

Counterfactual biscuit conditionals: A temporal remoteness account*

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Abstract Hypothetical conditionals like *If you are hungry, your stomach is growling* and ‘biscuit’ conditionals like *If you are hungry, there is pizza in the fridge* have been analysed as sharing the same syntactic and semantic template, differing only in the presence of an additional pragmatic inference leading to the ‘biscuit’ effect in the latter case (Franke 2009: a.o.). However, when considering their counterfactual versions, the two forms differ in the verbal morphological make-up of the consequent clause, which posits a challenge to the unified approach. The present papers develops an analysis of tense and mood morphology within the unified approach where the key idea is that counterfactuals biscuits involve breaking Sequence of Tense and so-called Sequence of Mood. Unacceptable biscuit and hypothetical forms are ruled out via pragmatic competition between weaker and stronger forms and via the Gricean Principle of Manner.

Keywords: conditionals, biscuit conditionals, counterfactual, mood, tense, fake tense, sequence of tense, double access, pragmatic competition

1 Introduction

It is well known that hypothetical and biscuit conditionals differ intuitively in their meaning. Run-of-the-mill **hypothetical** conditionals convey that the truth of the consequent clause is dependent on the truth of the antecedent clause, as in (1). **Biscuit** conditionals intuitively assert the truth of the consequent at the actual world w_0 regardless of the truth or falsity of the antecedent, as in (2).

- (1) If Sly Pete called, he won the game. HYP
(2) There are biscuits on the sideboard if you want them. (Austin 1956) BISCUIT

In the case of indicative conditionals (with an epistemic or metaphysical modal), hypothetical and biscuit conditionals have parallel verbal morphology. This is so both

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for the antecedent and the consequent clause: English and Spanish have ‘normal’, non-fake tense morphology throughout and Spanish additionally has indicative mood, no matter whether the conditional has a hypothetical or a biscuit interpretation:

- | | | |
|-----|---|--------|
| (3) | (On whatsapp: I know you well...) | |
| | If you are hungry right now, your stomach is growling. | HYPIND |
| (4) | If you are hungry right now, there is pizza in the fridge. | BIIND |
| (5) | Si (tú) tienes hambre, tu estómago está gruñendo. | HYPIND |
| | If (you) have.Ind hunger, your stomach is.Ind growling. | |
| (6) | Si (tú) tienes hambre, hay pizza en el frigorífico. | BIIND |
| | If (you) have.Ind hunger, have.Ind pizza in the fridge | |

One prominent line of analysis proposes a unified treatment of indicative hypothetical and biscuit conditionals (Franke (2009), Francez (2015), Lauer (2015), Csipak (2018), Biezma & Goebel (2018), Goebel (2017), a.o.). In a nutshell, they propose that the syntactic and semantic modal template is the same for hypothetical and biscuit conditionals (contra e.g. Ebert, Ebert & Hinterwimmer (2014)). The difference between the two conditional types lies in the pragmatics: An additional pragmatic inference arising from the notion of *conditional independence* triggers the ‘biscuit’ intuition that the consequent is being asserted of the actual world w_0 .

To see how this works in one such analysis, consider Franke (2009). He assumes a standard semantics for an indicative hypothetical conditional *If A then C*: $A \subseteq C$. Two propositions are conditionally independent if changing one’s belief about one will not change one’s belief about the other. This is the case of A and C in biscuit conditionals. The following pragmatic reasoning then ensues: Since A cannot possibly affect the truth of C, the speaker must believe that C in the actual world w_0 regardless of the truth or falsity of A, hence giving rise to the ‘biscuit’ interpretation.¹

However, in the case of *counterfactual* conditionals, hypothetical vs. biscuit conditionals differ in the verbal morphology of their consequent clause. In English and Spanish, they differ with respect to tense: For HypCFs, we must use fake tense (i.e., an ‘extra’ layer of past morphology), giving rise to the form *would* in (7a)/(9a),

¹ The more formal derivation of the pragmatic inference, following Franke (2009), proceeds as follows:

- (i) a. Speaker’s epistemic state allows her to utter *If A, C*.
- b. But A and C are conditionally independent.
- c. Speaker must either believe the falsity of A or the truth of C. Otherwise $\diamond(A \cap \bar{C})$, which contradicts the Speaker’s belief that *If A, C* because $\llbracket \text{if } A, C \rrbracket = A \subseteq C$.
- d. Non-triviality: Speaker believing the falsity of A would make the statement *If A, C* trivial ($\emptyset \subseteq C$). Since non-triviality is assumed, Speaker must believe C.

and cannot use real tense, witness (7b)/(9b). But for BiCFs, we (typically) have to use non-fake tense, as in (8b)/(10b), and cannot use fake tense, witness (8a)/(10a) (Csipak (2015), *pace* Franke (2009)).² Moreover, Spanish BiCFs must additionally have indicative mood in the consequent clause: (10b)

- (7) a. If you were hungry right now, your stomach **would be** growling. HYP
 b. # If you were hungry right now, your stomach is growling.
- (8) a. # If you were hungry right now, there would be pizza in the fridge.
 b. If you were hungry right now, there **is** pizza in the fridge. BICF
- (9) a. Si (tú) tuvieses hambre, tu estómago estaría gruñendo. HYP
 If (you) had.Subj hunger, your stomach **would.be** growling.
 b. # Si (tú) tuvieses hambre, tu estómago está haciendo ruidos.
 If (you) had.Subj hunger, your stomach is.Ind growling.
- (10) a. # Si (tú) tuvieses hambre, habría pizza en el frigorífico.
 If (you) had.Subj hunger, would.have pizza in the fridge.
 b. Si (tú) tuvieses hambre, hay pizza en el frigorífico. BICF
 If (you) had.Subj hunger, **have.Ind** pizza in the fridge.

Thus, the puzzle presents itself as follows. If the intuited interpretive difference between hypotheticals and biscuits is purely due the independence-based inference, why must the two conditional types be expressed with different morphology –i.e., with different tense and mood in the consequent– when in counterfactual form?

The goal of the present paper is to present a first, tentative analysis of tense and mood morphology in BiCFs that derives the morphological pattern in (7)–(10) while maintaining the general uniform approach to hypotheticals and biscuits. To this end, we will follow the temporal remoteness analysis of counterfactual morphology (Dudman (1983), Dudman (1984), Ippolito (2003), Grønn & von Stechow (2009), Romero (2017)) and extend mechanisms independently needed for breaking Sequence of Tense in attitude reports (Ogihara (1999)).

