1. Background and goals

This paper is dedicated to the interpretation of tense and aspect morphology in subjunctive conditionals (SCs). SCs are often built by using one or two additional layer(s) of past tense morphology on top of the regular tense morphology found in the corresponding indicative conditional (IC). Additional layer(s) of tense morphology characteristic of SCs are said to be ‘fake’, because they do not locate events in time. I will call ‘+ 1 past’ SCs (resp. ‘+ 2 past SCs’) those SCs that add one (resp. two) layer(s) of past tense morphology on top of the tense morphology locating events in time, see (1)-(3).

(1) If John runs the marathon next spring, he will win. IC
(2) If John ran +1 past the marathon next spring, he would +1 past win. SC
(3) If John had run +2 past the marathon next spring, he would have won +2 past. SC

Some speakers find Ippolito’s example (3) non natural. However, they judge it acceptable in a context making clear that the described situation s is truly counterfactual, by contrasting s with a situation s’ taken to hold in the actual world (see Ogihara 2013 and Iatridou 2000, 252, fn 26 for similar observations). This can be obtained e.g. by the adjunction of an instead of DP (If John had run the marathon next spring instead of yesterday, ...). I come back to this point in section 3. Note that according to my informants, this contrasting situation s’ does not necessarily have to be situated in the past, contrary to what Ogihara (2013, 530) claims, see the example (17a) below.
In languages like French, Greek, Italian or Hindi, the first additional layer of past tense is realized (a.o.) with the past imperfective aspect (IMP), cf. Iatridou (2000, 2010); see (4). Note that the French conditionnel (COND) found in the consequent combines the imperfective morphology -ai- with the future morphology -r-, cf. Iatridou (2000).

Why is it that IMP makes this contribution to counterfactuality (CF) rather than the perfective (PFV) (in the relevant languages)? As Iatridou (2010) observes, this crosslinguistic generalization can be explained in two ways. According to the ‘fake aspect’ approach, IMP qua aspect marker makes no semantic contribution to CF.2 According to the ‘real aspect’ approach, IMP makes a substantial semantic contribution in SCs through the aspectual properties by which IMP differs from PFV. As Iatridou (2010, 14) notices, such an approach has not been much explored yet: “[We] have found no obvious way to extend [the meaning of IMP] to cover [counterfactual conditionals]”.

The goal of this paper is twofold. Firstly, it aims to provide a ‘real aspect’ approach of the ‘fake’ imperfective in SCs, on the basis of French data. Secondly, it offers a new account of the (non)-cancelability of the CF inference in SCs, given the semantic contribution of aspectual operators (i.e. IMP) in these conditionals. I will argue that in languages like French, IMP is interpreted in SCs the same way as outside conditionals. However, I do not claim that the imperfective semantics is a necessary component of SCs. In fact, there is cross-linguistic evidence that it is not (Halpert & Karawani 2012, Bjorkman & Halpert 2013, Karawani 2014). Besides, even in French, the imperfective semantics is probably not systematically encoded by the plus que parfait (a double past combining IMP with the perfect morphology), neither outside conditionals, nor above the modal in conditionals (see section 6).

Note that the ‘real aspect’ approach of IMP is independent from the ‘real past’ approach of the same morphology, according to which the additional layer of past in SCs is a real past. I defend both approaches here, but many authors defend the latter view without committing about the former.

The paper is structured as follows. In sections 2-4, I present the general framework as well as Ippolito’s (2013) analysis and some of its shortcomings. Sections 5 and 6 present my proposal, which largely build on Ippolito’s analysis.

2. One vs. two additional layers of (‘fake’) past

2.1 The ‘real past’ approach of SCs

In this paper, I adopt the ‘real past’ approach of standard SCs, defended a.o. by Ippolito (2003, 2013), Arregui (2005), Romero (2014). According to this view, the ‘fake’ layers of past in SCs are in fact real insofar they express temporal precedence like in the regular use of the past. However, the additional past morphology is supposed not to be interpreted

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2For instance, it has been argued that IMP is chosen over PFV because (i) IMP is a cross-linguistically default aspect (Iatridou 2010), (ii) IMP is compatible with other ingredients that prove to be necessary to CF (and not because IMP is necessary to CF), see Halpert & Karawani (2012), or (iii) IMP is aspectually underspecified (it can have both perfective and imperfective interpretations), while PFV only has perfective interpretations (see Bjorkman & Halpert 2013).
within the ‘bare’ conditional (the structure consisting of the modal operator, the if-clause acting as its restriction and the consequent acting as its nuclear scope), but rather outside the if-clause and contributes to the interpretation of the modal. The intuition behind this idea is that we evaluate SCs as if we returned to a past time at which it was still possible that the antecedent would come true, and looked at possible futures with respect to that past. Among these approaches, I adopt Ippolito’s (2013) framework because it explicitly differentiates between cancelable and noncancelable CF.

