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Imperfect in Italian *irrealis* conditionals

Fabio Del Prete, Silvia Federzoni CLLE (CNRS & Université de Toulouse 2)

1. Introduction

Irrealis conditionals in Italian can have a surprising form: although syntactically full-fledged conditional structures, consisting of an 'if'-complementizer ("se"), a subordinate clause (protasis), and a matrix clause (apodosis), they can have a flat tense/mood morphology, with both their clauses in the imperfect tense of indicative (*Imperfetto*; Gherardini 1840, Fornaciari 1881, Rohlfs 1969, Bertinetto 1986, Bazzanella 1990, Mazzoleni 2001, Ippolito 2004). This structure is exemplified by (1):¹

(1) Se <u>venivi</u> alla festa ti <u>divertivi</u> un sacco. if come-2SG.IMPERF to-the party 2SG.CL amuse-2SG.IMPERF a lot 'If you *came / had come* to the party, you *would have / would have had* a lot of fun.'

In this paper we will use the term "*Imperfetto Irrealis*" to refer to conditionals such as (1) (in the reading expressed by the English translation above). *Imperfetto Irrealis* are puzzling for several reasons:

- (a) unlike English flat simple past conditionals ("If you came to the party, then you [certainly] had a lot of fun") and other indicative conditionals in Italian,² which are typically interpreted as epistemic (namely, the speaker ignores whether the protasis is true or false), they express counterfactual meaning;
- (b) unlike English "one past" counterfactuals, which cannot refer to past events ("If you came to the party **yesterday*, you would have a lot of fun"), they allow for, and even prefer, a past interpretation ("Se *ieri* venivi alla festa ti divertivi un sacco"), which might incline one to think that the *Imperfetto* is acting as a past tense there;
- (c) besides their past interpretation, they also allow for the events to be present or future for instance, (1) may be uttered during the party, while being on a phone conversation with the hearer, or before the party—, which makes one wonder whether, after all, the *Imperfetto* isn't acting differently from a past tense there;
- (d) they raise the question of what semantic relation the *Imperfetto* occurring in them bears to the standard values of Romance imperfects, namely, progressive, generic/habitual, and continuative, since *prima facie* the semantics of *Imperfetto Irrealis* has nothing to do with those values.

There is a further aspect which makes *Imperfetto Irrealis* an interesting object of study, which has to do with the relation between semantics and sociolinguistics. Contemporary grammars of Italian consider this kind of conditionals non-standard, or even substandard

¹ The glosses make use of the abbreviation "IMPERF" to refer specifically to the *Imperfetto* (and, occasionally, to other Romance indicative imperfects), instead of the more analytical expression "PST.IPFV.IND" (for "past imperfective indicative"). They conform in all other respects to the Leipzig Glossing Rules.

² *Imperfetto Irrealis* are not the only conditional structures in Italian that have the same indicative tense in both clauses. They are, however, the only such structures to receive a counterfactual interpretation. See section 2.4 for discussion.

(Mazzoleni 2001), whereas standard *irrealis* conditionals have a more complex TAME morpho-syntax, with the protasis in the subjunctive and the apodosis in the conditional mood. For example, (2) and (3) are generally regarded as the two standard variants of (1):

- Se <u>fossi</u> [be-2SG.IPFV.SBJV] <u>venuto</u> [come-PST.PTCP] alla festa ti <u>saresti</u> [be-2SG.PRS.COND] <u>divertito</u> [amuse-PST.PTCP] moltissimo.
 'If you had come to the party, you would have had a lot of fun.'
- (3) Se <u>venissi</u> [come-2SG.IPFV.SBJV] alla festa ti <u>divertiresti</u> [amuse-2SG.PRS.COND] moltissimo.

'If you came to the party, you would have a lot of fun.'

Counterfactual conditionals of these types have been made the object of thorough analyses within formal semantics (Ippolito 2003, 2006). In this paper we won't have anything to add to the discussion of their complex semantic composition; our concern will be instead with analysing the semantic contribution of the *Imperfetto* to the temporal and modal aspects of *Imperfetto Irrealis* and clarifying the semantic specificity of the latter *vis-à-vis* the standard *irrealis* conditionals. The view of *Imperfetto Irrealis* as non-standard is motivated to some extent by the observation that sentences such as (1) are largely attested in colloquial and informal speech. However, we will show that this view does not make justice to the full complexity of their use and meaning. The data we will be using come from (i) the web-based corpus itTenTen (Jakubíček *et al.*, 2013), exploited through the interface SketchEngine (Kilgarriff *et al.*, 2014), for the more informal data, and from (ii) the narrative subcorpus of the CORIS corpus (Rossini Favretti et al. 2002) and (iii) previous historical linguistics studies, for more formal data.

The structure of the paper is as follows. Section 2 focuses on the relation between Imperfetto Irrealis and standard counterfactuals. To shed light on this relation, it considers "mixed conditionals", in which an Imperfetto combines either with a conditional mood in the apodosis ("Se venivi alla festa ti saresti divertito moltissimo"), or with a subjunctive mood in the protasis ("Se fossi venuto alla festa ti divertivi moltissimo"). In section 3 we consider Imperfetto Irrealis and mixed conditionals in literary texts from the past centuries, to show that the use of the imperfect in contexts in which the standard grammar would require a subjunctive or a conditional is not a recent innovation typical of low registers. In section 4 we report the results of an inquiry into *irrealis* in the imperfect tense in Romance and we make a more specific comparison with French irrealis conditionals. Section 5 discusses the relation to the standard semantic values of continuativity, progressivity and genericity/habituality and proposes an account of Imperfetto Irrealis based on an analysis of the Imperfetto as a combination of a temporal operator PAST and an aspectual operator IPFV (imperfective). On the proposed analysis, the modality inherent to Imperfetto Irrealis does not come in through a modal reinterpretation of PAST or some covert modal operator, but it depends on the way IPFV operates in the branching time model that is assumed to represent the way speakers conceive of the world's temporal structure. Section 6 concludes.

2. Varieties of counterfactual conditionals in Italian

2.1 Standard counterfactual conditionals

Grammars of Italian give the conditional forms exemplified in (4a,b) and (5a,b) (from the itTenTen corpus) as the standard forms of Italian counterfactual conditionals—e.g., see the *Grande Grammatica Italiana di Consultazione (GGIC*, Renzi et al. 2001):

(4) *"Two pasts counterfactuals"*

- a. Se <u>fosse</u> [be-3SG.IPFV.SBJV] <u>stato</u> [be-PST.PTCP] Berlusconi <u>sarebbe</u> [be-3SG.PRS.COND] <u>stato</u> [be-PST.PTCP] il primo a mettersi in salvo. 'If he had been Berlusconi, he would have been the first to run for his life.'
- b. Se domani <u>avessi</u> [have-1SG.IPFV.SBJV] <u>voluto</u> [want-PST.PTCP] and are al cinema, con la moto non lo <u>avrei</u> [have-1SG.PRS.COND] <u>potuto</u> [can-PST.PTCP] fare. 'If I had wanted to go to the movies tomorrow, I could not have gone by motorbike.'
- (5) *"One past counterfactuals"*
 - a. Se <u>avessi</u> [have-1SG.IPFV.SBJV] un'altra possibilità la <u>userei</u> [use-1SG.PRS.COND], ma siamo in emergenza.
 'If I had another possibility, I would use it, but we are in an emergency.'
 - b. Ho paura di essere felice perchè se <u>succedesse</u> [happen-3SG.IPFV.SBJV] qualcosa non <u>reggerei</u> [stand-1SG.PRS.COND] ancora altra sofferenza.
 'I fear to be happy because if something bad happened, I would not bear more suffering.'

(A terminological note: I will use the term "counterfactual"—"CF", for short—as a cover-term that applies to both types of conditionals in (4) and (5), while being aware of the fact that conditionals of the variety "one past CF", and to a lesser extent even "two pasts CF" conditionals, are sometimes used without knowing that their hypothetical clauses are false in actual facts. An alternative terminology, more common among philosophers, has the term "subjunctive" applied to the same class of conditionals, but that would have been grossly inadequate as a label to be extended to *Imperfetto Irrealis*.)

The CFs in (4) have the verb of the protasis in the pluperfect subjunctive (a compound tense form made up of an auxiliary in the imperfect subjunctive and a main verb in the past participle) and the verb of the apodosis in the past conditional (a compound tense form made up of an auxiliary in the present conditional and a main verb in the past participle). This type of conditionals semantically corresponds to the English two pasts CF (Iatridou 2000, Ippolito 2003, 2006). It expresses CF meaning most strongly, since the implication that the protasis is false is strongest in this case (it is clear from the larger contexts of occurrence of [4a,b]—here omitted for reasons of space-that the person talked about in [4a] is not Berlusconi, and that the speaker who utters [4b] does not want to go to the movies on the day following her utterance). Although conditionals of this form often describe unrealized eventualities in the past, we can find some such conditionals which instead describe events in the future (exactly as we can find two pasts CFs in English which do that; see Ippolito's 2003 mismatched past counterfactuals). The conditional in (4b) is a case in point: the time adverb "domani" ('tomorrow') in the protasis indicates that it is a future (irrealis) event of going to the movies which is talked about. If the time adverb were dropped, the resulting conditional would be most likely interpreted as describing a hypothetical situation in the past.

