

# Towards a unified analysis of past and future tenses: the case of European Portuguese

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## Abstract

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While the literature has often highlighted the differences between the defining features of past and future tenses, little attention has been paid to the similarities that bring these linguistic forms together. Taking European Portuguese data as a point of departure, it was my goal in this paper to investigate some of the correspondences that arise between these structures. So, I will endorse the idea that, in both the past and the future domains, there are equivalent strategies to perform temporal location. Thus, tenses, such as the Pretérito Imperfeito do Indicativo (Imp) in the past or the Futuro Simples (FS) in the future, which do not display relevant temporal constraints beyond the mere location of an eventuality in an interval before or after  $t_0$ , interact with and are more easily influenced by other semantic categories, namely aspect and modality. On the contrary, tenses that require more evident temporal restrictions, in particular the imposition of final or initial boundaries to the situations with which they are

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combined, such as the Pretérito Perfeito Simples (PPerf) or the construction *ir* ('go') + Infinitive, have in common that they are less permeable to the influence of other external factors, with temporal location being their most prominent meaning.

**Keywords:** Tense, past tenses, future tenses, European Portuguese, temporal location, aspectual sensitivity.

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## 1. Introduction

The prominent differences that arise between tenses locating a situation before and after the speech time, and, more generally, between the linguistic expression of past and future temporal relations, have been discussed in the literature. In fact, it is usually considered that the representation of past and future relations must be asymmetrically conceived in order to account for the divergences that come about in a considerable number of contexts.

Nevertheless, and besides the distinctions that can be found in this respect, there are also interesting contact points that bring together some tenses expressing past and future information.

The main goal of this paper will be, thus, to point out a set of properties that, in a way or another, approximate certain past and future tenses, showing that they share substantial linguistic behaviours that, in some extent, call for a parallel treatment concerning their semantic representation.

I will illustrate my assumptions with four tense forms of European Portuguese: The Pretérito Perfeito do Indicativo (a past terminative tense), the Pretérito Imperfeito do Indicativo (imperfect past), the structure *ir* ('go') in the present tense + Infinitive (the so-called periphrastic future) and the Futuro Simples do Indicativo (simple future).

Based on data from European Portuguese, I will suggest that the *Pretérito Perfeito* and the structure *ir* ('go') + Infinitive, on the one hand, and the *Futuro Simples* and the *Pretérito Imperfeito*, on the other, share relevant behaviours and properties that, jointly, favour the idea that these tenses can be grouped together; concomitantly, I will argue that these linguistic features are relevant both in the past and in the future domain.

In order to achieve the above-mentioned goals, the paper is organised as follows: in section 2, I will briefly present some arguments that have been invoked in the literature to support a separate treatment for past and future temporal descriptions; in section 3, I will introduce some of the basic characteristics of the Portuguese tenses that will be considered along the article, namely the Pretérito Perfeito (PPerf), the Pretérito Imperfeito (Imp), the structure *ir* ('go') + Infinitive and the Futuro Simples (FS). In section 4, I will focus on some interesting similarities that approximate the PPerf and the structure *ir* ('go') + Infinitive, on the one hand, and the Imp and the FS, on the other, showing that a unified treatment for these past and future tenses is a reasonable option. In 5, I will propose a basic semantic temporal analysis that accommodates our previous observations. Section 6 brings together our concluding remarks.

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## 2. Differences in the expression of past and future temporal relations

Many authors consider that the linguistic representation of past and future temporal relations must be treated asymmetrically. Although it is not my intention to discuss deeply the multiple arguments that underlie this assumption, I will briefly illustrate here some of the reasons that have been raised to support the consideration of divergent treatments for past and future domains.

The major difference that emerges when considering the expression of past and future temporal relations has to do with the ascription of a truth value to the predications being described. While the truth or falsity of an eventuality located before the speech time can be easily evaluated, since it has already occurred in the real world at  $t_0$ , situations that are projected into a future interval have, in a certain extent, their truth-value unspecified, since, at utterance time, it is not possible to know if they will actually take place or not (see, e.g., Prior 1967; Besson & Hattiangadi 2014; 2020).

This observation involves important consequences that are reflected in the way past and future tenses are arranged in natural language.

