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LOTTE HOGEWEG, RADBOUD UNIVERSITY NIJMEGEN

## What's so unreal about the past?<sup>1</sup> Past tense and counterfactuals

### Abstract

Cross-linguistically, counterfactual or hypothetical meanings are expressed using past tense markers. The most common explanation for the relation between the past tense and counterfactual in hypothetical constructions is that the past tense marker has as its basic meaning not 'past tense' but something as 'distant from present reality'. However, more recently it has been argued that the past forms are able to express hypothetical or counterfactual meanings due to the conventionalization of conversational implicatures. In this paper I will argue for a specific path of grammaticalization for counterfactual conditionals. I argue that it is not that marker per se, but the complete construction that is responsible for the counterfactual interpretation. I hypothesize that the counterfactual grammaticalized as a construction from using regular conditionals with past time reference.

### 1. Introduction

Cross-linguistically, counterfactual or hypothetical conditionals are formed using past tense markers. This phenomenon is widely spread among European languages, such as English. In English, counterfactuals are construed with the subjunctive mood (1). What is crucial here however, is that it is the PAST FORM of the subjunctive mood. Furthermore, a tendency can be observed to use the past indicative in counterfactuals as example (2), which I found on the internet, shows.

- (1) If I were Bill Gates, I'd ban iPhones too<sup>2</sup>
- (2) They'd vote for Satan if he was a republican<sup>3</sup>

In the Dutch example (3) (taken from the Corpus of Spoken Dutch) the verbs in the antecedent and the consequent are inflected for past tense, but the sentence refers to the present. In the French example

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<sup>2</sup> Taken from <[http://news.cnet.com/8301-13506\\_3-10187963-17.html](http://news.cnet.com/8301-13506_3-10187963-17.html)>

<sup>3</sup> Taken from <<http://www.rightwingwatch.org/content/theyd-vote-satan-if-he-was-republican>>

(4), the verb in the antecedent is marked for past (imperfect) and the verb in the consequent is in the ‘conditional’ mood, which consists of the infinitive form plus a past imperfective suffix.

- (3) *Als ik jou was zou ik niet te gemene, harde grapjes maken<sup>4</sup>*  
 if I you be-PST would I not too cruel hard jokes make  
 ‘If I were you, I wouldn’t make jokes that are too cruel and harsh’
- (4) *Si j’étais plus vieille, je serais plus contente*  
 if I be-PST more old, I will-be-PST more happy  
 ‘If I were older, I would be happier’ (James 1982: 379)

It is also attested in several unrelated languages, like Tonga (5) and Cree (6) In Tonga both the verb in the antecedent and in the consequent are inflected for past tense. In Cree only the consequent of a present counterfactual bears the suffix *-pan* which indicates past tense and imperfective aspect (James 1982).

- (5) *Kuti naali-kuyanda kwiiya, naatali-kuli*  
 if he-want-PST to-learn, he-be-not-with-PST  
*banyinakulu ino*  
 his-grandmother now  
 ‘If he wanted to learn, he wouldn’t be with his grandmother now’ (James 1982: 380)
- (6) *Kiša: spin iskwe:wit, katamilona:kosi:pan*  
 if he-be-a-woman, he-will-be-good-looking-PST  
 ‘If he were a woman, he would be good-looking’ (James 1982: 380)

The most common explanation for the relation between the past tense and counterfactuals is that the ‘past tense’ marker has as its basic meaning not ‘past tense’ but something like ‘distant from present reality’ (among others Steele 1975, Langacker 1978 and Iatridou 2000). If this is the basic meaning, one expects the marker to be productive both as an indicator of past time reference as well as the counterfactual meaning. However, the constructions in which the marker can have a counterfactual interpretation are restricted and cross-linguistically diverse. Ziegeler (2000) argues that the counterfactual or hypothetical interpretations of past forms are caused by the conventionalization of conversational implicatures. A similar claim is made by Bybee (1995). In this paper I will argue for a specific grammaticalization path of counterfactuals. I will argue that the counterfactual grammaticalized as a construction due to a combination of the basic meaning of the past tense marker and a certain aspect of the meaning of conditionals, namely prediction. In the next section I will start by making explicit what I am referring to with the term *counterfactuals*.

## 2. Counterfactuals

The conditionals that I want to discuss in this article are conditionals with past tense marking that do *not* refer to the past, like (7). The verb in the antecedent and the consequent of (7) are inflected for past tense, but the conditional does not refer to the past.

- (7) If I was a song I’d be Superpop<sup>5</sup>

In the literature there is no consensus on how to call such conditionals. Both semantic and formal criteria are adopted to define one or more classes that have the aforementioned characteristics.