The paper is organized as follows. Section §2 gives a brief overview of a temporal remoteness account of hypothetical counterfactuals. Section §3 outlines how Sequence of Tense can be ‘broken’. The proposal follows in section §4 in three parts: In §4.1, we present an analysis for breaking Sequence of Tense and ‘Sequence of Mood’ in conditionals to account for the grammatical biscuit counterfactuals we observe; in §4.2, we rule out unattested biscuit counterfactuals by appealing to competition between forms; and in §4.3 we rule out unattested hypothetical counterfactuals by appealing to the Maxim of Manner. Section §5 concludes.

² The judgments reported here come from native speakers of English. Note that, for independent reasons, languages like German and Italian allow the form parallel to (8a) to receive a biscuit interpretation, leading to some confusion in the literature.

2 Background: A temporal remoteness account of HypCFs

Let us go back to our present –(11)-(12)– and past –(13)-(14)– HypCFs:³

- (11) If you **were** hungry right now, your stomach **would be** growling.
- (12) Si (tú) tuvieses hambre ahora, tu estómago estaría gruñendo.
If (you) **had.SUBJ** hunger now, your stomach **would.be** growling
- (13) If you **had been** hungry yesterday, your stomach **would have been** growling.
- (14) Si (tú) hubieses tenido hambre ayer, tu estómago habría estado gruñendo.
If (you) **had.SUBJ had** hunger yesterday, your stomach **would.have been** growling

(At least) two pieces of verbal morphology are involved in these forms.

First, there is a layer of so-called ‘fake’ past tense in the antecedent and consequent in English and Spanish. This layer of ‘fake’ tense has received two analyses in the literature: It is interpreted modally within the modal remoteness approach (Iatridou 2000; Schulz 2014) and temporally within the temporal remoteness approach (Dudman 1983; Grønn & von Stechow 2009; Romero 2014: a.o.). We will follow the temporal approach. The central idea, stemming from Dudman (1983), is that a counterfactual with ‘fake’ tense involves a back shift in time with a future (metaphysical) conditional interpreted under that back shift, as schematized in (15). ‘Fake’ tense morphology then follows from Sequence of Tense, independently needed for complement clauses in English and Romance, as we will see in §2.1.

- (15) PAST [MODAL_{METAPHY} [if (FUT) A] [then FUT C]]

Second, the antecedent clause appears in the **subjunctive mood** in Spanish. Following Schlenker (2005), we will interpret mood as imposing a restriction on the world pronoun, as independently argued for Romance complement clauses. This will be shown in §2.2.

2.1 ‘Fake’ past tense as Sequence of Tense

It is well known that an additional layer of past tense morphology is used in past attitude reports in indirect speech, a phenomenon known as ‘Sequence of Tense’ (Abusch 1997; Kusumoto 2005; von Stechow 2009). This is illustrated in (16)-(18) for English. A parallel pattern arises in Spanish.

³ Counterfactuality is a defeasible inference in the Spanish (12) and (14), just as in the English (11) and (13) (Lewis 1973; Anderson 1951). We leave aside Severe Tense Mismatch cases (Ippolito 2003).

Counterfactual biscuit conditionals

- | | | |
|------|--|-----------------|
| (16) | a. Annalea said (last week): “Lucía is sick”. | Present |
| | b. Annalea said (last week) that Lucía was sick. | Simple Past |
| (17) | a. Annalea said (last week): “Lucía has arrived on time”. | Present Perfect |
| | b. Annalea said (last week) that Lucía had arrived on time. | Past Perfect |
| (18) | a. Annalea said (last week): “Lucía will come”. | Future |
| | b. Annalea said (last week) that Lucía would come . | Conditional |

In order to get closer to the structures at hand, let us consider a past thought whose content is a future indicative conditional about hypothetical events on a certain salient date, e.g. today (which we will write as dd.mm.yyyy). The scenario is provided in (19). The direct thought is expressed in (20) and the indirect report is formulated in (21) for in English, and similarly in (22) and (23) for Spanish:

- (19) Scenario: Ana was wondering in 2018 how things would be at John’s talk today, dd.mm.yyyy. She thought: “If Juan is hungry (during the talk that day), his stomach will be growling”.
- (20) If Juan **is** hungry (that day), his stomach **will be** growling. DIRECT
- (21) She thought that, if Juan **was** hungry (that day), his stomach **would be** growling. REPORT
- (22) Si Juan tiene hambre (ese día), su estómago estará gruñendo. DIR.
If Juan **has**.IND hunger (that day), his stomach **will.be** growling
‘If Juan has is hungry (that day), his stomach will be growling.’
- (23) Ella pensó que, si Juan tenía hambre (ese día), su estómago
She thought that, if Juan **had**.IND hunger (that day), his stomach
estaría gruñendo. REPORT
would.be growling
‘She thought that, if Juan was hungry (that day), his stomach would be growling.’

Note that the complement clause in (21)/(23) and our present HypCFs (11)/(12) have *exactly* the same tenses –they differ solely in the mood of the antecedent in Spanish. More generally, the tenses in a HypCF in English and Spanish are the same as in a future indicative conditional within a past attitude report.⁴ Hence, once the grammar licenses a layer of ‘fake’ tense in the indirect report of a future indicative conditional, it will also license it in our HypCFs under Dudman’s structure (15).

Let us see how Sequence of Tense is derived in the indirect reports (21)/(23). On the syntactic side, the following ingredients have been proposed in the literature.

⁴ See Romero (2017) for the corresponding scenario and examples for past HypCFs.