The CFs in (5a,b) have the main verb of the protasis in the imperfect subjunctive and the main verb of the apodosis in the present conditional. This is the formally simplest structure for standard CFs in Italian and semantically corresponds to the English one past CF (Iatridou 2000, Ippolito 2003, 2006). As the English one past CF, it can describe eventualities that are present ([5a]) or future ([5b]), but it cannot describe eventualities that are past, as shown by the

unacceptability of the following variant of (5a), obtained by adding the time adverb "ieri" ('yesterday') to the protasis of the conditional:

(6) *Se *ieri* avessi un'altra possibilità la userei.[If I had another possibility yesterday, I would use it.]

When the eventuality is future, as in (5b), it remains open whether it will actually obtain or not, though the possibility that it will obtain is considered unlikely (the context preceding the conditional in (5b) makes it clear that the speaker thinks that something bad *might* happen).

Given the temporal properties of (5a,b) described above, we will sometimes qualify the subjunctive and conditional forms in this kind of CFs as *non-past*, to hint at the fact that those forms cannot describe eventualities in the past. We will also occasionally talk of *non-past subjunctive* and *non-past conditional* to refer to the imperfect subjunctive and to the present conditional, respectively. In contrast, we will at times qualify the subjunctive and conditional forms in CFs such as (4a,b) as *past* (Ippolito 2003).

2.2 Two non-standard systems

Beyond the standard forms exemplified in (4) and (5) above, *GGIC* distinguishes two non-standard systems regarding the structure of CFs:

- A. "La variante colloquiale del sistema standard, presente talora anche in livelli più alti, prevede la possibilità che l'indicativo imperfetto sostituisca il congiuntivo piuccheperfetto nella protasi e / o il condizionale composto nell'apodosi, come in [(7a-c)]:
 - [(7)] a. Se lo <u>sapevo</u> [know-1SG.IMPERF] prima, <u>sarei arrivato</u> [arrive-1SG.PST.COND] in tempo a salutarti.
 - b. Se lo <u>sapevo</u> [know-1SG.IMPERF] prima, <u>arrivavo</u> [arrive-1SG.IMPERF] in tempo a salutarti.
 - c. Se l'<u>avessi saputo</u> [know-1SG.PLUPERF.SBJV] prima, <u>arrivavo</u> [arrive-1SG.IMPERF] in tempo a salutarti.

[If I had known it in advance, I would have arrived on time to say goodbye.]"

(Mazzoleni 2001: 754)

[The colloquial variant of the standard system, sometimes present in higher registers as well, provides for the possibility that the indicative imperfect should replace the subjunctive pluperfect in the protasis and/or the compound conditional in the apodosis, as in (7a-c).]

- B. "Nel sistema «substandard» [tipico solamente di alcune varietà più basse] invece dei modi congiuntivo e condizionale appare l'indicativo, così che [...] [(1)] corrisponde all'incirca a [(2)] e [(3)]:
 - [(1)] Se <u>venivi</u> [come-2SG.IMPERF] alla festa, ti <u>divertivi</u> [amuse-2SG.IMPERF] un sacco.
 - [(2)] Se <u>venissi</u> [come-2SG.IPFV.SBJV] alla festa, ti <u>divertiresti</u> [amuse-2SG.PRS.COND] moltissimo.
 - [(3)] Se <u>fossi venuto</u> [come-2SG.PLUPERF.SBJV] alla festa, ti <u>saresti divertito</u> [amuse-2SG.PST.COND] moltissimo."

(Mazzoleni 2001: 754)

[In the «substandard» system [typical of lower varieties exclusively] the indicative mood appears instead of the subjunctive and the conditional, so that [(1)] approximately corresponds to [(2)] and [(3)].]

According to *GGIC*, the substandard system (the B-system) only has conditionals in the indicative mood, such as (1). Thus, the *Imperfetto* in this system could equally replace a past and a non-past subjunctive (in the protasis) or a past and a non-past conditional (in the apodosis). Hence, in the B-system "Se venivi ti divertivi" is semantically indeterminate: it could correspond either to a two pasts CF or to a one past CF.

In contrast, the colloquial variant of the standard system (the A-system) allows for "mixed conditionals"—an *Imperfetto* can combine either with a conditional mood in the apodosis ([8a]), or with a subjunctive mood in the protasis ([8b]). In addition, the *Imperfetto* in this system only replaces <u>past</u> subjunctives/conditionals, hence "Se venivi ti divertivi" univocally corresponds to a two pasts CF. In other terms, (8a-c) are equivalent in the A-system:

- (8) a. Se <u>venivi</u> [come-2SG.IMPERF], ti <u>saresti divertito</u> [amuse-2SG.PST.COND].
 - b. Se fossi venuto [come-2SG.PLUPERF.SBJV], ti divertivi [amuse-2SG.IMPERF].
 - c. Se venivi [come-2SG.IMPERF], ti divertivi [amuse-2SG.IMPERF].
 - 'If you had come, you would have had fun.'

Importantly, on the assumption of either system, *Imperfetto Irrealis* are expected to possibly describe events in the future, an expectation which is actually borne out (cf. "Se *domani* venivi, ti divertivi" ['If you came / had come to the party *tomorrow*, you would have / would have had a lot of fun']).³

We will now examine these claims in detail, by having recourse to corpus data (the data in the next section all come from the itTenTen corpus).

2.3 Mixed counterfactual conditionals

In order to shed light on the relation between *Imperfetto Irrealis* and standard CFs, we will use "mixed conditionals" of the sort we have just seen in (8a,b) (and in the description of the non-standard A-system). In mixed conditionals, an *Imperfetto* combines either with a conditional mood in the apodosis, as in (8a), or with a subjunctive mood in the protasis, as in (8b).

It is interesting to note that, while (8a,b) are easily and out of the blue recognized as acceptable mixed conditionals, (9a,b) have a dubious status (here indicated by the interrogative marks in front of the sentences):

- (9) a. ?Se venivi [come-2SG.IMPERF] ti divertiresti [amuse-2SG.PRS.COND].
 - b. ?Se venissi [come-2SG.IPFV.SBJV] ti divertivi [amuse-2SG.IMPERF].

It might be tempting to think that (9a,b) are strange, compared to (8a,b) and also in themselves, since they violate some Sequence of Tense (SOT) rule—the rule in question would require either a past conditional in the apodosis or a past subjunctive in the protasis for the *Imperfetto* to enter in an agreement relation with.⁴ Such an SOT strategy, however, would be problematic on empirical grounds, as we argue below.

³ In addition, the temporally mismatching CF (4b) could be turned into an acceptable *Imperfetto Irrealis*, i.e., "Se domani <u>volevo</u> [want-1SG.IMPERF] andare al cinema, con la moto non <u>potevo</u> [can-1SG.IMPERF]" ('If I wanted / had wanted to go to the movies tomorrow, I could not go / could not have gone by motorbike').

⁴ A similar rule might be invoked to account for the strangeness of conditionals (ia,b), which combine a past subjunctive with a non-past conditional and a non-past subjunctive with a past conditional, respectively:

⁽i) a. ?Se *fossi venuto* [come-2SG.PLUPERF.SBJV] ti *divertiresti* [amuse-2SG.PRS.COND]. 'If you had come, you would have fun.'

b. ?Se *venissi* [come-2SG.IPFV.SBJV] ti *saresti divertito* [amuse-2SG.PST.COND]. 'If you came, you would have had fun.'

There are revealing corpus data showing that mixed conditionals which share the same TAME structure as (9a,b) are in fact possible. Starting with (9a), the particular combination of TAME morphology instantiated by this conditional can be found in the following sentence:

(10) Se [M. Zelaya] *lasciava* [leave-3SG.IMPERF] fare agli americani *sareb[b]e* [be-3SG.PRS.COND] al suo posto.
'If M. Zelaya had left it to the Americans, he would be in his place (now).'

An attentive consideration of (10) and its interpretation makes us realize that (9a) could be rescued by replacing the form "ti divertiresti" ('you would have fun') in the apodosis with the progressive periphrasis "ti staresti divertendo" ('you would be having fun'), as in (11)—the progressive periphrasis is also in the present conditional, but it allows for temporal anchoring to the present more easily than the simpler form occurring in (9a):

(11) Se *venivi* [come-2SG.IMPERF] adesso ti *staresti divertendo* [amuse-2SG.PRS.PROG.COND]. 'If you had come, you would be having fun now.'

The mixed conditional (11), like (10), expresses a counterfactual dependence of a present event e_2 on a past event e_1 —more precisely, it expresses that e_2 would have been now in progress, had e_1 occurred in the past. This dependence, cognitively speaking, makes perfect sense and it so comes as no surprise that those mixed conditionals are acceptable.

It would seem more difficult, in contrast, to rescue (9b) from its dubious status: the use of the non-past subjunctive form "venissi" in the protasis suggests that the speaker regards the event of the hearer coming to the party as possible (though unlikely), whereas the use of the *Imperfetto* "ti divertivi" in the apodosis suggests that the speaker regards the issue of whether the hearer might have fun as closed by the time of speech—more precisely, the speaker believes it now settled that the hearer will not have fun at the relevant time. And yet, again, the particular TAME combination instantiated by (9b) can be found in corpus data. We report some relevant examples in (12)-(15):

- (12) Adesso se *fossimo* [be-1PL.IPFV.SBJV] in un telefilm ti *dicevo* [tell-1SG.IMPERF] che ti amavo.
 'Now if we were in a TV series I would have told you that I loved you.'
- (13) Berlusconi non controlla la sua informazione. Se *controllasse* [control-3SG.IPFV.SBJV] non *andavano* [go-3PL.IMPERF] in [onda] tanti programmi e servizi contro la sua politica. 'Berlusconi does not exercise control over the information on his channels. If he did, we would not have seen so many TV programs and report against his politics broadcasted on his channels.'
- (14) Quella maledetta spia si accende per tante stupide cose [...] Sicuramente niente di grave è gialla giusto? se *fosse* [be-3SG.IPFV.SBJV] rossa *erano* [be-3PL.IMPERF] guai più tremendi.