2.2 Ippolito’s typology of SCs

Ippolito (2013) assumes that what I call ‘+1 past’ SCs are modal structures under a present universal perfect (henceforth U-perfect), see (5a). What I call ‘+2 past’ SCs are modal structures under a past U-perfect, see (5b).

(5) a. PRES[PERF[∀⊆[WOLL[SIM[HIST p]][q]]]] ‘+1 past’ SCs
    b. PAST[PERF[∀⊆[WOLL[SIM[HIST p]][q]]]] ‘+2 past’ SCs

The two parameters involved in Ippolito’s analysis of conditionals are the historical accessibility function HIST and the similarity function SIM. The function HIST provides a set of worlds historically accessible from the evaluation world at the evaluation time. The similarity function SIM selects from the set of accessible worlds those that are the most similar to the actual world.

It is the temporal operator embedding the modal structure that manipulates the time argument of the accessibility function. Therefore, which worlds HIST will select depends not only on the evaluation world, but also on whether the modal structure is embedded under a past or a present U-perfect.

Finally, Ippolito adopts Abusch’s (1988) analysis of WOLL as a ‘tenseless’ necessity modal operator: The future auxiliary will spells out WOLL when in the scope of a present tense, and the future-in-the-past auxiliary would spells out WOLL when in the scope of a past tense.

For both types of SCs, when PERF combines with ∀, we obtain a ‘perfect interval’ \( t' \), such that for all subintervals \( t'' \) of \( t' \), the conditional proposition is true at \( t'' \). The right boundary of the perfect interval is the utterance time (UT) for ‘+1 past’ SCs and a contextually salient past time for ‘+2 past’ SCs.

The (simplified) truth conditions for the ‘+1 past’ SC (2) are in (6), and those for the ‘+2 past’ SC (3) are in (7).

(6) true if \( \exists t' \) such that the right boundary of \( t'=UT \), and \( \forall t'' \subseteq t' \), it is the case that all possible worlds historically accessible from the actual world at \( t'' \) maximally similar to the actual world and where John will run the marathon next spring are worlds where he will win.

(7) true if \( \exists t' \) whose right boundary is a salient past time, such that \( \forall t'' \subseteq t' \), it is the case that all possible worlds historically accessible from the actual world at \( t'' \)
maximally similar to the actual world and where John will run the marathon next spring are worlds where he will win.

The temporal schema Ippolito attributes to ‘+1 past’ SCs includes a first past component because the perfect interval extends before the UT, cf. (8). The one attributed to ‘+2 past’ SCs has a second past component that shifts this right boundary to a past time, cf. (9).

(8) Temporal structure for ‘+1 past’ SCs
\[
\text{PAST}_1 [\text{MODAL} [\text{PRES/PAST}_2 \ p] [\text{PRES/PAST}_2 q]]
\]

(9) Temporal structure for ‘+2 past’ SCs
\[
\text{PAST}_1 [\text{PAST}_2 [\text{MODAL} [\text{PRES/PAST}_3 q] [\text{PRES/PAST}_3 q]]]
\]

Note that when a ‘+2 past’ SC describes events in the past, we add two layers of ‘fake’ past (above MODAL) to one layer of real past (below MODAL), cf. (9). Thus, we in principle end up with three layers of past. However, neither standard English nor standard French has a regular form that expresses three pasts within the same clause. I therefore assume (like Ippolito 2013 and Iatridou 2000 for English) that SCs about past events are expressed by the same form (a double past), whenever they instantiate a ‘+1 past’ or a ‘+2 past’ SC (see Iatridou 2000, 252, fn. 26, who analyzes the latter case as an instance of haplology).

