



HAL
open science

To the Roots of Fake Tense and ‘Counterfactuality’

Adeline Patard

► **To cite this version:**

Adeline Patard. To the Roots of Fake Tense and ‘Counterfactuality’. Cahiers Chronos, 2019, Cross-linguistic Perspectives on the Semantics of Grammatical Aspect, 30, pp.176-212. 10.1163/9789004401006_008 . halshs-02159385

HAL Id: halshs-02159385

<https://shs.hal.science/halshs-02159385v1>

Submitted on 12 Oct 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

7. To the roots of fake tense and ‘counterfactuality’

Adeline Patard

Abstract

The present paper examines a particular type of interaction between grammatical aspect and modality, namely the aspectual constraints that are pragmatically and diachronically involved in the emergence of fake (past) tense and ‘counterfactuality’. The paper thus tackles the puzzle of ‘one-past counterfactuals’ where a simple past tense conveys ‘counterfactuality’, and is usually associated with ‘fake tense’, i.e. the non-past interpretation of past morphology. I argue for the distinction between two types of ‘counterfactuality’: (i) the contrary-to-fact interpretation $\neg p$ (or ‘real counterfactuality’) and the interpretation $\neg \pi p$ (or unlikelihood). Within a neo-Reichenbachian conception of past tenses, I expand on the idea that counterfactuality and unlikelihood are implicatures of scalar origin that are locally derived from Grice’s maxim of quantity, and predict that counterfactuality is restricted to imperfects (imperfective pasts) while unlikelihood is allowed by non-perfective pasts (i.e. preterits and imperfects). Finally, I explore the pragmatic origin and conventionalization of counterfactuality and unlikelihood in two uses of the French imparfait, using a diachronic model *à la* Heine (2002). The analysis of data from Latin and Medieval French suggests that fake tense (and aspect) is partly due to the semantic bleaching of the past tense that parallels the conventionalization of ‘counterfactual’ implicatures.

Keywords

Fake tense, imperfect, preterit, epistemic modality, scalar implicature, conventionalization of implicature

1. Introduction

It is a well-known fact that past tenses may convey modal meanings in various languages, this is why linguists have long been interested in the connection between past tense and modality (see for instance Steele 1975, Lyons 1977, Langacker 1978, James 1982). However, it is only more recently that grammatical aspect has been fully recognized as a determining parameter for the modal interpretations of past tenses (notably imperfects) and investigated as such (see for instance Mellet 1988, Martin 1991, Fleischman 1995 or, more recently, Arregui 2007, Boogaart and Trnavač 2011 or Patard 2014). The present chapter fits into this line of research by focusing on the link between grammatical aspect (imperfectivity but not only) and the ‘counterfactual’ interpretations of past tenses.

In a number of languages, past tenses may convey what is often called ‘counterfactuality’ (although the term is confusing, as will be argued later). It can be illustrated by the following examples from English where the past form refers to a contrary-to-fact situation (1) or to an unlikely situation (2):

- (1) *if JFK had not been assassinated, he would obviously have been re-elected. (The Spectator)*

(2) *And if you left me I would suffer a great deal.* (R. Jaffe, *After the reunion*)

Such ‘counterfactual’ uses may be puzzling to the linguist because, despite the past morphology, the interpretation is non-past. As the past tense does not (overtly) express pastness, the phenomenon is dubbed “fake tense” after the term coined by Iatridou (2000).

Fake tense and ‘counterfactuality’ have recently received extensive attention, notably in the domain of formal semantics informed by logics and philosophy (see among the most recent works: Ippolito 2013; Ogihara 2013; Romero 2014; Schulz 2014; Koo 2015; F Martin 2015, forthcoming; Teelings 2016; MacKay 2017), thus renewing the discussion on the interrelations between tense and modality. Yet, the old issue of whether the past tense in such contexts is interpreted temporally or modally (see the earlier works by Lyons (1977), Langacker (1978), James (1982), Palmer (1986) or Fleischman (1989)) is still largely open. According to the first temporalist view (advocated within the formal linguistics framework but not exclusively), past tense has a basic temporal meaning and fake tense in ‘counterfactuals’ only reflects the proposition-external scope of the tense morpheme: put simply, the past tense does not directly bear on the situation denoted by the proposition, but on some modal operator directly scoping over the proposition (see amongst others Gosselin 1999; Ippolito 2004, 2013; Arregui 2005, 2009; Caudal 2011; Patard 2011, 2014; Romero 2014, F. Martin 2015).¹ The discussion within this view generally surrounds the nature of the modal operator under the immediate scope of the past tense (possibility, epistemic evaluation/state, necessity, metaphysical conditional etc.), the pragmatics of the ‘counterfactual’ interpretation (role of presuppositions and (scalar) implicatures), and the semantic contribution of the past tense (present perfect or (imperfective) past).

As for the second non-temporal view, it is based on the idea that past tenses have an underspecified non-temporal meaning that subsumes past and modal interpretations (see among others Iatridou 2000, Karawani 2014, Schulz 2014, Mackay 2017). For instance, in her well-known proposition, Iatridou (2000) suggests that the past tense denotes an exclusion feature that may quantify over *times* or *worlds*. Consequently, the past tense may be interpreted temporally (the event is excluded from the *utterance time*) or modally (the event is excluded from the *actual world*). In the latter case, the interpretation is counterfactual. Such approaches interestingly echo the cognitive grammar view according to which past tenses are epistemic in nature and exclude the situation from the speaker’s immediate reality, i.e. the speaker’s here-and-now. Accordingly, past tenses may contextually license a temporal interpretation that is past (the situation is excluded from the present reality) or a modal interpretation that is unreal (the situation is excluded from actual reality) (see for instance Langacker 1978, 1991; Cutrer 1994, Doiz-Bienzobas 2002, De Mulder et Brisard 2006, Brisard 2010).

In the line of a previous work (Patard 2014), the present contribution aims to make a case for the temporalist view on fake tense and ‘counterfactuality’ by investigating their diachronic origin in discourse. In doing so, it concentrates on contexts with a simple past (an imperfect or a preterit) – the so-called ‘one-past counterfactuals’, and disregards contexts with a perfect past – the so-called ‘two-past counterfactuals’. The aim of the paper is two-fold. It

¹ One of the first formulations of this idea can be found in Dudman 1983, 1984.

first seeks to demonstrate that past tenses may locally implicate two types of ‘counterfactuality’ (designated as $\neg p$ and $\neg\pi p^2$) that are respectively triggered by imperfective pasts (i.e. exclusively imperfects) and unbounded past (i.e. imperfects or preterits) (section 4). Within the proposed modal, a first origin of fake tense would be the marked contexts that enables the implicature $\neg\pi p$ to arise. The paper further explores, on the basis of a diachronic model *à la* Heine and empirical data, the emergence of ‘counterfactuality’ in French. This suggests that fake tense could also be the result of the bleaching of past tenses due to the conventionalization of ‘counterfactuality’ (section 5). Before formulating my proposal, I explain some choices in regards to the terminology, the theory and research orientation (section 2) and expose background hypotheses on the semantics of past tenses (section 3).

2. Rationale

2.1 ‘Counterfactuality’

I would like to argue that the widespread term ‘counterfactuality’ is confusing because it refers to two different interpretations conveyed by distinct constructions, only one of which can be said to be truly counterfactual. I thus make the distinction between two epistemic interpretations pertaining to what the speaker knows or believes at the time of utterance: (i) the contrary-to-fact interpretation of proposition p – the genuine counterfactual interpretation – (cf. (1)), and (ii) the interpretation according to which p ’s realization is unlikely (cf. (2)). Examples (1) and (2) are repeated below:

- (1) *if JFK **had not been assassinated**, he would obviously have been re-elected.* (*The Spectator*)
 $\Rightarrow \neg p$ (counterfactuality)
- (2) *And if you **left** me I would suffer a great deal.* (R. Jaffe, *After the reunion*)
 $\Rightarrow \neg\pi p$ (unlikelihood)

I henceforth note the ‘true’ counterfactual interpretation $\neg p$ (‘it is not the case that p ’) and the unlikelihood interpretation $\neg\pi p$ (‘it is not probable that p is the case’). For the sake of convenience, and in accordance with a frequent usage in linguistics, I will continue to use the term of ‘counterfactuality’ with quotation marks when referring to both interpretations, but use $\neg p$ and $\neg\pi p$ to refer individually to one or the other interpretation.

At first sight, one may think that the distinction between $\neg p$ and $\neg\pi p$ reflects a morphological difference between ‘two-past’ and ‘one-past’ contexts (see again (1) and (2)). However data from Romance languages show that ‘simple’ imperfects (i.e. imperfective pasts) may also license $\neg p$, notably within indicative conditionals of the type [if *pluperfect/imperfect, imperfect*]. Here are examples from Italian, French and Spanish:³

² ‘it is not probable that p is the case’ (π stands for ‘probability’).

³ According to Dessi Schmid (2010), such conditionals are substandard both in Italian and Spanish, though more common in Italian than in Spanish. In both languages, the standard counterfactual conditional is of the type [if *subjunctive pluperfect, perfect conditional*]. As a native speaker, I would say that conditionals like (4) in French are also sub-standard, but this should be confirmed by empirical data. Note that, in French, the standard

- (3) Ita *Se arrivavi prima, vedevi il film dall'inizio.*
 If **arrive**_{IPFV.PST} earlier **see**_{IPFV.PST} the movie from the beginning

‘If you **had arrived** earlier, you **would have seen** the movie from the beginning.’

(Ippolito 2004)

- (4) Fre *Si je n'étais pas intervenu, ça se finissait au couteau.*
 If I not intervene_{PRF.IPFV.PST}, it **end up**_{IPFV.PST} with stabbing

‘If I hadn’t intervened, it **would have ended up** with stabbing’

(Patard 2007)

- (5) Spa *Si lo sabía, venía.*
 if it **know**_{IPFV.PST} **come**_{IPFV.PST}

‘If I **had known** that, I **would have come**.’

(Martínez-Atienza 2012)

These examples attest that the interpretation $\neg p$ is not only met in ‘two-past’ contexts, but may also be found in ‘one-past’ contexts. I will argue in section 4 that ‘one-past’ counterfactuality can only be conveyed by imperfects (imperfective pasts), hence its absence in a Germanic language like English.

Finally, I must signal that, *contra* a common conception in the formal literature, I do not consider that, in *irrealis* examples like (6) and (7), the fake tense licenses $\neg p$ (*counterfactuality*):

- (6) *if I **had** longer arms I would push the clouds away.* (Task Force)

- (7) *I wish he **was** dumb. I wish he **was** deaf. I wish he **was** blind.* (C. Dickens, *Master Humphrey’s clock*)

My argument is that fake tense conveys $\neg \pi p$ (*unlikelihood*) just like in the previous example (2). If, however, an *irrealis* reading is obtained, it is because fake tense enables it (an unlikely situation may prove counterfactual without contradictions) and, crucially, because it is inferred from the speaker’s world knowledge ((s)he contextually knows that p is not the case) and the stative aspect of the predicate (cf. [*I have longer arms*], [*he be dumb*], [*he be deaf*] etc.) (see R. Martin 1991, Gosselin 1999, Iatridou 2000 or Arregui 2007 for more detailed analyses). In contrast, contexts of epistemic ignorance/future reference and/or telic predicates generally license *unlikelihood* (and not *irrealis*) (cf. (8) and (9)). These are examples known as ‘*Future Less Vivid*’:

- (8) *If you **missed** the last bus, you would walk home.*

- (9) *Mary wishes that Peter **could come** to her birthday party next week.*

counterfactual conditional does not use a subjunctive imperfect in the protasis (like Italian or Spanish), but an indicative pluperfect: [if **pluperfect**, *perfect conditional*].