'That damned indicator light lights up for many silly reasons. It is certainly nothing to worry about, it is yellow isn't it? If it had been red, it would have meant more serious troubles.'

(15) ti amo ti amo [...] lo scrivo sempre alla mia compagna [...] te la potrei anche sistemare in TI AMO TI AMO ... se *fosse* [be-3SG.IPFV.SBJV] una parolaccia la *segavo* [cut-1SG.IMPERF], ma è cosa che fa solo bene e la lascio.
'ti amo ti amo I always write this to my girlfriend. I might even reduce it to TI AMO TI AMO ... if it were a bad word I would have cut it, but it's something that can only do good and I'll leave it as it is.'

Some native speakers we consulted still find a difference of acceptability between the mixed conditionals in (8a,b), (10)/(11), on the one hand, and those in (12)-(15), on the other; in particular, according to the speakers in question, (12)-(15) are degraded and would neatly improve if the non-past subjunctive forms in their protases were replaced by pluperfect subjunctive forms—e.g., "Se *fossimo stati* in un telefilm ti dicevo che ti amavo" is regarded as definitely better than (12). At this point, one might propose that the dubious status that (12)-(15) have for some speakers depended on the fact that those mixed conditionals all belong to some substandard system, of the sort of the B-system reviewed in Section 2.2; the idea would be that more strict speakers might simply not have access to the lower varieties characterized by the hypothesized substandard system (on the other hand, [8a,b] and, arguably, [10]/[11] would look better since they would all belong to a better-behaved system, such as the A-system of Section 2.2).

We believe that dismissing (12)-(15) as substandard would not be a very insightful move to make, and that more will be learnt about the semantic specificity of *Imperfetto Irrealis* and mixed conditionals if we adopt a less prescriptivist attitude to the data and look more closely at their structural properties. A property that we regard as crucial for the acceptability of (12)-(15) is the stativity of the predication in their protases: interestingly, stative predicates can be found in the non-past subjunctive in CFs that have a past conditional apodosis and an interpretation closer to that of a two pasts CF than a one past CF. The conditionals in (16)-(19) are cases in point:

- (16) se *fosse* [be-3SG.IPFV.SBJV] uno smartphone *avrei disabilitato* [disable-1SG.PST.COND] il servizio tramite apposito menù del cellulare
 'If it were a smartphone, I would have disabled this service via the dedicated menu on the phone.'
- (17) se *fosse* [be-3SG.IPFV.SBJV] facile le *avresti conquistate* [conquer-2SG.PST.COND] anche prima
 'It it were easy, you would have conquered them even earlier.'
- (18) Se *fosse* [be-3SG.IPFV.SBJV] tanto semplice *avremmo chiuso* [close-1PL.PST.COND] la partita inquinamento patologie nel mondo da un bel pezzo.
 'If it were so simple, we would have closed the dossier pollution and diseases in the world a while ago.'
- (19) Se *fossi* [be-1SG.IPFV.SBJV] in carrozzella *sarebbe stato* [be-3SG.PST.COND] un bel problema, abito al sesto piano l'ascensore è troppo piccolo
 'If I were on a wheelchair, it would have been a big trouble, (since) I live at the sixth floor and the lift is too small.'

We speculate that the property of stative eventualities by which they can be inferred to hold at larger time intervals spanning backward in time (relative to a bounded reference time) plays a role in the interpretation of (12)-(19): (i) a certain stative eventuality e_1 (described by

the non-past subjunctive protasis) is hypothesized to hold at t, (ii) but it can be inferred that if e_1 holds at t, then it has also held in the past of t, (iii) hence the supposition of e_1 may be relevant for the counterfactual dependence of an event e_2 located in the past of t (described by the apodosis in the past conditional or in the *Imperfetto*).

In line with much preceding literature emphasizing the modal, rather than temporal, meaning of morphologically past forms in CFs (Lyons 1977, Dahl 1997, Iatridou 2000), we note that the morphologically past forms in (12)-(19) (be them in the past conditional or in the *Imperfetto*) need not describe a past event. For instance, in (19) the big trouble (described by the past conditional form "*sarebbe stato* un bel problema" / 'it would have been a big trouble') which is counterfactually dependent on the state of the speaker being on a wheelchair is plausibly not (only) a past trouble, but (also) a present and future trouble; similarly, in (12) the event of the speaker cutting short the expression "ti amo ti amo" (described by the *Imperfetto* form "la *segavo*" / 'I would have cut it') is not a past cutting, but (more likely) a future cutting, as made clear by the surrounding context (cf. the continuation "la lascio" / 'I'll leave it as it is'). Thus, one may argue that the notion of pastness that is relevant to (12)-(19) is better conceived as modal in the general case, and a genuine temporal past reading is not necessarily present (see the discussion around CF [4b] in section 2.1).

2.4 Past and imperfectivity jointly matter

The *Imperfetto*, like Romance indicative imperfects in general, is a formally simple but semantically complex tense form, mainly consisting of two semantic features: a past tense feature and an imperfective aspectual feature (Bertinetto 1986, Giorgi and Pianesi 1997, Bonomi 1997, Ippolito 2004, Del Prete 2013). We now show that pastness and imperfectivity jointly matter for the quality of *Imperfetto Irrealis*, by considering the results of dropping either one of these features in turn.

Given an *Imperfetto Irrealis* such as (1), if we drop pastness, while keeping imperfectivity, what results is the present imperfective conditional (20):

(20) Se <u>vieni</u> [come-2SG.PRS.IPFV.IND] alla festa ti <u>diverti</u> [amuse-2SG.PRS.IPFV.IND] (di sicuro).

'If you come to the party you'll have fun (for sure).'

If we drop imperfectivity instead, while keeping pastness (either in the form of a perfect, or in the form of a perfective past), we obtain one of (21a,b), where (21a) is a perfect conditional, while (21b) is a past perfective conditional:

- (21) a. Se <u>sei</u> [be-2SG.PRS.IPFV.IND] <u>venuto</u> [come-PST.PTCP] alla festa ti <u>sei</u> [be-2SG.PRS.IPFV.IND] <u>divertito</u> [amuse-PST.PTCP] (di sicuro). 'If you have come to the party, you have had fun (for sure).'
 - b. Se <u>venisti</u> [come-2SG.PST.PFV.IND] alla festa ti <u>divertisti</u> [amuse-2SG.PST.PFV.IND] (di sicuro).
 'If you came to the party, you had fun (for sure).'

The conditionals in (20)-(21a,b) are all instances of what philosophers have referred to as "indicative conditionals" (Stalnaker 1975, Lewis 1976, Jackson 1987). We show below that they are *epistemic conditionals*, namely, they presuppose that the speaker does not know whether the protasis is true or false (Santorio 2012, Del Prete and Zucchi 2021)—as such, they lack the counterfactual flavor of (1).

Although it continues to be true that, in an utterance of (20), *S* is reasoning about a possible event e_1 of *H* coming to the party and is expressing a relation of dependence between an event e_2 of *H*'s amusement and event e_1 , still e_1 and e_2 are presented by *S* as being possibly actual future events (that is to say, as being possibly realized in the future). Thus, (20) is about *S*'s epistemic uncertainty regarding the open future: *S* does not know whether *H* will come to the party but only knows that, *if* he will, *then* he will have fun. The perfect conditional (21a) expresses a relation between two possible states, hypothetically obtaining at present: a state s_1 in which *H* has come to the party, and a state s_2 in which *H* has had fun at the party; this conditional can be said to be about *S*'s epistemic uncertainty regarding the open present, namely, *S* does not know whether s_1 and s_2 actually obtain at present but only knows that, *if* s_1 obtains, *then* s_2 does too.⁵ In (21b) the past tense forms in the protasis and apodosis are deictic to possibly actual past events, hence, again, the conditional has an epistemic interpretation, more precisely it is about *S*'s epistemic uncertainty regarding the open past: *S* does not know whether *H* came to the party but only knows that, *if* he did, *then* he had fun.

In conclusion, both the perfects in (21a) and the perfective pasts in (21b) are interpreted transparently and locally as temporal pasts with scope bounded to the propositions (protasis and apodosis) in which they appear, along the lines of the following logical structure:

(LP) IF [it is true that PAST(you-come-to-the-party)] THEN [it is true that PAST(you-havefun-at-the-party)]

Hence, they are genuine tense forms locating an event in the past, not the morphosyntactic reflex of a modal past scoping over the whole conditional (as standardly assumed in formal semantic analyses of counterfactuals in the spirit of Iatridou 2000). Notice that such a transparent and local (clause-bounded) interpretation of a past tense in a conditional is also possible with the *Imperfetto*, since conditionals in the *Imperfetto* are sometimes interpreted as normal indicative conditionals—a relevant example is (22), uttered by someone who doesn't know whether Mary was still in her office at 5PM but knows that it takes Mary one hour to get home from her office:

(22) Se alle 5 Mary <u>era</u> [be-3sG.IMPERF] ancora in ufficio, alle 5:30 di certo non <u>era</u> [be-3sG.IMPERF] ancora a casa.
'If at 5PM Mary was still in her office, at 5:30PM she was certainly not at home yet.'