Although Ippolito (2013) focuses on SCs, she extends part of her analysis to ICs. Given that my account of the CF inference of ‘+1 past’ SCs will be based on the competition between those SCs and ICs, the semantics of the latter has to be addressed here too.

As many others, Ippolito assumes that for ICs, MODAL is in the scope of PRES. She additionally suggests (pp. 112-115) that will-ICs are semantically similar to the corresponding SCs, except that the bare modal structure is now interpreted under PRES. Following this suggestion, I assume that following modal structure for will-ICs.

(10) PRES[WOLL[SIM[HIST p]][q]]

3. CF is cancelable in ‘+1 past’ SCs only

As is well-known, the inference of CF of SCs can be canceled in some cases. SCs à la Anderson 1951 are often argued to be of this type, cf. (11).\(^3\)

(11) If John had taken arsenic, he would have shown exactly the symptoms that he has now. [So, he probably took arsenic].
\(\Box\) John did not take arsenic.

A less controversial example of SCs whose CF inference is cancelable is the one of ‘+ 1 past’ SCs dealing with future events (henceforth ‘future-shifted SCs’), see (12).

\(^3\)There is no consensus on the way the CF inference should be analyzed in SCs à la Anderson. Traditionally, they are assumed to show that CF in SCs can be canceled. However, some recent analyses argue that the cancelability of the CF inference in those conditionals is illusory; see a.o. Karawani (2014), van Wijnbergen Huitink (2015) and Arregui & Biezma (2016). For lack of space, I do not discuss this point further, and assume here the traditional view for the sake of the argument.
The fake imperfective aspect in subjunctive conditionals is real

(12) If John took his exam tomorrow instead of Tuesday, he would have the most easy-going examiner. And who knows, perhaps he will take his exam tomorrow after all!

Ippolito proposes an important generalization, that I dub ‘Ippolito’s generalization’:

(13) CF is cancelable in ‘+1 past’ SCs, but not in ‘+2 past’ SCs.

Ippolito’s first piece of evidence for (13) is provided by SCs with three layers of past found in some American and English dialects. In SCs of this type, two (fake) layers of past surface on top of regular past tense morphology, cf. (14).

(14) a. If he knew she was coming, he stayed home. IC
   b. If he hadd-a known\textsubscript{+2} PAST she was coming, he would-a stayed\textsubscript{+2} PAST home.

Crucially, the inference of CF of SCs like (14b) is claimed to be non defeasible, see Danecygier & Sweetser (2005), Biezma et al. (2013), Ippolito (2013). Also, SCs of this form resist Anderson-like attempts to cancel CF, see Biezma et al.’s (2013) example (15).

(15) If Jones had’ve taken\textsubscript{+2} PAST arsenic, #he would have shown\textsubscript{+2} PAST exactly those symptoms that he in fact shows (so, he probably took arsenic).

Ippolito’s second piece of evidence for (13) deals with future-shifted SCs built with a double past. These SCs are unambiguously ‘+2 past’ SCs, since none of the two layers of past locates the event within time. And as Ippolito (2013, 26) observes, these future-shifted ‘+2 past’ SCs resist attempts to cancel the inference of CF, cp (16) with (12).

(16) If he had taken his exam tomorrow instead of Wednesday, he would have had the most easy going examiner. # And who knows, perhaps he will take his exam tomorrow after all!

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4 Note that contrary to Ippolito (2013), Biezma et al. (2013) analyze the extra morphology as a modal head rather than an additional past marker. Also, they do not indicate whether the SC (15) is already unacceptable without the overt cancelation. But it is expected to be so, since these SCs à la Anderson are typically understood as arguing for the truth of \( p \) even in absence of an overt cancelation of \( \neg p \).

5 The example through which Ippolito shows that the CF inference is not cancelable in future-shifted ‘+2 past’ SCs is more complicated, for it is also a SC à la Anderson (If Charlie had gone to Boston by train tomorrow instead of Tuesday, Lucy would have found in his pocket the ticket that she in fact found. #So, he must go to Boston by train tomorrow). Arregui & Biezma (2016) (and a IATL 31 reviewer) argue that contrary to Ippolito’s claim, the oddity of this example does not reflect the non-cancelability of the CF inference in ‘+2 past SCs’, but rather the restrictions bearing on the denial of the CF inference in Andersonian SCs. According to them, the CF inference of these SCs can be put into question in a ‘gentle’ way only, through e.g. the weak modal probably, as in (11), and not through a plain assertion of \( p \) or the use of the strong modal must \( p \), as in Ippolito’s example. My example (16) does not raise this objection, since it is not a SC à la Anderson, and it uses a weak modal for the cancelation of the CF inference.
Also relevant is the fact that speakers tend to find future-shifted ‘+2 past’ SCs more natural in a context making clear that the situation described is truly counterfactual, through e.g. the addition of an *instead of DP* adverbial (see fn 1). This observation suggests too that the CF inference of these SCs ‘has to be’ presented as non-cancelable.