First, it is interesting to point out that, in a vast number of languages, past relations are coded in a more detailed way than future ones. A good example of this phenomenon is the existence of tenses that express past events that are located before a past interval that constitutes their reference time (see Reichenbach 1947). The pluperfect in English and its correlates in Romance languages illustrate this kind of past-in-the-past relation. In those languages, however, there is no corresponding future tense, i.e., no tense expresses a situation posterior to an interval itself located in the future.

This kind of linguistic behaviour led authors such as Declerck (1991; 2006) to propose the existence of two main temporal domains – the past sphere and the non-past sphere, encompassing both present and future tenses –, corresponding to an asymmetrical conception of (linguistic) time.

Since future situations have not yet occurred at the speech time, they are typically conceived as hypothetical, indeterminate or open propositions. This indeterminacy inspired authors such as Prior (1967), Dowty (1979) or Galton (2006) to suggest the existence of inertia histories or inertia worlds associated with the expression of future eventualities. In these analyses, the future branches into a set of possible alternative paths, each of which corresponding to a possible history or to a possible world, compatible with our current knowledge, in which a given situation could develop. In Dowty's words, inertia futures "are to be thought of as worlds which are exactly like the given world up to the time in question and in which the future course of events after this time develops in ways most compatible with the past course of events" (Dowty, 1979: 128).

One way of interpreting this assumption would be to consider that, at speech time, it is not possible to ascribe any truth value to the propositions that describe situations occurring in a later interval, since we are not in a position to know which direction future states of affairs will take, i.e., which possible world will correspond to the actual course of events. So, since the truth value for these sentences is not accessible at the utterance time, the propositions in question would be treated as mere possibilities, hypotheses, or probabilities.

This kind of assessment supports those treatments that consider future tenses as the privileged means to express epistemic modality (see, e.g., Giannakidou 2014; Giannakidou & Mari 2018).

However, it is not tenable to assume that future tenses are always used to convey hypotheses or more or less plausible possibilities. Consider the following example:

(1) Portuguese

Vai	chover	amanhã	em	Paris.
go.PRES.3SG	rain.INF	tomorrow	in	Paris

‘It will rain tomorrow in Paris.’

In the context of a forecast presented in the television, for instance, a sentence like (1) is not meant to pick up any alternative from a set of different equivalent possibilities. On the contrary, in these circumstances, it makes a clear prediction that, in a given future interval, viz., tomorrow, it will actually rain in Paris.

In order to accommodate this kind of readings, in which future tenses describe an event that is predicted or expected to occur in a later interval, it is necessary to constrain somehow their interpretative properties.

There are, in fact, several proposals that attempted to solve this problem.

For instance, MacFarlane (2003; 2008) suggests that the truth value of a proposition in the future must be evaluated not only with respect to the utterance time (the interval in which it is produced) but also with respect to the later interval in which the situation is effectively located (the interval of its realization). So, the evaluation time for these propositions would be an interval that encompasses both the speech time and the (posterior) occurrence time of the eventuality.

Another line of reasoning would be to consider that, by asserting a proposition in the future, we are privileging one (and only one) of the different possible histories that the course of events could follow, viz., the particular history that takes place in the world of reference (typically, our real world). In this perspective, the truth value assigned to a given proposition would only take into account the truth or falsity of the situation that is being described in  $w_0$ , independently of all other possible histories or worlds that may be compatible with the future course of things. As in the case of MacFarlane’s suggestion, this privileged history takes place in an interval that includes the speech time and extends into the future; although, of course, its truth-value cannot be accessed at the utterance time, this interval is part of the whole history of the situation. Proposals along these lines are labelled in the literature the “Red Thin Line” hypothesis (see, among others, Belnap & Green 1994 or Malpass & Wawer 2012).

In short, what these analyses tell us is that, although open to several possibilities, the expression of futurity is not in general completely indeterministic. In effect, when we use a future tense, we expect that the relevant situation will take place in a forthcoming interval (exclusion made, of course, to the so-called pure modal uses of some future tenses).

Even if a high degree of indeterminacy is found at the utterance time, it is perfectly possible to make assertions about future situations, and, given the appropriate conditions, to ascribe a truth value to prospective propositions.

This does not mean, though, that the expression of past and future eventualities is not radically different in this respect. Indeed, while the propositions assigned to past

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tenses have their truth value perfectly established at the speech time, this is not the case for situations that are located at future intervals.