The logical structure of (22), like the one of (21a,b), clearly has two local pasts: one scoping inside the protasis and anchored to a relevant 5PM situation, the other one with scope bounded to the apodosis and anchored to the relevant 5:30PM situation. Crucially, however, the *Imperfetto* in a conditional sentence allows for a non-transparent, non-local interpretation; this is precisely what happens in *Imperfetto Irrealis* such as (1) (repeated here):

(1) Se <u>venivi</u> [come-2SG.IMPERF] alla festa ti <u>divertivi</u> [amuse-2SG.IMPERF] un sacco. 'If you had come to the party, you would have had a lot of fun.'

Section 5 will formalize the idea that (1) only involves one semantically active past and one semantically active imperfective, both scoping over the whole conditional. The logical structure of (1) will thus be as in (RPI):

 $^{^{5}}$ The perfect conditional (21a) has another reading, in which it is equivalent to the perfective past conditional (21b). This further reading of (21a) is due to the possibility of interpreting the present perfect as a perfective past in contemporary Italian (Bertinetto 1986).

(RPI) PAST [IMPERFECTIVE [IF [you-come-to-the-party] THEN [you-have-fun-at-theparty]]]

This logical structure refers to a past topic situation in whose possible futures in which H comes to the party H has fun at the party. As will be made clear below, the quantification over the possible futures (that are open at the past topic situation) comes in through the imperfective operator, which so turns out to be a crucial ingredient of *Imperfetto Irrealis* and main factor accounting for their modal properties.

2.5 To summarize

The empirical comparative investigation of *Imperfetto Irrealis* and standard CFs has revealed a closer semantic relation between the *Imperfetto* and <u>past</u> subjunctive/conditional, even in cases of mixed conditionals one might have taken as *prima facie* evidence of a closer semantic relation between the *Imperfetto* and <u>non-past</u> subjunctive/conditional.

In light of the foregoing discussion, the following temporal and modal properties of *Imperfetto Irrealis* can be stated (where by " e_1 " and " e_2 " we refer to the eventualities described by the protasis and the apodosis, respectively):

- T) The most natural temporal interpretation of *Imperfetto Irrealis* is such that e_1 and e_2 are past, e.g., "Se *ieri* venivi alla festa ti divertivi" ('If you had come to the party *yesterday* you would have had fun'). However, e_1 and e_2 may also be present or future (e.g., "Se *domani* venivi alla festa ti divertivi" ['If you came / had come to the party *tomorrow* you would have / would have had fun']).
- M) The most natural modal interpretation of *Imperfetto Irrealis* is such that e_1 and e_2 are unactualized, e.g., the sentence following the conditional in the discourse below is a continuation in full agreement with the conditional: "Se venivi alla festa ti divertivi, ma purtroppo non hai potuto / non potrai" ('If you had come to the party you would have had fun, but unfortunately you couldn't make it / won't make it').

Regarding these tempo-modal properties, we observe a similarity between *Imperfetto Irrealis* and two pasts CFs: e_1 and e_2 may be temporally past, present or future and are unactualized in two pasts CFs as well (as emphasized by Ippolito 2003): more precisely, when it is known that you won't come, the two pasts CF can be used to talk about a future (*irrealis*) event. Evidence from mixed conditionals have shown that the *Imperfetto* does not like the company of non-past subjunctive/conditional tenses (cf. "?Se venivi alla festa ti divertiresti moltissimo" / "?Se venissi alla festa ti divertivi moltissimo").

In the next section we consider more evidence of *Imperfetto Irrealis* and mixed conditionals from literary texts, which confirms that the *Imperfetto* in these contexts alternates with <u>past</u> subjunctive/conditional forms.

3. Imperfetto Irrealis and mixed conditionals in literary texts

Imperfetto Irrealis are present in literary works, as has been well documented by historical linguists (Gherardini 1840, Fornaciari 1881, Rohlfs 1969). Although (1) is typical of a spoken register, *Imperfetto Irrealis* are not just an innovation of colloquial speech but are rooted in literary use, spanning across several centuries. The examples in (23)-(26) are cited in Rohlfs (1969) and Fornaciari (1881):

(23) Braccio cercò di occupare il regno di Napoli, e se non <u>era</u> [be-3SG.IMPERF] rotto e morto all'Aquila, gli <u>riusciva</u> [manage-3SG.IMPERF].

(Niccolò Machiavelli, 15th/16th century) 'Braccio tried to occupy the reign of Naples, and if he had not been hit and killed in l'Aquila, he would have managed to do it.'

(24) <u>Avevano</u> [have-3PL.IMPERF] il giogo bello e scosso, se la prosperità non li <u>facea</u> [make-3SG.IMPERF] trascurati.

(Bernardo Davanzati, 16th century) 'They would now have the yoke shaken off, had prosperity not made them careless.'

- (25) Se <u>facevate</u> [do-2PL.IMPERF] a modo mio, questo non <u>succedeva</u> [happen-3SG.IMPERF].
 (Carlo Goldoni, 18th century)
 'Had you done it my way, this would not have happened.'
- (26) Ella non disse niente ma <u>cadeva</u> [fall-3SG.IMPERF] se non la <u>sorreggevano</u> [help-3PL.IMPERF] le mani di lui. La sorresse, la pose a sedere.
 (Antonio Fogazzaro, 19th/20th century)
 'She didn't say a word but she would have fallen if his hands had not helped her. He helped her, he let her sit down.'

Mixed conditionals are also largely attested in the literature. The following sentences (from Fornaciari 1881) constitute a representative sample of this kind of conditionals:⁶

(27) Se io non <u>avessi provato</u> [try-1SG.PLUPERF.SBJV], non <u>poteva</u> [can-1SG.IMPERF] mai credere.

(Giacomo Leopardi, 19th century)

'If I had not tried, I couldn't have believed.'

(28) Se Lucia non <u>faceva</u> [make-3SG.IMPERF] quel segno, la risposta <u>sarebbe stata</u> [be-3SG.PST.COND] diversa.

(Alessandro Manzoni, 19th century)

'If Lucia had not made that sign, the reply would have been different.'

(29) Io non <u>avrei</u> [have-1SG.PRS.COND] al presente questa ansietà, se io non mi <u>intrometteva</u> [interfere-1SG.IMPERF] in quelle faccende che non mi si aspettavano.

(Agnolo Firenzuola, 16th century)

'I would not have this worry at present, if I had not interfered in those matters that did not concern me.'

(30) Se <u>potuto aveste</u> [can-2PL.PLUPERF.SBJV] veder tutto, mestier non <u>era</u> [be-3SG.IMPERF] parturir Maria.

(Dante Alighieri, 13th/14th century)

'Had you been able to see all, there would have been no need for Mary to give birth.'7

⁶ Fornaciari, *Sintassi* chap. VIII: § 30. [A proposito delle proposizioni condizionali, pp. 412-413:] Nella terza e quarta forma si può sostituire ai tempi composti (trap. del congiunt. pass. del condizionale) l'imperfetto dell'indicativo.

⁷ The English translation of (25) is taken from Allen Mandelbaum's translation of "La Divina Commedia".

All the conditionals in (23)-(30) confirm the conclusion of the previous section: the *Imperfetto* in *irrealis* conditionals has a closer semantic relation to the <u>past</u> subjunctive and the <u>past</u> conditional. The literary texts that we have examined have an additional property, compared to the non-literary examples from the previous sections: the *Imperfetto Irrealis* (and mixed conditionals) occurring in them are always used to describe eventualities in the past (e.g., Machiavelli's conditional in the historical narrative in [23]), whereby the case for the past temporal interpretation and the connection with English two pasts CFs is more compelling if one takes this evidence seriously.

4. Imperfetto Irrealis in Romance

CF conditionals formally identical to the Italian *Imperfetto Irrealis* are attested in other Romance languages. Spanish allows for such CFs (p.c., Lola de Hevia):

(31) Si <u>venias</u> [come-2SG.IMPERF] a la fiesta te <u>divertias</u> [amuse-2SG.IMPERF].

They seem to be possible in Catalan, too, to some extent (p.c., Rafèu Sichel-Bazin, Joan Busquets):

(32) Si <u>venies</u> [come-2SG.IMPERF], (segur que) et <u>diverties</u> [amuse-2SG.IMPERF].

As Joan Busquets has reported to us: "Sur le site officiel 'Consultations linguistiques' du gouvernement catalan, il est dit que 'la corrélation entre le conditionnel et l'imparfait indicatif est aussi possible. [...] on peut le trouver dans la langue courante avec un sens expressif. Par exemple :

[(33)] Si me'l trobava [imparfait] fumant al carrer, m'el carregava [imparfait] !

(littéral : si je me le trouvais fumant dans la rue, je le tuais !)' "

[On the Catalan government official website "Linguistic consultations", it is said that "the correlation between the conditional construction and the indicative imperfect is also possible. [...] it is possible to find the latter in ordinary speech with an expressive meaning. For example:

[(33)] Si me'l trobava [IMPERF] fumant al carrer, m'el <u>carregava</u> [IMPERF] ! (*if I found him smoking in the street, I would kill him!*)']

As far as we could ascertain, CFs of the *Imperfetto Irrealis* kind are not possible in Occitan or French. Thus, both Occitan and French have the imperfect of indicative in the protasis but the conditional mood in the apodosis of CFs, as shown in (34) and (35):

- (34) Se <u>veniás</u> [come-2SG.IMPERF] t'<u>amusariás</u> [amuse-2SG.PRS.COND]. (Occitan)
- (35) Si tu <u>venais</u> [come-2SG.IMPERF] tu t'<u>amuserais</u> [amuse-2SG.PRS.COND]. (French)

'If you came, you would have fun.'