French shows the same tendency. The future-shifted ‘+2 past’ SC (17a) — inspired by one of Arregui & Biezma’s (2016) examples — is generally judged acceptable, but not the discourse continuation (17b), that overtly cancels the CF inference. Also, future-shifted ‘+2 past’ SCs à la Anderson like (18) are judged unacceptable by all my informants, even though CF is not overtly denied. This is expected given (13): Since Andersonian SCs are typically understood as arguing for the truth of $p$, a contradiction arises given that the CF inference of ‘+ 2 past SCs’ is non-cancelable.

(17)  a. Si elle avait accouché demain (plutôt que dans une semaine), elle aurait bénéficié d’un régime fiscal beaucoup plus avantageux.  
   #Et c’est encore possible!

   ‘If she had given birth tomorrow (instead of within one week), she would have benefited of a much more advantageous tax treatment. And it’s still possible!’

   b. Si elle avait accouché demain (plutôt que dans un mois), elle se serait senti aujourd’hui exactement comme elle est en train de se sentir: début de contractions, etc.

   ‘If she had given birth tomorrow (instead of within one month), she would have felt exactly how she is feeling right now: beginning of contractions, etc.’

4. Ippolito’s account for Ippolito’s generalization

Ippolito’s (2013) account for the cancelability of the CF inference in ‘+1 past’ SCs goes as follows. She argues that the ‘No Empty Restriction’ requirement (‘The restriction of a quantifier cannot be empty’) associated with the modal is only a *pragmatic* presupposition designed to avoid vacuously true assertions. This means, in practice, that it is only required that there be some subinterval $t''$ of $t'$ such that some antecedent-world is historically accessible at $t''$ (this requirement does not have to be satisfied at each subinterval $t''$ of $t'$). This subinterval $t''$ can be the UT (=right boundary of $t'$), but does not have to. In case $t'' \neq \text{UT}$ only, the antecedent is counterfactual.

The account faces two difficulties, both acknowledged by Ippolito herself. Firstly, it crucially relies on the claim that in ‘+1 past SCs’, the right boundary of the ‘perfect interval’ is UT. However, the present U-perfect (whose right boundary is given by UT) is severely restricted in languages like French or Italian, and, in any case, not available in absence of a
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Since DP adverbial and an additional adverbial like always. Why would they build such a U-perfect without such adverbials just in SCs? Secondly, if the higher temporal operator is a perfect, and if the past morphology in the antecedent/consequent is there for agreement reason with the higher operator, why don’t we see a perfect in the antecedent/consequent? Ippolito’s (2013) account for the noncancelability of the CF inference in ‘+2 past’ SCs is more complicated. Briefly, she argues that this inference is conveyed by antipresupposition, and assumes that “unlike scalar conversational implicatures, antipresuppositions cannot be suspended or canceled” (p. 92). I present and criticize this part of her analysis in Martin (2015), section 4.2, to which I refer the reader.

5. Proposal for ‘+1 past’ SCs

My account for the cancelability of the CF inference in ‘+1 past’ SCs relies on the following two assumptions. Firstly, I assume that ‘+1 past’ SCs are modals embedded under PAST rather than under a present U-perfect. Ippolito’s structure (5a) [=23a below] is minimally modified as in (23b).

(23) Structure for ‘+1 past’ SCs
  a. PRES[PERF[∀⊂[WOLL[SIM[HIST p]][q]]]] (Ippolito)
  b. PAST[WOLL[SIM[HIST p]][q]] (suggested modification)

The two problems of Ippolito’s account just mentioned are solved: What we see on the surface is the reflection of the tense involved in the structure, and we do not need to assume that the present perfect can have its U-reading in absence of any adverbials supporting this reading in languages like French or Italian.