In Spanish, the imperfect may also frequently occur in conditionals with a subjunctive imperfect in the protasis ([if *subjunctive imperfect*, **imperfect**): ex. *Si tuviera dinero, me **compraba** una moto* (Briz 2004: 49). In this case, the interpretation is not counterfactual, but ‘potential’ (Dessi Schmid 2010: 53), i.e. what I refer to as $\neg \pi p$.

These observations show that the modal interpretation of fake tense in ‘one-past’ contexts – whether *irrealis* (cf. (6) and (7)) or *future-less-vivid* (cf. (8) and (9)) – is not coded in the past morphology, but is co(n)textually implicated. I will detail the inferential process in section 4.2.

2.2 A functional and diachronic perspective

Contrary to the recent works in formal semantics, I will not attempt to define the truth conditions of fake tenses, nor utilize the Kripkan notion of possible worlds. The reason for that is double. First, I claim that it is quite possible to give an operational description of the semantics and pragmatics of fake tense without using the formalism of modal logics, provided the description is based on an adequate formal apparatus including a precise metalanguage. Second, I consider that the semantics of modal constructions in natural languages (such as the ones responsible for fake tense and ‘counterfactuality’) is not reducible to their truth conditions, which may either be too inclusive (some aspects of their truth conditions do not pertain to their semantics proper) or too exclusive (some aspects of their semantics cannot be formalized in terms of truth conditions). Crucially for the present issue, the epistemic category of *unlikelihood* ($\neg\pi p$), which is fundamental in my view to account for examples such as (2) (see section 4), cannot be easily captured (if at all) by quantification over possible worlds.⁴ I thus adopt a more functional point of view and will be concerned with how linguistic structures serve to communicate information. The present paper will consequently aim at understanding how (fake) past tenses may contribute to evoke ‘counterfactual’ situations in discourse.

I further approach fake tense from a diachronic perspective with the usage-based underlying idea that “language structure emerges from language use” (Tomasello 2003: 5). Hence, the paper seeks to answer the question: *how have fake tense and counterfactuality emerged from the (normal) usage of past tenses?* This very research question comes up with a few common but nontrivial observations. First, in language with temporal and modal usages of past tense, the default and prototypical interpretation is the temporal one. Second, cross-linguistic studies show that the past tense alone generally fails to convey ‘counterfactual’ interpretations, unless it is combined with modal markers such as *if* and *would* in English counterfactual conditionals (cf. James 1982, Fleischman 1989, Van Linden and Verstraete 2008). Third, as emphasized by James (1982) (see also Dahl 1997 and Hogeweg 2009), temporal uses of past tenses are ‘regular and productive’ and thus predictable while modal uses are ‘irregular and idiosyncratic’ and consequently less prone to predictions. Indeed, there seems to be considerable variation in the way languages express ‘counterfactuality’ with past tense morphology (see for instance Van Linden and Verstraete 2008, Boogaart and Trnavac 2011).

From these observations, I hypothesize that (i) fake tenses have developed from ‘real’ tense uses and (ii) surfaced with the creation of (idiosyncratic) constructions whose meaning is not compositional but derives from conventionalized implicatures. Thus, the particular

⁴ See for instance Price’s (1983) arguments against a truth-conditional treatment of ‘probably’. However attempts to account for what I call ‘*unlikely* conditionals’ can be found in Karttunen and Peters 1979 or von Stechow 1998.

structures of these constructions, which I assume to be responsible for fake tense and ‘counterfactuality’, are (at least partly) determined by the initial conditions at the time of their emergence, i.e. the TAM paradigms of the language in question and their ongoing evolutions. According to these hypotheses, one cannot strictly predict from the synchronic TAM paradigms which verbal forms (whether subjunctive or past indicative) will serve to express ‘counterfactuality’ (see for instance Ippolito 2009 or Karawani 2014 for such predictions). Indeed, the diachrony of the language in question should also be taken into account (cf. the diachronic analysis of French and Latin data in section 5). However, predictions can be made from the proposed inference-based analysis as to the semantics of past tenses with which ‘counterfactuality’ may (or may not) obtain. Thus, I will argue in section 4 that (i) $\neg p$ (the ‘true’ counterfactual interpretation) is only licensed by unbounded pasts and that $\neg\pi p$ (the unlikely interpretation) cannot be found with perfective pasts. The proposal is based on a neo-Reichenbachian conception of past tenses which is elaborated in the next section.

3. Background hypotheses

3.1 Past tenses encode past

Following the temporalist view, my first hypothesis is that past tenses encode anteriority to the time of speech; their meaning is fundamentally temporal, not epistemic (*contra* Iatridou (2000) and the Cognitive Grammar view). This approach is supported by the facts recalled in the preceding paragraph: past is the default and prototypical interpretation and is found in contexts that are regular, productive and predictable, whereas the modal interpretations are only obtained with additional modal markers, in contexts that are irregular, idiosyncratic and thus much less predictable.

Another fact is that the modal readings carried by past tenses may be cancelled by the subsequent context. Cancellation proves possible in conditionals yielding $\neg\pi p$ (cf. (10)), as has been amply shown in the logical literature (see Anderson 1951 or Stalnaker 1975), as well as in ‘imperfective paradox’ contexts yielding $\neg p$ (cf. (11)):

- (10) *If the patient had the measles, he would have exactly the symptoms he has now. WE CONCLUDE, THEREFORE, THAT THE PATIENT HAS THE MEASLES.*

(Iatridou 2000)

- (11) Fre *Paul se noyait_{IPFV.PST} lorsqu’ un sauveteur a plongé pour le sauver. MAIS PAUL S’EST NOYÉ QUAND MÊME.*

‘Paul was drowning when a rescuer dived in to save him. BUT PAUL DROWNED ALL THE SAME.’

In (10), the preterit conveys a sense of unlikely (the measles are considered as unlikely), which is cancelled afterwards by the speaker’s conclusion (*WE CONCLUDE, THEREFORE, THAT THE PATIENT HAS THE MEASLES*). Similarly, in (11), the French imperfect insinuates that the drowning finally did not happen, but this interpretation is overridden by the following sentence (*MAIS PAUL S’EST NOYÉ QUAND MÊME*). The possibility to cancel the modal readings in

such contexts suggests that the modal meaning is not asserted but conversationally implicated⁵ (see again Anderson 1951 or Stalnaker 1975).

I would like to argue now that the cancellability of the modal interpretation (hence the fact that it is an implicature) is incompatible with the non-temporal and monosemous approach defended by Iatridou (2000) or cognitive grammarians. In these theories, past tenses encode a non-temporal abstract meaning (cf. Iatridou's exclusion feature) from which one could contextually derive a past or modal interpretation. On this view, the final interpretations of past tenses are specific instantiations of the abstract meaning, elaborated thanks to contextual information. Then, when the (specific) modal interpretation is canceled by the following context, one may expect that the abstract meaning encoded by the past tense is reinterpreted differently? How then would it contribute to the revised interpretation? The theory would predict that the past tense should either yield the default reading, i.e. the past interpretation (cf. Brisard 2010), or possibly induce an underspecified reading whereby the domain on which the exclusion feature operates would remain undetermined.

However this is not exactly what happens in the quoted examples. In the revised reading of (10), there is no exclusion to be interpreted, be it from the 'actual time' (the speaker's 'present reality') or from the 'actual world' (the speaker's 'actual reality'): the topic time/world just coincides with the actual time/world and does not exclude it (*WE CONCLUDE, THEREFORE, THAT THE PATIENT HAS THE MEASLES*). This leads us to the nihilist conclusion that the past tense has no semantic content but only carries implicatures, which one may not want to. Example such as (11) is also problematic for the aforementioned theories, but for a different reason. In (11), the imperfect initially licenses both a past and modal interpretation (the denoted drowning is past and counterfactual: it did not happen in the past) before being reinterpreted as expressing past only (the drowning effectively took place in the past). On the non-temporal view, such an example would suppose that, at first, the past morphology is interpreted twice, *licensing past AND modality*, as though there was two layers of past tense marking as in 'two-pasts counterfactuals' (e.g. *If Paul **had drowned**, Marie would have been inconsolable*). But then how come a single tense morpheme is used to convey *past AND modality*? The theory should explain this exception to the complexity principle of iconicity, i.e. why is a complex meaning expressed by a simplex morphology (and not by a complex one)? Furthermore, the possibility to cancel the modal interpretation in contrast to the past interpretation (see below) rather hints at a different semantic status of the past and modal interpretations. While the modal reading appears as a cancelable implicature derived from the context, the default past reading definitely has another status which has to be accounted for.

Indeed, pastness conveyed by simple past morphology proves very difficult (if not impossible) to eliminate. When a non-past reinterpretation is possible, the validity of the situation is in fact extended beyond the past domain. As a result, the denoted situation may be interpreted to hold both in the past and in the present (12) or to have a generic validity (13):

⁵ I will argue later that $\neg p$ and $\neg\pi p$ indeed first arose as conversational implicatures, but that they conventionalized in some constructions, thus losing the ability to be canceled in certain contexts (see section 5). Note that conditionals constitute a very specific case in at least two regards. First, the cancellation test does not work equally for $\neg\pi p$ and $\neg p$: contrary to $\neg\pi p$, $\neg p$ may indeed resist cancelability, notably when expressed by an imperfect (see Ippolito 2004). Second, it is generally considered in the (logical) literature that the epistemic status of the denoted eventualities is never asserted in 'counterfactual' conditionals; what is asserted is the 'conditional' relation between the protasis and the apodosis (see Anderson 1951 or Stalnaker 1975).

(12) *The patient was sick, but, in fact, he still is.*

(13) *John was sick, but, in fact, he is always sick.*

In either case, the situation is still valid in the past, i.e. the past interpretation is maintained. Then, if modality can contextually be cancelled but not past reference, one should come to the conclusion that the past interpretation is not just a contextual elaboration of non-temporal core meaning *à la* Iatridou or *à la* Langacker, but that it is encoded by the past tense. I shall elaborate the proposed semantic description of past tenses in the following section that outlines the main points of a previous description (Patard 2014).

3.2 Meaning and default interpretation of past tenses

In the wake of Klein (1994) or Gosselin (1996) and adopting a Reichenbachian terminology (Reichenbach 1947), I take past tenses to express relations between three moments: the time of speech S, the reference time or reference interval R, and the eventuality or situation time E. Every past tense first encodes a deictic relation with the time of speech: R precedes S, i.e. the past tense refers to a moment or interval that is anterior to the time of speech. A second relation is optionally expressed by past tenses and corresponds to their aspectual import, it is the relation between R and E. In the case of imperfects, R is included within the duration of E (the so-called ‘imperfective aspect’). In the case of preterits, the relation between R and E is left unspecified, which may be dubbed ‘neutral aspect’ (see Smith 1991/1997). The aspectual interpretation of the situation is then contextually determined, most often by the actionality of the predicate. The schematic meaning encoded by imperfects and preterits is summarized in (14) and (15):

(14) imperfects
[R < S] [past time reference]⁶
[R ⊂ E] [imperfective aspect]

(15) preterits
[R < S] [past time reference]
[R 0 E] [neutral aspect]

In the proposed schematic meaning, R is an abstraction, an underspecified time point, but it can get specific instantiations in context. For instance, in the prototypical use of past tenses, R specifically refers to:

(i) a past *topic time* (Tt) (see Klein 1994), i.e. the past moment about which the speaker says something or asks a question;

(ii) the *aspectual vantage time* (Ap) from which the internal time of the eventuality is considered (e.g. from an inner perspective in the case of imperfective aspect).

In other contexts, R may instead instantiate:

⁶ [x] indicates that meaning x is encoded by a form.

(iii) an *epistemic evaluation point* (Ep):⁷ this is another sort of vantage point from which the speaker vouches for the *validity of the proposition* or V (*it be true that [p]*) because of what she knows or believes at the time. V (*it be true that [p]*) can be viewed as a *meta-predicate* scoping over the predicate expressed in the proposition, it hence refers to a situation (one could say a ‘meta-situation’) that is located on the timeline and is seen from a certain aspectual perspective (just like ‘normal’ situations expressed by predicates). V can be regarded as a stative eventuality as it involves no change over time and possesses no intrinsic endpoint.