In sum, we can say that the expression of past and future situations differs in the following aspects: (i) typically, the means used to convey past relations are more abundant and detailed in the languages of the world when compared to those devoted to the representation of future relations; and (ii) past situations have their truth-value settled at the utterance time, contrary to future ones, whose truth or falsity can only be evaluated at a subsequent interval; that is, while past is closed, future is, at least to a certain extent, open.

Nevertheless, when we look closer to specific tenses expressing past and future relations, we see that there are also significant points of contact between them that pave the way for a more systematic analysis of some of their fundamental semantic properties.

The main goal of this paper is, thus, to highlight the similarities that arise between specific past and future tenses; to my knowledge, such parallels have received little attention in the literature. As mentioned before, in my analysis I will consider four tenses of European Portuguese: the Pretérito Perfeito and the Pretérito Imperfeito, as representatives of the past, and the structure *ir* ('go') + Infinitive and the Futuro Simple, as representatives of the future.

Before proceeding with the comparison of the chosen tenses, however, I will briefly present some of their main semantic characteristics.

### 3. Some remarks on the semantics of EP past and future tenses

As I will show shortly, the FS and the Imp, on the one hand, and the PPerf and the structure *ir* ('go') (in the present tense) + Infinitive, on the other, share a set of interesting linguistic behaviours that will lead us to assume that they can be grouped together, revealing that past and future expressions, despite their differences, have also much in common.

In order to achieve this goal, however, it is important to offer, firstly, a brief characterisation of each of the tenses that will be discussed in this paper. Of course, it is not my intention, in the next subsections, to provide a complete description of the tenses at issue, but only to sketch some of their main semantic properties, with special reference to their temporal attributes.

#### 3.1. The Futuro Simple (FS)

To facilitate a systematic comparison between the several tenses that will be considered in this paper, I will assume, as a starting point, an analysis that departs from the temporal relations they establish. So, I will propose that, at least partially, the core meaning of these linguistic forms is temporal in nature.

Thus, regarding the FS, I will follow here the theoretical framework proposed by Gennari (2000; 2002), who, based on data retrieved from Spanish, but which can be easily extended to EP examples, advocates a unified treatment for the simple future, maintaining that this verbal form consistently conveys a temporal relation of posteriority with respect to the speech time.

Gennari (2000; 2002) proposes, for the Spanish simple future, a treatment that considers, simultaneously and in an integrated way, temporal, modal and aspectual

features. The simple future is seen as a tense that systematically locates the situations with which it occurs in an interval following the speech time, but that can also, in specific environments, interact with the aspectual profile of the relevant situations and convey several sorts of modal information.

One analysis along these lines allows us to account easily for the linguistic behaviour manifested by the simple future tense also in EP, as I will try to demonstrate below.

First of all, it should be noted that the theoretical proposal developed by Gennari is perfectly compatible with the fact that there are contexts in which the simple future merely locates the situations combining with it in an interval following the utterance time, displaying no specific explicit modal values.<sup>1</sup> Namely, this is the case of (i) sentences that unequivocally express a high degree of certainty regarding the future realisation of the eventualities involved (cf. (2)); (ii) the contexts in which our world knowledge or our understanding about the functioning of natural phenomena lead us to assume the necessity or the inevitability of the occurrence of a foreseeable eventuality (cf. (3)) or (iii) constructions involving adverbials that provide the location of the situation in a precise or strict period of time which, fixing a perfectly well-defined interval for the fulfilment of the eventualities in the future, contribute decisively to the setting up of their effective happening (cf. (4)).

(2) Portuguese (CetemPúblico, par=ext1045249-des-95b-1)<sup>2</sup>

As	quatro	primeiras	cabeças	de	série	vão
the	four	first	heads	of	series	go.PRES.3PL
amanhã	lutar	por	um	lugar	na	final, onde
tomorrow	fight	for	one	place	in the	final, where
estará	de	certeza	uma	tenista	espanhola.	
be.FS.3SG	for	sure	a	tennisplayer	Spanish	

‘The first four seeds will tomorrow fight for a place in the final, where a Spanish tennis player will surely be present.’