First, (interpretable) tense morphology is treated as a pronoun pro_i (Partee (1973) a.o.) with a temporal feature relative to an anchor time pronoun pro_j (von Stechow (1995); Abusch (1997); Kusumoto (2005), a.o.). In our LFs, the temporal feature and its anchor will appear superscripted after pro_i , e.g. $pro_i^{[PAST\ pro_j]}$. Second, some pieces of temporal morphology may be left uninterpreted when licensed in a chain headed by an temporal pronoun with an interpretable past feature (Ogihara 1995; Kusumoto 1999; Grønn & von Stechow 2009). In our LFs, uninterpreted morphology will appear crossed out, e.g. \overline{past} . Third and finally, for the sake of concreteness, we assume that a future indicative conditional is headed by a silent modal with a metaphysical modal base METAPHY and a stereotypical ordering source L (cf. Kaufmann (2005)). Adding \exists -closure to bind pro_1 and pro_4 , these ingredients give us LF (24) for our indirect report examples (21)/(23):

(24) LF of (21)/(23):

$$\begin{aligned} \lambda 0 \exists_1 [\text{Ana think at } pro_1^{[PAST\ pro_0]} [\lambda 2 \text{ MODAL}_{\text{METAPHY}}^L\ pro_2 \\ \lambda 3 \exists_4 [\text{John be hungry at } pro_4^{[past][FUT\ pro_3]}] \\ \lambda 3 \exists_4 [\text{his stomach be growling at } pro_4^{[past][FUT\ pro_3]}]]]] \end{aligned}$$

On the semantic side, temporal features are interpreted as imposing presuppositions on the value of the pronoun (Heim 1994; Kratzer 1998), as defined in (25)-(27). Furthermore, we treat the value of a temporal/mood pro_i as a world-time pair, i.e., as an index, with temporal and accessibility constraints understood as in (28):

(25) $\llbracket pro_i^{[PAST\ pro_j]} \rrbracket^g$ is defined only if $g(i) < g(j)$; if defined, $\llbracket pro_i^{[PAST\ pro_j]} \rrbracket = g(i)$

(26) $\llbracket pro_i^{[PRES\ pro_j]} \rrbracket^g$ is defined only if $g(i) \circ g(j)$; if defined, $\llbracket pro_i^{[PRES\ pro_j]} \rrbracket = g(i)$

(27) $\llbracket pro_i^{[FUT\ pro_j]} \rrbracket^g$ is defined only if $g(j) < g(i)$; if defined, $\llbracket pro_i^{[FUT\ pro_j]} \rrbracket = g(i)$

(28) a. For any two indices $\langle w, t \rangle$ and $\langle w', t' \rangle$:

$\langle w, t \rangle < \langle w', t' \rangle$ iff $w = w'$ and t is prior to t' .

$\langle w, t \rangle \circ \langle w', t' \rangle$ iff $w = w'$ and t and t' overlap.

b. For any two indices $\langle w, t \rangle$ and $\langle w', t' \rangle$:

$\langle w, t \rangle \in \text{MOD}(\langle w', t' \rangle)$ iff $t = t'$ and w' is accessible from w via MOD.

This leads to the truth conditions of the indirect report (21)/(23) in (29). Note that \exists_4 in (29) ranges over indices i_4 which share the world-member with i_3 and whose temporal coordinate is a salient time (today dd.mm.yyyy in our scenario).

(29) Truth conditions of (21)/(23):

$$\begin{aligned} \lambda i_0. \exists i_1 [i_1 < i_0 \wedge \forall i_2 \in \text{Dox}_{\text{Ana}}(i_1) \forall i_3 \in \text{Metaph}^L(i_2): \\ \exists i_4 [i_3 < i_4 \wedge J \text{ be-hungry at } i_4] \rightarrow \\ \exists i_4 [i_3 < i_4 \wedge J \text{'s stomach be-growling at } i_4]] \end{aligned}$$

2.2 Subjunctive mood

In Spanish and other Romance languages, representational verbs like *pensar* ‘think’ select INDICATIVE, as illustrated in (30), whereas non-representational verbs like *lamentar* ‘regret’ select SUBJUNCTIVE, as exemplified in (31).

- (30) Bea piensa [que Juan enseña / *enseñe semántica]
Bea thinks [that Juan teaches.IND / *teaches.SUBJ semantics]

‘Bea thinks that Juan teaches semantics.’

- (31) Bea lamenta [que Juan *enseña / enseñe semántica]
Bea regrets [that Juan *teaches.IND / teaches.SUBJ semantics]

‘Bea regrets that Juan teaches semantics.’

We will follow [Schlenker \(2005\)](#)’s analysis of mood morphology, with the following ingredients. First, mood morphology introduces a mood feature on the world pronoun, again represented as a superscript on the pronoun in our LFs, e.g. $pro_i^{[IND\ pro_k]}$. Second, the features IND(icative) and SUBJ(unctive) are relative to a pronoun pro_k that picks up the so-called “local context” (in the sense of [Stalnaker \(1975\)](#)): For root clauses, $\llbracket pro_k \rrbracket$ equals the Common Ground (CG); for embedded complement clauses, $\llbracket pro_k \rrbracket$ (roughly) equals $Do_{x,x}(w_0)$ of the attitude holder x . Finally, the feature IND imposes a presupposition on the value of the world pronoun whereas the feature SUBJ imposes no presupposition, as defined in (32)–(33):

- (32) $\llbracket pro_i^{[IND\ pro_k]} \rrbracket$ is defined only if $g(i) \in g(k)$;
if defined, $\llbracket pro_i^{[IND\ pro_k]} \rrbracket = g(pro_i)$

- (33) $\llbracket pro_i^{[SUBJ\ pro_k]} \rrbracket = g(pro_i)$

Let us see briefly how these mechanisms derive mood selection in examples (30)–(31). We start by computing the proposition expressed by the complement clause when containing Indicative mood –namely, the partial function (34)– and when containing Subjunctive mood –namely, the total function (35)–, where x is the attitude holder:

- (34) $\llbracket Juan\ teach\ semantics\ at\ pro_i^{[IND\ pro_k]} \rrbracket =$
 $\lambda w': w' \in Do_{x,x}(w_0). J\ teaches\ sem\ in\ w'$ IND-proposition

- (35) $\llbracket Juan\ teach\ semantics\ at\ pro_i^{[SUBJ\ pro_k]} \rrbracket =$
 $\lambda w': w' \in Do_{x,x}(w_0). J\ teaches\ sem\ in\ w'$ SUBJ-proposition

In the case of *think*, we have the standard lexical entry in (36). This entry simply asks us to check the value of our proposition at the worlds $w \in Do_{x,x}(w_0)$. For that,

the partial IND-proposition (34) suffices. By *Maximize Presupposition!* in (37), the maximally presuppositional IND-proposition *has* to be used. Hence, *think* can take the IND-proposition and cannot take the SUBJ-proposition, as we saw in (30).