By default, the speaker commits to V at speech time S: the speaker normally believes in the present that what she says is the case (= {it is true that [p]}).⁸ This is illustrated in example (16) with a prototypical past interpretation.

(16) *Max ran fast.*

The corresponding aspecto-temporal interpretation is diagrammed in figure 1.

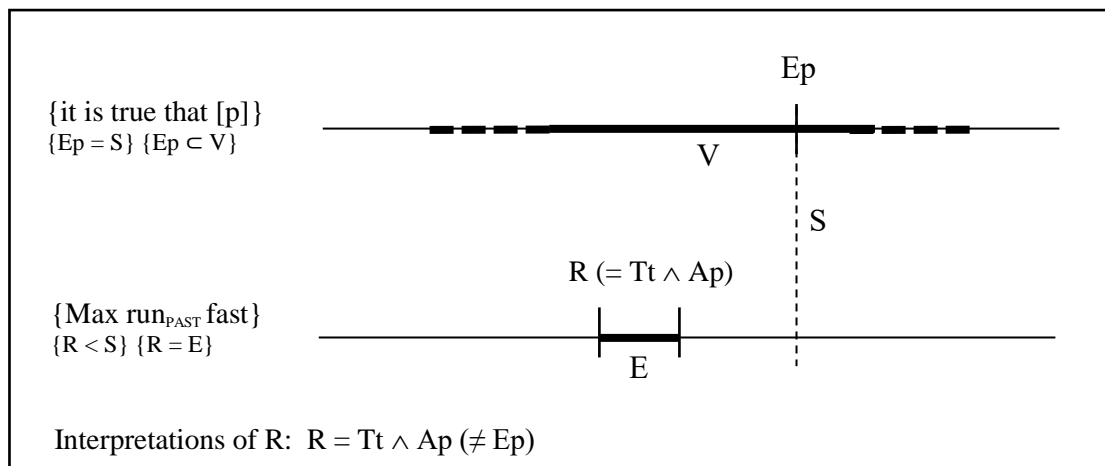


Figure 1. Aspectual and temporal interpretation of V (*it be true that [p]*) and E (*Max ran fast*) in the utterance ‘Max **ran** fast’.

The default interpretation in (16) is {it is true that [Max run_{PAST} fast]}. Thus, E (*Max ran fast*) received the default interpretation of the preterit combined with a telic situation, i.e. the past and perfective interpretation: {R < S} {R = E}. As for V (*it be true that [p]*), it is given a present and imperfective characterization, i.e. it is assessed from an evaluation point Ep that coincides with the time of speech ({Ep = S}) and that is included within V ({Ep ⊂ V}).

However, in other contexts, the speaker does not commit to V at the time of speech but the validity of the proposition is endorsed in the past, which means that the evaluation point Ep is not present but past. Such contexts are discussed in the next paragraph.

⁷ What I call Ep can be identified with Boogaart’s *epistemic evaluation time* (Boogaart 2007) or MacFarlane’s *assessment time* (MacFarlane 2011, Ippolito 2013).

⁸ This interpretation can be seen as a generalized conversational implicature attached to the indicative mood and derived from Grice’s maxim of quality ‘Be truthful’ (see Gosselin 2010: 26).

3.3 Marked interpretation of past tenses

Consider the following examples from Dutch where the preterit *kwam* is used in a past indirect speech to refer to a telic situation:

- (17) Dut *Marie zei dat Jan MORGEN kwam_{PST}.*
 ‘Mary said that John **was coming** TOMORROW.’

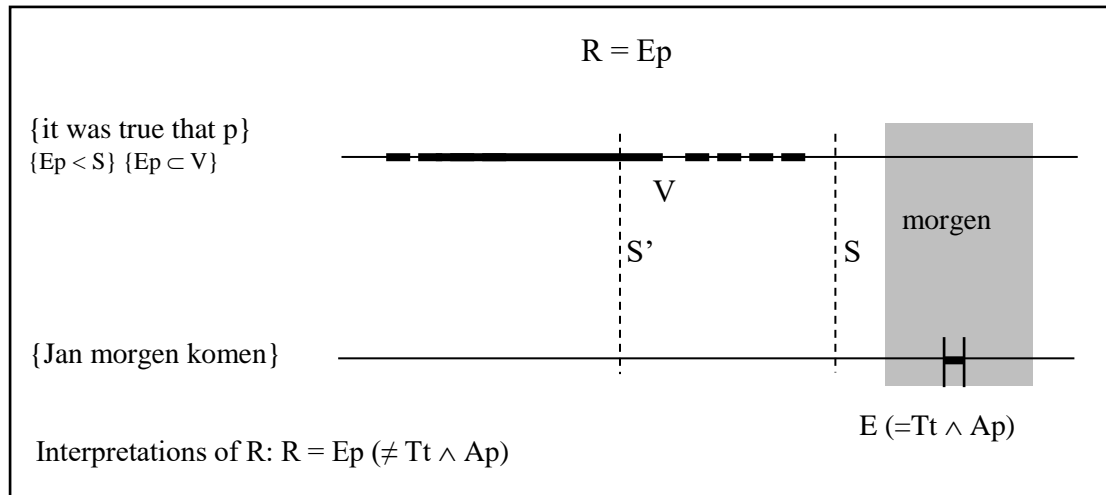


Figure 2. Aspectual and temporal interpretation of V (*it be true that [p]*) and E (*Jan morgen komen*) in the utterance ‘*Marie zei dat Jan morgen kwam*’.

In (17), the interpretation of the past tense is almost the reverse of the one obtained in (16): here V receives a past interpretation (*{it was true that [p]}*) whereas E gets a non-past interpretation (signaled by the adjunct *morgen* ‘tomorrow’). Contrary to (16), the past R denoted by the past tense coincides with the evaluation point E_p ($R = E_p$): it is not the actual speaker who commits to the proposition’s validity V but the past speaker (Marie). In other words, the past tense does not bear on the situation E anymore but applies to V.⁹ This means that the past tense has a proposition-external scope, which is manifested by *fake tense*: despite the past morphology, the situation is not grounded in the past domain, but may occur in the present or future (because $R \neq Tt$). It is easy to show that this type of context also licenses *fake aspect*. Take the French example with an imperfect:¹⁰

- (18) Fre *Marie a dit que Jean restait_{IPFV.PST} demain JUSQU’A QUATRE HEURES.*
 ‘Marie said that John **was staying** tomorrow UNTIL FOUR O’CLOCK.’

⁹ The proposed analysis crucially differs from the traditional view on ‘sequence-of-tenses’ as a phenomenon of morphological agreement (see for instance Ogihara 1989, Abusch 1994 or von Stechow 2009). I reject the idea that the embedded past tense is a vacuous reflex of the higher past tense used in the matrix clause. On the contrary, I consider the embedded past tense to be semantically meaningful and to denote the exact same relations between R, S (and possibly E) that it expresses outside ‘sequence-of-tenses’ contexts.

¹⁰ The English translations of (17) and (218) require the use of a past progressive (*was coming* and *was staying*). Note however that the progressive does not express ongoingness in these particular contexts but futurity: the situation is posterior to a given reference time (here introduced by the verbum dicendi *said*). This type of use is not a central use of the progressive and some languages lack it (e.g. French, cf. De Wit and Patard 2013).

Here, the imperfective morphology (*restait*) does not impose an internal perspective on the situation. That is why it is acceptable to use a delimitative adverbial licensing a perfective reading (*jusqu'à quatre heures* 'until four o'clock'). This shows that the past R denoted by the past tense is also dissociated from the aspectual vantage point A_p ($R \neq A_p$), thus allowing for a perfective interpretation of imperfective morphology.

Fake tense and fake aspect may be indicative of the fact that past tenses do not scope over the proposition but over V, the validity of p. I will argue in section 4.3 that the unlikely conditionals illustrated in (2) are comparable to the preceding uses with regard to the functions of R: in those contexts, R crucially functions as an evaluation point E_p while its reference to a *topic time* (Tt) or an *aspectual vantage point* (A_p) is optional. In those contexts, it is the interpretation of R as E_p that originally triggers the unlikely implicature $\neg\pi p$.

4. The pragmatic origin of 'counterfactuality'

In this section, I argue for the pragmatic origin of the interpretations $\neg\pi p$ and $\neg p$ that may be attached to simple past tenses – preterits or imperfects – in certain contexts. As underlined by Ziegeler (2003), such interpretations are not only licensed in conditionals (see (19) and (20)), which is probably the most frequently cited environment for the expression of 'counterfactuality', but they may also arise outside of them (see (21) and (22)):

(19) Eng *And if you **left** me I would suffer a great deal.* (R. Jaffe, *After the reunion*)

(20) Ita *Se **partivi** domani, **incontravi** mia sorella.*
 if **leave**_{IPFV.PST} tomorrow **meet**_{IPFV.PST} my sister
 'If you **had left** tomorrow, you **would have met** my sister'.

(Ippolito 2004)

(21) Dut ***Vertrok** hij nu maar!*
leave_{PST} he now but
 'I wish he **was leaving** now!'

(Janssen 1994)

(22) Fre *Une minute de plus et le train **s'en allait** sans moi.*
 One minute of more and the train **leave**_{IPFV.PST} without me
 'One more second minute and the train **would have left** without me'.

(N. Castioni, *Vivement plus tard*)

4.1 Scalar implicatures

The proposed analysis builds on the general idea formulated in previous work (see for instance Ziegeler 2000, Ippolito 2004 or Verstraete 2006) that past tenses may locally give rise to scalar modal implicatures that are derived from Grice's quantity maxim: '*Do not make your contribution more informative than is required*'. Past tenses are seen as less informative than alternative tense forms that could be used in the same contexts, thus forming with them a scale of informativeness. The marked under-informative use of the past tense then triggers a Q-based implicature (Horn 1984, 1989), i.e. an 'upper-bounding' inference according to

which the hearer should not interpret beyond what is said. The implicatum is not necessarily that anything beyond what is said does not hold (the strong implicature $\neg p$), but - and this is the main difference with the authors quoted above - the implicatum may also be that the unmarked alternative tense provides too much information considering what the speaker knows, i.e. the speaker is not certain about whether p is valid or not (the weak implicature p or $\neg p$).¹¹ It is the latter that is at the origin of the implicature $\neg \pi p$ conventionalized in the unlikely use of past tenses. I will further argue that the difference between the strong implicature $\neg p$ and the weak implicature p or $\neg p$ is dependent on the types of informativity scale the past tense forms with the alternative tense.

4.2 Strong implicature $\neg p$

The strong implicature $\neg p$, which is the genuine counterfactual interpretation, is only obtained with imperfects, i.e. imperfective pasts, because it is triggered by the imperfective aspect. Indeed, imperfective pasts, or more generally unbounded pasts, form an informativity scale with ‘bounded pasts’ in regards to the completion of the situation denoted by the predicate. What I call ‘bounded pasts’ are either perfective pasts (like the French *passé simple*) that give a global perspective on the unfolding of the situation including its boundaries, or perfects referring to anterior situations (like the French *passé composé*) that rather focus on the resulting state beyond the final boundary. In either case, bounded pasts assert or presuppose that the situation has reached its natural endpoint and is completed. By contrast, unbounded pasts (like imperfects) focus on subintervals of the situation excluding its boundaries ($R \subset E$ in our terminology), thus giving an inner perspective on the situation that is blind to its outcome. As a consequence, nothing is said about whether the situation has reached its natural endpoint. Bounded pasts are thus more informative than unbounded pasts as to the completion of the denoted situation. Hence the scale of informativity:

- (23) Scale of informativity I (completion of the situation)
 < unbounded past, bounded past >

By virtue of (23), the use of an imperfect may contextually implicate the negation of the content conveyed by an alternative bounded past. Thus, when using a less informative imperfect, the speaker signals that the use of a bounded past would be over-informative and that (s)he is not in a position to endorse the completion of the past situation. The speaker then implicates $\neg p_{\text{bounded past}}$: it is not the case that p , with p using a bounded past. Hence the following characterization of the strong implicature $\neg p$:

- (24) Strong implicature
 < unbounded past, bounded past >
 unbounded past $\Rightarrow \neg p_{\text{bounded past}}$

¹¹ This echoes the distinction sometimes drawn between strong and weak counterfactuality (see Ippolito 2006, 2013 or Tellings 2016).

