
An imperfetto essay: ludic use, formalisation and L1 implications

Lorenzo Pinton

Abstract

The aim of this essay is to inquire the semantics of a peculiar pretend-play use of the Italian *imperfetto*, the so-called *ludic imperfetto*, and briefly analyse its relations with a well-known hypothesis in L1 acquisition, the Aspect before tense Hypothesis. After giving a general presentation of the (ludic) imperfetto, we will take stock of the fake tense debate, in order to arrive at a formalisation of the ludic imperfetto through the results of the ‘past-as-modal’ position in the aforementioned debate. In the last section we will see how this ‘past-as-modal’ reading and the Aspect before tense Hypothesis mutually support each other, in favour of a more abstract original meaning of the imperfetto.

1 Introduction

The Italian ludic imperfetto well testifies the numerous challenges that can arise in approaching the intertwined areas of tense, grammatical aspect, and lexical aspect. This use appears in pretend-play contexts and departs from other imperfetto occurrences in various respects. To make it even more interesting, it is employed exclusively by children.

After giving a general overview on the Italian imperfetto in 1.1, all these characteristics will be presented in detail in 1.2. We will then confront the imperfetto with two other debates to accomplish the following goals.

1. Give a full formalisation of the ludic imperfetto;
2. Analyse its implications in L1 acquisition.

Therefore, in 2.1 we will present the modern debate between ‘past-as-past’ and ‘past-as-modal’ interpretations of fake tense, exploiting the latter to give a general formalisation for the core meaning of the imperfetto. Then, in 2.2, we will proceed formalising the unique additional characteristic that distinguishes the ludic imperfetto from the other uses.

In 3.1 we will briefly present the Aspect before tense Hypothesis in L1 acquisition and in 3.2 we will connect it to the the challenge arisen by the ludic imperfetto. What we assumed as a methodology will then become the outlined solution for this challenge, a core abstract meaning for the imperfetto/past tense that can branch in tense or modal forms. This then implies a mutual support between the Aspect before tense Hypothesis and the ‘past-as-modal’ reading. Finally, in 3.3, our conclusions will be presented, along with a couple of ideas for further research.

1.1 The Italian imperfetto

The Italian verbal system can be classified by means of moods, and subsequently by tenses (which are inflected for each person and, in case of passive forms, for gender). This essay will focus on one peculiar use of the imperfetto, one of the indicative mood’s tenses.

Generally, the imperfetto is thought to combine a past tense and an imperfective aspect.

The past tense projects the event in a time that precedes the evaluation time, so if for instance the sentence is uttered and evaluated in the present, the past tense places it in the past.

The imperfective aspect defines on-going (maybe lately interrupted), habitual, or iterated actions.

The combination of these two elements gives rise to the standardly acknowledged functions of the imperfetto, namely those of describing habitual, progressive, and continuous past actions (Bertinetto, 1986).

- (1) Quando era piccolo, Marco giocava in giardino.
When he was young, Marco used to play [play-IMP-3S] in the garden.

As frequently said (Baranzini and Ricci, 2015; Bertinetto, 1986), these uses of the Imperfetto provide a ‘durative’ point of view: in contrast with other Indicative past tenses in Italian, such as the *passato prossimo* or the *passato remoto*, which confer punctuality, the imperfetto presents events from an ‘internal perspective’, without tracing its precise boundaries (Baranzini and Ricci, 2015).

- (2) Quando John arrivò, Maria dormiva.
‘When John arrived, Maria was sleeping [sleep-IMP-3S].’

In the example above, even without the time clause (expressed with the *passato remoto*), the main clause has no ambiguity: it refers to a past time,

and the action is presented as ongoing, from the internal perspective of someone observing it *while* it takes place.

That being said, the imperfetto serves way more uses and functions than the ones mentioned above. These ‘additional’ uses might not convey the two features we presented above as characterizing the ‘standard uses’: the past tense and the imperfective aspect. It is actually possible to detect at least 8 other possible uses of the imperfetto.¹ Amongst them there are for example the oneiric use, aimed at describing dreams, and the reporting use, mainly employed in news and articles, which both show a ‘flattening’ of the aspectual properties of the ‘standard’ imperfetto.

These uses have also been referred to as ‘secondary’ or ‘discursive’ in opposition to ‘primary’ or ‘systematic’ (Araus, 1996). Some of these secondary uses have been also defined ‘modal’ for they evoke non-actual scenarios. The focus of this essay is on one of these secondary modal uses, the ludic imperfetto.

1.2 The ludic imperfetto, description and motivations

Adopted by children in pretend-play situations, the ludic imperfetto is employed ‘to plan and negotiate’ the playing scenario and ‘marks the transition from a real to a pretend frame of reference’ (Musatti and Orsolini, 1993). This planning activity is sometimes referred to as enplotment (to remark the quasi-narrative aspect) and precedes the enactment, namely the phase in which an unreal scenario, the stage of the game, has been set and the actual play begins.

- (3) (Giochiamo!) Io ero la polizia e tu eri il ladro.
‘(Let’s play!) I am [be-IMP-1S] and you are [be-IMP-2S] the thief.’