6 A sentence with a U-perfect conveys the meaning that the eventuality (e.g. a state of sickness in (19)) takes place at each moment of the ‘perfect interval’. The left boundary of this interval is given by the argument of the since DP adverbial.

(19) John has been (continuously) sick since his arrival. # But he’s fine now.
(20) Jean a été #(continuellement) malade depuis son arrivée. OK Mais il va bien maintenant.
(21) A. What is happening? B. John has been sick.
(22) A. Qu’est-ce qu’il se passe? B. Jean a été malade.

Under the semantic accounts of the difference between the U- and E(xistential) readings of the perfect, like Iatridou et al.’s (2003) analysis, the U-perfect requires the interval to include the reference time (RT), that is UT for the present perfect. As a consequence, denying that the predicate holds at UT is expected to lead to a contradiction, see (19). In languages like French, the U-perfect is severely restricted, and truth-conditionally different from the English U-perfect (at least if one follows Iatridou et al.’s (2003) claim that UT is included in the perfect interval by assertion). Firstly, the U-reading of the French perfect imperatively needs a depuis DP adverbial and an adverbial like always or continuously (see the observations reported in Schaden 2007). For instance, in the French translation (22) of (21), B’s answer cannot possibly be used to convey the meaning that John’s sickness still holds at UT. Even in presence of a depuis DP adverbial, the universal reading is odd in absence of an additional adverbial like continuellement ‘continuously’, etc; see the French translation (20) of (19). Secondly, when the U-reading is available (as in (20) with continuellement), it is always possible to deny that the predicate holds at RT, contrary to what happens in English; see (20) vs. (19).
Secondly, I adopt Ferreira’s (2014) proposal that in conditionals, the modal (here \textit{WOLL}) is a stativizer. Consequently, I assume that the aspect above \textit{WOLL} attaches to a stative predicate. The running time ($\tau(s)$) of the described state is the interval during which the bare modal structure is true, see the modified truth-conditions (24) for the ‘+1 past’ SCs.\(^7\)

\[(24) \text{ A ‘+1 past’ SC ‘If } p, q \text{’ is true iff} \]
\[
\exists s \text{ whose running time } \tau(s) \text{ is a past interval } t', \text{ such that all } p\text{-worlds historically accessible from the actual world at } \tau(s) = t' \text{ maximally similar to the actual world are } q\text{-worlds.}
\]

For the indicative \textit{will}-conditionals, I simply follow Ippolito’s (2003) suggestion summarized in (10), and add the same stative component as in SCs. The truth-conditions for ICs are given in (25).

\[(25) \text{ An IC ‘If } p, q \text{’ is true iff} \]
\[
\exists s \text{ with } \tau(s) = \text{UT}, \text{ and such that all } p\text{-worlds historically accessible from the actual world at } \tau(s) = \text{UT maximally similar to the actual world are } q\text{-worlds.}
\]

Next, I defend a competition-based approach of the CF inference, similarly to Ippolito (2013) and Leahy (2011). More specifically, I follow them in assuming that the CF inference of some SCs arises through some pragmatic competition between ICs and SCs. The hypothesis I argue for is summarized below under (26).

\[(26) \text{ i. PRES and PAST above WOLL in conditionals compete the same way as} \]
\[(\text{Altschuler & Schwarzschild 2012 assume PRES and PAST to compete in} \]
\[\text{non-modal stative sentences.} \]
\[
\text{ ii. The CF inference of ‘+1 past’ SCs derives from the cessation implicature} \]
\[
\text{routinely triggered by past stative sentences. This is the reason why the CF} \]
\[
\text{inference of ‘+1 past’ SCs is generally cancelable.} \]
\[
\text{ iii. In languages like French, IMP makes the same semantic contribution above} \]
\[
\text{WOLL in conditionals as in stative sentences outside conditionals.} \]

My account differs from previous competition-based approaches on two points. Firstly, I propose to analyze the competition between ICs and SCs as directly reflecting the competition between PRES and PAST outside conditionals, see the point [i.] above. Secondly, I assume that a competition takes place between ‘+1past SCs’ and the corresponding IC \textit{will}-conditionals. On this point, I differ from Leahy (2011), who mainly concentrates on the competition between ICs and ‘+2 past’ SCs.

