception of the weird *were* form).

I will assume that there is just one active PAST operator, the other one being a kind of agreement item.

What is the PAST doing?

Possible Analyses:

- No rhyme or reason

- Different operators, PAST morphology is co-opted for nebulous reasons

- PAST has a deep meaning that surfaces either as past tense or as "subjunctive" (Iatridou [18])

- PAST means past – end of story

My preference in principle is the simplest story: PAST means past.

Q: What does PAST locate in the past in FLVs?

A: What's located in the past is the time from which we check the accessibility of antecedent worlds. In other words, it is the modal operator which is affected by PAST.

(28)   If he arrived on time, the seminar would start at 4pm.

At time t' (in the past of the speech time), worlds accessible at that time in which he arrives on time (after the speech time) are worlds in which the seminar starts at 4pm.

Why would a speaker go back to what were accessible worlds in the past? Possibly to deliberately leave it open whether there are still accessible worlds where he will arrive on time, or even to signal that there are no such worlds accessible anymore.

NB: locating the time of accessibility in the past does not affect the time reference of the antecedent and consequent clauses, which is still calculated from the time of speech (modulo the optional covert FUT).

(29)   *If he came yesterday, the seminar would start at 4pm.

3.2   Counterfactual Conditionals

Here, finally, is the most complex kind of conditional:

(30)   If he had arrived on time, the seminar would have started at 4pm.

What has happened? Iatridou: another layer of tense/aspect, in particular a second layer of PAST.

What is the second layer of PAST doing? It is locating the antecedent and consequent clauses in the past of the speech time.

Perhaps, nothing else is different.

3.3   Counterfactuals are Simply Past Conditionals

We thus get the idea that counterfactuals are simply past conditionals, twice over: first we talk about what worlds *were* accessible at a past time, second we talk about past events in the antecedent and consequent clauses.

As Bennett admits, this is very seductive:

(31)   a.   If you swim in the sea today, your cold will get worse.
        b.   If you had swum in the sea yesterday, your cold would have got worse.

Thomason *&* Gupta [35]:

(32)   If Oswald hadn't shot Kennedy, then Kennedy would be alive today.

is the past of

(33)   If Oswald doesn't shoot Kennedy, then Kenny will be alive . . . .

"We want to propose (tentatively) that a subjunctive asserts that the corresponding indicative sentence *was* true in some contextually determined interval of time."

4   Problems for the PAST = past Theory

Nute [28, 29, 30] complained that it's too easy to find past times at which the indicative was true, even if we judge the counterfactual false. Thomason [36] answers that there is reference to a contextually determined interval of time, as Thomason *&* Gupta in fact said explicitly in the original article.

Bennett:

(34)   [Sheep are checked first for weight and then for health; if they fail for weight they go into the meadow, if for health into the barn; if they pass both they go to the slaughter-house. Consider now a sheep that squeaks through on weight and on health; we do not want to say that]

        if it hadn't been picked for slaughter it would have gone to the barn;

        [yet during the minute between the two checks there is a sound basis for saying that]

        if it isn't picked for slaughter it will go to the barn.

(35)   [We are watching a black earth-to-sky pillar of cloud approaching your villa outside Marrakesh; I ignorantly remark 'I hope it doesn't rain – that would make our picnic uncomfortable, and you – knowing more – reply sardonically:]

    a.   If it doesn't rain, the picnic will be impossible. [because if it doesn't rain the cloud must be a sandstorm which will make the picnic impossible]

    b.   If it hadn't rained, the picnic would have been impossible.

(36)   If it hadn't rained, the cloud would have (to have) been a sandcloud.

(37)   If Booth didn't shoot Lincoln, someone else did.

(38)   If Booth hadn't shot Lincoln, someone else would have.

(39)   If Booth hadn't been the one who shot Lincoln, someone else would (have to) have been (the one who shot him). (Fogelin [14])

Barker's complaint [3]:

(40)   [A randomly tossed coin comes up heads.]

    a.   If you had bet on heads you would have won.

    b.   If you bet on heads, you will win.

(41)   a.   If you embark on that plane you will be killed.

    b.   If you had embarked on that plane you would have been killed.

Edgington [9]: "The fraudulent fortune-teller, gazing into her crystal ball, says 'It's not altogether clear, but I'm pretty sure that if you fly this week, you will be killed'. I miss my plane. It crashes. About 90% of those on board are killed. 'My God she was right!', I say, 'It was very likely that I would have been killed, had I caught that plane'. Lucky guesses are sometimes right, and this was one. The value to be assigned to the hindsightful counterfactual trumps the most rational value to be assigned to the forward-looking indicative."

Connection to MacFarlane's [26] assessment-relative theory of the future?

But maybe this is all a bit too quixotic. What if the natural modal for an indicative conditional (one that is present-oriented) is an epistemic modal, while once PAST applies, the modal is naturally interpreted as a metaphysical/historical necessity kind of modal? Then we don't necessarily expect that at the past time of accessibility a corresponding indicative has to be true.

5   Mismatched Two Past Conditionals

Ippolito [19, 20] draws attention to counterfactuals like this one:

(42)   If he had arrived tomorrow, we would have held the seminar on Wednesday.

We observe that we have double PAST marking even though the clauses actually refer to events in the future of the speech time. How can that happen?

Ippolito proposes that both layers of PAST apply to the time of accessibility, which leaves the time reference of the two clauses untouched.

The time reference of the two clauses now works as expected. The covert FUT shifts the antecedent clause to the future of the speech time and so does another covert FUT for the consequent.

Why two PASTs? Obvious answer to try: to distinguish counterfactuals about the future from Future Less Vivids.

6   ESPN Counterfactuals

(43)   If Ramirez doesn't catch that, it's a double and the tying run is in scoring position.

(44)   If Ramirez hadn't caught that, it would have been a double and the tying run would have been in scoring position.

Two layers of PAST replaced by two historical presents. The over modal disappears:

(45)   If Ramirez doesn't catch that, it will be a double and the tying run will be in scoring position.

Why does the modal disappear? Not needed as host for the layers of tense morphology. And/or, *will* doesn't seem as immediate / engaged in the action.

Do these work like true counterfactuals?

(46)   If he had taken arsenic, he would show exactly these symptoms.

(47)   ??If he took arsenic, he shows exactly these symptoms.

(48)   If Rodman is heckled by the guy, he does exactly this. So, perhaps he was heckled.

[see http://semantics-online.org/blog/2004/04/present_indicative_counterfactuals]

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