<sup>4</sup> Taken from

<<http://www.koffiebar.nl/phpbb2/viewtopic.php?t=121&sid=af3a8ba07a8421cd7f5946a3049e8e26>>

<sup>5</sup> Taken from <<http://glennw.skynetblogs.be/post/2881919/if-i-was-a-song-id-be-superpop>>

Wierzbicka (1997) for example distinguishes between several types of conditionals on the basis of formal characteristics. Conditionals with *if* with pluperfect in the antecedent and *would* in the consequent are termed *counterfactuals* by Wierzbicka. Conditionals without pluperfect in the antecedent but with *would* in the consequent are called *hypotheticals*. Lewis (1973) on the other hand takes semantic properties as a point of departure to define a set of conditionals under which most of the conditionals of my interest fall. Among this set he calls *counterfactuals* fall shortened hypothetical expressions lacking verb phrases, like *No Hitler, no A-bomb*, but not conditionals with past tense marking that refer to the future, like *if our ground troops entered Laos next year, there would be trouble*. A semantic approach is also taken by Iatridou (2000). She defines *counterfactuals* as the set of grammatical constructions that make reference to situations that are ‘contrary to fact’. Iatridou notes that situations can be contrary to fact if they cannot be helped anymore. This means only constructions that refer to the present or to the past can be counterfactual. Constructions with past tense marking that refer to the future, like (8), are referred to as Future Less Vivid (FLV)<sup>6</sup>. Since FLV’s are future oriented they are not considered to be counterfactual by Iatridou.

(8) *If he took this syrup, he would get better* (Iatridou 2000: 234)

The purpose of this article is to find an explanation for the occurrence of the marker that usually indicates past time reference in conditionals that do not refer to the past. I will therefore include all conditionals with this property. I will still refer to such conditionals as *counterfactuals*

### 3. The reason for the past tense in counterfactuals

The relation between the past tense and counterfactuality has received constant attention during the last decades. Below I will discuss the most influential theories and address the arguments for and against.

#### 3.1 Past tense is not the basic meaning of the ‘past tense’ marker

It is often argued that the basic meaning of the ‘past tense’ marker has to be defined in such a way that it includes both its use to refer to the past time as well as its use to mark something as counterfactual. Based on a historical reconstruction of the connection between the marker of the past and the marker of irrealis in Proto-Uto-Aztecan Steele (1975) argues for a semantic primitive *dissociative* which can be modified by tense, aspect and modality parameters.

This view corresponds to the view of Iatridou (2000). She argues that the meaning of the ‘past tense’ marker is the exclusion function in (9).

(9)  $T(x)$  excludes  $C(x)$  (Iatridou 2000: 246)

$T(x)$  stands for topic (the  $x$  that we are talking about) and  $C(x)$  stands for the “ $x$  that for all we know is the  $x$  of the speaker” (p. 246). The variable ( $x$ ) can range over times or worlds. Iatridou refers to, among others, Lyons (1977) in which the same intuition is put forward. What is usually treated as an opposition between past versus non-past in English, should be seen as a particular case of the distinction remote versus non-remote. The aforementioned analyses do not assume that one meaning is more basic than the other. This means that it is not the case that one is derived from the other but they are both the result of a modification of a more basic category: *dissociative*, *exclusion* or *remoteness*.

I argue that referring to the past IS the basic meaning of the ‘past tense’ marker. An obvious observation is that the ‘past tense’ marker is used for past time reference far more than it is used to indicate counterfactuality. It seems to very much depend on the type of construction whether the past

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<sup>6</sup> To be precise, the meaning of an FLV is defined as follows (Iatridou 2000: 234):

“*Future Less Vivid conditional*

Assertion: the reader’s favorite semantics for an FNV [future neutral vivid l.h.] ‘if p, q’

Implicature: the actual World is more likely to become a  $\neg p$  World than p World”

tense marker can have the latter function. In some counterfactual environments the ‘past tense’ marker is obligatory, like in counterfactual conditionals. In some constructions it is optional (10) and in some constructions it is not possible to mark something as counterfactual using the ‘past tense’ marker (11).

- (10) a. *Imagine that Johnny were coming tomorrow*  
b. *Imagine that Johnny is coming tomorrow*  
(11) a. *\*Johnny acts like he were drunk tonight*  
b. *\*I have the recurrent dream I were a gypsy*

Furthermore, the constructions in which the marker CAN have that meaning differ per language. One example of the differences between English and Dutch is given in (12) and (13).

- (12) *He acts as if he were rich*  
(13) *Hij doet alsof hij rijk is*  
*‘He does as-if he rich is’*

It seems that the marker is not productive as a marker of counterfactuality and that the constructions in which it can, must be remembered by a language user. This was also pointed out by James (1982) who did a cross-linguistic study on the connection between past tense and hypothetical or counterfactual meanings. She observes that in her sample of indo-European and several unrelated languages the use of the ‘past tense’ marker to refer to the past is fully regular and productive while its use to indicate the hypothetical is typically irregular and idiosyncratic. She therefore argues for an analysis in which the marker’s basic meaning is ‘past time’ and in which its use has been extended to some hypothetical cases.

### 3.2 Extension of basic meaning

Based on the observations in the previous paragraph, I argue that the basic meaning of the marker is past time reference and that its meaning is extended in some constructions to mark counterfactuality. Some analyses along this line have been made in the past. Fleischman (1989) argues that distance from the speaker’s ‘now’ along a temporal axis is metaphorically converted into distance conceptualized in a more abstract domain. This line of reasoning of Fleischmann is criticized by Givón (1994). One of his arguments is that the metaphor hypothesis as put forward by Fleischman is not specific enough. He argues that mechanisms of grammaticalization need a point of penetration. From what is known about grammaticalization it is not likely that speakers recognize the similarity between two domains across the board. It is typical for a metaphorical extension to enter the new domain at a specific point at which the analogy with the old domain is most obvious. Givón then proposes such a point of penetration where the remoteness metaphor could first have been associated with a decreased belief in the reality of state of events expressed. He argues the past tense marker was first used in its metaphorical way in, what he calls, counterfactuals (conditionals with pluperfect marking) and then extended to low certainty environments. However, if one assumes a metaphorical relation between the two uses, one has to account for the fact that the marker can only have the new meaning in certain linguistic environments. If metaphor was the cause of the extension of the old meaning, one would expect the marker to be used whenever the intended meaning is appropriate. As I have shown in example (11), this is not the case.