Most importantly, this formal difference in the realization of the apodosis is coupled with a semantic difference for the interpretation of the whole conditional sentence in these languages: unlike the Italian *Imperfetto Irrealis*, the CFs (34) and (35) cannot have a past interpretation and are thus like the English one past CFs (see the English translation above). In order to obtain an interpretation similar to that of the *Imperfetto Irrealis* in (1) above (hence, the interpretation

of an English two pasts CF), Occitan and French need the <u>pluperfect indicative</u> in the protasis and the <u>past conditional</u> in the apodosis, as in (36) and (37):⁸

- (36) S'<u>èras vengut</u> [come-2SG.PLUPERF.IND] te <u>seriás amusat</u> [amuse-2SG.PST.COND]. (Occitan)
- (37) Si tu <u>étais venu</u> [come-2SG.PLUPERF.IND] tu te <u>serais amusé</u> [amuse-2SG.PST.COND].⁹ (French)

'If you had come, you would have had fun.'

The difference in behavior between Italian *Imperfetto* and the French (and Occitan) imperfect indicative, as it emerges in the expression of *irrealis* conditionals, is an important fact from the perspective of the study of morphosyntactic/semantic variation within Romance languages, whose explanation in our opinion would require considering the evolution of the whole tense-aspectual systems of these languages. We will leave it as a speculative hypothesis here that the French indicative imperfect (*Imparfait*) took over the role of describing *irrealis* hypothetical situations from the subjunctive imperfect, possibly within a more general tendency in French for the indicative to take over from the subjunctive in non-veridical contexts.

5. Imperfetto Irrealis and the standard values of Romance imperfects

5.1 Imperfetto beyond conditionals

Like Romance indicative imperfects more generally, the *Imperfetto* has some core uses to describe an eventuality e as follows (Bertinetto 1986, Bonomi 1997, Anand and Hacquard 2010):

- (a) e is <u>ongoing</u> at some relevant time $t_{\rm R}$,
- (b) the time $t_{\rm R}$ at which *e* is ongoing is in the past,
- (c) *e* requires <u>contextual framing</u>.

However, the use of the subjunctive in the protasis of *irrealis* conditionals is steadily declining in this language, with the indicative taking over *salva significatione* (Jean Sibille, p.c.).

⁹ The case of French, however, is more complex than this standard picture would let one imagine, in particular due to "*if*-less" conditional constructions such as (i) (Anne Condamines, p.c.):

(i) Tu <u>étais</u> là il y a 5 minutes, tu le <u>voyais</u>.⁹ you be-2SG.IMPERF there ago 5 minutes you him see-2SG.IMPERF 'Had you been there five minutes ago, you would have seen him.'

In (i), the *Imparfait* occurs in the two juxtaposed clauses, which creates a close parallel to Italian *Imperfetto Irrealis*. Patard (2019) discusses a similar construction, as exemplified by the literary example (ii), to show the possibility of a counterfactual interpretation of the *Imparfait*:

(ii) Une seconde de plus il [le taureau] l'<u>éventrait</u> [gore-3SG.IMPERF].
'One more second and the bull would have gored him.' (Gustave Flaubert, *Un cœur simple*)

⁸ Occitan can also have the imperfect subjunctive, instead of the imperfect indicative, in the protasis of an *irrealis* conditional, as in (i) and (ii), which are the subjunctive minimal variants of (34) and (36), respectively:

⁽i) Se <u>venguèsses</u> [come-2SG.IPFV.SBJV] t'amusariás.

⁽ii) Se <u>foguèsses</u> [be-2SG.IPFV.SBJV] vengut te seriás amusat.

The best known among such uses are the continuative, the progressive and the habitual/generic uses, illustrated below:

- Continuative

(36) Mentre <u>scrivevo</u> e <u>scrivevo</u> [write-1SG.IMPERF], mi chiedevo se sarebbe interessato a qualcuno leggere tutto questo papiro.
'While I was going on writing and writing, I was wondering whether anyone would be interested in reading all this screed.'

- Progressive

(37) In quel preciso momento <u>fumava</u> [smoke-3SG.IMPERF] tranquillamente un toscano. 'At that very moment he was quietly smoking a Tuscan cigar.'

- Habitual

(38) In quel periodo <u>leggeva</u> [read-3SG.IMPERF] un salmo al giorno. 'During that period he would read one psalm a day.'

- Generic

(39) A quell'epoca le donne <u>dipendevano</u> [depend-3PL.IMPERF] economicamente dal marito. 'At that time women were economically dependent on their husbands.'

In each of these uses the three basic functions in (a)-(c) above are present. The eventuality presented as ongoing in the past is a temporally scattered, though presumably atomic event of writing a book in (36), an atomic event of smoking a Tuscan cigar in (37), a plural event of reading psalms in (38), and a very large state of being economically dependent on one's husband in (39). In each of (37)-(39) the contextual framing required by the *Imperfetto* is made explicit via a time adverbial occurring in sentence-initial position; contextual framing is also necessary for the interpretation of (36), though in this case it is not obtained via an expression occurring in the sentence but is determined on the basis of the preceding context.

Other uses are possible for the Italian Imperfect. Here we emphasize its use to describe an event in the future with respect to a past reference time, illustrated in (40):

- Future-in-the-past

(40) Mi ha detto allora che <u>veniva</u> [come-3SG.IMPERF] a trovarci la settimana dopo. 'She then told me that she <u>would come</u> to visit us the following week.'

This use too has been analyzed in terms of the basic functions in (a)-(c) above, via a connection to the so-called *futurate readings* of present tense sentences (Dowty 1979, Copley 2010, Bonomi and Del Prete 2009): the fundamental idea, going back to Dowty (1979), is that a preparatory state preceding and leading to an event can become semantically relevant in some cases, besides the event itself in the denotation of the verb phrase. Copley (2010) proposes the notion of *plan* as semantically relevant for the analysis of futurates, providing a cognitively interesting interpretation of Dowty's general idea of a preparatory state.

The relation between (40) and futurates becomes clearer if we transpose (40) into the present, as in (41a), or if we turn it into direct discourse, as in (41b):

- (41) a. Mi ha appena detto che <u>viene</u> [come-3SG.PRS.IPFV.IND] a trovarci settimana prossima.
 'She has just told me that she <u>will come</u> to visit us next week.'
 - b. Mi ha detto allora: "<u>Vengo</u> [come-1SG.PRS.IPFV.IND] a trovarvi settimana prossima."

'She told me then: 'I'll come to visit you next week.''

The idea in an approach to futurates à *la* Dowty-Copley is that the imperfective underlying the present tense clause "Vengo [come-1sg.PRS.IPFV.IND] la settimana prossima" ('I'll come next week') does not operate on the property of events lexically denoted by the verb in the present tense; instead, it operates on a derived property of states semantically related to that property of events, one which is true of a planning/preparatory state leading to an event of that type.

Importantly, the future-in-the-past use is not common to all Romance imperfects. French would rather use the *Conditionnel Présent* in this context, as in (42):

(42) Elle m'a dit qu'elle <u>viendrait</u> [come-3SG.PRS.COND] nous voir la semaine d'après.

This might be a factor in accounting for the perceived unacceptability of *irrealis* conditionals with *Imparfait* in the apodosis. (But, again, the situation in French appears to be more complex, as it appears to be possible to use the *Imparfait* in alternative to the *Conditionnel Présent* in contexts of future-in-the-past; cf. "Elle m'a dit qu'elle <u>venait</u> [come-3SG.IMPERF] nous voir la semaine d'après" [Myriam Bras, Juliette Thuilier, Raphael Sicheu-Bazin, p.c.]. See Kamp and Rohrer [1983].)

5.2 What relation to the non-conditional uses?

Imperfetto Irrealis do not clearly fit with the core (non-conditional) uses of Romance imperfects. For example, *Imperfetto Irrealis* (43) intuitively conveys a relation between a culminated (not ongoing) event of coming to the party and a culminated (not ongoing) event of having fun (cf. Anand and Hacquard 2010 on imperfect in French CFs); in addition, the future time adverb "domani" indicates that (43) is about future (not past) events of coming to the party and having fun.

(43) Se *domani* <u>venivi</u> [come-2SG.IMPERF] alla festa, ti <u>divertivi</u> [amuse-2SG.IMPERF] un sacco.

'If you had come to the party tomorrow, you would have had a lot of fun.'

One might suggest, on the other hand, that there is a closer relation between *Imperfetto Irrealis* and the future-in-the-past use of the *Imperfetto*: a topic situation in the past is such that an event e_1 of coming occurs in the future of that situation, and e_1 in its turn provides the anchoring point to interpret the *Imperfetto* of the apodosis; the result of this two-steps interpretation is that the event e_2 of having fun occurs in the future of the event e_1 of coming to the party, which in its turn occurs in the future of a past topic situation. This temporal structure is depicted in Fig. 1.