Uttering (3), the speaker wishes to give pretend-play instructions, asking the addressee to pretend to be a thief while the speaker herself will perform the police. Among the ludic imperfetto’s semantic peculiarities, the most important for the purpose of this essay is the evocation of an unreal world. The modal use of past tenses is a broadly discussed topic in the literature, and the ludic imperfetto may constitute an important contribution since it not only evokes a non actual world, but does so without any overt lexical setting of hypothetical scenarios (as in *if*-clauses) and without the presence of modal verbs. Even more noticeable is the fact that the ludic imperfetto

¹For a full list and extensive discussion of these uses, we suggest ‘Semantic and pragmatic values of the Italian imperfetto: Towards a common interpretive procedure’ by Baranzini and Ricci (2015).

not only bears the evocation of an unreal world, but also a non-lexicalized pretension of it to be real. Anything expressed with the ludic imperfetto requests to be put on stage. Let us compare the following examples:

- (4) a. Tu andavi in spiaggia e trovavi una conchiglia.
 ‘You went [go-IMP-2S] to the beach and found [find-IMP-2S] a shell.’
 b. Tu eri andato in spiaggia e trovavi una conchiglia.
 ‘You had gone [go-TR.PR.-2S] to the beach and found [find-IMP-2S] a shell.’

The *trapassato prossimo* is an indicative tense compound by an auxiliary inflected in the imperfetto and the past participle of the lexical verb, it expresses anteriority with respect to the imperfetto. The difference between (4a) and (4b) is then that in the former the speaker requests the addressee to pretend to go to the beach and find a shell, while in the latter the fact that the addressee ‘has gone’ to the beach has ‘already happened’, it is in the background, and the only action that has to be put in play is the one of finding a shell.

Another major property is the one we could define temporal-aspectual elasticity, following Baranzini and Ricci (2015). This can already be detected in (4), by the presence of the verb ‘find’ whose lexical aspect is that of ‘achievements’. Achievements are both punctual and telic and thus cannot be felicitously inflected in tenses that are connected to progressive or habitual grammatical aspects.² This well shows that in its modal uses, the imperfetto loses not only its tense characterisation, but also the aspectual properties; that means that any verb, regardless of its own lexical aspect, can be inflected in modal imperfetto forms, in contrast with temporal uses, that restrict to the imperfetto only those verbs whose lexical aspect can be felicitously combined with imperfetto’s typical grammatical aspects, i.e. only states and activities. This temporal-aspectual elasticity can be appreciated even more in the following example:

- (5) Facciamo che tu eri in pericolo e io ti salvavo, sparavo al bandito, lo strozzavo e lo trasportavamo vicino al fiume... (C. Comencini, Matrioška, Milano, Feltrinelli, 2002)³
 ‘Let’s pretend that you were in danger and I saved you, I shot the villain and strangled him, and we carried him close to the river...’

²Except for some very special cases, for instance ‘Exactly three years ago, I was finding the winning ticket.’.

³This example has been adapted from Baranzini and Ricci (2015).

Each one of the verbs in the example is felicitously inflected in its imperfetto form.

As last semantic property, there is what Lodge (1979) identifies as the mitigation effect. He supposes that the past in pretend-play has a twofold distance purpose: distance from reality, but also distance from the self. Children would then use past forms also to highlight that the context is playful and friendly, communicating the pretend-play instructions as proposals and not as orders. This peculiarity will be left out of this essay's scope.

Let us now turn to a brief exposition of the non-semantic characteristics of the ludic imperfetto.

First of all, this form presents, like several secondary imperfetto uses, attested equivalents in other Romance languages (see Araus (1996) for Spanish, Pohl (1967) for French, Slama-Cazacu (1977) for Romanian). Similar phenomena can be observed even in non-Romance languages. Lodge (1979) and Kaper (1980) noticed that English children show a tendency to use past simple verbs in pretend-play occasions too. However, some long-distance similarities given, discussions with native English speakers confirmed that this use is not as prominent as it is in Italian, where it is the main strategy pursued by children to define unreal scenarios in pretend-play situations.⁴ Indeed, according to the data from Musatti and Orsolini (1993), in the emplotment phase the most used form by Italian children is the imperfetto by far, while Lodge (1979) and Kaper (1980) found an equal distribution between the uses of past tense and present tense by English children.⁵ The Italian data have shown to be very similar to the French ones of Pohl (1967). This similarity suggests similar patterns for the remaining Romance languages.

The age in which the ludic imperfetto emerges and is used can vary from 2 to 10 years old, with its peak below 5 (Antinucci and Miller, 1976; Musatti and Orsolini, 1993; Pohl, 1967). Even more intriguing is the fact that children seem to have very few inputs when it comes to the ludic imperfetto. Adults refer to (im)possibility with more complex linguistic structures, such as conditional and modal verbs, and the tendency is to avoid the imperfetto, except in rare cases in which it is paired with other lexical tools that signal transition to unreality (Musatti and Orsolini, 1993). It is therefore puzzling how children come to use this form: Musatti and Orsolini (1993) hold that it is by virtue of those rare cases mentioned above, others, like Lodge (1979),

⁴Dean McHugh, personal communication.

⁵This is why sometimes in the English translations of our examples, we have opted for present tense verbs (where the attitude 'Let's pretend that' is implicit).

connect it to the instructions gave to actors on the stage,⁶ while Rodari (1973) sees a link to fairy tales language.⁷ In any case, we can affirm that the ludic imperfetto is developed quite independently and spontaneously. It is also certain that it disappears in grown up adults. For this reason, Pohl (1967) regards it as the only linguistic form exclusive to children.

To sum up, the ludic imperfetto deserves particular interest for the following four characteristics:

1. It explicitly evokes non-actual worlds, without any other lexical marker, requesting to act as if those worlds were true.
2. It is temporal-aspectual elastic.
3. It is developed and used by children but tends to disappear in grown up adults; however, native speaker adults do not consider the form ungrammatical.
4. It is developed independently even though there exist several possible alternatives which do not require particularly complex sentences or verbs inflections.⁸

On the one hand, (1) Will be the main aspect taken into account in our formalisation in §2.