### 3.3 Extension without metaphor

More recently different hypotheses have been put forward that do not involve a metaphorical extension of the ‘past tense’ marker. Dahl (1997) argues the basic meaning need not be broadened since a counterfactual interpretation can be achieved by taking the basic meaning of the ‘past tense’ marker together with the meaning of several linguistic items it occurs with. Dahl proposes a theory that is based on the *branching futures model* of Tedeschi (1981). According to this model, at any point in

time, there is one past and an infinite amount of possible futures, as is graphically illustrated in figure 1.

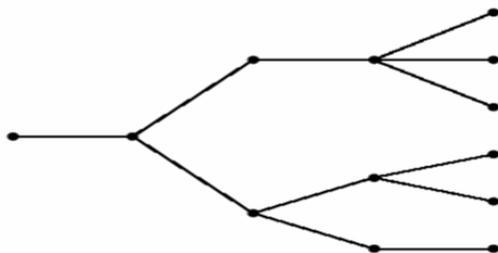


Figure 1: the branching futures model

A counterfactual situation with respect to the present, is located at a branch of the tree that can be found by going backwards in time from the present and then forward along an alternative path. The past tense marker is used to refer that point in time where the alternative present was still a possible future. Bybee (1995) provides an historical overview of the development of the English modal auxiliaries *would*, *should*, *might* and *could*. She shows that originally, the forms were used in to refer to the past, but that gradually they lost their past meaning. Bybee concludes that the combination of the modal sense and the past sense produced the hypothetical reading and that the hypothetical sense replaced the past meaning over time. Similarly, Ziegeler (2000) gives an overview of the development of hypothetical *would*. She concludes that past time reference in combination with the meaning of volition verbs in certain contexts gives rise to the implicature that the complement of *would* is not realized, hence counterfactual. As for counterfactual conditionals, she hypothesizes, in a way similar to Dahl, that the temporal meaning that was originally associated with counterfactual conditionals has been weakened and that an inference arising from the notion of prediction relating to past time, an inference of counterfactuality, became the only meaning of the combination of past time reference and prediction. In this paper I will elaborate on the hypothesis put forward by Dahl and Ziegeler. I will show how the meaning of conditionals with past tense marking changed from referring to the past to referring to the presence. Semantic change entails that something that was not previously part of the encoded meaning of a certain form, becomes part of the encoded meaning or vice versa. Therefore, we must first determine the exact contribution of the past tense marker to the meaning of counterfactuals. Both Dahl and Ziegeler argue that the past tense marker is only one of the indicators of counterfactuality. I will argue that the past tense marker in combination with a predicting conditional is enough to establish the meaning of what I have been referring to as counterfactuality. In the next section I will specify what I take to be the meaning of counterfactuals. I will argue, following Iatridou (2000), that the past tense marker in counterfactuals indicates that the actual world is excluded from the topic worlds. The interpretation that the antecedent is false in the actual world may be an implicature or a presupposition. Hereafter I will elaborate on how the change of meaning of the past tense marker came about.

#### 4. The meaning of the past tense in counterfactuals

In (14) the ‘past tense’ marker is obviously not used to indicate that the events or states under its scope took place in the past.

- (14) If Jane Austen were among us now, whom would she cast as herself?<sup>7</sup>

<sup>7</sup> Taken from <<http://www.nytimes.com/2007/04/01/opinion/01sun4.html>>

If the ‘past tense’ marker is not used to refer to the past, what is its contribution to the meaning of the construction under consideration? The obvious thing to say is that the marker indicates that the event expressed by in the conditional is contrary to fact. The question, however, is whether this interpretation is caused by an implicature, a presupposition or whether this it is encoded in the meaning of the conditional. And if this contrary to fact meaning is not encoded in the meaning of the counterfactual, what is the encoded meaning? Several authors have argued for the implicature view (amongst others Comrie 1986, Stalnaker 1975). According to Iatridou (2000) the past tense morpheme (or what is usually referred to as the past tense morpheme) has the same meaning when it is used for past time reference as when it is used to mark something as being contrary to fact. The marker is an exclusion function that can function over times as well as over worlds. When the morpheme ranges over time, the topic time (the time that we are talking about) excludes the utterance time. When the marker functions over worlds, it indicates that the actual world is excluded from the topic worlds (the worlds that we are talking about). When the marker is used to exclude the utterance time from the topic times, it is often implicated the event or state under its scope no longer holds at the moment of utterance. The following example of Iatridou clarifies this.

(15) John was in the classroom (Iatridou 2000: 248)

This implicates that John is not in the classroom anymore. But this implicature can be cancelled. This is shown by this possible follow-up:

(16) In fact he still is (Iatridou 2000: 248)

It has been argued that the contrary to fact interpretation of counterfactuals can be cancelled in a similar way. Iatridou gives the following example to prove this point (p. 232).