Before spelling out the proposal further, let me first briefly summarize Altschuler & Schwarzschild’s (2012) competition-based account of past vs. present stative sentences and show how it applies to languages like French, that obliges one to choose between two past morphologies in stative sentences, too.

\(^7\)Note that Ippolito needs this assumption too for her account of the English facts (although she does not commit to it explicitly), for in absence of any adverbial like \textit{since DP} or \textit{always}, the English U-perfect needs a stative eventuality or a progressive, see e.g. Iatridou et al. 2003. Compare e.g. \textit{Since this morning, John has been sick/ has been sleeping/ has continuously slept/ #has slept.}
5.1 Past stative sentences and cessation implicature

Altshuler & Schwarzschild (2012) assume that in stative sentences, PRES and PAST are scalar alternatives, PRES being the strongest alternative, and consequently argue that a stative PRES-φ sentence asymmetrically entails (⇒) its PAST-φ alternative. Take for instance their example (27), and assume a context where a little boy named Scotty has just been brought to the hospital. Dr. Spock is talking to him, when the nurse walks in and ask: ‘How is he doing?’. The claim is that in that context, (27a) entails (27b), but not the reverse.

(27) a. Scotty is anxious. b. ⇒ Scotty was anxious.

From this, Altshuler & Schwarzschild (2012) derive the well-known observation that a PAST-φ stative sentence (the weaker statement) often implicates (⇝) the negation of the stronger PRES-φ alternative:

(28) a. Scotty was anxious. b. ⇝ ¬ (Scotty is anxious).

This is what they call the cessation implicature, cf. (29).

(29) Cessation implicature: the utterance of a past stative sentence implicates that no state of the kind described currently holds.

Languages like French force one to choose between IMP (the imparfait) and PFV (the passé composé) for past stative sentences too. I argue that in these languages, PRES in stative sentences competes with IMP, but not with PFV. Let me explain why.

For cessation to be implicated rather than entailed, the denoted state has to be potentially non-maximal, i.e. potentially included within some larger state of the same nature (Bary 2009). Importantly, non-maximality can be obtained with IMP, but not with PFV. For perfective operators differ from imperfective ones in that they impose a ‘maximal part requirement’, which is satisfied if a VP-event culminates or ceases to develop in the actual world. This is the essence of Altshuler’s (2014) (slightly modified) hypothesis (30).

(30) Hypothesis about (im)perfective operators (Altshuler 2014)

a. An operator is imperfective if it requires a part of an event in the extension of the VP that it combines with, but this part need not be maximal.

b. An operator is perfective if it requires a maximal part of an event in the extension of the VP that it combines with.

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8The passé simple is the other past perfective form in French, but its use is mostly restricted to written French. The pattern is exactly the same as for the passé composé. Additionally to its perfective use, the passé composé is also used as a present perfect. But the E-reading of the present perfect (which is the most accessible reading with a bare (non modified) stative predicate) is very similar to the perfective use.
Thus, in languages like French, only imperfective past stative sentences can implicate cessation. Perfective ones, on the other hand, entail a change of state inference, that is, entail that the described state has ended in the past (because of the maximal part requirement). For instance, (31), with IMP, implicates that Scotty is not anxious at UT; (32) shows that this implicature can be canceled.

(31) Scotty était anxieux.
    Scotty be-IMP.3SG anxious
    ‘Scotty was anxious.’

(32) Scotty était anxieux et l’est toujours.
    Scotty be-IMP.3SG anxious and it is still
    ‘Scotty was anxious and still is.’

On the other hand, (33), with PFV, entails that Scotty’s state of anxiety has ended before UT (If Scotty is (again) anxious in UT, we necessary deal with two different fits of anxiety). Hence the difficulty to cancel the inference with toujours ‘still’, cf. (34).

(33) Scotty a été anxieux.
    Scotty be-PVF.3SG anxious
    ‘Scotty was anxious.’

(34) #Pierre a été anxieux et l’est toujours.
    Scotty be-PVF.3SG anxious and it is still
    ‘Scotty was anxious and still is.’

In conclusion, I have argued that in languages like French, the cessation implicature is raised by stative past IMP sentences, but not by stative past sentences built with a PVF.