On the other hand, from (2), (3), and (4) a further academic interest rises, the fact that this peculiar form might challenge or account for the Aspect-before-tense hypothesis in L1 acquisition. This topic will be deepened in more detail in §3.

⁶But in terms of causality, it is more likely that the ‘stage’ imperfetto comes from the ludic one, rather than the other way around.

⁷Since the very first line of a fairy tale, ‘C’era una volta’ (lit. ‘There was once’, ‘Once upon a time’) the imperfetto defines the tense of the story.

⁸A completely fine alternative could be the present tense, as used above for English, with an implicit ‘Facciamo finta che’ (‘Let’s pretend that’) made unnecessary by the evident context. Sometimes, as noted by Musatti and Orsolini (1993), certain expressions may introduce the switch to unreality properly operated by the imperfetto, the most frequent such expressions are ‘per finta’ (‘for make-believe’) and ‘andiamo a giocare’ (‘let’s go and play’). So, as Antinucci and Miller (1976) put it: ‘It is highly significant that the first form the child chooses in order to mark the verb in these cases, before he can master the appropriate subjunctive and conditional, is the imperfect.’

2 Formalising the ludic imperfetto

2.1 Past or modality, the core meaning

The spirit driving our formalisation, will be the same that led Baranzini and Ricci (2015), namely a search for a ‘common interpretative procedure’. The idea behind Baranzini and Ricci’s paper was to find a semantic core shared by the numerous uses of the imperfetto, that can subsequently branch through a process of pragmatic enrichment.⁹ In the same fashion, our procedure can be split in two:

1. formalising the common core of every imperfetto;
2. formalising the specific attribute that characterises the ludic use.

To accomplish the first task, it is useful to briefly summarise a broad ongoing debate, the one between past-as-past and past-as-modal interpretations. This terminology has been introduced by Schulz (2014), and aims at describing two opposite approaches that the literature has taken with regards to what is commonly referred to as ‘fake tense’. ‘Fake tense’, as the name suggests, refers to non-temporal usage of the English past tense. The debate mainly revolves around counterfactual conditionals, also called subjunctive conditionals.¹⁰

(6) If it **were**¹¹ raining now, the road would be muddy.

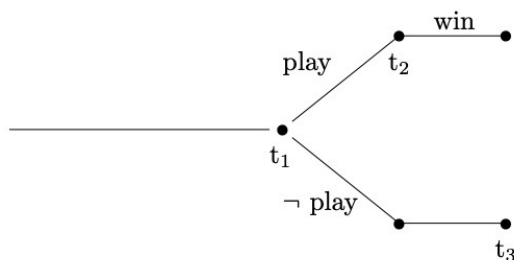
The ‘past-as-past’ interpretation accounts for a strict temporal meaning of past tense, by this it is meant that the past tense always holds a temporal connotation. This approach has been recently accounted for in Ippolito (2013) and Khoo (2015), and explained in Schulz (2014), Mackay (2019), and Karawani (2014). In this view, the modal use is understood in historical terms, and the fact that conditionals do not refer to actual past is generally

⁹We believe that our study can be extended to the Spanish *imperfecto*, the French *imparfait*, and the equivalent tenses in other Romance languages. However, in the interest of space, here we limit ourselves to the treatment of the Italiano imperfetto.

¹⁰Actually, according to Von Stechow (2012), ‘neither terminology is entirely accurate’. In fact languages that do not offer past subjunctives, like English, express this conditionals with an ‘additional past layer’ in the indicative mood. Therefore, relying on mood to name the distinction is deceptive. In the same fashion, using the term ‘counterfactual’ might be misleading too, since such conditionals do not always show counterfactual hypotheses. Various examples supporting this claim can be found in Von Stechow (2012).

¹¹On the lines of Iatridou (2009), it has to be specified that this form cannot be regarded as a subjunctive mood, but must be acknowledged as a past indicative.

led back to wide scopes taken by past tense in conditionals. This means that when a conditional is uttered using the past, its modal meaning can be conferred thanks to the idea that ‘some other conditional was true at a time before the time of utterance’ (Mackay, 2019). We can better understand this view recalling the philosophy of time that grounds it. In fact, the past-as-past view is connected to a the specific time picture that conceives the future as open to possibilities, and the past as closed (Prior, 1957). The idea behind using the past in counterfactuals would then be to bring back the action to a time in which more possibilities, now historically deleted, existed. Let us consider the picture below, from Karawani (2014),¹² to exemplify the view.



Imagine to be at t_3 when the following sentence is uttered: ‘If Germany played England, Germany would win the game.’ According to the ‘past-as-past’ view then the contribution of the past morpheme is to bring us back at t_1 where it *was* not decided yet that Germany *was* not going to play England.

In opposition to the ‘past-as-past’ view, the ‘past-as-modal’ interpretation postulates a more malleable, since more abstract, core meaning for past tense. According to this analysis, the very minimal meaning of the past is ‘distance’, from here and now. This abstract notion of distance can then materialise in temporal distance (past, as distant from the present, ‘not now’) or modal distance (unreality, as distant from reality, ‘not here’). This view has been accounted for in Iatridou (2000), Schulz (2014), and Mackay (2019). One of the way to account for this reading is to abstract the common view of time as a preceding relation $<$ on the set of times T (with a designated present time t^*). This abstraction gives us, following Mackay (2019):

- A set of indices I ;
- A relation $<$ on I ;

¹²Who adapted it on his turn from Dahl (1997).