(17) 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: 232).

In this case the contrary to fact-interpretation is cancelled by the second sentence. Because of this Iatridou argues that counterfactuality is a conversational implicature just like the implicature caused by reference to the past. When the ‘past tense’ morpheme is used in a conditional *if p, (then) q* it ranges over worlds. In that case it is ASSERTED that the topic world excludes the actual world. It is IMPLICATED that the event or state described in *p* does not hold in the actual world, but this implicature can be cancelled. Von Stechow (1998), on the other hand, proposes that subjunctive conditionals (the conditionals I have been referring to as counterfactuals) carry a PRESUPPOSITION that the current domain of quantification<sup>8</sup> is partly outside the context set. Presuppositions are not cancelable but the felicity of conditionals like (17) can be explained by the fact that the presupposition holds that the domain of quantification is only partly outside the context set.

I will leave the issue of presupposition versus implicature for what it is since for my proposal it is only of importance what meaning is encoded by the use of the past tense marker. As said, I will follow Iatridou in that I take the encoded meaning to be the exclusion of the actual world from the topic worlds. Whether this IMPLICATES or PRESUPPOSES that *p* does not hold in the actual world is an important question but not of influence for my argument. For the sake of simplicity I will refer to the intended meaning with *counterfactuality* sometimes.

As I clarified in section 3, I regard all conditionals with ‘past tense’ marking that do not refer to the past as a manifestation of the same phenomenon. When a conditional with ‘past tense’ marking refers to the past it means that the conditional refers to alternative pasts, that is the past in alternative worlds. When it refers to the present, it means that the conditional refers to alternative presents, the present in alternative worlds. In counterfactuals that refer to the future the marker indicates that the speaker refers to future in alternative possible worlds. Since the future is yet to happen, a future counterfactual cannot be interpreted as ‘contrary to fact’. The effect of a future counterfactual may therefore be different from the effect of past and present counterfactuals. Nonetheless, the encoded meaning is the same in all of them.

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<sup>8</sup> According to Von Stechow this domain of quantification can probably be identified with the topic worlds of Iatridou (2000)

## 5. The change of meaning of the ‘past tense’ marker in counterfactuals

In line with Ziegeler’s (2000) proposal I argue that a prediction relating to past time gives rise to an implicature of counterfactuality. A semantic change can take place when a certain implicature commonly arises with a certain linguistic form. That implicature can be taken as part of the inherent meaning and can even go so far as to replace the original meaning (Bybee et al. 1994). An example of such a change is the development of the adverb *since* as a marker of causation. Originally *since* was only used to express a temporal relationship. Since a cause usually precedes an effect and because cause-effect is a very common rhetorical relation between two utterances, hearers inferred a causal relation when *since* was used. In present day English *since* can be used without any temporal association, as in (18).

- (18) *Since I have a final exam tomorrow, I won’t be able to go out tonight*  
(Hopper and Traugott, 1993: 81).

As I mentioned in the previous section, I follow Iatridou (2000) in her definition of the meaning of the past tense marker in counterfactuals, namely that the actual world is excluded from the topic world. However, the marker can only have this meaning in certain environments. For the marker to get this interpretation, it depends on the construction it occurs in. We can therefore say that it is not that marker per se, but the complete construction that is responsible for this interpretation. Not only single words or morphemes, but also constructions can undergo processes of grammaticalization<sup>9</sup> (see for example Traugott 2003). It is even argued that particular items are not the subject of grammaticalization, but the constructions the particular item occurs in (Bybee 2003). I will argue that the implicature caused by a predictive conditional with past time reference became part of the encoded meaning of that construction and later replaced the original meaning of past the ‘past tense’ marker. Below I will first go deeper into the meaning of different types of conditionals to show that prediction is a crucial element in the grammaticalization process.

## 6. The meaning of conditionals

Dancygier and Sweetser (2005) distinguish four major classes of conditionals: predicting conditionals, epistemic conditionals, generic conditionals and speech-act conditionals. A predicting conditional predicts something conditionally, upon some unrealized event. In a sentence *if p, (then) q*, the speaker pictures a situation in which *p* happens and predicts that *q* will happen because of that. An example of a predicting conditional is (19).

- (19) *If you eat this bug, you will get sick.*

Epistemic conditionals follow the speaker’s reasoning process. In a sentence *if p, (then) q* the speaker concludes that *q* must be the case, in a situation where *p* is the case. An example of an epistemic conditional is given in (20).

- (20) *If she is not here by three, she forgot.*

A generic conditional *if p, (then) q* states that in every situation *p, q* will happen. The difference with the predicting conditionals is that the prediction made in predicting conditionals holds for one particular instance of *p* that is relevant at the moment of speaking (in case of example (19) someone is

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<sup>9</sup> Although most grammaticalization theorists agree on the fact that constructions can undergo processes of grammaticalization, there is no agreement on what types of change are rightfully labeled as an instance of grammaticalization (Noël 2006). A change in meaning of an otherwise stable construction, as I will argue is the case for counterfactuals, may therefore not be considered a case of grammaticalization in the strict sense by every grammaticalization theorist.

about to eat some strange food, for example). Generic conditionals, like (21) are about all instances of  $p$ , and not one in particular.