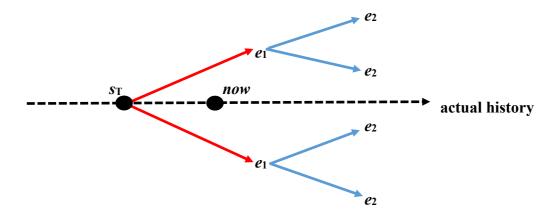


Figure 1. Temporal diagram for *Imperfetto Irrealis* (43) (s_T = topic situation, e_1 = you coming to the party, e_2 = you having a lot of fun at the party)

Other *Imperfetto Irrealis*, however, challenge the idea of e_1 providing the anchoring point from which e_2 is projected to the future. Consider (44):

(44) Se *domani* <u>venivi</u> [come-2SG.IMPERF] alla festa, adesso ti <u>preparavo</u> [prepare-1SG.IMPERF] quel dolce che ami tanto.
'If you had come to the party tomorrow, now I would have baked you that cake which you like so much.'

In (44), *H*'s coming to the party *tomorrow* (= e_1) is the reason for *S*'s baking the cake *now* (= e_2). Therefore, if e_1 were the anchor for the projection of e_2 , e_2 would have to be projected to the past of e_1 . This would run against the hypothesis of an alignment between the *Imperfetto* in (44) and the future-in-the-past use.

One (who wished to defend the idea of a close connection between *Imperfetto Irrealis* and the future-in-the-past) could insist that (44)'s interpretation is actually structured in a similar way to (43)'s; the only difference between the two conditionals would reside in how their superficially identical protases are interpreted (and, secondarily, how the protasis and apodosis eventualities are situated relative to the speech point). The argument would run as follows: the protasis of (44) does not refer to an event of H coming to the party, but rather to a state of it being decided (or settled) that H will come to the party; the relevance of such a state to the truth conditions of (44) is brought out by the appropriateness of a reformulation of (44) which makes explicit reference to the state in question—(45) being an example of such a reformulation.

(45) Se <u>era deciso</u> [be-3SG.IMPERF decided] che domani venivi alla festa, adesso ti preparavo quel dolce che ami tanto.

'If it had been decided that you were coming to the party tomorrow, now I would have baked you that cake which you like so much.'

According to this argument, once the covert reference to the underlying state—the state of it being decided that H will come to the party (let's call it "Settled-Party")—were made explicit, the temporal structure of (44) would turn out to be similar to the one of (43): the state

referred to in the protasis (s_1 = Settled-Party) would still provide the anchoring point from which the apodosis event (e_2 = S baking H their favorite cake) is projected to the future (see Fig. 2).¹⁰

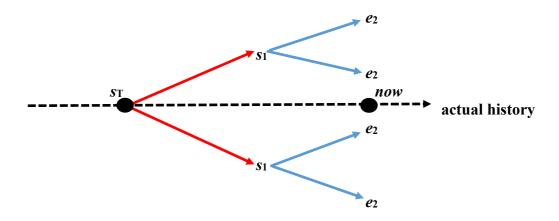


Figure 2. Temporal diagram for *Imperfetto Irrealis* (44) / (45) (s_T = topic situation, s_1 = Settled-Party, e_2 = S baking H their favorite cake)

Although we agree on the idea of a unified temporal structure for *Imperfetto Irrealis* like (43) and (44), we think it is possible to specify such a unified structure without assuming that, despite their formal syntactic identity, the protasis of (43) and the protasis of (44) differ in meaning in the way described above. Furthermore, we would have qualms on an attempt to unify *Imperfetto Irrealis* and futures-in-the-past via an approach to the latter which was based on the Dowty-Copley's idea of a preparatory/planning state; the reasons for our qualms is that *Imperfetto Irrealis* do not seem to us to talk in any sense about plans/preparations leading to events (a conditional like [1] seems to us to pertain to the category of <u>planning</u> which is arguably involved in [41a,b]).

The view we suggest can be articulated as follows:

- **Morphosyntax-1:** an *Imperfetto Irrealis* [if $\Phi_1 \Phi_2$] only involves one *Imperfetto* scoping over the whole 'if'-construction at Logical Form (LF);
- **Morphosyntax-2:** the *Imperfetto*'s showing up on the main verbs in Φ_1 and Φ_2 are semantically inert morphosyntactic reflexes of the one unique wide-scoping *Imperfetto*;
- Semantics-1: in accordance with Morphosyntax-1/2, [if $\Phi_1 \Phi_2$] only introduces one branching point, s_T , in the semantic model;
- Semantics-2: *s*_T is located at the reference time *t*_R (typically found in core uses of Romance imperfects);
- Semantics-3: on each branch of s_T where a Φ_1 -eventuality occurs, there occurs a Φ_2 eventuality as well;
- **Pragmatics:** the temporal relation between the Φ_1 -eventuality and the Φ_2 -eventuality on each branch of s_T is contextually inferred, based on specific information regarding the two

¹⁰ A secondary difference between the two structures has to do with the position of the eventualities relative to the speech point [*now*]: in (43)'s temporal diagram both the protasis and the apodosis eventuality lie in the future of the speech point and only the topic situation is in the past of it, whereas in (44)'s temporal diagram neither the protasis nor the apodosis eventuality would lie in the future of the speech point.

events which may come from general world-knowledge or local knowledge pertaining to the linguistic context.

According to this view, the temporal structure unifying (43) and (44) is as in Fig. 3:

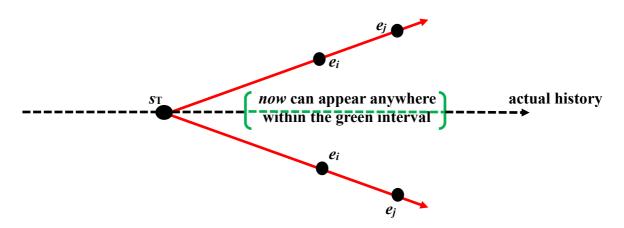


Figure 3. Unified temporal diagram for *Imperfetto Irrealis*

In this diagram, e_i and e_j are the Φ_1 -eventuality and the Φ_2 -eventuality, *in one order or another*— e_1 may precede e_2 , as in (43) and (45), or e_2 may precede e_1 , as in (44) (in its direct interpretation), or else e_1 and e_2 may be overlapping, as in (46):

(46) Se <u>ero</u> [be-1SG.IMPERF] ricco, non <u>avevo</u> [have-1SG.IMPERF] bisogno di lavorare tanto. 'If I had been rich, I would not have needed to work this much.'

The speech point can fall anywhere within the green interval on the dotted line—it can be situated (i) before e_i and e_j , as in (43), (ii) after e_i and e_j , as in the minimal variant of (43) in which "ieri" ('yesterday') occurs instead of "domani", (iii) at a point overlapping with e_i and e_j , as in (46), or (iv) between e_i and e_j , as in (47):

(47) Se quest'anno <u>venivi</u> [come-2SG.IMPERF] più regolarmente agli allenamenti, l'anno prossimo <u>giocavi</u> [play-2SG.IMPERF] in prima squadra.
'If you had come to practice more regularly this year, you would have played in the first team next year.'

What is crucial is that the topic situation lies in the past of the speech point, however this may be situated relative to the protasis and the apodosis eventualities. We will formally spell out the view sketched above in section 5.4.

5.3 Previous semantic analyses of past-marked CFs

Formal semantic analyses of past-marked counterfactuals can be divided in two families (a common assumption throughout these analyses is that the English modal "would", commonly found in the apodoses of English CFs, is the past tense form of the untensed auxiliary "WOLL", whose present tense form is "will" [Abusch 1997]):

(PM) "Past as Modal": analyses based on the idea that the past tense marking in CF conditionals is a "fake past"; what appears to be a past tense at the surface is actually a modal (Iatridou 2000).

(PP) "Past as Past": analyses based on the idea that the past tense marking in CFs corresponds to a true past tense; this interacts with a modal which is independently given by the semantics of the conditional construction (Ippolito 2003).

More specifically, (PM)-approaches assume the following:

- (PM1) The morphological past in the protasis and apodosis is the morphological reflex of a "modal past", PAST^M, which takes scope over them at Logical Form and whose actual semantic contribution is to take us from the actual world to a merely possible world: PAST^M($\Phi > WOLL(\Psi)$)
- (PM2) The protasis and the apodosis of two-pasts CFs each involve a true past tense, **PAST**, which scopes inside its clause; in addition, the past tense of the apodosis scopes above the future auxiliary WOLL: $PAST^{M}(PAST(\Phi) > PAST(WOLL(\Psi)))$

A problematic aspect of (PM), emphasized by Ippolito (2003), is the difficulty to reconcile (PM2) with what Ippolito calls *mismatching past counterfactuals* (e.g., "If Charlie had taken his Advanced Italian test tomorrow [instead of last Monday, which was way too early], he would have passed"; Ippolito 2003: 146).

(PP)-analyses claim the genuine temporal value of the morphological past-marking, while keeping to one fundamental aspect of (PM)-analyses, concerning the scope of the past tense. More specifically, they assume the following:

- (PP1) Despite its morphological realization on the verbs inside the protasis and the apodosis, the past tense in CFs is not clause-bounded but it takes wide scope above the whole conditional.
- (PP2) The wide-scoping past tense restricts the modal base of a (possibly covert) modal operator, which is the modal underlying the conditional construction in Kratzer's (1991, 2012) analysis of conditionals.

5.4 Proposal of a formal analysis of Imperfetto Irrealis

The formal analysis we propose for *Imperfetto Irrealis* has certain features in common with both the (PM) and the (PP) approach to CFs: with the former it shares the morphosyntactic assumption that the tense/aspect features found on the verbs in the protasis and apodosis are there for a mechanism of feature-spread from a higher *Imperfetto* scoping over the whole conditional, hence they are not semantically interpreted, whereas with the latter it shares the semantic assumption that the past that we see morphologically realized in *Imperfetto Irrealis* is just what it is in non-conditional contexts such as (36)-(40), namely, a temporal past. Regarding the modality, we propose that it is due to the interpretation of the imperfective aspect in a branching time model of historical possibilities, as detailed below.