$$(36) \quad \llbracket \textit{think} \rrbracket(p)(x) = \lambda w_0. \forall w \in \text{Dox}_x(w_0): p(w)$$

$$(37) \quad \textit{Maximize Presupposition!}: \text{Make your contribution presuppose as much as possible!} \quad (\text{Heim 1991})$$

In the case of *regret* we have the lexical entry (38) (adapted from Heim (1992)'s *be glad*). The idea is that, for each world $w \in \text{Dox}_x(w_0)$, we compare in terms of desirability the world w^p most similar to w where p is true –which is w itself– and the world w^{-p} most similar to w where $\neg p$ is true –namely, $\text{Sim}_w(\text{rev}_p(\text{Dox}_x(w_0))+\neg p)$. If we take p to be total SUBJ-proposition (35), the expression $\text{Sim}_w(\text{rev}_p(\text{Dox}_x(w_0))+\neg p)$ will be defined. But, if we take p to the partial IND-proposition (34) instead, the expression will be undefined.⁵ Hence, *regret* must combine with a SUBJ-proposition and cannot combine with an IND-proposition, as we saw in (31).

$$(38) \quad \llbracket \textit{regret} \rrbracket(p)(x) = \lambda w_0: \forall w \in \text{Dox}_x(w_0) [p(w)]. \\ \forall w \in \text{Dox}_x(w_0) [\text{Sim}_w(\text{rev}_p(\text{Dox}_x(w_0))+\neg p) >_{\text{Bou}_x(w_0)} w]$$

2.3 Tense and mood in HypCFs

We have now the necessary ingredients for an analysis of the tense and mood morphology in HypCFs. On the one hand, we have the general LF structure (39) assumed for HypCFs in the temporal remoteness approach (Dudman (1983); Grønn & von Stechow (2009); cf. Ippolito (2003)). On the other, we have the analyses of tense and mood in the preceding sections.

$$(39) \quad \text{PAST [MODAL}_{\text{METAPHY}} \text{ [if (FUT) A] [then FUT C]]} \quad (= (15))$$

Extending previous analyses and applying the result to our HypCFs (40) and (41), Romero (2017) obtains the (preliminary) LF (42) and the truth conditions (43):⁶

⁵ The formal expression $\text{Sim}_w(\text{rev}_p(\text{Dox}_x(w_0))+\neg p)$ instructs us, first, to temporarily revise $\text{Dox}_x(w_0)$ with respect to p , as defined in (i). If we take IND- p , the (temporarily) revised $\text{rev}_p(\text{Dox}_x(w_0))$ contains only worlds in which John teaches semantics, as the original $\text{Dox}_x(w_0)$ did. Second, we need to update the result of this revision with $\neg p$, which results in an empty doxastic state (contradiction). Finally, Sim_w ask us to look at the worlds w' within this empty updated revised doxastic state and to select the world w' most similar to w . But, since there is no world in that epistemic state, it is impossible to select one.

(i) For any context c and proposition p :
 $\text{rev}_p(c) = \cup \{X \subseteq W: c \subseteq X \text{ and } X+p \text{ is defined}\}$

⁶ See Romero (2017) for two adjustments to this LF and truth conditions, one concerning temporal

(40) If you **were** hungry right now, your stomach **would be** growling. (=11)

(41) Si (tú) tuvieses hambre ahora, tu estómago estaría gruñendo.
If (you) **had.SUBJ** hunger now, your stomach **would.be** growling

‘If you were hungry now, your stomach would be growling.’ (=12)

(42) LF: $\lambda 0 \exists_1 [\text{MODAL}_{\text{METAPHY}}^L \text{pro}_1^{[\text{PAST } \text{pro}_0]} \lambda 8 \exists_4 [\text{you be hungry at } \text{pro}_4^{[\text{SUBJ CG}][\text{past}][\text{FUT } \text{pro}_8]}] \lambda 8 \exists_4 [\text{your stomach be growling at } \text{pro}_4^{[\text{past}][\text{FUT } \text{pro}_8]}]]]$

(43) $\lambda i_0. \exists i_1 [i_1 < i_0 \wedge \forall i_8 \in \text{Metaph}^L(i_1): \exists i_4 [i_8 \in \text{CG} \wedge i_8 < i_4 \wedge \text{you be hungry at } i_4] \rightarrow \exists i_4 [i_8 < i_4 \wedge \text{your stomach be growling at } i_4]]$

This accounts for the grammaticality of ‘fake’ tense in the antecedent and consequent of HypCFs both in English and Spanish and for the grammaticality of subjunctive mood in the antecedent of HypCFs in Spanish.⁷

3 Background: Breaking Sequence of Tense

When Sequence of Tense is broken in attitude reports by using an absolute tense, e.g. English present tense in (44), we obtain a so-called “double-access” temporal reading: The time of the embedded proposition must align both with the utterance time t_0 and with the attitude holder’s subjective “now” t_1 (Abusch 1997; Ogihara 1999). The same facts holds for Spanish.

(44) John said Mary is pregnant.

a. John said at a past time t_1 that Mary is pregnant at t_0 .

b. John said at a past time t_1 that Mary is pregnant at t_1 .

However, using the lexical entry (45) for absolute present tense produces the LF (46), which only gives us temporal alignment of t_4 with t_0 , as in (47a). To obtain the desired alignment with t_1 , Ogihara (1999) proposes an analysis (very much simplified here!) where the temporal property is duplicated and linked to t_2 as well, as underlined in (47b):

(45) $\llbracket \text{pro}_i^{[\text{PRES } \text{pro}_0]} \rrbracket^g$ is defined only if $g(i) \circ g(0)$; if defined, $\llbracket \text{pro}_i^{[\text{PRES } \text{pro}_0]} \rrbracket = g(i)$

(46) LF: $\lambda 0. \exists_1 [\text{John say at } \text{pro}_1^{[\text{PAST } \text{pro}_0]} \lambda 3 \exists_4 [\text{Mary be pregn. at } \text{pro}_4^{[\text{PRES } \text{pro}_0]}]]$

alignment between i_4 and the actual index i_0 and one restricting the metaphysical possibilities quantified over (Morgenbesser cases).

⁷ The Spanish verbal paradigm has only one mood version of ‘would+Verb’. Since there is no mood choice for this form in the consequent clause, the mood distinction is neutralized.