(21) *If you put salt on a slug, it dies.*

In speech-act conditionals like (22), the consequent is not dependent on the antecedent. The speaker of (22) will be at the desk whether the hearer needs instructions or not. The speaker of the conditional indicates that the speech act made in the consequent (an invitation to ask for instructions) is relevant in a situation in which the antecedent holds.

(22) *If you need instructions, I'll be in my room*

I will not include the speech-act conditionals in my analysis because the antecedent and the consequent stand in a different relation to each other than in the other three types and therefore they behave differently.

Counterfactual conditionals can be of the predicting type, as in (23)

(23) *If you took this bug, you would get sick*

They can be of the epistemic type as well, as is shown by (24). But not all epistemic conditionals can be used counterfactually, as (25) shows.

(24) *If we heard church bells ringing, it would be nine o'clock.*

(25) *If Reagan was president, he lived in the White House.*

In conditional (24) the past tense indicates that the situation expressed by the antecedent is counterfactual. In (25) on the other hand the past tense indicates past reference. (25) is not interpreted as being contrary to fact. Someone could utter (25) if somebody had just told him that Reagan was president at some point. The speaker thereupon concludes Reagan must have lived in the White House. This difference in behavior between several epistemic conditionals was also noticed by Dancygier and Sweetser (2005). They observe that epistemic conditionals can be predicting or non-predicting. Non-predicting epistemic conditionals express a conclusion more than they predict something conditionally. In (26) the antecedent is not a necessary condition for the consequent to be true. In (27) on the other hand, the speaker predicts the consequent conditionally upon the possible future event mentioned in the antecedent.

(26) (After finding out Tom is the cat) *If Tom is the cat, Jerry must be the mouse*

(27) (Before turning on the television) *If sesame street has started, it is past 6*

The same distinction can be made for generic conditionals. There are real generic conditionals (28) and specific indefinite conditionals which are predicting something (29) (Dancygier and Sweetser 2005).

(28) *If you put salt on a slug, it dies*

(29) *If you ever meet Eric, you will be surprised*

In contrast with the real generics, the specific indefinite conditionals can be counterfactual.

(30) *If a woman got married, she lost her job*

(31) *If you had ever met Eric, you would have been surprised*

We can conclude that all counterfactual conditionals have prediction as part of their meaning. I argue that this aspect of the meaning of conditionals in combination with past time reference that is the source of an implicature. It is impossible to predict the past. One cannot predict a past event  $q$  on the basis of a past event  $p$ . One can reason about the relation between two past events or reason about the

truth of one event based on the truth of another event, but cannot predict a past event based on another past event. If a hearer hears a conditional with past time reference and assuming he can identify it as a predicting conditional, he will assume that the speaker wants to convey information about the relation between *p* and *q*. This relation cannot be an actual causal relation between the past events *p* and *q*. If so, the speaker not have used a conditional to express this. Since the hearer assumes the speaker's utterance is relevant and not just a non-interpretable sequence of words, he will infer that the conditional concerns a predicted causal relation between two hypothetical past events. In other words, the hearer will infer that the speaker is talking about alternative pasts, that is, the past in alternative possible worlds.

As I argued in section 4, the meaning of the 'past tense' marker in counterfactuals is that the actual world is excluded from the topic worlds. Making a prediction with respect to the past gives rise to an implicature that the speaker refers to alternative possible worlds. In the next section we will see that historical data on the development of counterfactuals shows that this implicature became part of the inherent meaning of the 'past tense' marker in conditionals.

## 7. The development of counterfactuals

In this section I will discuss historical data on the development of counterfactuals in Romance languages and English.

### 7.1 Romance languages

In the development of counterfactuals in Romance languages, there is the general tendency that past form conditionals initially referred to the past. At a later stage, the same conditionals with past tense marking were used with present time reference as well as past time reference. Yet later, after a period of temporal ambiguity, the conditional with past tense marking became non-past in value. At this point the pluperfect made its entrance in counterfactuals with past reference (Harris, 1986). This development shows that the past tense marker was initially chosen for its basic meaning, past time reference. Because it is not possible to predict the actual past, a hearer of a past tense conditional could infer that the speaker was talking about alternative pasts, i.e. the past in alternative possible worlds. So, at this point in time the 'past tense' marker was used to express its basic function. However, every time a conditional with past tense marking was used, this gave rise to the implicature that the speaker was referring to an alternative course of events in the past. This implicature was then reanalyzed as being part of the encoded meaning of the conditional with past tense marking. This is shown by the fact that at a later stage, the same conditionals with past tense marking were used with present time reference as well as past time reference. Here, the marker is no longer used to refer to the past but it carries out its new function, it excludes the actual world from the topic worlds. This can be viewed as a manifestation of the desire to temporally disambiguate between past and present counterfactuals.

### 7.2 English

The same pattern as in Romance languages can be found in the development of English counterfactuals. The earliest English counterfactuals attested, from the pre-Old English stage, all had past optative forms in both the antecedent and the consequent (Molencki 2000), as is exemplified in (32). It has been argued that the earliest English counterfactuals always had past reference (Behre 1934), but this observation is not endorsed by everybody.

- (32) *frauja ip vereis here, ni þau gadaupnodedi broþar meins*  
 lord if thou-were here, not then died brother mine  
 'Lord if thou hadst been here, my brother had not died' (Molencki 2000: 312)

In Old-English and Early Middle English both present and past counterfactuals were construed of past subjunctive/indicative forms (Molencki, 2000). In this stage, the past tense marker is not used to refer to the past, but to indicate that present conditionals hold in alternative possible worlds.