<sup>1</sup> It should be noted that, as we have seen in section 2, the expression of futurity is modal by nature, in that the truth or falsity of prospective propositions is not yet settled at the speech time. However, this conception of modality associated with all prospective expressions should not be confused with the specific modal values that certain future tenses sometimes convey, such as deontic modality, epistemic uncertainty, probability, and so forth. As Gennari notes, these specific modal flavours may be completely absent from some future sentences that merely locate the situations in an interval following the utterance time. This is the reason why, according to the author, approaches that characterise the future tenses as epistemic modals, such as the ones offered by Giannakidou (2014) and Giannakidou & Mari (2018), fail to account for the linguistic behaviour of the Spanish simple future: on the one hand, they do not consider the range of modal (non-epistemic) uses exhibited by this tense form (including, e.g., sentences with a clear deontic force); on the other, they are not able to deal appropriately with the difference that arises between epistemic, hypothetical or probable uses of the simple future and pure temporal, predictive ones.

<sup>2</sup> The examples presented along this paper are mainly real productions, taken from the Portuguese *corpus* CetemPúblico, available at [www.linguateca.pt](http://www.linguateca.pt); however, in order to establish comparisons between the different tenses under analysis, I will also use sentences resulting from manipulation, so that other variables than the relevant ones are kept aside and the interference of disturbing linguistic factors is avoided.

## (3) Portuguese (CetemPúblico, par=ext1077164-clt-soc-93b-2)

Mas, quando as chuvas pararem, daqui a  
 but, when the rains stop.FUTSUBJ.3PL from here to  
 umas semanas, e a comida começar a  
 some weeks, and the food start.FUTSUBJ.3SG to  
 escassear, o destino destes insectos já está  
 runout.INF, the fate of these insects already be.PRES.3SG  
 marcado: formarão imensas nuvens vivas e  
 marked: form.FS.3PL immense clouds alive and  
 migrarão para as regiões habitadas e cultivadas.  
 migrate.FS.3PL to the regions inhabited and cultivated  
 ‘But, when the rains stop, in a few weeks from now, and food starts to run out,  
 the fate of these insects is already set: they will form immense living clouds  
 and migrate to the inhabited and cultivated regions.’

## (4) Portuguese (CetemPúblico, par=ext5122-des-94a-1)

Os restantes jogos da jornada disputam-  
 the remaining matches of the day play.PRES.3PL.-  
 se todos no domingo às 17 horas, com  
 se.CLITIC all in the Sunday at the 17 hours, with  
 exceção do Benfica-Estrela da Amadora, que se  
 exception of the Benfica-Estrela da Amadora, which se.CLITIC  
 realizará às 20h00.  
 takeplace.FS.3SG at the 20h.00  
 ‘The remaining matches of the day will all be played on Sunday at 5 pm, with  
 the exception of Benfica-Estrela da Amadora, which will take place at 8 pm.’

The rising of this kind of purely temporal interpretations does not prevent, though, the coming about of other readings associated with the FS that enhance their basic temporal meaning with some additional linguistic information. So, it is easy to find, for instance, the harmonisation, in the same sentence, of an unequivocally temporal meaning, projecting the eventuality into the future, with modal information, for example conveying an epistemic attitude of uncertainty, as illustrated in (5):

## (5) Portuguese (CetemPúblico, par=ext17258-soc-95b-1)

São 19 horas em Newcastle (Inglaterra) e o  
 be.PRES.3SG 19 hours in Newcastle (England) and the  
 navio vai zarpar dentro de poucos minutos,  
 ship go.PRES.3SG leave.INF in of few minutes,  
 rumo a Bergen, na Noruega, onde só  
 heading for Bergen, in the Norway, where only  
 chegará (= deve chegar) na tarde do dia  
 arrive.FS.3SG (= should arrive) in the afternoon of the day  
 seguinte.  
 next  
 ‘It is 7 pm in Newcastle (England) and the ship will set sail in a few minutes,  
 heading for Bergen, Norway, where it will arrive (= should not arrive until) the  
 afternoon of the next day.’

On the other hand, Gennari's (2000; 2002) proposal also takes into account the aspectual constraints that affect the interpretation of the simple future in the so-called hypothetical or conjectural readings, in particular regarding its interaction with the speech time. In effect, when combined with the FS, states and events behave quite differently in this context.

As pointed out by many authors, such as Martin 1981, Dendale 2001 or Laca 2016, in the so-called conjectural or hypothetical uses, the main goal of the FS is not to locate a given situation at an interval following the ST; rather, it is primarily used to present a given proposition as a supposition or as a possibility to be evaluated (confirmed or invalidated) in an interval that typically includes the time of utterance, as shown by example (6) below.