As a Q-based implicature, $\neg p_{\text{bounded past}}$ is locally derived in marked contexts where the unmarked alternate could not have been used appropriately (Horn 2004: 16). The markedness of the context in our case is due to the unusual combination of an imperfect with a telic predicate. In their unmarked use, imperfects apply to atelic predicates (states or activities) and entail that the situation was the case in the past (Fre *Pierre courait* ‘Pierre was running’ \rightarrow *Pierre a couru* ‘Pierre ran’). When combined with a telic predicate (achievement or accomplishment), one comes up with ‘the imperfective paradox’ (Dowty, 1979): the imperfect does not entail that the situation occurred (Fre *Pierre courait le marathon* ‘Pierre was running the marathon’ \nrightarrow *Pierre a couru le marathon* ‘Pierre ran the marathon’), thus implicating that the situation did not occur (\Rightarrow *Pierre n’a pas couru le marathon* ‘Pierre did not run the marathon’). Hence, the counterfactual implicature is only triggered in the marked context of ‘imperfective paradox’:

- (25) Strong implicature
 < unbounded past, bounded past >
 unbounded past \Rightarrow $\neg p_{\text{bounded past}}$ / ‘imperfective paradox’

The following utterance from Spanish is a typical example of Romance imperfect triggering implicature $\neg p$:

- (26) Spa *Salía_{IPFV.PST} (vs **salí_{PFV.PST}**) del trabajo, cuando el jefe me llamo.*
 ‘I **was leaving** work when the boss called me.’

(Ferraro and Ortiz Lopez 2002)

The imperfect *salía* (‘was leaving’) signals that the scalar alternative *salí* (‘left’), which is a perfective past, is too informative. As a consequence, *salía* implicates \neg *salí*: the speaker finally did not leave work.

This implicature is also found in the so-called ‘counterfactual use’ of the French imperfect:

- (27) Fre *Une seconde de plus il [le taureau] l’**éventrait**_{IPFV.PST} (vs **éventra**_{PFV.PST}).*
 ‘One more second and the bull **would have gored** (/ **gored**) him.’

(G. Flaubert, *Un cœur simple*)

Éventrait (‘was goring’) here indicates that the alternative perfective past *éventra* (‘gored’) conveys too much information and therefore implicates \neg *éventra*. I will argue in section 5.2 that the implicature $\neg p$ has conventionalized in such use.

The proposed analysis leads to the prediction that pasts that are not unbounded - i.e. perfective pasts, anterior perfects but also preterits (that can get a bounded interpretation) - cannot convey implicature $\neg p$ because they cannot produce an ‘imperfective paradox’. However, this does not mean that their use in counterfactual contexts is excluded, only they cannot contribute to counterfactuality. However, for this very reason, one may predict that unbounded pasts will be preferred to bounded pasts in counterfactual contexts.

4.3 Weak implicature p or $\neg p$ and implicature $\neg \pi p$

Implicature $\neg \pi p$ is contextually derived from the weak implicature that the speaker is not certain about the validity of p , i.e. does not know whether p or $\neg p$. This weak implicature is itself obtained with both imperfects and preterits because it is triggered by the past meaning. I will argue that the weak implicature is licensed by the proposition-external scope of the past morpheme (manifested in fake tense and fake aspect, see *supra* 3.3) in contexts presenting similarities with indirect speech.

I should remark at this point that perfective pasts do not allow for a proposition-external-scope reading. Let us consider the following French translation of example (17):

- (28) Fre *Marie a dit que Jean venait_{IPFV.PST} (*vint_{PFV.PST}) demain.*
 ‘Marie said that Jean **was coming** (***came**) tomorrow.’

The imperfect *venait* does not scope over p (both tense and aspect are fake) but over p 's validity: the coming of Jean is endorsed by Marie in the past. The French past perfective *vint* is unacceptable in the context because it immediately scopes over p (the situation is past and viewed in its entirety), which is incompatible with the future adjunct *demain* ‘tomorrow’. This example illustrates that perfective pasts are never fake, they can never get a higher scope above the proposition. I suggest the reason is because V (p 's validity) is a state-like situation (see *supra*) the evaluation of which (E_p) requires an imperfective viewpoint ($E_p \subset V$, see *supra* again). This would predict that imperfective pasts (like imperfects) and aspectually-unspecified past (like preterits) can get a proposition-external-scope reading, but not bounded pasts (like the French perfective past or the French perfect). Consequently, only imperfects and preterits should allow for the weak implicature p or $\neg p$ (the speaker is not certain about the validity of p) and hence for the implicature $\neg \pi p$ it may lead to.

Non-perfective pasts with a proposition-external scope form an informativity scale with present tenses as to the present evaluation of p 's epistemic validity. Non-perfective pasts are less informative because p 's validity is not endorsed in the present but in the past ($E_p < S$) while, with present tenses, the speaker vouches for the situation's present validity ($E_p = S$). Hence the informativity scale:

- (29) Scale of informativity I (evaluation of p 's validity)
 < non-perfective past, present >

By virtue of (29), the use of a non-perfective past indicates that a present tense would be too informative, that the speaker is not in position to commit to p 's validity in the present or, put differently, that (s)he is not certain about p 's present validity. Thus, a less informative past implicates p_{present} or $\neg p_{\text{present}}$, that the present validity of the situation is uncertain. Crucially, p_{present} or $\neg p_{\text{present}}$ might contextually implicate *unlikely*: because the speaker does not endorse the situation's validity in the present, (s)he may suggest believing that the situation is unlikely ($\neg \pi p_{\text{present}}$).¹² Hence the following characterization of the weak implicature p or $\neg p$:

¹² In a first bulk of temporalist analyses (see for instance Dahl 1997, Ziegeler 2000, Hogeweg 2009) generally based on a branching futures model (notably Tedeschi 1981), past tenses may convey ‘counterfactuality’ because

- (30) Weak implicature p or $\neg p$
 < non-perfective past, present >
 non-perfective past $\Rightarrow p_{\text{present}}$ or $\neg p_{\text{present}}$ ($\Rightarrow \neg \pi p_{\text{present}}$)

Like the strong implicature, the implicature p_{present} or $\neg p_{\text{present}}$ only locally obtained in contexts where the non-perfective past is marked, but where the unmarked alternate could not have been appropriate to convey the targeted meaning. The markedness of the configuration here lies in the unusual use of a past tense to refer to a non-past situation in contexts where past is fake (and so is aspect). These marked contexts are characterized by a proposition-external scope of the past tense which bears on the epistemic validity of p (cf. section 3): the past R denoted by the past tense functions as an evaluation point Ep ($R = Ep$), which means that the validity of the situation is endorsed in the past and not, as it is expected in normal communication, in the present. We have seen previously that the scoping over V corresponds to a proposition-external scope of the past tense as met in indirect speech (which may be manifested by fake tense and fake aspect). Hence the final characterization of the weak implicature p or $\neg p$:

- (31) Weak implicature p or $\neg p$
 < non-perfective past, present >
 non-perfective past $\Rightarrow p_{\text{present}}$ or $\neg p_{\text{present}}$ ($\Rightarrow \neg \pi p_{\text{present}}$) / proposition-external scope

Such configuration is typically found in evidential contexts presupposing a past source. Here is an example from Italian:

- (32) Ita *Domani Paolo lavorava_{IPFV.PST} (vs *lavora_{PRS}*) fino alle sei del pomeriggio.*
 ‘Tomorrow Paolo was supposed to work until six p.m.’

With the use of the imperfect *lavorava*, the speaker refers to some past evidence attesting the validity of a non-past situation. More formally, the imperfect refers to a past evaluation point ($R = Ep$) from which p 's validity is considered ($Ep < S$ and $Ep \subset V$). Thence, as the imperfect does not directly scope over p , tense is fake: the situation is localized in the future thanks to the adjunct *domani* (‘tomorrow’). And so is aspect: the delimitative adjunct *fino alle sei del pomeriggio* (‘until six p.m.’) allows for a perfective interpretation of the imperfect. Formally, one gets: $R \neq Tt \wedge Ap$, which means that R does not coincide with topic time and the aspectual vantage point. The aspectuo-temporal analysis of example (32) is shown in figure 3.

they allow referring to a past ‘choice point’ when the course of events took an alternative path (Dahl 1997) or to past predictions that could still be true (Ziegeler 2000, but see also Dudman 1983,1984 and Romero 2014). My line of explanation sides with other temporalist analyses that are slightly different (see Ippolito 2004, 2013 or F. Martin 2015, forthcoming): for them, past tenses enable the speaker not to endorse the situation’s validity in the present, thus implicating it may not be valid. However, my account differs from the latter (but converges with some of the former analyses) in that past tenses are fake because past reference has bleached with the conventionalization of the ‘counterfactual’ implicature.

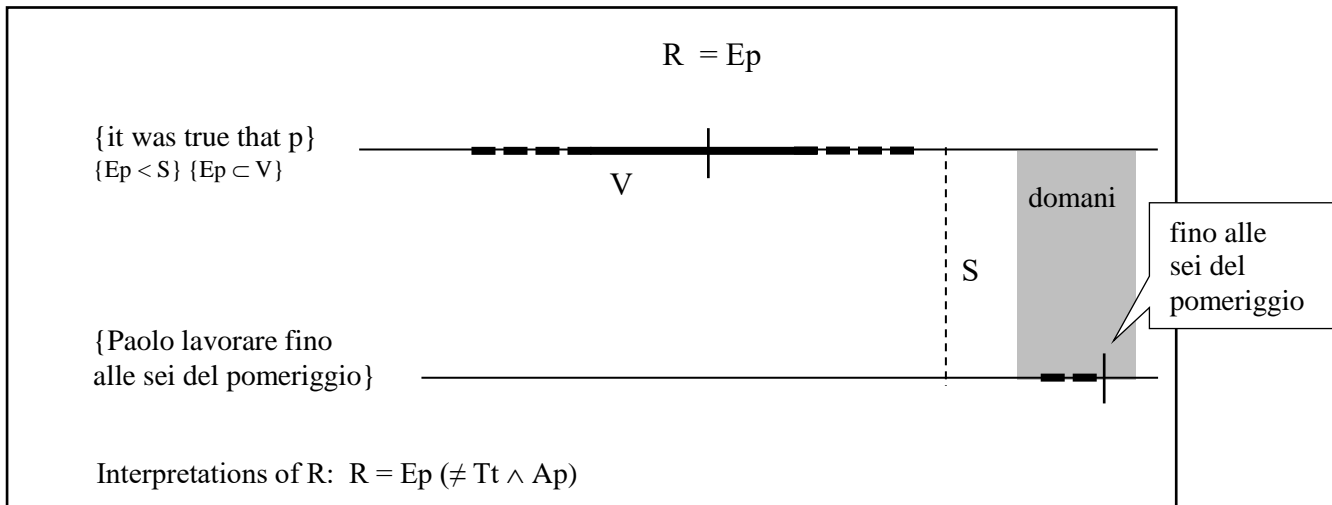


Figure 3. Aspectual and temporal interpretation of V (*it be true that* [p]) and E (*Paolo lavorare fino alle sei del pomeriggio*) in the utterance ‘*Domani Paolo lavorava fino alle sei del pomeriggio*’.

By using the imperfect *lavorava*, the speaker signals that the alternative assertion with the present tense (*lavora*) is beyond what (s)he can vouch for and hence implicates that the validity of p_{lavora} is uncertain: it is not sure whether Paolo is going to work until 6 p.m. This type of context is also well attested for the imperfect Spanish (see Leonetti and Escandell-Vidal 2003) and, to a lesser extent, for the French imperfect (see Patard 2012).