- (47) a. $\lambda t_0. \exists i_1 [i_1 < i_0 \wedge \forall t_2 \in \text{SAY}_{\text{john}}(t_1): \exists t_4 [t_4 \circ t_0 \wedge \text{Mary be pregnant at } t_4]]$
 b. $\lambda t_0. \exists i_1 [i_1 < i_0 \wedge \forall t_2 \in \text{SAY}_{\text{john}}(t_1): \exists t_4 [t_4 \circ t_0 \wedge \text{Mary be pregnant at } t_4 \wedge \underline{t_4 \circ t_2}]]$

4 Proposal

We are ready to go back to the contrast between hypothetical and biscuit counterfactual conditionals. The crucial differences between the two counterfactual types can be recapitulated as follows.

In HypCFs, the consequent clause must contain ‘fake’ tense, both in English and in Spanish. This is shown in (48)-(49): While the (a)-versions with ‘fake’ tense are grammatical, the (b)-versions with no ‘fake’ tense in the consequent clause are unacceptable under the hypothetical reading:

- (48) a. If you were hungry right now, your stomach **would be** growling. HYP CF
 b. # If you were hungry right now, your stomach **is** growling.
 (49) a. Si (tú) tuvieses hambre, tu estómago estaría gruñendo.
 If (you) had.Subj hunger, your stomach **would.be** growling. HYP CF
 b. # Si (tú) tuvieses hambre, tu estómago está(/esté) gruñendo.
 If (you) had.Subj hunger, your stomach **is.Ind(/is.Subj)** growling.

In BiCFs, the consequent clause should contain no ‘fake’ tense, both in English and in Spanish. This can be seen in (50)-(51): While the (a)-versions with ‘fake’ tense are deviant as biscuits, the (b)-versions without it are perfect. Furthermore, the consequent clause must appear in indicative mood in Spanish, as shown in (51b):

- (50) a. # If you were hungry right now, there would be pizza in the fridge.
 b. If you were hungry right now, there **is** pizza in the fridge. BICF
 (51) a. # Si (tú) tuvieses hambre, habría pizza en el frigorífico.
 If (you) had.Subj hunger, would.have pizza in the fridge.
 b. Si (tú) tuvieses hambre, hay(/*haya) pizza en el frigo. BICF
 If (you) had.Subj hunger, **have.Ind(/*Subj)** pizza in the fridge.

We have already seen in §2.3 why ‘fake’ tense in the consequent clause makes good HypCFs. What still needs to be accounted for is the following.

First, why does the lack of ‘fake’ tense and the use of indicative mood in the consequent make good BiCFs? We will propose in §4.1 that, in these forms, we are breaking Sequence of Tense and, additionally for Spanish, we are breaking what could be called ‘Sequence of Mood’; that is, we are doing double access readings at the same time in the temporal and modal domain. In lack of a fully worked-out

analysis of double access readings over indices (i.e., $\langle \text{time}, \text{world} \rangle$ -pairs), we will extend our simplified version of Ogihara’s (1999) idea as a stop-gap solution.

Second, why does ‘fake’ tense in the consequent clause and, additionally for Spanish, non-Indicative mood make BiCFs deviant? In other words, why does maintaining Sequence of Tense and Sequence of Mood in (50a)/(51a) make bad BiCFs? We will argue in §4.2 that pragmatic competition between the relevant forms rules out the unacceptable options.⁸

Third and finally, why does the lack of ‘fake’ tense and the use of indicative in the consequent make HypCFs unacceptable, as in (48b)/(49b)? We will sketch a potential solution in §4.3 based on the Gricean Principle of Manner.

4.1 Grammatical BiCFs

We propose that grammatical BiCF forms like (52)-(53) –whose consequent clause has no ‘fake’ tense and, in Spanish, bears Indicative mood– involve broken Sequence of Tense and broken “Sequence of Mood”, leading to a double access reading of the temporal parameter and of the modal parameter within the evaluation index.

(52) If you were hungry right now, there **is** pizza in the fridge. = (50b)

(53) Si (tú) tuvieses hambre, hay pizza en el frigorífico. = (51b)
If (you) had.Subj hunger, **have.Ind** pizza in the fridge.

To implement this idea, some formal apparatus will be needed. Next to temporal intervals overlapping with two times à la Ogihara (1999), we need modal ‘intervals’ –i.e., stretches of logical space– overlapping with two modal contexts. We construe an interval as a plural sum T of time points and, following Schlenker (2004), as a plural sum W of possible worlds. We put these pluralities into a pair to form an i (nternally)-plural index $\langle W, T \rangle$. Temporal precedence $<$ and overlap \circ between i -plural indices are defined in (54) and a parallel definition for modal overlap \bullet is given in (55). Note that the condition on the latent parameter has been relaxed: While (28) required the equality $w=w'$ for atomic worlds, (54) requires a non-empty intersection $W \cap W' \neq \emptyset$ between plural worlds (and similarly for (55)):

(54) For any two indices $\langle W, T \rangle$ and $\langle W', T' \rangle$:
 $\langle W, T \rangle < \langle W', T' \rangle$ iff $W \cap W' \neq \emptyset$ and T is prior to T' .
 $\langle W, T \rangle \circ \langle W', T' \rangle$ iff $W \cap W' \neq \emptyset$ and T and T' overlap.

(55) For any two indices $\langle W, T \rangle$ and $\langle W', T' \rangle$:
 $\langle W, T \rangle \bullet \langle W', T' \rangle$ iff $T \cap T' \neq \emptyset$ and W and W' overlap.

⁸ This is true of the typical cases; we discuss exceptions in §4.2.

The contribution of mood is redefined in (56): $\text{pro}_i^{[\text{IND } \text{pro}_k]}$ presupposes modal overlap \bullet between index $g(i)$ and the maximal i-plural index -imax defined in (57)–corresponding to the local context $g(k)$. For example, if our local context is $\{\langle w_1, t_7 \rangle, \langle w_2, t_7 \rangle, \langle w_3, t_7 \rangle\}$, its i-max is $\langle w_1 \oplus w_2 \oplus w_3, t_7 \rangle$.

$$(56) \quad \llbracket \text{pro}_i^{[\text{IND } \text{pro}_k]} \rrbracket \text{ is defined only if } g(i) \bullet \text{imax}(g(k));$$

$$\text{if defined, } \llbracket \text{pro}_i^{[\text{IND } \text{pro}_k]} \rrbracket = g(\text{pro}_i)$$

$$(57) \quad \text{For any set } I \text{ of (atomic) indices:}$$

$$\text{imax}(I) = \langle \max(\{w' : \exists t' [\langle w', t' \rangle \in I]\}), \max(\{t' : \exists w' [\langle w', t' \rangle \in I]\}) \rangle$$

Finally, we assume that, if a proposition is predicated of an i-plural index $\langle W, T \rangle$, that proposition must hold true throughout that entire modal-temporal space, that is, through all the pairs $\langle w, t \rangle$ such that $w \in W$ and $t \in T$.