- A designated index i^* .

If it is clear that in the temporal use of the past this set of indices and this relation can be interpreted as the traditional order mentioned few lines above, it is less clear what they mean in the modal case. Answering the puzzle about the modal meaning of this indices is the challenge Mackay tries to pursue in his cited paper. His solution is to define the set I as the set of sets of propositions that circumscribe the modal base, the relation $<$ as the proper subset relation $\subset$, and the designated index i^* as the factive common ground.¹³ Proper subsets will then gradually have less presupposed and true propositions than the designated index i^* . Thus, the concept behind Mackay (2019)’s formalisation is to expand the modal base by reducing the number of propositions that are presupposed and true in the context of utterance.

Another formalisation in this framework that will be exploited here is the one proposed by Karawani and Zeijlstra (2013), who define maybe in a more straightforward way, the past tense as defining non-actual veridicality (not here and now), expressed by the following formula:

$$\|NAV\| \phi(w,t) \text{ presupposes that } \exists w',t'. [\langle w,t \rangle \neq \langle w^0, t^0 \rangle \wedge \phi(w,t)]^{14}$$

To exploit these formalisations in order to give a unified meaning of the various imperfettos, we must first point out the differences between the imperfetto and the fake tense. First of all, as said before, the fake tense debate and formalisations have mainly revolved around counterfactuals.¹⁵ Italian having a past subjunctive,¹⁶ the imperfetto rarely appears in conditionals.¹⁷

¹³‘The factive common ground, in a context of utterance, is the set of propositions that are presupposed and true in the context of utterance’ (Mackay, 2019).

¹⁴Where t^0 is the time of utterance and w^0 the actual world.

¹⁵However, some authors would like to give the debate a wider scope, affirming that the fake tense appears not only in conditionals. Therefore, the ludic imperfetto might also constitute a good argumentation in favor of this thesis, at least for Romance languages.

¹⁶As Iatridou (2000) points out if a language has only a subjunctive present it will prefer the indicative past in conditionals, otherwise, if it has a subjunctive past as well, the latter will be chosen. Subjunctive is preferred to indicative, but past over present has priority.

¹⁷For the sake of transparency we have to point out now that there exists an imperfetto called ‘counterfactual’ but cannot be paired with the fake tense in counterfactual conditionals, because it has a completely different use. Instead of presenting the past tense in the antecedent of the conditional, the ‘counterfactual’ imperfetto is used to describe a non-actual resulting state of affair in the conditional consequent, after that a non-actual hypothesis has been introduced by means of past subjunctive in the antecedent. An instance of this use, adapted by Baranzini and Ricci (2015), can be found later, at (7b).

When it appears, probably uttered by children or learners, it is perceived as ungrammatical by proficient speakers, who often cannot resist the impulse to correct it.¹⁸ This peculiarity could actually be very relevant for the ‘past-as-modal’ reading since the ludic imperfetto constitutes an example in which the modality is evoked only by the past morpheme itself, without any lexical item that introduces the unreal scenario (as modal verbs or the conjunction ‘if’).

The second important difference is that, when it is used modally, the imperfetto cannot refer to plausible or even possible situations. If the fake tense can be used to talk about future events, like wishes, that maintain a possibility status,¹⁹ the imperfetto can only refer to unreal, remote, scenarios. Thus, the imperfetto comes to have two to-some-extent restricted meanings: it can refer either to an impossible ‘now’, or to an actual, (unbounded) past.²⁰

- (7) a. Quando suo padre arrivò, Marco giocava/stava giocando in giardino.
When his father arrived, Marco was playing [play-IMP-3S] in the garden.
- b. Incidente aereo, Capirossi illeso. “Ho avuto paura, sì, tanta paura. Altri trenta secondi e (ora) non c’ero più.”
‘Air crash, Capirossi unharmed. “I was scared, yes, really scared. Thirty more seconds and (now)”²¹ I would no longer have been here” [I be-IMP no longer here].’²²
- c. *Se ieri Marco giocava/stava giocando in giardino, adesso sarebbe felice.
If yesterday Marco was playing [play-IMP-3S/be-IMP-3S play-GER] in the garden, now he would be happy.

¹⁸Although there are regional variations in which the imperfetto in conditionals is considered grammatical. At least in Veneto and in Tuscan dialects there are even popular sayings with imperfetto in conditionals. E.g. ‘Se me nono gavea le rode, el jera na cariola.’ (lit. ‘If my grandpa had [have-IMP-3S] wheels, he would be [be-IMP-3S] a wheelbarrow.’, popular saying used to sarcastically mock someone who is making too many conjectures with ‘ifs’ and ‘buts’).

¹⁹E.g. ‘I wish you came to the party next week.’

²⁰We have to acknowledge a case in which the imperfetto seems to be referred to the future. That is the planning imperfetto: ‘Stasera andavamo al ristorante, vuoi venire?’ (‘This evening we were going [go-IMP-1PL] to the restaurant, would you like to come?’). However, Baranzini and Ricci (2015) correctly analyse the planning imperfetto as actually referring to the time of the decision-making rather than to the planned event itself.

²¹Introduced here by us to mark a difference later.

²²Example adapted from Baranzini and Ricci (2015), taken on their turn from www.motograndprix.motorionline.com.