5.4.1 Unified semantics for the Imperfetto

We aim at a unified semantics for the *Imperfetto* across conditional and non-conditional uses, building on a previous proposal in Del Prete (2013) (to whom we refer for a detailed presentation of the formal framework). We assume a variant of classical Branching Time which accommodates partiality (referred to below as "Partial Branching Time" — PBT, for short): instead of moments (instantaneous events maximally extended through space), Kratzerian situations are the elements ordered by temporal succession. The idea at the basis of BT is

extended to situations: every situation has a unique past and many possible futures. Unlike in classical BT models (Prior 1967, Thomason 1984, Belnap et al. 2001), in PBT the future branches stemming from a given situation *s* are not all the futures that are metaphysically possible at *s* but a smaller set of possible courses of events, representing the expected continuations of *s*. Crucially, the cluster of the expected continuations of *s* need not include the course of events that later turns out to be actual (i.e., the continuation of *s* which ends up being realized in actual facts).

The interpretation of an *Imperfetto* requires an anchoring situation s_R ,¹¹ whose size may vary widely from one case to another. To illustrate, in (36) s_R is the scattered situation during which writing is said to occur, in (37) it is the punctual moment at which smoking a Tuscan cigar is said to be ongoing, in (38) it is the extended period—of several months, or maybe years—over which reading psalms is said to occur (where by "reading psalms" we mean a plural event which is the sum of atomic events of reading a psalm), and in (39) it is the large epoch across which the state of women being economically dependent on their husbands is said to hold (where by "the state of women being economically dependent on their husbands" we mean a plural eventuality which is the sum of atomic eventualities of a woman being economically dependent on their husbands.

The anchoring situation s_R is typically included in the (spatio-temporal) trace of the event in the denotation of the verb—this is the relation that we see in (36)-(39) (as we have pointed out above, [38] and [39] involve large anchoring situations and plural events/states overflowing those situations). However, it need not always be so: for instance, in (40) s_R is the situation in which the matrix clause event of saying occurs, and this situation is clearly not included in the trace of the visiting event described by the subordinate clause but precedes that trace.

Formally, the *Imperfetto* contributes both a pastness condition and an imperfectivity condition (Ippolito 2004, Del Prete 2013). The pastness condition is spelled out in terms of distance of s_R from the time of the context t_C in the pastward direction, as in (48) below. We assume a referential analysis of tense (Heim 1994): the feature PAST introduces a situation variable at LF, and further presupposes that the value of this variable is past with respect to the context situation. The subscript k on PAST is the situation variable introduced by tense; the value of k under the assignment g is the anchor s_R (i.e., $g(\langle k, w \rangle) = s_R$).

(48)
$$[[PAST_k]]^{C, g, w} = \lambda P_{\langle i, t \rangle} g(\langle k, w \rangle) \langle s t_C, P(g(\langle k, w \rangle))^{12}$$

The imperfectivity condition is spelled out in terms of two formal concepts: (a) an operation of forward-expansion f-exp(s), which expands a situation s forward in PBT (Fig. 4),¹³ and (b) an operator THR (to be read 'throughout'), defined in (49) below, which takes a property of eventualities P and a (branching) situation s and spreads out P over s—more precisely, "THR($P_{<v,t>}$, s)" states that every branch of s is temporally included by the trace of a P-

¹¹ This is sometimes described as a *point of reference* in Reichenbachian approaches to tense (Bertinetto 1986, Giorgi and Pianesi 1997).

¹² The type system contains the basic types **e** (individuals), **t** (truth values), **i** (situations), **v** (events), and **s** (circumstances of evaluation). The evaluation function [[]] takes the LF α onto the object α^* which is the semantic value of α relative to a context C, an assignment function g, and a circumstance of evaluation w. The function g is a two-place function which assigns (a) a temporal value (= a situation) to any variable of type **i** relative to any circumstance w and (b) an individual to any variable of type **e** relative to any circumstance w: given variable s of type **i**, variable n of type **e** and circumstance w, g(<s, w>) is a situation belonging to (some history in) w and g(<n, w>) is an individual inhabiting (some history in) w. The context C is a sequence of parameter values including the time of utterance t_c , the circumstance of utterance wc, the speaker s_c and the hearer h_c .

¹³ The idea of forward expansion of a reference time was proposed in Condoravdi (2002, 2003) and later used by Deo (2010) and Del Prete (2013).

eventuality. In (49), *b* is a branch of *s*, i.e. a sub-situation of *s* which lies within a single history. Branches of *s* represent expected continuations of the initial part of *s* (in Fig. 4 *s* corresponds to the whole branching situation f-exp(s_0), of which s_0 is the initial part, and branches b_1 , b_2 , and b_3 are the expected continuations of s_0).

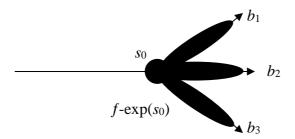


Figure 4. Forward-expansion of situation s₀ in PBT

(49) THR($P_{\langle v,t \rangle}$, s) =_{Def} $\forall b \ [b \subseteq_{S} s \rightarrow \exists e \ [P(e) \land b \subseteq_{S} \tau(e)]]$

The lexical entry for the imperfective operator IPFV is (50):

(50) [[IPFV]] = $\lambda s. \lambda P_{\langle v,t \rangle}$. THR(P, f-exp(s))

Thus, IPFV is a tempo-modal feature and the *Imperfetto*, which combines PAST and IPFV, is a mixed temporal/modal form.

To see how the analysis works in a particular case, we apply it to the progressive sentence in (51) (here we assume, following Del Prete [2013], that the role of reference time adverbials such as "in quel momento" ['at that moment'] is to constrain the value of the variable introduced by tense; tense combines with the time adverbial at LF, thus forming a complex tense operator, e.g., $[_TPAST_k [_{TAdv} at that moment]]$, the presuppositional part of which includes a condition on the reference situation that depends on the time adverbial):

(51) In quel momento Maria fumava un toscano.'At that moment Maria was smoking a Tuscan cigar.'

The LF of (51) is (52) and the compositional derivation of its truth conditions is in (53a-f):

- (52) $[_{TP} [_T PAST_k [_{TAdv} at that moment]] [_{AspP} IPFV [_{VP1} [_{DP} a Tuscan cigar]_1 1[_{VP2} Maria smoke t_1]]]]^{14}$
- (53) a. [[$[v_{P2} \text{ Maria smoke } t_1]$]]^{c, g, w} = = $\lambda e.$ [smoke(e) $\wedge \text{Ag}(e) = \text{Maria } \wedge \text{Th}(e) = g(<1, w>)$] b. [[$1[v_{P2} \text{ Maria smoke } t_1]$]]^{c, g, w} =
 - $= \lambda x. \lambda e. [\operatorname{smoke}(e) \wedge \operatorname{Ag}(e) = \operatorname{Maria} \wedge \operatorname{Th}(e) = g^{[x/1, w]}(<1, w>))]^{15}$
 - c. [[$[DP a Tuscan cigar]_1$]]^{c, g, w} = $\lambda P_{\langle e, \langle v, t \rangle \rangle}$. $\lambda e. \exists x [Tuscan-cigar(x) \land P(x, e)]$
 - d. [[$[VP1 [DP a Tuscan cigar]_1 1[VP2 Maria smoke t_1]]$]] c, g, w == $\lambda e. \exists x [Tuscan-cigar(x) \land smoke(e) \land Ag(e) = Maria \land Th(e) = x]$

¹⁴ Sentence (51) is analyzed as containing the complex tense operator [$_T$ PAST_k [$_{TAdv}$ in quel momento]], whose semantic contribution is to introduce a situation s_R which must coincide with whatever moment M* is deictically referred to by "quel momento".

¹⁵ $g^{[x/1,w]}$ is the assignment which differs from g at most for the value that it assigns to <1, w> and $g^{[x/1,w]}(<1,w>)$ = x.

- e. [[[AspP IPFV [VP1 [DP a Tuscan cigar]] [VP2 Maria smoke t_1]]]]]^{c, g, w} =
 - $= \lambda s. \forall b \ [b \subseteq_{S} f \text{-exp}(s) \to \exists e \ \exists x \ [\text{Tuscan-cigar}(x) \land \text{smoke}(e) \land \text{Ag}(e) = \text{Maria} \land \text{Th}(e) = x \land b \subseteq_{S} \tau(e)]]$
- f. [[(52)]]^{c, g, w} = 1 *iff iff* {g(<k, w>) <_S t_C \land g(<k, w>) = that-moment} $\forall b \ [b \subseteq_{S} f \text{-exp}(g(<k, w>)) \rightarrow \exists e$ $\exists x \ [\text{Tuscan-cigar}(x) \land \text{smoke}(e) \land \text{Ag}(e) = \text{Maria} \land \text{Th}(e) = x \land b \subseteq_{S} \tau(e)]]$

The situation $g(\langle k, w \rangle) = s_R$ in (53f) is a small situation, as required by the adverbial "in quel momento". Each of the branches of f-exp($g(\langle k, w \rangle)$) is included by the temporal trace of an event of Maria smoking a Tuscan cigar. This event property is so spread out over the anchoring situation and its expected continuations.