Let us apply the idea of temporal/modal double-access and this formalization to our examples. The present and indicative morphology in (52)/(53) leads to LF (58). This gives us the temporal and modal alignment of index i_4 with the (atomic) utterance index i_0 and with the CG in the last \exists -subformula in (59), but no temporal or modal alignment of i_4 with the (atomic) counterfactual index i_8 and $\text{Metaph}^L(i_1)$:

$$(58) \quad \text{LF: } \lambda 0 \exists i_1 [\text{MODAL}_{\text{METAPHY}}^L \text{ at } \text{pro}_1^{[\text{PAST } \text{pro}_0]}]$$

$$\lambda 8 \exists i_4 [\text{you be hungry at } \text{pro}_4^{[\text{SUBJ CG}] \text{ past } [\text{FUT } \text{pro}_8]}]$$

$$\lambda 8 \exists i_4 [\text{be pizza at } \text{pro}_4^{[\text{IND CG}] \text{ [PRES } \text{pro}_0]}]$$

$$(59) \quad \lambda i_0. \exists i_1 [i_1 < i_0 \wedge \forall i_8 \in \text{Metaph}^L(i_1):$$

$$\exists i_4 [i_8 \bullet \text{imax}(\text{CG}) \wedge i_8 < i_4 \wedge \text{you be hungry at } i_4] \rightarrow$$

$$\exists i_4 [i_4 \bullet \text{imax}(\text{CG}) \wedge i_0 \circ i_4 \wedge \text{there be pizza at } i_4]]$$

To supply the desired alignment, we extend Ogihara's idea and propose to duplicate the temporal and modal relations as $i_8 \circ i_4$ and $i_4 \bullet \text{imax}(\text{Metaph}^L(i_1))$ to allow for local binding, resulting in (60), with the duplication underlined:

$$(60) \quad \lambda i_0. \exists i_1 [i_1 < i_0 \wedge \forall i_8 \in \text{Metaph}^L(i_1):$$

$$\exists i_4 [i_8 \in \text{CG} \wedge i_8 < i_4 \wedge \text{you be hungry at } i_4] \rightarrow$$

$$\exists i_4 [i_4 \bullet \text{imax}(\text{CG}) \wedge i_0 \circ i_4 \wedge \text{there be pizza at } i_4 \wedge$$

$$\underline{i_4 \bullet \text{imax}(\text{Metaph}^L(i_1)) \wedge i_8 \circ i_4}]$$

Note that, crucially, i_4 in the last \exists -subformula is an i-plural index overlapping temporally with the time parameters of i_0 and i_8 and overlapping modally with the world parameters of $\text{imax}(\text{CG})$ and $\text{imax}(\text{Metaph}^L(i_1))$. That is, for each atomic i_0 of shape $\langle w_0, t_0 \rangle$ and each atomic i_8 of shape $\langle w_8, t_8 \rangle$, there is an i_4 of shape $\langle w_0 \oplus \dots \oplus w_8, t_0 \oplus \dots \oplus t_8 \rangle$ temporally and modally overlapping with them. For each such combination of i_0 and i_8 , there being pizza in the fridge is predicated of

the entire index i_4 . As a result, by breaking Sequence of Tense and Sequence of Mood in BiCFs, the truth conditions (60) guarantee not only that there is pizza in each hypothetical hungry-index i_8 , but also at each potential actual index i_0 . This hard-wires the ‘biscuit’ effect: the feeling that the consequent is being asserted (of i_0) regardless of the truth of the antecedent.

4.2 Unacceptable Biscuit Counterfactuals

Note that the truth conditions in (60) resulting from breaking Sequence of Tense/Mood in examples (52)/(53) are stronger than the ones in (63) below resulting from not breaking it in examples (61)/(62).⁹

- (61) # If you were hungry right now, there would be pizza in the fridge. =(50a)
 (62) # Si (tú) tuvieses hambre, habría pizza en el frigorífico. =(51a)
 If (you) had.Subj hunger, would.have pizza in the fridge.
 (63) $\lambda i_0. \exists i_1 [i_1 < i_0 \wedge \forall i_8 \in \text{Metaph}^L(i_1):$
 $\exists i_4 [i_8 \in \text{CG} \wedge i_8 < i_4 \wedge \text{you be hungry at } i_4] \rightarrow$
 $\exists i_4 [i_8 < i_4 \wedge \text{there be pizza at } i_4]]$

Following Franke (2009), (52)/(53) and (61)/(62) are predicted to equally receive a biscuit interpretation irrespective of tense or mood, since p and q are conditionally independent. This means that (52)/(53) and (61)/(62) compete for signalling the same message. Thus, there are two competing strategies for the speaker to communicate her commitment to q in i_0 : to use the semantically weaker form (61)/(62) aided by pragmatic inferencing, or to use the semantically stronger form (52)/(53) (trivially accompanied by pragmatic inferencing). The stronger form should be chosen.

Similar effects arise from competition between a stronger and a weaker alternative in other cases, e.g. the competition between moods with *Maximize presupposition!* leading to mood selection, as we saw in §2.2, and competition between tenses leading to cessation implicatures (Altshuler & Schwarzschild (2013)). The latter phenomenon is illustrated in (64)-(65), where the use of past tense as opposed to present tense with a stative predicate when no topical past time is salient triggers the implicature that the stative property does not hold at the utterance time:

- (64) John is sick.
 (65) John was sick. \rightsquigarrow John is no longer sick.

⁹ Unlike in (60), i_4 in (63) is specified to be temporally posterior to the hypothetical index i_8 . However, since i_4 in (60) must stretch to include the temporal parameters of (past hypothetical) i_8 and (present actual) i_0 as well their modal space, (60) also entails that there is pizza in the fridge at a hypothetical index posterior to i_8 .