In conclusion, the ‘counterfactual’ interpretation of past tenses can be viewed as two distinct implicatures of scalar origin that are invited in discourse to meet specific communicative aims: to refer to a counterfactual situation or to convey the speaker’s belief that the situation is unlikely. These implicatures are drawn from different informativity scales and obtained in different contexts of markedness. Strong implicature $\neg p$ (or genuine *counterfactuality*) is triggered by imperfects in contexts where a bounded past is expected (the so-called ‘imperfective paradox’). As for implicature $\neg \pi p$ (or *unlikelihood*), it is derived from the weak implicature p or $\neg p$ that is itself triggered by imperfects or preterits in contexts where a present tense is expected. In those contexts, tense (and aspect) may be ‘fake’ because of the proposition-external scope of the past tense.

In the next section, I will substantiate the proposed analysis by examining data concerning the French and Latin imperfect. I will further suggest a historical scenario whereby the conventionalization of the ‘counterfactual’ implicatures has led to the aspectuo-temporal bleaching of French imperfect in certain constructions, thus expanding the extent of fake tense and aspect to $\neg p$ contexts.

5. Conventionalization of implicatures

I shall now attempt to show that ‘counterfactual’ implicatures attached to the French imperfect (henceforth *imparfait*) has conventionalized at the expense of its aspectuo-temporal meaning (thus extending fake tense and aspect to $\neg p$ contexts). This semantic evolution can be accounted for by means of a diachronic model *à la* Heine.

5.1 Diachronic model

Adopting a diachronic model inspired by Heine’s model for semantic change (Heine 2002), I hold that the semantic evolution of a grammatical item from one meaning to another is marked by two types of intermediate stages or contexts: *bridging contexts* and *switch contexts*. As Heine further assumes, I regard these contexts as traces of past semantic evolution(s) that may still be observed in synchrony, where they correspond to different uses of the same linguistic form.

The first intermediate stage (stage 2) is that of *bridging contexts*. It corresponds to contexts where the conventional meaning of the grammatical item carries an inference which is invited by the speaker, i.e., which constitutes the very meaning the speaker wishes to convey with the grammatical item. Such contexts are characterized by semantic ambivalence in as far as the grammatical item is associated with two contiguous meanings: (i) the source meaning encoded by the linguistic form and (ii) the target meaning derived by means of inferencing. This step is a necessary condition for the subsequent semantic change. For the *imparfait*, bridging contexts corresponds to contexts where pastness and imperfectivity allow for ‘counterfactual’ inferences ($\neg p$ and $\neg \pi p$), so that the *imparfait* is contextually associated to ‘counterfactuality’.

A more advanced stage (stage 3), and arguably the crucial step in semantic change, is that of *switch contexts*. It corresponds to contexts where (some aspects of) the source meaning (have/) has been backgrounded and consequently become inconsistent with the interpretation of the utterance. As a result, the inferred target meaning is the only meaning that remains focused in the interpretation. For the *imparfait*, switch contexts correspond to new contexts where pastness and imperfectivity have become partially or totally inconsistent: ‘counterfactuality’ has prevailed over tense and aspect. In other terms, tense and/or aspect are becoming fake since they are no longer interpreted.

Finally, the conventionalization of the target meaning is completed and the semantic change fully achieved in contexts where the source meaning is not interpreted anymore (stage 4). This reflects the fact that the target meaning is now considered to be the meaning encoded by the construction in the competence of the speakers. This corresponds, for the *imparfait*, to new contexts where the past and imperfective interpretation is not attainable anymore; ‘counterfactuality’ has become the very meaning of the construction. The different stages hypothesized are diagrammed in figure 4.

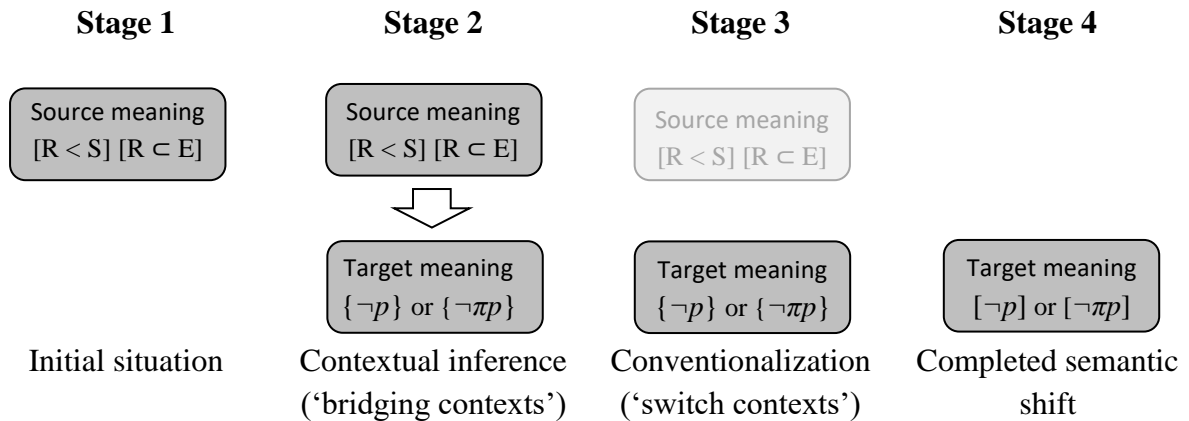


Figure 4. From past and imperfectivity to ‘counterfactuality’

The following sections examine two ‘counterfactual’ constructions based on the French *imparfait*: the so-called ‘counterfactual’ use of the *imparfait* (also known as the use of ‘thwarted imminence’) and the conditional use in hypotheticals. The aim is (i) to assess in Modern French at which stage of conventionalization ‘counterfactuality’ stands in these constructions and (ii) explore the diachronic evolutions that may account for the situation in synchrony.

5.2 Counterfactual use of the *imparfait*

5.2.1 Modern French

In Modern French, the *imparfait* in its counterfactual use is usually semantically ambivalent: the past imperfective meaning (source meaning) and implicature $\neg p$ (target meaning) are contiguous in the interpretation. Let us consider again example (27) given under (33).

- (33) Fre *Une seconde de plus il [le taureau] l'éventrait*_{IPFV.PST}.
‘One more second and the bull **would have gored** him.’

(G. Flaubert, *Un cœur simple*)

Here, the counterfactual situation denoted by *éventrait* (litt. ‘was going’) can be interpreted as ongoing at a past reference time. As the *imparfait* is the only past marker in the utterance, one can conclude that the aspecto-temporal reading is by default still available (alongside $\neg p$). So, by default, the counterfactual use of the *imparfait* corresponds to bridging contexts where the source meaning and the implicature are conjoined.

However, when other contextual indicators exclude it, the past imperfective meaning is no longer possible, though the utterance is still acceptable with a counterfactual reading. (34) gives an illustration with a futurate reading (the speaker is referring to a future travel that could have taken place but will not):

- (34) Fre - *Seul ou avec Nadine, ça ne fait pas beaucoup de différence, dit-il avec mauvaise foi : puisque tu n'es pas jalouse d'elle. Ça fait toute la différence du monde ! dit-elle d'une voix bouleversée. Seul, j'étais*_{IPFV.PST} *avec toi, nous restions*_{IPFV.PST} *ensemble. Le premier voyage d'après-guerre : tu*

n'as pas le droit de le faire avec une autre.

‘Alone, I **would have been** with you, we **would have remained** together’.

(S. de Beauvoir, *Les Mandarins in Bres* 2009)

Similarly, (35) is an example with a perfective and counterfactual reading (perfectivity is marked by the durative adjunct *en même pas deux heures* ‘in less than two hours’):

(35) Fre A father to his son who has just ridden up Mount Ventoux:

– *Plus entraîné, tu le montais*_{IPFV.PST} [Mount Ventoux] *en même pas deux heures.*

‘Better trained, you **would have climbed** it (Mount Ventoux) in less than two hours.’

(conversation *in Bres* 2009)

In such contexts, pastness and imperfectivity are clearly ruled out or, put differently, tense and aspect have become fake. This points toward a more advanced conventionalization of the implicature whereby counterfactuality has prevailed over tense and aspect. Yet the conventionalization of $\neg p$ is not fully completed in the construction in as far as the past and imperfective import of the *imperfect* still contributes to the default reading of the construction as in (33). To sum up, the semantic shift has attained the stage of switch contexts (with fake tense and/or aspect), but not the ultimate stage where counterfactuality has replaced past and imperfectivity in the competence of the speakers. Let us now explore the diachrony of this counterfactual construction.

5.2.2 Diachrony

The use of the *imparfait* in counterfactuals is first attested in Old French in the apodosis of conditionals (Patard and De Mulder 2014: 36):

(36) OldFre *Mes ne poeie*_{IPFV.PST} *a vos venir* / *Ne fors de mun país esseir* / *Se vos ne m'eussiez requis*_{SBJ.PQP}.

‘I **would not have been able to** (lit. **could not**) come to you, or even leave my country, if you **had not requested** me.’

(M. de France, XIIth century)

However counterfactuality is not triggered here as a scalar implicature generated by the ‘imperfective paradox’. The predicate *poeir venir* is not telic: it describes an ability to come that may be analyzed as a stative predicate since ability can be seen as a homogenous quality that does not change over time. Moreover, a perfective past like the *passé simple* is possible in the same type of contexts with the same $\neg p$ interpretation (37):

(37) OldFre *Se vos fuissiés*_{SBJ.IMP} *de tel aage* / *Qu'estoit li rois, ainc ne vi*_{IPFV.PST} *rien* / *Qui autre resamblast si bien.*

‘If you had been the same age as was the king, I **would have** never **seen** (lit. never **saw**) anyone who looked like him so well’

(*Guillaume de Palerne*, XIIIth century *in Wagner* 1939: 252)

In fact, the motivation of past tenses (whether imperfective or perfective) in such counterfactual contexts is not modal but purely deictic: the past tense is used to anchor the

situation in the past.¹³ The $\neg p$ interpretation arises as a non-scalar implicature derived from contextual expressions and world knowledge about time that is asymmetrical. In (36) and (37), the $\neg p$ interpretation results from the combination of the hypothetical meaning conveyed by the subjunctive pluperfect/imperfect in the protasis (*eussiez requis* in (36) and *fuissiez* in (37)) and the past meaning of imperfect in the apodosis. Indeed, because of our practical experience of time, past is associated in our knowledge to the certain and known (and future to the possible and unknown). As a consequence, when a speaker makes a hypothesis about what happened in the past (which is normally known and certain), (s)he then implicates $\neg p$: the past hypothetical situation was not the case. Thence, the past tenses *poëie* and *vi* in (36) and (37) do indirectly contribute to counterfactuality, but not via scalar reasoning: they localize in the past a hypothetical situation, which is then implicated to be contrary-to-fact (because past is normally known and certain). These contexts may reflect the incipient semantic move of bridging contexts since tense, aspect and counterfactuality are contiguous in the interpretation.

Note that, in Old French, this type of use may have been favoured because of the parallel evolution of subjunctive expressions. Indeed, the subjunctive form inherited from Latin to convey past counterfactuality in conditionals, namely the subjunctive imperfect (e.g. *fussiez* in (37)), has become temporally ambiguous in Old French: it could refer to a past counterfactual situation or to a non-past hypothetical situation (cf. Wagner 1939: 295, Yvon 1958: 166-167).¹⁴ Given this fact, past indicative forms could have been attracted to the apodosis of past counterfactual conditionals to compensate for the temporal ambiguity of the subjunctive imperfect. It is also possible that past tenses were expressively exploited to emphasize the realization of the situation if the conditions described in the protasis have been met, as opposed to subjunctive forms that rather underlined the unreality of the situation (Wagner 1939).