- (33) *Gif þu wistest hwæt þe towaerd is þonne weope*  
 if thou knewest-IND what thee imminent is then wept-SUBJ  
*þu mid me*  
 thou with me  
 ‘If you know what is to come to you, you would weep with me’ (Molencki 2000: 313)
- (34) *Ac hit wære to hrædlic gif he þa on cildcradole acweald wurde*  
 but it were too quick if he then in child-cradle killed were  
 ‘But it would have been too early if he had been killed in his cradle then’  
 (Molencki 2000: 313)

And similar to the Romance languages, at a certain point English developed a way to formally distinguish between past and present counterfactuals. In the thirteenth century, pluperfect markers began to make their appearance in past counterfactual conditionals (Molencki 2000).

- (35) *Bot al his praier had ben als noght If godd self his*  
 but all his prayer had been as nothing if God himself has  
*might had wroght*  
 might had wrought  
 ‘But all his prayer would have been of no use if God had shown his power’  
 (Molencki 2000: 315)

The historical data shows that, when we look at conditionals, the new function of the past tense marker first became apparent in present conditionals. However, the change already took place in the conditionals referring to the past. The implicature that comes about when uttering a predicting conditional with past time reference became an encoded aspect of the meaning of this construction. The past tense marker was reanalyzed as an indication of past time reference to an indication that the conditional holds at alternative possible worlds.

## 8. Cross-linguistic data

Let us take a look at some cross-linguistic data that is available on the relation between the past tense marker and counterfactual or hypothetical constructions. As I mentioned earlier, the relation between the past tense and counterfactuals is not just a European phenomenon. Because of the wide cross-linguistic distribution of the relation, an explanation for it should be plausible for all the languages the phenomenon is attested in. James (1982) did a crosslinguistic survey on languages in which there is a relation between the past tense and hypotheticality. Her sample includes Chipewyan, Old Irish, Garo, Haya, English, French, Classical Greek, Latin, Russian, Tonga, Cree and Nitinaht. In this section I will discuss the data of these languages and see if it fits the hypothesis I propose.

Of two of the languages in her sample she only found one example of a counterfactual and they referred to the past. These languages are Chipewyan and Nitinaht. In the example of Chipewyan, the suffix *-ni* is used which usually indicates past tense. The conditional refers to the past. However, according to James, the source of the example (Li 1946) suggests that the marker sometimes indicates contrary to fact-ness in a conditional and that the marker is also used for wishes in the future.

- (36) *setθuc bədjǝ́ ʔesnaiχahǝ́lenǝ́*  
 my-grandson without-him-if I-live-future-not-past  
 ‘If without my grandson, I would not have lived’ (Li 1946 in James 1982: 382)

In Nitinaht the past counterfactual has the past tense marker *it* in the antecedent and the combination of future *ʔi:k* and past *ibt* in the consequent. Again, the source of this example (Klokeid 1976) states that the combination of past and future signals counterfactuality in general. But since no other examples are given, we cannot be certain about this.

- (37) (ʔoyi) kab'at'p it qwiw s, hitaqaya ʔi:k ibt s ʔa:bay ʔoyi  
 (if) know PST SPEC I, come FUT PST I yesterday TIME  
 'If I had known (it), then I would have come yesterday' (Koleid 1976 in James 1982: 382)

For three of the languages in James' (1982) sample there were, besides examples of counterfactuals referring to the past, also examples of counterfactuals referring to the future.<sup>10</sup> One of the languages is Garo. In this example of Garo, the suffix *-cim* which normally indicates past reference, is used in the consequent of the conditional. The conditional refers to the past.

- (38) aŋa uiode reŋgencim  
 I know-if come-FUT-PST  
 'If I had known, I would have come' (Burling 1961 in James 1982: 381)

In the following example the same suffix is used in the consequent of a conditional that refers to the future. It is suggested that the same suffix could be used for present counterfactuals as well.

- (39) na'a indake dakode namginokcim  
 you thus do-if good-FUT-PST  
 'if you did it like this, it would be good' (James 1982: 389)

For Old Irish, Haya, it also holds that there are examples of counterfactuals that refer to the past and counterfactuals that refer to the future. In Old Irish future and past counterfactuals are marked the same and it is suggested that present counterfactuals would be marked similar as well. In Haya present counterfactuals are marked similar as future counterfactuals like (40) with a suffix indicating 'recent past'. In counterfactuals referring to the past a suffix indicating 'semi-recent past' is added (James 1982).

- (40) ká n-a-ku-bona éfarasy' ein' ámabába  
 if I-RECPST-IRR-see horse having wings  
 ti-n-á-ku-amini  
 not-I-RECPST-IRR-believe  
 'if I saw a horse with wings, I wouldn't believe it' (Salone 1979 in James 1982: 380)

James also gives examples of present counterfactuals in English, French, Classical Greek, Latin, Russian, Tonga and Cree. We already saw that in Cree the consequent of the conditional is marked with the suffix *-pan*. In a counterfactual referring to past time, the suffix frequently appears in the antecedent also and the semantic past time would be marked with the prefix *ki-*, which indicates past tense unmarked for aspect (James 1982).