To derive this cessation implicature, [Altshuler & Schwarzschild \(2013\)](#) argue that present tense stative predicates entail being true not just of the utterance time but also of prior times. This means that, by using present tense, the speaker of (64) conveys the stronger message that the interval of John being sick includes both the speech time and times prior to speech time. In contrast, using the past tense in (65) only commits the speaker to John being sick at some times prior to speech time, thus giving rise to the implicature that the speaker does *not* want to commit to John being sick at speech time.

A similar mechanism takes place in our examples:

- (66) If you were hungry now, there is pizza in the fridge. = (50b)
 (67) # If you were hungry now, there would be pizza in the fridge. = (50a)

By breaking Sequence of Tense, the speaker of (66) signals that she is committed to there being pizza in the fridge both at the counterfactual hungry-indices and at the actual index. In (67), the semantics only commit the speaker to there being pizza at the counterfactual hungry-indices. This gives rise to the implicature that the speaker does not want to commit to there being pizza being at the actual index. But, because of conditional independence, the hearer infers that the speaker *does* commit to there being pizza at the actual index. Thus a pragmatically contradictory message is sent, which in competition loses to the clear message (66).

Note that [Franke \(2009\)](#)'s inference is the only source of the “biscuit” effect when the grammar does not allow speakers a morphological choice, e.g. in modal subordination cases such as (68) due to [Swanson \(2013\)](#). Here the speaker is only committed to there being biscuits at her desire indices (conditionally independently of p), but crucially not at i_0 .

- (68) I want to vacation at a posh hotel in London. We would have tea every afternoon, and there **would be** biscuits on the sideboard if one were so inclined. (Swanson 2013)

4.3 Unacceptable Hypothetical Counterfactuals

HypCF forms that break Sequence of Tense/Mood are unacceptable, as in (69) and (70). We will rule them out by appealing to the Maxim of Manner ([Grice \(1975\)](#)).

- (69) # If you were hungry right now, your stomach is growling. = (48b)
 (70) # Si (tú) tuvieses hambre, tu estómago está gruñendo. = (49b)
 If (you) had.Subj hunger, your stomach is.Ind growling.

We claim that (69) and (70) are not ungrammatical, i.e., ruled out for syntactic or semantic reasons, but rather they are pragmatically odd. [DeRose & Grandy \(1999\)](#)

note that there are two reasons why a speaker may utter the more complicated *If p, q* instead of plain *q*: Either she is uncertain about *q*'s truth when uttered on its own (if *p* and *q* are conditionally dependent), or she is uncertain about *q*'s relevance when uttered on its own (if conditionally independent). If she is convinced of both *q*'s truth and its relevance, by the Principle of Manner she should utter plain *q* rather than *If p, q*. This sheds light on the oddity of (69)/(70) in run-of-the-mill contexts: On the one hand, since *p* and *q* are conditionally dependent, the use of *If p, q* indicates that the speaker is uncertain about the truth of *q*; on the other, qua present indicative in the consequent clause, the speaker signals that she considers *q* true. The clash between these two messages leads to pragmatic oddity.

However, it has been pointed out to us that there are some special contexts where the speaker *does* intend to communicate both a counterfactual thought and the truth of its consequent, e.g. in Anderson conditionals (Anderson (1951)) like (71):¹⁰

(71) If Jones had taken arsenic, he would be showing exactly the symptoms which he in fact does show.

(72) # If Jones had taken arsenic, he is showing exactly the(se) symptoms.

Why is (72) not a shorter, more elegant way of expressing (71)? The speaker of (71) utters a conditional even though she is apparently certain about both the truth and the relevance of the consequent in the actual world. Adding to DeRose & Grandy (1999), a third reason for uttering *If p, q* presents itself: The speaker is wishing to distance herself from claims about the actual world.¹¹ Using the form in (72) would counteract this effect and is thus at odds with the speaker's communicative goals.

5 Outlook

The unified independence-based approach proposed for hypothetical and biscuit *indicative* conditionals (Franke (2009), Francez (2015), Lauer (2015), Csipak (2018), Biezma & Goebel (2018), Goebel (2017), a.o.) has been extended to hypothetical and biscuit *counterfactual* conditionals to derive the entire pattern in (48)-(51) by combining the temporal remoteness approach to counterfactual morphology with the following key ingredients: (i) breaking Sequence of Tense and Sequence of Mood in an extension of Ogihara (1999), (ii) competition between more informative vs. less informative forms and (iii) the Gricean Principle of Manner.

Open issues include the following.

First, on the theoretical front, the analysis of double access readings used here needs to be further refined (possibly as a *de re* analysis) and unified across constructions, including purely temporal double access like (44), index double access

¹⁰ We thank an anonymous reviewer and members of the SALT audience for pointing out such cases.

¹¹ We thank Magdalena Kaufmann for pointing out this possibility.

like our BiCFs (50b)/(51b) and potentially other double-access-looking data. For example, in (73), translated into Spanish from Schlenker (2004), the (a)-version breaking Sequence of Tense/Mood can be used to convey that, if Juan thought of the actual rainy weather pattern that it counts as good weather, Juan would be crazy, while the (b)-version does not allow for this interpretation.

- (73) Context: It is raining outside and the speaker sees that. [Spanish]
- a. Si Juan pensase que hace.Ind buen tiempo, estaría loco.
'If John thought that the weather **is.Ind** nice, he would be crazy.'
- b. # Si Juan pensase que hiciese.Subj buen tiempo, estaría loco.
'If John thought that the weather **was.Subj** nice, he would be crazy.'

Second, on the empirical front, this paper has only investigated how BiCFs behave in languages like English and Spanish, which use verbal morphology to convey counterfactuality and allow double-access options on that morphology. How do languages using other means to express counterfactuality behave? Do those means also permit a double-access indexing option, or does the “biscuit” feeling rely solely on the pragmatic inference (cf. Swanson’s (2013) (68))?

Third, we have built our analysis of BiCFs and related forms on the temporal remoteness approach. However, counterpossibles like (74) posit a challenge to this general line. One possible avenue might be to relativize indicative and counterfactual conditionals to a given epistemic state (cf. Leahy (2018)).

- (74) If two plus two were five, this addition would be correct.