- d. *Incidente aereo, Capirossi illeso. “Ho avuto paura, sì, tanta paura. Altri trenta secondi e ieri non c’ero più.”
 ‘Air crash, Capirossi unharmed. “I was scared, yes, really scared. Thirty more seconds and yesterday I would no longer have been here” [I be-IMP no longer here].’
- e. Se un’ora fa Marco stava partendo da casa, adesso dovrebbe essere arrivato.
 If one hour ago Marco was leaving [be-IMP-3S leave-GER] home, by now he should have arrived.

We chose the so-called standard imperfetto to give an example in (7a) of its felicitous temporal use. (7a) describes an action that took place in the actual past. The even more progressively marked form ‘imperfetto + gerundive’ works perfectly too.

As a counterpart, to show a felicitous modal use in (7b) we employed the counterfactual imperfetto. The imperfetto in (7b) talks about a non-actual present, on a non-actual past condition given by the past subjunctive.

In (7c) it is shown that trying to express a non-actual past through the imperfetto results in ungrammatical sentences. The ungrammaticality emerges also with the ‘imperfetto + gerundive’ form.

Similarly, (7d) shows that a case similar to (7b) becomes ungrammatical if we try to use the imperfetto to describe a non-actual scenario placed in the past thanks to the overt time marker ‘ieri’ (‘yesterday’).

Finally, (7e) proposes a case that might be tricky. In this case however, ‘if’ can only be interpreted as ‘given’ and the fact that the imperfetto comes to describe an actual past is what makes the sentence grammatical. This is marked by the fact that in the consequent we have the epistemic modal ‘dovrebbe’ (‘should’). Moreover, this reading is possible only because we have the progressive form ‘imperfetto + gerundive’, the bare imperfetto would have made the antecedent unactual and consequently, the whole sentence ungrammatical.

Now that we have clarified that the imperfetto, in any use, consists of a bi-dimensional meaning in which one and only one of its dimensions can be modified (either the present time of utterance or the actual world), it starts to become clearer also how we want to make use of the past-as-modal formalisations described above.

To accomplish our first goal then, defining a common meaning for any imperfetto,²³ we will add a constraint to Karawani and Zeijlstra (2013)’s NAV

²³We must point out that this meaning is conceived exclusively in terms of presupposition. Following Heim (1994), tense is a presupposition about the value of a parameter,

formula. The constraint aims at blocking the possibility that the imperfetto modifies both the time of utterance and the actual world.

Definition 1 (Core Meaning of the Imperfetto). $\|IMP\| \phi(w, t)$ presupposes that $\exists w', t'. [\langle w, t \rangle \neq \langle w^0, t^0 \rangle \wedge \neg(w \neq w^0 \wedge t \neq t^0) \wedge \phi(w, t)]$

With this formula we do not want to commit ourselves to a positive answer to the ontological question of whether we can unequivocally identify an identical time of utterance between the actual and a non-actual world. What we want to express with this formula is that the imperfetto, when used modally, cannot talk about a non-realized possibility in the past, but only in the present.

This view conceives the most general interpretation of the imperfetto, its core meaning, as the interdependency of the two parameters: whenever one varies, the other remains still. We then proceed defining further these two parameters, limiting their meaning through Mackay (2019)'s formalisation mentioned above.²⁴ If one between t' and w' is the designated index for a certain set of indices (so $t' = t^0$ or $w' = w^0$), the other value will be a certain index i which strictly stands in the relative relation $<$ to the designated index i^* of the same set of indices. Using the letters w and W for the modal indices and their set we have:

Definition 2 (Frameworks of the Imperfetto). The core meaning of the Italian imperfetto, in any use, can assume one and only one of the following forms:

1. $\langle w^0, t' \rangle$; with $t' < t^0$;
2. $\langle w', t^0 \rangle$; with $w' \subset w^0$.

With set of temporal indices T and set of modal indices W .

It is then possible to categorize any use of the imperfetto according to these two forms:

- **Temporal shift**, $\langle w^0, t' \rangle$: standard, narrative, reporting, mitigation, fictional, oneiric, and planning imperfetto;
- **Modal shift**, $\langle w', t^0 \rangle$: ludic and counterfactual imperfetto.

in her case time. In our case we have two parameters, time and world of evaluation. The imperfetto, as the other tenses, does not contribute any at-issue meaning.

²⁴The reason to do so is not only to have an elegant branching which exploits the same structure for times and worlds but also to overcome problems with previous formalisations extensively discussed in Mackay (2019).

Now that we have defined the core meaning that any imperfetto shares, we will now proceed to give a formalization of the ludic imperfetto itself, incorporating its specific attribute.

2.2 Pretend it to be true: the ludic meaning

This part deals with what Baranzini and Ricci (2015) would define as the pragmatic enrichment of the imperfetto. We arrived to a formula able to express a basic meaning that can apply to any imperfetto, but now we have to look at the specific goal the ludic imperfetto pursues.

As we have seen in §1, the ludic imperfetto emerges in the so-called enplotment phase of children's pretend-play. In this phase instructions on the characters and actions that will be performed are delivered. If on the one hand then the ludic imperfetto has the function of evoking a non-actual world, the fantastic world where children's adventures take place, on the other hand it bears the implicit, pragmatic request of acting as if that world were real. In semantic terms, uttering a ludic imperfetto not only summons an ir-reality known to be false at the world and time of utterance, but begs the addressee(s) to commit themselves to temporally switch the world of utterance with one of those in which the evoked reality is actual. To semantically formalise this pragmatic request, we want to define a Pretend-operator.