For Tonga the following counterfactual is given.

- (41) kuti naali-kuyanda kwiiya, naatali-kuli  
 if he-want-PST to learn, he-be-not-with-PST  
 banyinakulu ino  
 his-grandmother now

<sup>10</sup> James refers to these conditionals as Future Less Vivids and does not regard them as counterfactuals. As I mentioned, I consider all conditionals with past tense marking that do not refer to the past to be a manifestation of the same phenomenon.

‘If he wanted to learn, he wouldn’t be with his grandmother right now’ (James 1982: 380)

There is no information on whether a past counterfactual would be marked differently. In Classical Greek the present counterfactual is formed with past tense markers (imperfect) in both the antecedent as well as the consequent, as in (42) (James 1982). Past counterfactuals are marked with the aorist in both clauses (Greenberg 1986).

- (42) *Tauta uk an edynanto poiein ei me:*  
 this not IRR they-be-able-PST to-do if not  
*diaite: metria extro:nto*  
 lifestyle abstemious they-lead-PST  
 ‘They would not be able to do this if they did not lead an abstemious life’  
 (James 1982: 379)

Latin (at least in a later stage, see the previous section) distinguishes between past and present counterfactuals as well. Present counterfactuals are formed with the imperfective, as in example (43) (James 1982) and past counterfactuals with the pluperfect (Harris 1986). The same holds for English.

- (43) *si adesset, bene esset*  
 if he-be-here-SUBJ-PST well it-be-SUBJ-PST  
 ‘If he were here, it would be well’ (James 1982: 379)

In French the present counterfactuals is constructed with the imperfect in the antecedent and a conditional form in the consequent, as in example (44) (James 1982). The past counterfactual is made up of a pluperfect form in the antecedent and a past conditional form in the consequent (Harris 1986).

- (44) *Si j’étais plus vieille, je serais plus contente*  
 if I be-past more old I will-be-PST more happy  
 ‘If I were older, I would be happier’ (James 1982: 379)

Russian uses a past tense marker in both the antecedent as well as the consequent, as can be seen in (44) (James 1982). The same form is used for past counterfactuals (Khomitsevich, personal communication).

- (45) *Yesli b∞ dul poput∞y veter*  
 if HYP blow-past favourable wind,  
*m∞ pl∞li značitel’no b∞streje*  
 we sail-PST much faster  
 ‘If a favorable wind were blowing, we would be sailing along much faster’  
 (James 1982: 379)

To sum up, for Chipweyan and somewhat less for Nitinaht, there are some indications that the same form that is used for the past counterfactual can be used for present counterfactuals as well. This means that these languages are either in the stage where the exclusion of the actual world is an implicature or in the stage where it is encoded in the meaning of the construction but where there is no way to formally distinguish between past and present counterfactuals. For another group of languages it is more certain that they are in this latter stage of the development of the counterfactual. For both present and past counterfactuals they use the same marking. This group is relatively small, only Old Irish and Russian fall under it. A third group of languages, which consists of French, English, Latin, Cree, Classical Greek, and Haya does formally distinguish between past and present counterfactuals. In those languages the counterfactuals are in the last stage, which means that conditionals with original (simple) past marking no longer have the ability to refer to the past. Not all languages use a perfective marker to add the extra layer of past, as we saw. Haya, for example uses a suffix indicating ‘recent past’ in present counterfactuals and uses an extra suffix indicating ‘semi-recent past’ in counterfactuals referring to the past (James 1982).

The survey on the relation between the past tense and counterfactuals shows that it is possible that there are languages that only have counterfactuals referring to the past. For certain, there are

languages that use the same form for both past and present counterfactuals. The largest group however formally distinguishes between past and present counterfactuals. The pattern shows that it is always the past counterfactual that needs extra markers to be distinguishable from present counterfactuals. It is also clear that no language has present counterfactuals but no past counterfactuals. This cross-linguistic pattern is compatible with the idea that counterfactuals started off as past referring conditionals and that the alternative world-meaning took over the form. For two languages it is not obvious whether the marker in the conditionals indicates past reference or counterfactuality. For these languages it may be the case that the past tense marker is used to refer to the past, but this gives rise to the implicature that the conditional holds in alternative possible worlds. The fact that some languages have one form for present and past counterfactuals shows that the second stage in the development of English and Romance counterfactuals is still found cross-linguistically.

## 9. Other counterfactual constructions

Ziegeler (2000) shows that prediction or volition in combination with past time reference is the source for the hypothetical meaning of *would*. In this paper I have elaborated on the hypothesis that past tense in combination with a predictive conditional implicates the counterfactuality of conditional. We could conclude that a counterfactual interpretation of the ‘past tense’ marker is caused by the implicature that rises when a prediction or volition is expressed in relation to the past. This could also be the source for counterfactual wishes formed by a verb meaning ‘to want’ inflected for past tense in languages like Dutch and Greek (Iatridou 2000).