5.4.2 Morphosyntactic and semantic structure of *Imperfetto Irrealis*

For an *Imperfetto Irrealis* [se $\Phi_1 \Phi_2$], we make the following assumptions:

- (A1) the two *Imperfetto*'s IMPERF₁ and IMPERF₂ in Φ_1 and Φ_2 are the morphosyntactic reflexes of a syntactically higher IMPERF₀ that scopes over the whole conditional at Logical Form;
- (A2) a topic situation s_T is introduced for the evaluation of the conditional [se $\Phi \Psi$] (Arregui 2005), where s_T is identical to the anchoring situation s_R needed for the interpretation of IMPERF₀;
- (A3) the THR-operator (of the IPFV underlying IMPERF₀) takes the pair of the eventproperties in Φ_1 and Φ_2 (instead of a single event-property, as in the core uses) and a forward-expansion of s_T as its arguments: THR($\langle P^{\Phi_1}, Q^{\Phi_2} \rangle, f$ -exp(s_T))
- (A4) THR universally quantifies over branches of $f \exp(s_T)$ in which a P^{Φ_1} -event occurs and requires that in each such branch there occurs a Q^{Φ_2} -event as well: THR($\langle P, Q \rangle$, s) =_{Def} $\forall b [[b \subseteq_S s \land \exists e (P(e) \land \tau(e) \subseteq_S b)] \rightarrow \exists e [Q(e) \land \tau(e) \subseteq_S b]]$
- (A5) in accordance with (A3), the IPFV underlying IMPERF₀ takes the pair of the event-properties in Φ_1 and Φ_2 (instead of a single event-property) as its second argument: [[IPFV]] = $\lambda s. \lambda < P^{\Phi_1}_{<v, \leftarrow}, Q^{\Phi_2}_{<v, \leftarrow} >$. THR(< P, Q >, f-exp(s))

The temporal relation between the protasis event e_1 and the apodosis event e_2 is not encoded by any semantical rule which would be rigidly associated with the conditional construction but it is contextually inferred, based on specific information regarding e_1 and e_2 which may come from general world-knowledge or local knowledge pertaining to the linguistic context.

To illustrate, for *Imperfetto Irrealis* (54) the assumptions (A1)-(A5) lead to the LF in (55) and the truth conditions derived in (56a-d):

- (54) Se venivi alla festa ti divertivi.
- (55) $[_{TP}[_{T} PAST_k] [_{AspP} IPFV [_{VP1} you come to the party] [_{VP2} you have fun]]]$
- (56) a. [[[$_{VP2}$ you have fun]]]^{C, g, w} = λe . [have-fun-at-the-party(e) \wedge Exp(e) = h_C] b. [[[$_{VP1}$ you come to the party]]]^{C, g, w} = = λe . [come-to-the-party(e) \wedge Th(e) = h_C]

- c. [[$[A_{spP} IPFV [VP1 you come to the party] [VP2 you have fun]]]]^{C, g, w} =$ = λs_i . $\forall b [[b \subseteq_S f-exp(s) \land \exists e (come-to-the-party(e) \land Th(e) = h_C \land \tau(e) \subseteq_S b)]$ $\rightarrow \exists e [have-fun-at-the-party(e) \land Exp(e) = h_C \land \tau(e) \subseteq_S b]]$
- d. $[[(55)]]^{C,g,w} = 1$ *iff iff* $\{g(<k, w>) <_{s} t_{C}\} \forall b [[b \subseteq_{s} f - \exp(s) \land \exists e \text{ (come-to-the-party}(e) \land \operatorname{Th}(e) = h_{C} \land \tau(e) \subseteq_{s} b]] \rightarrow \exists e \text{ [have-fun-at-the-party}(e) \land \operatorname{Exp}(e) = h_{C} \land \tau(e) \subseteq_{s} b]]$

This analysis predicts that (54) is true if and only if the past topic situation s_T is such that all future branches b_i open at s_T in which the hearer comes to the party are such that the hearer has fun at the party in b_i .

For *Imperfetto Irrealis* (44) (repeated below), which was discussed at length in section 5.2, the analysis predicts the truth conditions in (57):

- (44) Se *domani* <u>venivi</u> [come-2sG.IMPERF] alla festa, adesso ti <u>preparavo</u> [prepare-1sG.IMPERF] quel dolce che ami tanto.
 'If you had come to the party tomorrow, now I would have baked you that cake which you like so much.'
- (57) { $g(\langle k, w \rangle) \langle_S t_C$ } $\forall b [[b \subseteq_S f \exp(s) \land \exists e_1 \text{ (come-to-the-party}(e_1) \land \text{Th}(e_1) = h_C \land \tau(e_1) \subseteq_S b \land \tau(e_1) \subseteq_S \text{ TOMORROW}_C)] \rightarrow \exists e_2 [\text{bake-}h_C\text{'s-favorite-cake}(e_2) \land \text{Ag}(e_2) = s_C \land \tau(e_2) \subseteq_S b \land \tau(e_2) \subseteq_S t_C]]$

The particular temporal ordering of the two events in (44) (namely, the apodosis event e_2 precedes the protasis event e_1) is captured in (57) via the relational formulae $\tau(e_1) \subseteq s$ **TOMORROW**_C and $\tau(e_2) \subseteq s t_C$, given the obvious model condition $t_C < \text{TOMORROW}_C$ (the present moment precedes tomorrow). It should be now obvious how the analysis applies to the other cases we considered in section 5.2, which illustrated the other possible temporal orderings of e_1 and e_2 relative to the speech point, and so we leave that as a routine exercise to our readers.

6. Conclusion

Imperfetto Irrealis have puzzling temporal and aspectual properties: unlike well-known core uses (continuative, progressive and habitual/generic) of Romance imperfects to describe an eventuality as past, they allow for the whole range of temporal interpretations, namely, the events described by the protasis and the apodosis can be past, present or future; in addition, the ongoingness condition characteristic of those core uses is not relevant anymore, since the events described by the protasis and the apodosis are seen as culminated. *Imperfetto Irrealis* are also puzzling for their modal properties: unlike the other indicative conditionals, which are generally interpreted as epistemic, they express counterfactual meaning. With respect to both their temporal and modal properties, we have shown that *Imperfetto Irrealis* are closer to two pasts CFs than one past CFs, by relying on data of mixed CFs (in which an *Imperfetto* combines with a past Subjunctive or a past Conditional). The data suggest that, in spite of the latitude of their temporal interpretations, *Imperfetto Irrealis* preserve the true past tense active in core uses of Romance imperfects.

Building on a previous analysis of imperfective sentences in Del Prete (2013), as well as on crucial insights from Ippolito (2004, 2006), Arregui (2005) and Anand and Hacquard (2010) concerning CF semantics, we have proposed a formal account of *Imperfetto Irrealis* which allows a <u>partially unified</u> view of the *Imperfetto* semantics across conditional and non-conditional uses. The main insight making this partial unification possible bears on the morphosyntactic structure of *Imperfetto Irrealis* and is inspired by previous formal analyses of CFs (Iatridou 2000, Ippolito 2006): the two realizations of the *Imperfetto* that we see in an

Imperfetto Irrealis are the morphosyntactic reflexes of a single higher PAST+IPFV, therefore the true semantically active *Imperfetto* is not situated where one can see/hear the *Imperfetto* morphology (that is, inside the protasis or the apodosis) but higher in the syntactic structure.

In the proposed account, framed in a branching time theory with Kratzerian situations as the basic temporal entities (Del Prete 2013), the reference situation anchoring the *Imperfetto* still corresponds to a past topic situation, consistently with the PAST feature underlying this tense-aspectual form, and the imperfective feature still operates by expanding the topic situation forward in time and then spreading the event-properties of the protasis and apodosis through this forward-expanded situation. However, unlike in non-conditional uses in which IPFV applies to a single event-property and requires inclusion of the extended topic situation in the event run-time, in the CF conditional uses IPFV applies to two event-properties (the protasis' and the apodosis') and requires inclusion of the two events in the extended topic situation. It is at this point that the uniformity of our view of *Imperfetto* breaks down: the topological relation characteristic of imperfective aspect (whereby the reference time is included by the event run-time) is reversed in *Imperfetto Irrealis*.

The counterfactuality of *Imperfetto Irrealis* is captured in our theory as the effect of an interaction between past and imperfectivity, which are thus claimed to be essential ingredients of the counterfactual meaning—neither one alone (i.e., without the contribution of the other) would suffice to produce counterfactuality. More precisely, by PAST the actual history is erased (from the present) up to the topical situation s_T , while by IPFV the topical situation s_T is expanded toward the future, thus branches that were possible at s_T (but were later discarded) become relevant for semantic evaluation. The puzzling temporal properties of *Imperfetto Irrealis* have been accounted for by assuming a weak semantic constraint: what the PAST feature uniquely requires is that the topical situation s_T be past, whereas by the IPFV feature the protasis and apodosis events are projected to the future of s_T but are left unordered with respect to the speech point, which can turn out to be in the future, overlapping or in the past of the protasis and apodosis events.

Finally, we have devoted some space to discussing the sociolinguistic profile of *Imperfetto Irrealis*. These structures have received, and continue to receive, considerable attention among linguists interested in diaphasic variation (Bazzanella 1990, Mazzoleni 2001, among many others). We have shown that, although generally perceived as non-standard or even substandard, *Imperfetto Irrealis* are well-established constructions, in colloquial but also, importantly, in literary use. They are formally simpler and semantically more flexible than the standard CFs of Italian with subjunctive mood in the protasis and conditional mood in the apodosis. This greater formal simplicity and semantic adaptability might be factors explaining their success in lower registers of the language. This doesn't take anything away from their semantic beauty.

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