References

- Abusch, Dorit. 1997. Sequence of tense and temporal de re. *Linguistics and Philosophy* 20. 1–50.
- Altshuler, Daniel & Roger Schwarzschild. 2013. Moment of change, cessation implicatures and simultaneous readings. In E. Chemla, V. Homer & G. Winterstein (eds.), *Sinn und Bedeutung* 17, 45–62.
- Anderson, Alan Ross. 1951. A note on subjunctive and counterfactual conditionals. *Analysis* 11. 35–38.
- Austin, John L. 1956. Ifs and cans. In *British Academy*, vol. 42, 109–132.
- Biezma, Maria & Arno Goebel. 2018. The pragmatic ingredients to get perfect biscuits. In R. Truswell, C. Cummins, C. Heycock, B. Rabern & H. Rohde (eds.), *Sinn und Bedeutung* 21, 179–198.
- Csipak, Eva. 2015. *Free factive subjunctives in German*: University of Göttingen PhD dissertation.

- Csipak, Eva. 2018. Discourse-structuring conditionals and past tense. In R. Truswell, C. Cummins, C. Heycock, B. Rabern & H. Rohde (eds.), *Sinn und Bedeutung* 21, 301–315.
- DeRose, K. & R.E. Grandy. 1999. Conditional assertions and ‘biscuit’ conditionals. *Nous* 33. 405 – 420.
- Dudman, V. H. 1983. Tense and time in english verb clusters of the primary pattern. *Australian Journal of Linguistics* 3. 25–44.
- Dudman, V. H. 1984. Conditional interpretations of if-sentences. *Australian Journal of Linguistics* 4. 143–204.
- Ebert, Christian, Cornelia Ebert & Stefan Hinterwimmer. 2014. A unified analysis of conditionals as topics. *Linguistics and Philosophy* 37. 353–408.
- Francez, Itamar. 2015. Chimerical conditionals. *Semantics & Pragmatics* 8. 1–35.
- Franke, Michael. 2009. *Signal to Act. Game Theory in Pragmatics*: University of Amsterdam PhD dissertation.
- Goebel, Arno. 2017. Laws for biscuits: Independence and dependence in conditionals. In D. Burgdorf, J. Collard, S. Maspong & B. Stefánsdóttir (eds.), *Semantics and Linguistic Theory* 27, 377–396.
- Grice, H. P. 1975. Logic and conversation. In P. Cole & J. Morgan (eds.), *Syntax and semantics 3: Speech arts*, 41–58. New York: Academic Press.
- Grønn, Atle & Arnim von Stechow. 2009. Temporal interpretation and organization of subjunctive conditionals. Ms. University Oslo.
- Heim, Irene. 1991. Artikel und definitheit. In A. von Stechow & D. Wunderlich (eds.), *Semantik: Ein internationales Handbuch der zeitgenössischen Forschung*, 487–535. Berlin: de Gruyter.
- Heim, Irene. 1992. Presupposition projection and the semantics of attitude verbs. *Journal of Semantics* 9. 183–221.
- Heim, Irene. 1994. Comments on Abusch’s theory of tense. In H. Kamp (ed.), *Ellipsis, tense and questions*, 143–170. U. Amsterdam.
- Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31. 231–270.
- Ippolito, Michela. 2003. Presuppositions and implicatures in counterfactuals. *Natural Language Semantics* 11. 145–186.
- Kaufmann, Stefan. 2005. Conditional truth and future reference. *Journal of Semantics* 22. 231–280.
- Kratzer, Angelika. 1998. More structural analogies between pronouns and tenses. In D. Strolovitch & A. Lawson (eds.), *Semantics and Linguistic Theory* 8, 92–109. Ithaca, N.Y.: CLC.
- Kusumoto, Kiyomi. 1999. *Tense in embedded contexts*: University of Massachusetts at Amherst PhD dissertation.
- Kusumoto, Kiyomi. 2005. On the quantification over times in natural language.

- Natural Language Semantics* 13. 317–357.
- Lauer, Sven. 2015. Biscuits and provisos. In E. Csipak & H. Zeijlstra (eds.), *Sinn und Bedeutung* 19, 357–374.
- Leahy, Brian. 2018. Counterfactual antecedent falsity and the epistemic sensitivity of counterfactuals. *Philosophical Studies* 175. 45–69.
- Lewis, David. 1973. *Counterfactuals*. Malden: Blackwell.
- Ogihara, T. 1999. Double access sentences generalized. In T. Matthews & D. Strolovitch (eds.), *Semantics & Linguistic Theory* 9, 224–236. Ithaca: CLC.
- Ogihara, Toshiyuki. 1995. The semantics of tense in embedded clauses. *Linguistic Inquiry* 26. 663–679.
- Partee, Barbara. 1973. Some structural analogies between tenses and pronouns in English. *Journal of Philosophy* 7. 601–609.
- Romero, Maribel. 2014. ‘Fake tense’ in counterfactuals: A temporal remoteness approach. In L. Crnic & U. Sauerland (eds.), *The art and craft of semantics: A festschrift for irene heim*, vol. 2, 47–63. Cambridge, MA: MITWPL.
- Romero, Maribel. 2017. Tense and mood in counterfactual conditionals: the view from Spanish. In T. van Gessel A. Cremers & F. Roelofsen (eds.), *Amsterdam Colloquium* 21, University of Amsterdam.
- Schlenker, Philippe. 2004. Sequence phenomena and double access readings generalized. In J. Lecarme & J. Guéron (eds.), *The syntax of time*, 555–595. Cambridge: MIT Press.
- Schlenker, Philippe. 2005. The lazy frenchman’s approach to the subjunctive. In T. Geerts, I. van Ginneken & H. Jacobs (eds.), *Romance languages and linguistic theory 2003*, 269–309. Amsterdam: Benjamins.
- Schulz, Katrin. 2014. Fake tense in conditional sentences: A modal approach. *Natural Language Semantics* 22. 117–144.
- Stalnaker, R. 1975. Indicative conditionals. *Philosophia* 5. 269–286.
- von Stechow, A. 1995. On the proper treatment of tense. In M. Simons & T. Galloway (eds.), *Semantics and Linguistic Theory* 5, Ithaca N.Y.: CLC.
- von Stechow, A. 2009. Tense in compositional semantics. In Wolfgang Klein & Ping Li (eds.), *The expression of time*, 129–166. Berlin/New York: De Gruyter.
- Swanson, Eric. 2013. Subjunctive biscuit and stand-off conditionals. *Philosophical Studies* 163(3). 637–648.

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