5.2 PAST compete with PRES above WOLL in SCs too

Let us now come back to the CF inference of ‘+1 past SCs’. I argue that this inference is cancelable because it is parasitic on the cessation implicature routinely triggered by past stative sentences outside conditionals, which is itself a cancelable inference. Let me spell-out this idea in more detail.

As we just saw, in stative sentences, PAST and PRES are scalar alternatives, PRES being the strongest alternative. As a result, a past stative sentence implicates that no state of the kind described currently holds at UT. Applied to conditionals, the idea is therefore that a ‘+1 past’ SC implicates that no state s such that the bare conditional proposition is true at τ(s) holds at UT (in other words, a ‘+1 past’ SC implicates the negation of the corresponding will-IC).

Note that à nouveau ‘again’ solves the problem raised by toujours ‘still’ because it satisfies the change of state inference entailed by PFV stative sentences (see Scotty a été-PVF.3SG anxieux et l’est à nouveau, ‘Pierre was anxious and again is’). Also, observe that the U-reading of the present perfect is excluded in (33)-(34), for this reading would require the verb in the present perfect to be modified by an adverbial like toujours.
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Crucially, given the No Empty Restriction requirement, it is presupposed that \( p \)-worlds are historically accessible during states of this kind. Therefore, the aforementioned implicature triggers in turns the inference that no \( p \)-world is historically accessible at \( UT \). This is the CF inference. Since this inference is parasitic on the cessation implicature, it is defeasible.

Let me illustrate the analysis through the example (35). Given the competition between \textsc{past} and \textsc{pres} in stative sentences, (35) implicates (36), that is the negation of the corresponding \textit{will}-IC (this is the cessation implicature). This, in turn, is at the source of the CF inference (37).

(35) If Scotty took his exam tomorrow, he would pass.
(36) \( \sim \neg \exists s \text{ with } \tau(s)=UT \text{ such that all } \text{Scotty-takes-his-exam-tomorrow-worlds} \text{ historically accessible from the actual world at } \tau(s)=UT \text{ maximally similar to the actual world are } \text{Scotty-will-pass-worlds} \)
(37) \( \sim \neg \text{(some Scotty-takes-his-exam-tomorrow-world is historically accessible at UT).} \)

In languages like French (that force one to choose between \textsc{imp} and \textsc{pfv} for any past sentence), the cancelability of the CF inference in ‘+1 past’ SC is therefore a direct consequence of the fact that the ‘fake’ past above \textsc{woll} is spelled-out with \textsc{imp}: \textsc{imp} is not associated to the maximal part requirement and therefore implicates cessation only. It therefore leaves open the possibility that the relevant state \( s \) output by \textsc{woll} hold all throughout the interval up to the present. In ‘+1 past’ SCs, \textsc{imp} is therefore ‘real’ in that it just has the same aspectual contribution as outside conditionals: It is a partitive operator within and outside conditionals.

An argument in favor of the proposed analysis has to do with ‘+1 past’ SCs that do not compete with their stronger alternative (the corresponding \textit{will} IC), because the context makes the antecedent obviously false. Take e.g. the IC (38).

(38) John est mort. \#Mais s’il écrit-PRES un roman aujourd’hui, ce sera-FUT un succès. ‘John is dead. But if he writes a novel today, it will be a success.’
(39) John est mort. Mais s’il écrivait-IMP. un roman aujourd’hui, ce serait-COND.1 un succès. (#Ça va peut-être arriver!) ‘John is dead. But if he wrote a novel today, it would be a success. (#Maybe it will happen!)’

In the case of (39), the competing stronger statement (38) could not be uttered to begin with, precisely because \( p \) is taken to be CF. Obviously, the CF inference of (39) is not expected to be a cancelable implicature, since the stronger statement cannot be felicitously asserted to begin with. And as the oddity of the continuation parenthesis in (39) shows, the CF inference is indeed noncancelable in (39), although we deal with a ‘+1 past’ SC.
6. Proposal for ‘+2 past’ SCs

For ‘+2 past’ SCs, I keep Ippolito’s main structure: The bare conditional is embedded under a past perfect, introducing [PAST] and [PERFECT]. However, her assumption that the high past perfect systematically gets the universal reading is given up, for reasons I will explain now.