Definition 3 (Pretend-operator). An utterance of $\text{Pret}[\phi]_w$ is a request that can be felicitously uttered if and only if $\llbracket \phi \rrbracket_w = 0$ and that is satisfied if and only if conversation's participants temporarily act as if they substituted the world of utterance w with a fictional w' in which $\llbracket \phi \rrbracket_{w'} = 1$.²⁵

Here we will not analyse this operator further, because of its scope on people's action. However, we must point out that in her MSc thesis, Benossi (2017) provided the formalisation of a similar operator exploiting a multi-sorted logic together with Event Calculus. In any case, we are confident that the following example will clarify its meaning. Imagine John exclaims, speaking with Paul, $\text{Pret}[\text{'You are a walrus.'}]$. First of all we have to notice that $\text{Pret}[\text{'You are a walrus.'}]$ is felicitously uttered if and only if Paul is not a walrus. Second $\text{Pret}[\text{'You are a walrus.'}]$ will be satisfied if and only

²⁵The interaction between Pretend-operator and connectives is as follows:

Negation: an utterance of $\text{Pret}[\neg\phi]_w$, felicitously uttered if $\llbracket \phi \rrbracket_w = 1$ is the request to temporarily substitute the world of utterance w with a fictional w' in which $\llbracket \phi \rrbracket_{w'} = 0$;

Conjunction: $\text{Pret}[\phi]_w \wedge \text{Pret}[\psi]_w = \text{Pret}[(\phi \wedge \psi)]_w$;

Disjunction: $\text{Pret}[\phi]_w \vee \text{Pret}[\psi]_w = \text{Pret}[(\phi \vee \psi)]_w$.

if Paul will pretend to be a walrus (bouncing a ball with his nose, jumping, ...), namely if his actions will be consistent with a world w_n in which $\llbracket \text{Paul is a walrus} \rrbracket = 1$.

The pretend-operator is the specific characteristic of the ludic imperfetto, the pragmatic request to act as if the descriptions given were true. Let us recall (a shorter version of) our example (3).

- (8) Io ero la polizia e tu eri il ladro.
I am [be-IMP-1S] and you are [be-IMP-2S] the thief.

To give the full meaning of the ludic imperfetto we just have to combine the core meaning of imperfettos with the Pretend-operator. Not referring to an actual past, the ludic imperfetto belongs to the modally shifted category of imperfettos. The main use of the imperfetto is then the one of recalling a non-actual (fantastical) world, in the present: $\langle w', t^0 \rangle$. This evocation on the one hand begs for a pragmatic intervention. When uttered by a children, (8) says something blatantly false. This falsity however is not introduced by any lexical element that could provide a reason for a shift to a non-actual world for discourse purposes (as in an *if*-clause). The falsity then triggers the pragmatic request to pretend. Moreover, the modal imperfetto immediately fulfil the Pretend-operator felicity condition.

Definition 4 (Meaning of the Ludic Imperfetto). :

$\llbracket \text{LUD.IMP}[\phi] \rrbracket_{w,t}$ presupposes that $(w = w^0 \wedge t = t^0 \wedge \neg\phi(w^0, t^0) \wedge \exists w'. [\langle w', t^0 \rangle \neq \langle w^0, t^0 \rangle] \wedge \phi(w', t^0))$ and asserts $\text{Pret}[\phi]_w$

This formula allows us to explain also something slightly beyond the ludic imperfetto. As can be noted, the presence of the Pretend-operator in the formula implies the substitution of the world of utterance w_0 with a fictional world w' in conversation's participants 'make-believe'. This detail is what triggers the use of the present tense in the enactment phase. On the one hand, the sentences uttered in the enplotment phase are evaluated in the actual world, and thus they must appeal to the imperfetto to evoke a non-actual world. On the other hand, the enactment phase happen right after the substitution of frame of reference, and thus what allows the use of the present is precisely the previous introduction of a new, non-actual world of evaluation.

In the next and last section we will discuss the relations between the ludic imperfetto and one of the main hypotheses in L1 acquisition, namely the Aspect before tense Hypothesis.

3 The ludic imperfetto and L1 acquisition

As we have seen in 1.2, the ludic imperfetto carries one peculiar characteristic concerning aspect, along with two special features linked to the young age of its users, namely:

1. It is temporal-aspectual elastic.
2. It is developed and used by children but tends to disappear in grown up adults; however, native speaker adults do not consider the form ungrammatical.
3. It is developed independently even though there exist several possible alternatives which do not requires particularly complex sentences or verbs inflections.

The aim of this section is to evaluate these three characteristics in the framework of one L1 acquisition hypothesis. In 3.1 and in 3.2 we will briefly present the hypothesis, and we will see what it can suggest on the ludic modal use, and viceversa, given the aforementioned temporal-aspectual elasticity. Finally, in 3.3, the conclusions of this essay will be presented, along with a couple of suggestions for future work.

Before starting a disclaimer is needed, this section do not intend to account for or against the hypothesis, but simply to inquire the mutual implications that link it to the ludic imperfetto.

3.1 The Aspect before tense Hypothesis

Verb inflections acquisition is one of the main areas in which L1 acquisition studies have focused. One of the challenges raised by the topic is to address whether patterns on the order in which these inflections are acquired by children can be found, across children with same native language as well as across different languages. If patterns exist then a new puzzle arises, the puzzle on the rationale behind these patterns.