The scalar use of the *imparfait* to convey $\neg p$ in the apodosis of past counterfactual conditionals is only documented from Middle French. Here is an example from the XVth century:

- (38) MidFre [...] *et si le duc eust marché*_{SBJ.PLU} *cent pas, ils passoient*_{IPFV.PST} *oultre la rivière du Thesin.*
 ‘and if the Duke **had walked** a hundred steps, he **would have crossed** (lit. **was crossing**)
 the river Thesin.’

(P. de Commynes, *Mémoires*, XVth century)

This type of contexts is marked for it exhibits an ‘imperfective paradox’: the *imparfait* bears on a telic predicate (*passer oultre la rivière Thesin* ‘cross the river Thesin’). It then signals that a bounded past would be too informative and therefore implicates $\neg p_{\text{bounded past}}$: that the situation did not occur. In the diachronic model proposed, this type of context should also be viewed as bridging contexts (like the aforementioned Old French contexts), since the aspect-

¹³ These deictic uses of past tenses in counterfactual contexts are attested in both Romance and Germanic languages (Patard 2014: 90). Here is an authentic example from English with a preterit: *There was plenty of rumors about Angel floating around school, and if only half of them were true I was dead meat.* (M. Roeder, *Outfield menace*).

¹⁴ This is the case of its perfect equivalent, the subjunctive pluperfect, which, until the second half of the 13th century, mostly conveyed anteriority and not past reference (e.g. *eussiez requis* in (36)).

temporal meaning of the imperfect and implicature $\neg p$ are conjoined in the interpretation. Nevertheless, one may consider that they represent a further step towards semantic change because the *imparfait* does directly express counterfactuality (through scalar reasoning), which was not the case in the Old French contexts. Furthermore, the perfective *passé simple* is not attested in such contexts (contrary to the Old French contexts), thus confirming predictions made in section 4.2.

My hypothesis is that the source construction of the Modern counterfactual use of the *imparfait* is constituted by past conditionals such as (38) that exhibit ‘imperfective paradox’. Indeed, the two constructions show common properties: syntactically the structure is bipartite with a protasis and an apodosis [p, q],¹⁵ the *imparfait* is used in the apodosis and it conveys counterfactuality. As for the constructional differences, they can be accounted for in terms of conventionalization of implicature $\neg p$ (at the expense of pastness and imperfectivity, see previous section) and loosening of the [si p, q] construction inherited from Latin (*si*-clauses are no longer mandatory).

The *imparfait* may first be attracted to the apodosis of past conditionals because of the counterfactual implicature it could trigger (see (38)). This attraction probably becomes stronger from the XVIIth century, when the subjunctive pluperfect, which had at that time replaced the ambiguous subjunctive imperfect to express counterfactuality, also starts declining.¹⁶ Note that the unmarked form for counterfactuality in Modern French, namely the *conditionnel passé*,¹⁷ starts expanding in past conditionals in place of the subjunctive pluperfect at this very period (Patard *et al.* 2015). It is plausible that, as a result, the more frequent use of the *imparfait* in past conditionals has entailed the constructionalization (Traugott and Trousdale 2013) of a new counterfactual construction of the form [p, *imparfait*] in which counterfactuality has prevailed over tense and aspect. Fake tense and aspect in this context are consequently the corollary of the conventionalization of $\neg p$ as the meaning of the new construction.

5.3 Conditional use of the *imparfait*

5.3.1 Modern French

When used in conditionals [si p, q] of the form [si *imparfait*, *conditionnel*], the *imparfait* is always fake: the interpretation is invariably non-past (because $R \neq Tt$) and may be perfective as well (because $R \neq Ap$):

¹⁵ See Berthonneau and Kleiber (2003, 2006), and Bres (2006, 2009) for a detailed analysis of the counterfactual construction in Modern French, notably the bipartite structure [p, (et) q] and the linguistic features of the initial element p.

¹⁶ Note that French *a priori* seems to confirm Iatridou’s (2009) prediction that a language that possesses a past tense and a non-past subjunctive (but no past subjunctive) uses the past tense to express counterfactuality. However, the past tense is not the unmarked form for counterfactuality in French, it is the *conditionnel passé*. It is the latter form that has gradually replaced the subjunctive pluperfect in past and counterfactual conditionals (Patard *et al.* 2015).

¹⁷ The use of a *conditionnel passé* in place of an *imparfait* in the counterfactual use can be considered as the standard configuration (ex. *Un seconde de plus et le taureau l’aurait éventré.* ‘One more second and the bull would have gored him.’).

- (39) Fre *Si Jean terminait_{IPFV.PST} sa thèse, il hériterait de la fortune de son oncle.*
'If Jean **finished** his PhD, he would inherit the fortune of his uncle.'
(Vet, personal communication)

This suggests that the *imparfait* has a proposition-external scope in the construction (or R = Ep), just as in marked indirect speech contexts evoked in section 3.3. The *imparfait* does not bear on the situation but on p's validity (V) or, put differently, the epistemic validity of the proposition is not asserted in the present but in the past. This is confirmed by the possibility to make V explicit by means of the expression *c'est vrai que* 'it was true that':

- (40) Fre *Si Pierre était_{IPFV.PST} riche / Si C'ETAIT_{IPFV.PST} VRAI QUE Pierre est riche, il achèterait une voiture.*
'If Pierre **was** rich / If IT WAS TRUE THAT Pierre is rich, he would buy a car'.
(Gosselin 1999: 38)

The paraphrase of example (40) shows that the *imparfait* does not scope over the predicate *être riche*, which is in the present tense, but on *c'est vrai que* which is in the *imparfait*. Thus the *imparfait* does not apply to the situation but to its epistemic evaluation, it thence signals that the speaker does not vouch for p's validity in the present but rejects it in the past.

As maintained in section 4.3., such scalar use of a fake past tense in lieu of a present tense, which is tantamount to the speaker's non-commitment to p's validity, can trigger implicature $\neg\pi p$: the speaker implicates that (s)he is not certain about the situation's validity which is therefore viewed as unlikely. In Modern French, implicature $\neg\pi p$ appears to be fully conventionalized in [*si imparfait, conditionnel*], i.e. has clearly become the very meaning of the construction. Indeed, as noticed earlier, the past reading with the reference to some previous speech or thought is usually not possible and the only interpreted meaning is the unlikelihood of the situation. This signifies that the aspectuo-temporal source meaning has been supplanted by the target 'counterfactual' implicature (stage 4).

The past reference displayed by utterance manipulations as in (40) is only an abstract remnant of the source meaning and does not normally receive any specific interpretation (anymore). Incidentally, past reference may be impossible and the use of *c'est vrai que* reveal hardly acceptable¹⁸, for instance in 'counterfactuals' à la Lewis:

- (41) Fre *Si les kangourous n'avaient_{IPFV.PST} pas de queue / Si *C'ETAIT VRAI_{IPFV.PST} que les kangourous n'ont pas de queue, ils tomberaient à la renverse.*
'If kangaroos **had** no tail/ if *IT WAS TRUE THAT kangaroos have no tail, they would topple over.'

This impossibility further confirms the bleaching of tense and aspect and the conventionalization of 'counterfactuality' in construction [*si imparfait, conditionnel*].

¹⁸ In short, the use of *c'est vrai que* proves unacceptable because it contradicts our world knowledge about kangaroos. *C'est vrai que* signals that p's validity was endorsed in the past, i.e. there was a past moment when kangaroos had no tail, which one knows to be never the case (for having a tail is a definitional feature of kangaroos).

Note, however, that there may still be some overt past reference in hybrid contexts mixing conditional morphosyntax and indirect speech. In such contexts, the protasis reports some anterior speech by means of the *imparfait*¹⁹.

- (42) Fre *Si, d'ailleurs, la valeur actuelle du couple franc-mark **était**_{IPFV.PST} si avantageuse pour l'Allemagne et si nuisible pour la France, nous devrions être très déficitaires dans nos échanges avec notre puissant voisin, or nous sommes largement excédentaires.}*
 ‘Besides, if the current franc/mark exchange rate **was** so advantageous for Germany and so harmful for France, we should be in a serious deficit position in trading with our powerful neighbor, and yet we have a large surplus.’

(*Le Monde* quoted by Bres 2005)

In (42), the *imparfait était* (as well as the comparative adverb *si* which presupposes a previous speech *si nuisible (qu'on le dit/l'a dit)* ‘so harmful (as one says/has said)’) refers to some anterior speech in which p is endorsed by another speaker (R = Ep). The non-commitment of the actual speaker in p’s validity implicates that (s)he is doubting the reality of the situation against which (s)he is indeed arguing in (42). Thus, the aspectuo-temporal source meaning coexists with the target implicature it carries, which reflects stage 2 in our diachronic model. I hypothesized in a previous paper (Patard 2014: 92) that this type of hybrid context served as a ‘point of penetration’ (Givón, 1994: 318) for the extension of past tenses to $\neg\pi p$ contexts. To verify this hypothesis, I shall now examine the origin of the conditional construction in Latin.

5.3.2 Diachrony

One can trace the origin of the French construction from the Latin period. Indeed, from Early Latin, the use of indicative pasts in the protasis of ‘counterfactuals’ (including perfects, imperfects and pluperfects) is possible, albeit marked (Ernout and Thomas 1953, Sabanéeva 1996, Haverling 2010, 2013). The past tense generally serves to ground the situation in the past domain and it is said to underline the reality/factuality of the situation while ‘counterfactuality’ is expressed by the subjunctive in the apodosis. Interestingly, the imperfect, in the usually quoted examples, carries specific modal undertones and has an ambivalent scope. Typically, it evokes or presupposes some previous speech or thought which the speaker seems to call into question on the basis of what (s)he knows (one could use *really* in the translation to emphasize the speaker’s attitude)²⁰:

- (43) Lat – *Quid faceret ? – Si **amabat**_{IPFV.PST} rogas quid faceret ? adseueraret dies noctisque, in custodia esset semper.}*
 ‘– What could he do? – You ask what he could do if he (really) **loved** her? – He should have watched over her nights and days, guarded her all the time.’

(Plaute, IIIth century B.C. quoted by Haverling 2010)

The imperfect also shows a double scope:

¹⁹ Similar hybrid contexts for English are reported in the literature, ex. *If you **earned** as much as you claim, you would not go around in that old car* (Dahl 1997: 108).

²⁰ By contrast, with a perfect in the apodosis, the speaker seems to have no clue about the reality of the past situation: *Nemo si haec **praeteriit**, postquam intro abii, cistella hic iaceret* ‘For if no one **passed** by after I went inside, the casquet should be lying here’ (Plaute, IIIth century B.C. quoted by Haverling 2010).

- a proposition-internal scope: it bears on the predicate and thus gives a past ($R = Tt$) and imperfective ($R = Ap$) characterization of the situation (here the master's love for Palestra denoted by *amare*)
- a proposition-external scope: it also applies to p's validity V ($R = Ep$) by situating it in the past or, in other words, the reality's situation is not endorsed by the actual speaker but in a presupposed anterior speech (about the master's love for Palestra).

The corresponding aspecto-temporal interpretation is diagrammed in figure 5.