- (46) *Ik wou dat ik een huis had*  
 I want-PST that I a house have-PST  
 ‘I wish I had a house’
- (47) *O Kostas tha iθele na oδiyuse*  
 Kostas MOD want-PST-IMP PART drive- PST-IMP  
*kokino aftokiniko*  
 red car  
 ‘Kostas wishes he drove a red car’ (Iatridou 1982: 239)

This would also explain why in Dutch (48a) is grammatical, but (48b), in which the main verb is inflected for present tense, is not. If one assumes a compositional account in which the ‘past tense’ marker can freely vary between its two meanings, one would expect the pattern to be reversed. After all, the ‘wanting’ is not contrary to fact, only its complement is. Interestingly, Dutch has two past forms for the verb *willen* ‘want’. One past form is formed in a regular way by adding *-de* to the root of the verb, as in (48c) The other verb is formed irregularly by changing the vowel in the root of the verb, as in (48d). However, the irregular past form of the verb in a construction exemplified in (48) is commonly associated with a counterfactual interpretation while the regular past form is commonly associated with past reference. This again shows that the ability of the past tense marker to indicate counterfactuality is very much dependent on the construction it occurs in.

- (48) a. *Ik wou dat ik een auto had*  
 I want-PST that I a car have-PST
- c. *Ik wilde dat je ermee ophield*  
 I want-PST that you with-that stop-PST
- b. *\*Ik wil dat je ermee ophield*  
 I want that you with-that stop-PST

Furthermore, some constructions seem to be derived from the counterfactual conditional. This idea is supported by the fact that in her cross-linguistic sample, James (1982) finds that all languages in which there is a relation between the past tense and hypotheticality, use the past tense marker in counterfactual conditionals. The second most attested construction with ‘past tense’ marking is the

counterfactual wish. In many languages the counterfactual wish shares some formal characteristics, namely the conditional marker, with counterfactuals, as in Dutch, English and French.

- (49) a. Als ik toch maar die reis kon maken  
 b. If only I could make that journey  
 c. Si je pouvais faire ce voyage

In some languages a counterfactual wish can be introduced by a verb that expresses ‘wanting’ or ‘wishing’ that is not inflected for past tense. Among these languages are English (50) and Cree (51) (James 1982). In English and Cree only the embedded verb is inflected for past tense.

- (50) *I wish I were you*  
 (51) nipakose:lithe:n ki:takošinokopa:ne: ota:košihk  
 I wish PST-he-come-PST yesterday  
 ‘I wish he had come yesterday’ (James 1982: 384)

Iatridou (2000: 243) speculates about the possibility of tracing back constructions like (50) and (51) and also (46) and (47) to counterfactual conditionals as well. She thinks we might be able to paraphrase counterfactual wishes as counterfactual conditionals as follows:

- (52) A wishes that B → A thinks that if she had B, she would be happy (that she has B)  
 (53) A wants B → A thinks that if she has B, she will be happy (that she has B)

According to Iatridou, these paraphrases capture the fact that the counterfactuality of counterfactual wishes is subject oriented and not speaker oriented, and that the desire expressed, even if it is about a situation in the past, is a desire the subject has in the present. Iatridou suggests that perhaps the paraphrases should make us suspect that the only true contrary to fact environment is the counterfactual conditional and that counterfactual wishes are contrary to fact because they contain counterfactual conditionals as part of their meaning.

Another sign that other counterfactual constructions are derived from counterfactual conditionals is that in languages in which the past tense is not part of the present counterfactual, like Turkish, some hypothetical and counterfactual constructions seem to be derived from counterfactual conditionals as well. In Turkish the counterfactual conditional is formed with the conditional marker *-se* (or *-sa* as in (54) due to vowel harmony) (Theunissen & Türkmen, 2005).

- (54) *hava güzel ol-sa parka gideriz*  
 weather beautiful be-COND park-to go-we  
 ‘If the weather would be nice, we would go to the park’

This marker *-se* is also used in counterfactual wishes:

- (55) *yarın gel-se*  
 tomorrow he-come-COND  
 ‘If he only came tomorrow’

And it can be used in constructions that indicate a lack of certainty:

- (56) *Ali hasta olsa gerek*  
 Ali sick be-COND need  
 ‘Ali is probably ill’

In conclusion, a counterfactual interpretation is dependent on the construction as a whole and not just on the ‘past tense’ marker. This indicates that the answer to the question of the relationship between the past tense and counterfactuality should not be sought in broadening the definition of the past tense marker, but rather in individual processes of grammaticalization based on the combination of the basic meaning (past time reference) together with the meaning of the construction in which it appears.

## 10. What's so unreal about the past?

In this article I have contributed to an explanation for the relation between the past and counterfactuals, which is found cross-linguistically. Traditionally this relation is explained by defining the basic meaning of the 'past tense' marker in such a way that it includes both its use to refer to the past time as well as its use to mark something as counterfactual. More recently it has been argued that the conventionalization of pragmatic inferences is the source for the hypothetical and counterfactual interpretations of past forms. A similar hypothesis was proposed for counterfactual conditionals. In this paper I have elaborated on this hypothesis. I have argued that a predictive conditional with past time reference gives rise to the implicature that the conditional refers to an alternative past, that is, the past in alternative worlds. If a certain implicature commonly arises with a certain linguistic form, the meaning of that form can change. This is what happened with past conditionals. This hypothesis is supported by the historical data on the development of counterfactuals in English and Romance languages. Furthermore, cross-linguistic data is in line with this idea as well. We can therefore conclude that there is nothing unreal about the past. Moreover, the fact that the past is real and known is the cause for it to have acquired its extended meaning in counterfactuals.

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