Several seminal studies have shown that such patterns exist, that they lies in the interplay between grammatical aspect, tense, and lexical aspect, and that they are similar between Romance languages and English (we will limit ourselves to cite Bronckart and Sinclair (1973), Antinucci and Miller (1976), and Shirai and Andersen (1995)). In a very sketchy way, we might say that the emergence's features found are:²⁶

²⁶The following summary is a shortened version of a scheme given by Vraciu (2012), who on her turn adapted Andersen (1996).

- (Perfective) past tense inflections first emerge with achievement and accomplishment predicates, and then they are extended to activities and states;
- Imperfective inflections emerge later than perfective and follows the reverse path, first state and activity predicates and only later achievements and accomplishments;
- Progressive inflections emerge for activity predicates, and then for accomplishments and then for achievements. They are not overgeneralised for states.

The most likely hypothesis that tried to explain this data has been called Aspect before tense Hypothesis.²⁷ To avoid terminology confusion, it is important to highlight that in this case ‘aspect’ refers to lexical aspect, also called *Aktionsart*.²⁸

The hypothesis affirms that children confuse lexical aspect and tense, resulting in the tendency to use verbs inflections to somehow match verbs’ *Aktionsart*. This tendency is therefore reflected, for instance, in the first emergence of perfective past tense inflections for achievements on the one hand, and their avoidance for activities.

People that first proposed this hypothesis (Bronckart and Sinclair (1973) and Antinucci and Miller (1976)), observed data from children speaking French in the first case, and Italian and English in the second. Bronckart and Sinclair (1973) focused on children from 2;11 to 8;7, and Antinucci and Miller (1976) between 1;6 and 2;5. The fact that these ages overlap with those of children using the ludic imperfetto²⁹ (or its Romance and English

²⁷Other than the Aspect before tense Hypothesis, another quite popular theory that tried to provide reasons for the mentioned morphological features is the Discourse Hypothesis. This Hypothesis is to some extent compatible with the Aspect before tense Hypothesis (Vraciu, 2012). It did not seem appropriate to analyse this Hypothesis here since it focuses on narrative contexts. Even though in ludic imperfetto contexts some ‘stories’ can be made up (the quasi-narrative aspect mentioned in 1.2), see example (5), we have already seen in §1 that standard and narrative uses of the imperfetto can be clearly distinguished from the ludic one.

²⁸Lexical aspect refers to intrinsic temporal features of verbs. It does not deal with some morphological markers, as in the case of grammatical aspect, but with inherent connotations arisen by the specific semantics of every verb. There are four traditional lexical aspects (states, activities, accomplishments, and achievements) and a fifth one, added later (semelfactives) (Coppock and Champollion, 2019).

²⁹In the case of Antinucci and Miller (1976) this overlap is only tangential but this fact does not constitute a problem, given the similarities between Romance languages already attested in these topics.

counterparts) in the studies of Musatti and Orsolini (1993), Lodge (1979), and Pohl (1967), allows comparisons between the studies.

3.2 The ludic challenge and how to solve it

As we said in 1.2, the ludic imperfetto bears a unique property concerning lexical aspect, the temporal-aspectual elasticity.

- (5) Facciamo che tu eri in pericolo e io ti salvavo, sparavo al bandito, lo strozzavo e lo trasportavamo vicino al fiume... (C. Comencini, Matrioška, Milano, Feltrinelli, 2002)
'Let's pretend that you were in danger and I saved you, I shot the villain and strangled him, and we carried him close to the river...'

Therefore, on the one hand the imperfetto is typically thought as combining a past tense and an imperfective and progressive aspects, and then its usage should be restricted to certain *Aktionsarten*, excluding states; on the other hand, however, children themselves develop autonomously the ludic use, which treats any *Aktionsart* in the same way. This second claim seems to go against the predictions on the links between lexical aspect and L1 acquisition. For these reasons it seems that the ludic imperfetto might threaten the Aspect before tense Hypothesis.

The Aspect before tense Hypothesis has not always been safe from objections. In particular, in the mid-80s a big challenge has been raised. Weist et al. (1984) found that Polish L1 children in early stages of learning (from 1;7 to 2;2) could employ deictic future reference, combine telic and atelic predicates with past tense, and distinguish between perfective and imperfective past. These observations caused a revision to the hypothesis which converted the previous assumption of past as absolute defective category to past as relative defective category (Vraciu, 2012).

We believe the problem arisen by the ludic imperfetto is simpler and does not require to recalibrate the hypothesis. In fact, we think the contradiction can be easily solved through another debate we analysed, the one between 'past-as-past' and 'past-as-modal' interpretations.

The ludic imperfetto can constitute a problem for the Aspect before tense Hypothesis only if we postulate a strict temporal meaning for the imperfetto, as the 'past-as-past' interpretations tend to do for fake tense in general. On the contrary, accepting two different kinds of imperfetto (or past tenses in general) that emerge from a branching of a more abstract meaning, the problem vanishes. In this scenario, the Aspect before tense Hypothesis would have no problem: it would still hold for the cases in which the imperfetto

shows temporal connotations (when its form in our formalization is $\langle w^0, t' \rangle$; with $t' < t^0$) and, at the same time, it would allow exceptions for cases in which we are facing a modal imperfetto that does not involve any past connotation ($\langle w', t^0 \rangle$; with $w' \subset w^0$).

In this perspective then, it appears clear that the Aspect before tense Hypothesis suggests a ‘past-as-modal’ interpretation: whoever accounts for this Hypothesis cannot at the same time take into consideration the possibility that a unified temporal meaning serves as basis for any imperfetto meaning.