Most analyses of the past perfect assume that this tense can either have an E(xistential) or U(niversal) reading, just like the present perfect (see e.g. Iatridou et al. 2003, Schaden 2007 and references therein). The main difference between the present and the past perfect is that with the present perfect, RT is given by UT, while with the past perfect, RT is situated before UT. There is also a general agreement on the fact that under the E-reading of the past perfect, it is asserted that the described eventuality (v) does not continue after RT. For instance, under the E-reading of (40), Peter’s sickness takes place somewhere in the past before Mary’s visit and ceased afterwards. In Altshuler’s (2014) terms, the E-reading is perfective in that it requires a ‘maximal eventuality’. On the other hand, under its U-reading, whether v continues beyond RT is left open. For instance, in (41), it is asserted (Iatridou et al. 2003) or implicated (Schaden 2007) that Peter’s sickness (which started at the time of the bite) continued up to and including the time of Mary’s visit. Whether Peter is still sick after RT is left opened. In Altshuler’s (2014) terms again, the U-reading is imperfective in that the denoted eventuality does not need to be maximal.

(40) Mary visited Peter last month. He had been sick. (E-reading)

(41) Mary visited Peter last month. He had been very sick since a strange bug had bitten him a week before. (U-reading)

Let us now come back to the high past perfect in ‘+2 past SCs’. We saw that given the No Empty Restriction requirement, p-worlds are accessible during the temporal trace of the state s output by WOLL. If it is asserted that s ceases before UT, p-worlds are presupposed to be accessible before UT only; the CF inference is therefore expected not to be cancelable. We are in this configuration if the high past perfect gets the E-reading. If the possibility is left open that s continues until UT, the CF inference is in principle cancelable (since p-worlds are then potentially accessible until UT). We are in this configuration if the high past perfect gets the U-reading.

Why CF is not cancelable in French or Italian ‘+2 past’ SCs is now easy to explain. As already mentioned before, the U-perfect of these languages is very restricted, and in fact impossible to get with a ‘bare’ perfect, not modified by a since DP and an adverbial like always. Also, even if adverbials of this type were present in the SC, they would not be able to outscope the antecedent or consequent in order to apply to the high modal. As a result, the past perfect can only have its E-reading, and the CF inference cannot be cancelled.

In English, the U-reading of the perfect is less constrained and perhaps even available in absence of overt adverbials inducing this reading. As we saw however, there is nevertheless a strong tendency to interpret the CF inference as non cancelable in English ‘+2 past’ perfects too. I propose to account for this tendency by two factors. Firstly, it might
be that in even in English, the U-reading is more difficult to access than the E-reading in absence of adverbials inducing this reading, as e.g. in (40). Perhaps the U-reading needs at least a covert since DP adverbial in English too. But again, even if this covert adverbial were retrieved in the SC, it could not outslope the antecedent/ consequent in order to attach to the high modal. As a consequence, the past perfect in SCs might be forced to have its E-reading even in English. Secondly, I argue that the CF in ‘+2 past’ SCs is strengthened by the competition with the corresponding ‘+1 past’ SC. The idea is the following: Why bother using a (high) double past rather than a (high) simple past, if not to increase the temporal distance between s and UT? Choosing a more complex form to fulfill the very same information than the corresponding simpler form seems pointless. The hearer will therefore infer that the speaker chooses the high double past in order to strengthen the inference that the eventuality does not continue after RT (and, therefore, that p-worlds are not accessible anymore in UT).

Note that under this analysis, although IMP is morphologically present in the past perfect in languages like French, the imperfective semantics does not play a crucial role in the interpretation of the ‘high’ past perfect, like I argued it is the case in ‘+1 past’ SCs. But in fact, even outside conditionals, it is dubious that the French plus que parfait is inherently imperfective: It does not seem to display the ‘internal point of view’ characteristic of the imparfait, and it has a perfective reading (the E-reading). If the plus que parfait is not unequivocally imperfective outside conditionals, there is no reason to expect it to be so above WOLL in SCs — and in fact, as we have just seen, it is the perfective reading which is selected in SCs. It might be that IMP appears in the plus que parfait because combining a perfect with an imperfective is the only unmarked way to build a double past in languages like French, within and outside conditionals. The imperfective semantics is therefore not a necessary ingredient of SCs, even in languages like French. But when IMP is involved in the semantics of SCs, as I argue it is the case in ‘+1past’ SCs, it is a real imperfective.

References


Fabienne Martin


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