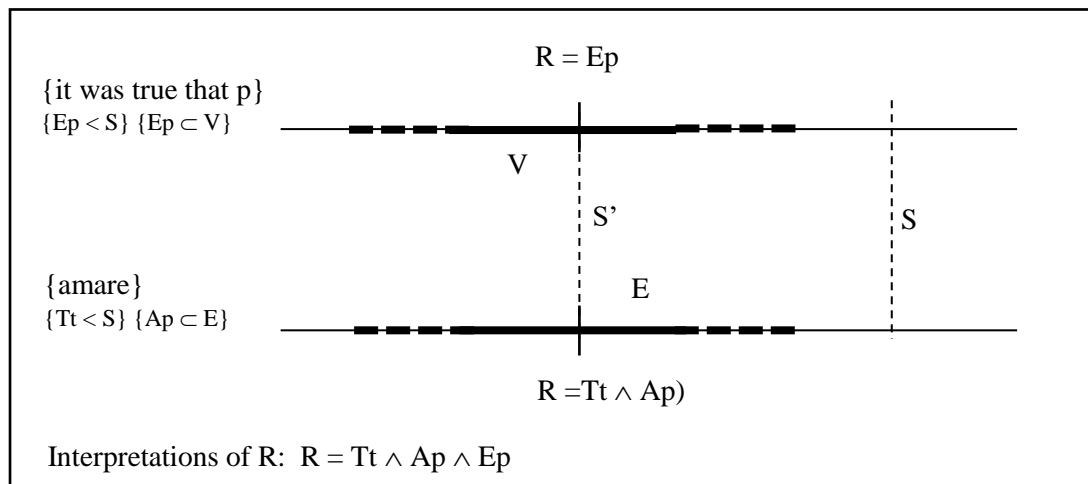


Figure 5. Aspectual and temporal of V (*it be true that* [p]) and E (*amare*) in the utterance ‘*Si amabat, rogas quid faceret ?*’.

The external scope interpretation (over V) triggers implicature $\neg\pi p$: the speaker takes his distance with p's reality and, as a consequence, the situation is interpreted to be unlikely. This reading is confirmed by the apodosis in the subjunctive that describes what the master should have done if he really loved Palestra, namely he should have watched over her night and day, guarded her all the time. As the imperfect carries both the source meaning and the target implicature, these contexts can be viewed as reflecting the second stage of bridging contexts in my diachronic model.

According to Biraud et Mellet (2000), the interpretation licensed in (43) is typical of the Latin imperfect in indirect speech. According to the authors, the imperfect in past indirect speech usually stresses the presence of an anterior speaker while the subjunctive or the infinitive implies that the actual speaker is more committed to the content of the reported speech. Therefore one may think that the imperfect has been attracted to such hypothetical contexts (in comparison with the perfect) to express the fact that the speaker distances herself with the reality of the situation described in the protasis.

Indeed, implicature $\neg\pi p$ (*unlikely*) appears to be conventionalized in the VIth century with the emergence of new contexts with the same surface structure [*si indicative imperfect, subjunctive*] but where the source meaning is no longer available ($R \neq Tt \wedge Ap$). Implicature $\neg\pi p$ is the only interpretation that remains in the foreground. These new contexts

hence correspond to the third stage of switch contexts in my diachronic model. (44) gives an illustration:

- (44) Lat *Melius mihi est mori quam vivere. Si iubebas_{IPFV.PST}, [...] accederemus ad prilium cognuscebas, cui ex nobis sit utelitas an ignavia.*
 ‘[...] If you **commanded** it, we would engage in combat you would see which one is brave, which one is a coward.’
 (*Chronicle of Fredegar*, VIIth century quoted by Sabanéeva, 1996)

The aspecto-temporal interpretation is diagrammed in figure 6.

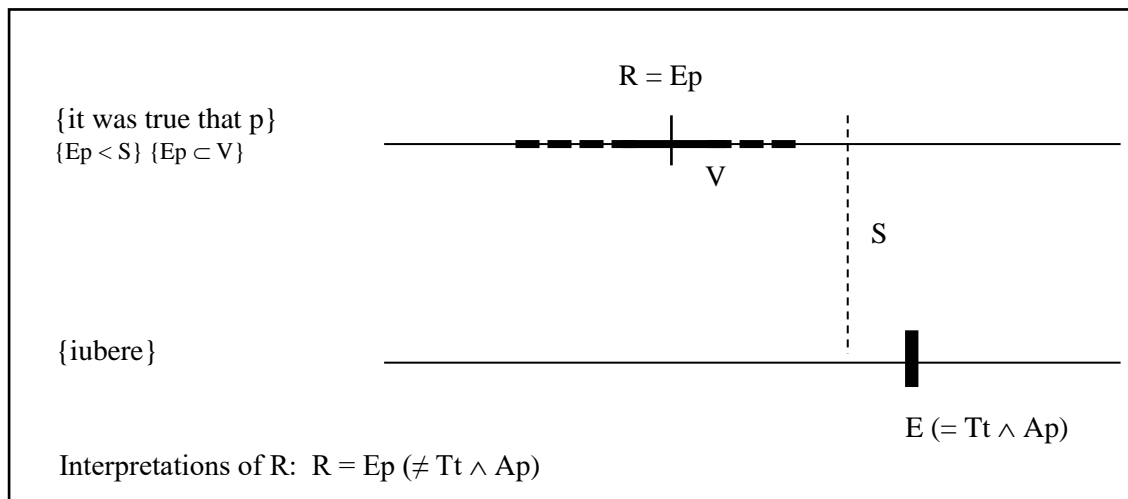


Figure 6. Aspectual and temporal of V (*it be true that [p]*) and E (*iubere*) in the utterance ‘*Si iubebas, accederemus ad prilium*’.

The interpretation of the imperfect is the same as in the Modern French construction: tense and aspect have become fake (the described command received a non-past and perfective interpretation) and the imperfect only signals that the situation is considered unlikely (the speaker doubts that the hearer will command to engage in combat).

This semantic evolution of construction [*si indicative imperfect, subjunctive*] must be connected to the parallel development, in Late Latin, of the subjunctive pluperfect in non-past counterfactuals (Thomas 1938, Sabanéeva 1996). According to Sabanéeva (1996: 144), the use of the imperfect could have been favored in conditionals to express what he calls ‘possibility’ (what I name $\neg\pi p$), i.e. the situation is unlikely but still possible, by opposition to the subjunctive pluperfect which carries strict counterfactuality ($\neg p$). This would explain why the imperfect in the protasis of unlikely conditionals has become unmarked in Old French and eventually become quasi-obligatory by Classical French.

5.3 Summing up the diachronic evolution

The following table maps the examples commented above with the different stages of the imparfait’s evolution from past and imperfectivity to ‘counterfactuality’ hypothesized in our diachronic model (see *supra* figure 4).

Stages		Counterfactual use of the <i>imparfait</i>
1	Initial situation	(36) OldFre <i>Mes ne poeie a vos venir / Ne fors de mun país esseir / Se vus ne m'eussiez requis.</i> (XII th century)
2	Bridging contexts	(38) MidFre[...] <i>et si le duc eust marché cent pas, ils passoient outre la rivière du Thesin.</i> (XV th century) (33) Fre <i>Une seconde de plus il [le taureau] l'éventrait.</i> (Modern French)
3	Switch contexts	(34) Fre - <i>Seul ou avec Nadine, ça ne fait pas beaucoup de différence, dit-il avec mauvaise foi : puisque tu n'es pas jalouse d'elle. Ça fait toute la différence du monde ! dit-elle d'une voix bouleversée. Seul, j'étais avec toi, nous restions ensemble. Le premier voyage d'après-guerre : tu n'as pas le droit de le faire avec une autre.</i> (Modern French) (35) Fre A father to his son who has just ridden up Mount Ventoux: – <i>Plus entraîné, tu le montais_{IPFV.PST} [Mount Ventoux] en même pas deux heures.</i> (Modern French)
Stages		Conditional use of the <i>imparfait</i>
2	Bridging contexts	(43) Lat – <i>Quid faceret ? – Si amabat, rogas quid faceret ? adseueraret dies nocteisque, in custodia esset semper.</i> (III th century) (42) Fre <i>Si, d'ailleurs, la valeur actuelle du couple franc-mark était si avantageuse pour l'Allemagne et si nuisible pour la France, nous devrions être très déficitaires dans nos échanges avec notre puissant voisin, or nous sommes largement excédentaires.</i> (Modern French)
3	Switch contexts	(44) Lat <i>Melius mihi est mori quam vivere. Si iubebas, [...] accederemus ad prilium cognuscebas, cui ex nobis sit utelitas an ignavia.</i> (VII th century)
4	Completed semantic shift	(39) Fre <i>Si Jean terminait sa thèse, il hériterait de la fortune de son oncle.</i> (Modern French) (40) Fre <i>Si Pierre était riche, il achèterait une voiture.</i> (Modern French) (41) Fre <i>Si les kangourous n'avaient pas de queue, ils tomberaient à la renverse.</i> (Modern French)

6. Conclusion

The aim of the paper is to offer a functional account of fake tense and ‘counterfactuality’ that is informed by diachronic reflection based on French and Latin data. In my proposal, ‘counterfactuality’ corresponds to two implicatures ($\neg p$ and $\neg \pi p$) of scalar origin. These are locally derived in discourse by the marked use of an imperfect or a non-perfective past respectively, in lieu of an unmarked bounded past or a present tense. As for fake tense and aspect, it is originally a possible manifestation of the past tense’s proposition external scope that is constitutive of the marked contexts allowing for implicature $\neg \pi p$ (*unlikelihood*). Fake tense and aspect then becomes systematic due to the semantic bleaching of the past tense that parallels the conventionalization of $\neg \pi p$. In the case of $\neg p$, fake tense and aspect is exclusively the result of the conventionalization of the implicature at the expense of the aspectuo-temporal source meaning of the past tense. The diachronic study of French and Latin data further suggests that the increase of the marked contexts enabling the semantic change is not random but results from parallel macro-structural changes, namely the bleaching and

decline of subjunctive forms that have created an expressive need for forms conveying ‘counterfactuality’.

References

- Abusch, Dorit. 1994. Sequence of tense revisited: Two semantic account of tense in intensional contexts. In H. Kamp (ed.), *Ellipsis, tense and questions*, DYANA deliverable R.2.2.B, University of Amsterdam, 87-139.
- Anderson, Alan R. 1951. A note on subjunctive and counterfactual conditionals, *Analysis* 12: 35-38.
- Arregui, Ana C. 2005. *On the Accessibility of Possible Worlds: The Role of Tense and Aspect*. Doctoral dissertation, University of Massachusetts: Amherst, USA.
- Arregui, Ana C. 2007. When aspect matters: the case of “would” conditionals. *Natural Language Semantics* 15: 221-264.
- Arregui, Ana C. 2009. On similarity in counterfactuals, *Linguistics and Philosophy* 32(3): 245-278.
- Heine, Bernd. 2002. On the Role of Contexts in Grammaticalization. In Wischer, I. and Diewald, G. (eds), *New reflections on grammaticalization*, Amsterdam: John Benjamins, 83-101.
- Berthonneau, Anne-Marie and Kleiber, Georges. 2003. Un imparfait de plus ... et le train déraillait, *Cahiers Chronos* 11: 1-24.
- Berthonneau, Anne-Marie and Kleiber, Georges. 2006. Sur l'imparfait contrefactuel, *Travaux de Linguistique* 53(2): 7-65.
- Biraud, Michèle and Mellet, Sylvie. 2000. Les faits d'hétérogénéité énonciative dans les textes grecs et latins de l'Antiquité, *Cahiers Chronos* 5: 9-48.
- Boogart, R. 2007. The past and perfect of epistemic modals. In L. de Saussure, J. Moeschler and G. Puskas (eds), *Recent advances in the syntax and semantics of tense, aspect and modality*, Berlin and New York: Mouton de Gruyter, 47-69.
- Boogaart, Ronny and Trnavac, Radoslava. 2011. Imperfective aspect and epistemic modality. In Patard, A. and Brisard, F. (eds), *Cognitive Approaches to Tense, Aspect, and Epistemic Modality*, Amsterdam: John Benjamins, 217-248.
- Bres, Jacques. 2005. L'imparfait: l'un et/ou le multiple ? À propos des imparfaits narratif et d'hypothèse, *Cahiers Chronos* 14: 1-32.
- Bres, Jacques. 2006. Encore un peu, et l'imparfait était un mode, L'imparfait et la valeur modale de contrefactualité, *Cahiers de Praxématique* 47: 149-176.
- Bres, Jacques. 2009. Sans l'imparfait, les vendanges tardives ne rentraient pas dans la jupe rhénane... Sur l'imparfait contrefactuel, pour avancer, *Syntaxe et sémantique* 10: 33-50.
- Brisard, Frank. 2010. Aspects of virtuality in the meaning of the French imparfait, *Linguistics* 48(2): 487-524.
- Caudal, Patrick. 2011. Towards a novel aspectuo-temporal account of conditionals. *Cahiers Chronos* 22: 179-209.
- Cutrer, L. Michelle. 1994. *Time and tense in narrative and everyday language*. Doctoral Dissertation, University of California: San Diego, USA.