In the light of the above, it is clear that splitting the meaning of the imperfetto into two branches appears to be a necessary move. If we first exploited a split meaning just as a methodology for our formalisation, now it has to be recognized that modal uses show special lexical properties that suggest a definitive abandonment of a purely temporal framework.

3.3 Conclusions and future work

In the present study we inquired the meaning of the ludic imperfetto. In 1.1 we introduced the quite wide world of the Italian imperfetto(s), and in 1.2 we presented the ludic imperfetto, its semantic properties as well as its more general linguistic features. We also drew some parallelisms between Italian and other Romance and non-Romance languages concerning this use.

In formalising the ludic imperfetto we followed Baranzini and Ricci (2015)’s methodological strategy. Namely, in 2.1, we aimed at formalising the general core meaning common to any imperfetto. In doing so, we approached the debate on fake tense. We placed ourselves in the ‘past-as-modal’ interpretation, putting a further constraint on Karawani and Zeijlstra (2013)’s NAV formula, and defining the relations between worlds as the proper subset relation, following Mackay (2019). This allowed us to show that any imperfetto is defined by two parameters which are interdependent: if one of them varies, the other can only assume its default value. The ludic imperfetto conveys the modification of the world parameter, invoking a non-actual world. In 2.2 we then proceeded for the final step towards its formalisation, implementing the Pretend-operator.

Finally, we turned to the analysis of the ludic imperfetto from the perspective of L1 acquisition. In 3.1 we introduced the Aspect before tense Hypothesis, which predicts tense to be a defective category whose use is highly affected by lexical aspect, in early stages of language acquisition. In 3.2 we showed how the temporal-aspectual elasticity of the ludic imperfetto seems to constitute a problem for the Hypothesis, especially if we consider

the naturalness with which this use is developed by children. To conclude, we outlined the possible solution for this apparent contradiction. The solution lies in what we assumed as methodology throughout the essay, an abstract core meaning for the imperfetto that has the potential to branch into temporal and modal forms. The behaviour of temporal imperfettos is the one predicted by the Aspect before tense Hypothesis, while modal imperfettos can behave differently since they do not hold any temporal connotation, and the ludic imperfetto belongs to this second group. In conclusion, the ludic imperfetto actually constitutes a solid reinforcement for the ‘past-as-modal’ interpretation, the Aspect before tense Hypothesis, and their mutual implication.

From these results, new questions looking for answers arise. First of all, looking for similarities across languages, we might ask whether every language that presents non-actual pasts also presents the ludic imperfetto. On the other hand, inquiring what happens in languages that do not use past forms in modal ways might prove to be fertile as well. In particular, what happens in those languages that suggest a radically different perspective on past and future?³⁰

Yet, we think that the most challenging question could be posed on the reasons and the mechanics behind the acquisition of the ludic imperfetto and its counterparts in other languages. How is it possible that children, with very few inputs, if any, come to acquire the postulated abstract distance meaning for the imperfetto, whose temporal use (the one for which children have inputs) is just one of the two ways in which it can branch? Our tentative answer relies on the reverse path, namely that it is the abstract distance meaning that originates from certain specific occurrences, like the ludic imperfetto, which are mainly driven by psychological and communicative goals. We conjecture that the past is preferred to the future since it is closed to possibilities and thus it is more ‘safe’. Children would use the past because doing so they do not have to worry that what they pretend might actually happen, as if it were expressed with the future.³¹ Among the various avail-

³⁰An interesting data to confront could come from the Aymara language, for which the spatial representation of time is the opposite compared to the most common view (including Romance and Germanic languages) for which the past is behind us and the future in front of use. See Núñez and Sweetser (2006) for further details.

³¹This claim could be supported by the fact that in some languages there exist modal uses of the future to express possibility. In Italian, for example, an epistemic modal future, sometimes called ‘presumptive’ or ‘evidential’ future, is attested and it is implied to make conjectures and guesses. Recent detailed discussions on this topic can be found in Ippolito and Farkas (2019), Frana and Menéndez-Benito (2019), and Frana and Rawlins (2019).

able pasts, children would then choose the imperfetto because of its temporal indeterminacy, a feature well highlighted in Bertinetto (1986).³²

However, we believe that a reliable answer to this question posed above might be provided by neurolinguistics and psycholinguistics. The outlined solution we have given could be tested in experimental approaches. We provide here a sketch of how such an experiment could look like. We can imagine that one way to do it could be to look at the different neurological areas that are activated as well as the levels of intensity of their neuronal activity when children evaluate sentences. These sentences could describe either good/happy/exciting or bad/sad/dangerous scenarios, and should be presented both in past and future forms. The idea is then that, if past is connected to unreality, children should show less intense reactions when presented with past sentences since they consider the described scenario as not possible, in contrast with future sentences. For example, we think they would show less excitement when good scenarios are described using past tense rather than future, as well as they would show less activity in the brain areas related to fear and danger when bad scenario sentences are described using the past rather than the future.

As can be sensed, on the one hand this essay provided an account for the formalisation of the ludic imperfetto and its L1 acquisition implications, but on the other hand numerous challenges are posed. Future research will try to answer those questions, but for now, like playing children, we will *pretend that we were* satisfied with what we achieved in this essay.

³²(‘There are valid reasons on the basis of which it can be asserted that the use of the imperfect is mostly compatible with contexts implying indeterminacy. [...] Therefore, it must be generally concluded that indeterminacy is not uniquely determined by the whole of the message conveyed by the text; it is also suggested precisely by the imperfective value as such, which can sometimes prevail over competing contextual indications’ (Bertinetto, 1986).

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