- Dahl, Östen. 1997. The relation between past time reference and counterfactuality: a new look. In Athanasiadou, A. and Dirven, R. (eds), *On conditionals again*, Amsterdam: John Benjamins, 97-114.
- De Mulder, Walter and Brisard, Frank. 2006. L'imparfait marqueur de réalité virtuelle, *Cahiers de Praxématique* 47: 97-124.
- Dessi Schmid, Sarah 2010. 'Modal uses' of the Italian imperfetto and the Spanish imperfecto: a comparison. In M. G. Becker and E.-M. Remberger (eds), *Modality and Mood in Romance*, Berlin: De Gruyter, 39-66.
- De Wit, Astrid and Patard Adeline. 2013. Modality, aspect and the progressive: The semantics of the present progressive in French in comparison with English, *Languages in contrast* 13(1): 113-132.
- Dowty, David R. 1979. *Word meaning and Montague Grammar: The semantics of verbs and times in Generative Semantics and Montague's PTQ*, Kluwer: Dordrecht.
- Dudman, V. H. 1983. Tense and time in English verb clusters of the primary pattern, *Australian Journal of Linguistics* 3: 25-44.
- Dudman, Victor H. 1984. Conditional interpretations of if-sentences, *Australian Journal of Linguistics* 4: 143-204.
- Ernout, Alfred and Thomas, François. 1953. *Syntaxe latine*, Paris: Klincksieck.
- Ferraro, Marta I. and Ortiz Lopez, Jorge Fernando, 2002. La temporalidad verbal en español. In *Proceedings of the 2. Congreso Brasileño de Hispanistas*, San Pablo, São Paulo. Available from: http://www.proceedings.scielo.br/scielo.php?script=sci_arttext&pid=MSC0000000012002000100038&lng=en&nrm=iso.
- Fleischman, Suzanne. 1989. Temporal distance: A basic linguistic metaphor, *Studies in Language* 13: 1-50.
- Fleischman, Suzanne. 1995. Imperfective and irrealis. In J. Bybee and S. Fleischman (eds), *Modality in grammar and discourse*, Amsterdam/Philadelphia: John Benjamins, 519-551.
- Givón, Talmy. 1994. Irrealis and the subjunctive, *Studies in Language* 18, 265-337.
- Gosselin, Laurent. 1996. *Sémantique de la temporalité en français*, Louvain-la-Neuve: Duculot.
- Gosselin, Laurent. 1999. Les valeurs de l'imparfait et du conditionnel dans les systèmes hypothétiques, *Cahiers Chronos* 4: 29-51.
- Gosselin, Laurent. 2010. *Les modalités en français: la validation des représentations*, Amsterdam: Rodopi.
- Grice, H. Paul. 1975. Logic and conversation. In P. Cole, and J. L. Morgan (eds), *Syntax and Semantics III: Speech Acts*, Academic Press: New York, 41-58.
- Haverling, Gerd V. 2010. On tense, viewpoint and modality from Early to Late Latin. In P. Anreiter and M. Kienpointner (eds), *Latin linguistics today. Akten des 15. Internationalen Kolloquiums zur lateinischen Linguistik*, Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck, 143-158.
- Haverling, Gerd V. 2013. On tense and mood in conditional clauses from Early to Late Latin. In F. Josephson and I. Söhrman (eds), *Diachronic and Typological Perspectives on Verbs*, Amsterdam: John Benjamins, 13-56.

- Hogeweg, Lotte. 2009. What's so unreal about the past: past tense and counterfactuals. In Tsangalidis, A. and Facchinetti, R. (eds), *Studies on English Modality in honour of Frank R. Palmer*, Bern: Peter Lang, 181-208.
- Horn, Larry. 1984. Towards a new taxonomy for pragmatic inference: Q-based and R-based implicature. In D. Schiffrin (ed.), *Meaning, form, and use in context*, Washington, DC: Georgetown University Press, 11-42.
- Horn, Larry. 1989. *A Natural History of Negation*, Chicago: the University Press of Chicago.
- Horn, Larry. 2004. Implicature. In L. R. Horn and G. Ward (eds), *The Handbook of Pragmatics*, Blackwell Publishing: Malden, 2-28.
- Iatridou, Sabine. 2000. The Grammatical Ingredients of Counterfactuality, *Linguistic inquiry* (31), 231-270.
- Ippolito, Michela. 2004. Imperfect Modality. In J. Guéron and J. Lecarme (eds), *The Syntax of Time*, Cambridge: MIT Press, 359-387.
- Ippolito, Michela. 2013. *Subjunctive Conditionals*, Cambridge: MIT Press.
- James, Deborah. 1982. Past tense and the hypothetical. A cross-linguistic study, *Studies in Language* (6), 375-403.
- Karawani, Hadil. 2014. *The Real, the Fake, and the Fake Fake in Counterfactual Conditionals, Crosslinguistically*, Doctoral dissertation, Universiteit Amsterdam: Amsterdam.
- Langacker, Ronald W. 1978. The form and the meaning of the English auxiliaries, *Language* 54: 853-882.
- Langacker, Ronald W. 1991. The Auxiliary: Grounding. In *Foundations of Cognitive Grammar* (vol. 2), Stanford: Stanford University Press, 240-281.
- Leonetti, Manuel, Escandell-Vidal, Victoria. 2003. On the Quotative readings of Spanish Imperfecto, *Cuadernos de Lingüística* Vol. X: 135-154.
- Lyons, John. 1977. *Semantics*, Cambridge: Cambridge University Press.
- MacFarlane John. 2011. Epistemic Modals are Assessment-Sensitive. In A. Egand and B. Weatherson (eds), *Epistemic Modality*, Oxford: Oxford University Press, 144-178.
- Martin, Fabienne. 2015. The imperfective in subjunctive conditionals: fake or real aspect? In T. Brochhagen, F. Roelofsen and N. Theiler (Eds.), *Proceedings of the 20th Amsterdam Colloquium*, Amsterdam: Universiteit Amsterdam, 266-275.
- Martin, Fabienne. forthcoming. The fake imperfective aspect in subjunctive conditionals is real', *Proceedings of NELS 46*.
- Martin, Robert. 1991. Types de procès et systèmes hypothétiques ; de l'aspect 'de re' à l'aspect 'de dicto', *Travaux de linguistique et de philologie* (22): 87-95.
- Martínez-Atienza, María. 2012. Formas verbales en contraste en italiano y en español: similitudes, diferencias y explicación, *Revista Electrónica de Lingüística Aplicada* 11: 69-86.
- Mellet, Sylvie. 1988. *L'imparfait de l'indicatif en latin classique. Temps, aspect, modalité*, Leuven: Peeters.
- Ogihara, Toshiyuki. 1989. *Temporal reference in English and Japanese*, Doctoral Dissertation, University of Texas: Austin.
- Ogihara, Toshiyuki. 2013. Counterfactual conditionals and focus. *English Linguistics* 30: 509-539.

- Palmer, Frank. 1986. *Mood and Modality*, Cambridge: Cambridge University Press.
- Patard, Adeline. 2007. *L'un et le multiple. L'imparfait de l'indicatif en français: valeur en langue et usages en discours*, Doctoral dissertation. Université Paul-Valéry: Montpellier, France.
- Patard, Adeline. 2011. The epistemic uses of the English simple past and French imparfait. In Patard, A. and Brisard, F. (Eds.), *Cognitive Approaches to Tense, Aspect, and Epistemic Modality*. Amsterdam: John Benjamins, pp. 279-310.
- Patard, Adeline. 2012. Aspect, dialogisme et modalité. Théorie et analyse de quatre langues européennes. In J. Bres, A. Nowakowska, J.-M. Sarale and S. Sarrazin (Eds.), *Dialogisme : langue, discours*, Berlin: Peter Lang, 77-92.
- Patard, Adeline. 2014. When tense and aspect conveys modality: reflections on the modal uses of past tenses in Romance and Germanic languages. *Journal of Pragmatics* (71): 69-97.
- Patard, Adeline and De Mulder, Walter. 2014. Aux origines des emplois modaux de l'imparfait: Le cas de l'emploi hypothétique et de l'emploi contrefactuel. *Langages* (193): 33-47.
- Patard, Adeline, Natalia Grabar and Walter De Mulder. 2015. Etude diachronique du conditionnel passé ou l'origine de la contrefactualité. *Journal of French Language Studies* 25(2): 189-211.
- Patard, Adeline and Richard, Arnaud. 2011. Attenuation in French simple tenses. *Cahiers Chronos* (22): 179-209.
- Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. New York: Free Press.
- Romero, Maribel. 2014. Fake tense in counterfactuals: A temporal remoteness approach. In L. Crnič and U. Sauerland (Eds.), *The Art and Craft of Semantics: A Festschrift for Irene Heim*, volume 2, MITWPL 71: 47-63.
- Sabanéeva, Margarita, 1996. *Essai sur l'évolution du subjonctif latin*. Louvain: Peeters.
- Schulz, Katrin. 2014. Fake tense in conditional sentences: a modal approach. *Natural Language Semantics* 22:117-144.
- Smith, Carlota. 1991/1997. *The Parameter of Aspect*, Dordrecht: Kluwer.
- Stalnaker, Robert. 1975. Indicative conditionals. In Kasher, A. (Ed.), *Language in Focus: Foundations Methods and Systems*, Reidel: Dordrecht, 179-196.
- Steele, Susan. 1975. Past and irrealis: just what does it all mean?. *International journal of American linguistics* 41(3): 200-217.
- Tedeschi, Philip J. 1981. Some evidence for a branching-futures semantic model. In Tedeschi, Z., and Zaenen, A. (Eds.), *Tense and Aspect* (Volume 14 of *Syntax and Semantics*). Academic Press: New York, 239-270.
- Thomas, François. 1938. *Recherches sur le subjonctif latin. Histoire et valeur des formes*, Paris: Klincksieck.
- Tomasello, Michael. 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*, Cambridge: Harvard University Press.
- Traugott, Elizabeth Closs, Trousdale Graeme. 2013. *Constructionalization and constructional changes*, Oxford: Oxford University Press.

- Van linden, An and Verstraete, Jean-Christophe. 2008. The nature and origins of counterfactuality in simple clauses. Cross-linguistic evidence. *Journal of Pragmatics* 40: 1865-1895.
- Verstraete, Jean-Christophe. 2006. The nature of irrealty in the past domain: evidence from past intentional constructions in Australian languages. *Australian Journal of Linguistics* 26(1): 59-79.
- von Fintel, Kai. 1998. The presupposition of subjunctive conditionals. In U. Sauerland and O. Percus (Eds.), *The Interpretive Tract* (vol. 25 of *MIT Working Papers in Linguistics*), MIT: Cambridge, pp. 29-44.
- Wagner, Robert-Léon. 1939. *Les phrases hypothétiques commençant par « si » dans la langue française, des origines à la fin du XVIe siècle*. Paris: Droz.
- Yvon, Henri. 1958. Supposition, subjonctif et conditionnel. *Le Français Moderne* 26(3):161-183.
- Ziegeler, Debra. 2000. *Hypothetical Modality. Grammaticalisation in an L2 Dialect*. Amsterdam/Philadelphia: John Benjamins.
- Ziegeler, Debra. 2003. The Development of Counterfactual Implicatures in English: A Case of Metonymy or M-Inference? In: Panther, K.-U. / Thornburg, L. L. (Eds.), *Metonymy and Pragmatic Inferencing*. Amsterdam: Netherlands: Benjamins, 169-203.