(6) Portuguese (CetemPúblico, par=ext606363-pol-94b-1)

Segundo	alguns	desses	rumores,	o	arquitecto-chefe
according	some	of these	rumours,	the	architect-chief
das	reformas	estará	gravemente	doente e	quase a
of the	renovations	be.FS.3SG	seriously	ill and	almost at
					morrer.
					die.INF

‘According to some of these rumours, the chief architect of the renovations will be seriously ill and close to death.’

This sentence does not mean that the chief architect will be seriously ill at some interval in the future; it simply conveys a not-yet-confirmed hypothesis that he is ill at the utterance time.

So, at first glance, sentences such as (6) could be invoked as counterexamples regarding the analysis advocated by Gennari (2000; 2002), since, apparently, the future location of the situations involved does not occur in this kind of context.

There are, however, strong reasons that point towards a greater degree of complexity regarding the status of this kind of sentences: we cannot simply say that they convey a plain conjecture overlapping the time of speaking, since other linguistic factors play an important role in the licensing of these structures.

In this view, it is important to emphasize that the purely conjectural interpretation of the FS is restricted to stative predications, events being typically excluded from receiving a similar reading, as the contrast between the following examples shows:

(7) Portuguese (state, conjectural reading)

O	João	estará	agora	no	escritório.
the	João	be.FS.3SG	now	in the	office
					‘João may be in the office now.’

(8) Portuguese (state, conjectural reading)

A	Maria	viverá	agora	em	Paris.
the	Maria	live.FS.3SG	now	in	Paris
					‘Maria may be living in Paris now.’



## (9) Portuguese (process, no conjectural reading)

# O João conversará agora com os colegas.  
 # the João talk.FS.3SG now with the colleagues  
 ‘João may be talking with his colleagues now.’

## (10) Portuguese (culminated process, no conjectural reading)

# A Rita fará agora o jantar.  
 # the Rita make.FS.3SG now the dinner  
 ‘Rita may be making dinner now.’

## (11) Portuguese (culmination, no conjectural reading)

# Os assaltantes arrombarão agora a porta do  
 # the burglars breakdown.FS.3PL now the door of the  
 banco.<sup>3</sup>  
 bank  
 ‘# Burglars may be breaking down the bank’s door now.’

Supporting the idea that these present-oriented conjectural readings of the FS are mainly dependent on aspectual factors, we can invoke the fact that, when we apply a stativiser like the Portuguese Progressive form (cf. Cunha 1998) to the eventive constructions at hand, the hypothetical reading becomes immediately available, as shown in (12)-(14):

## (12) Portuguese

O João estará agora a conversar com os  
 the João be.FS.3SG now to talk.INF with the  
 colegas.  
 colleagues  
 ‘João may be talking with his colleagues now.’

## (13) Portuguese

A Rita estará agora a fazer o jantar.  
 the Rita be.FS.3SG now to make.INF the dinner  
 ‘Rita may be making dinner now.’

## (14) Portuguese

Os assaltantes estarão agora a arrombar a  
 the burglars be.FS.3PL now to breakdown.INF the  
 porta do banco.  
 door of the bank  
 ‘Burglars may be breaking down the bank’s door now.’

<sup>3</sup> For the discussion at hand, I am only considering the hypothetical readings where the FS overlaps the utterance time; it is possible, of course, to get a near future interpretation where the FS locates the situations in an interval immediately following the ST, but then we are primarily dealing with the standard temporal information associated to this form rather than with this specific modal value.

So, the licensing of the overlapping hypothetical reading associated to the FS is restricted to specific linguistic contexts, revealing a noteworthy sensitivity to aspectual factors. In particular, this interpretation is only possible with (basic or derived) states, being systematically ruled out with events.

Given the observations we have just made, we can conclude that the analysis proposed by Gennari (2000; 2002) for the FS in Spanish applies quite straightforwardly to its EP counterpart. In effect, by positing a consistent relationship of posteriority of the described situation with respect to the utterance time, this treatment adequately accounts for the inadequacy of examples such as (9)-(11), in which this requirement is not met. On the other hand, overlapping conjectural readings with statives can also be easily accommodated, provided that we take into account some general semantic principles, viz. the assumptions made by Kamp & Rohrer (1983) and by Kamp & Reyle (1993) according to which states, unlike events, can extend beyond the limits of their reference times. In the case of the FS, since states may occur in an interval that surpasses their future location interval, they may expand into the present time. In other words, the overlapping relation with respect to the ST shown by the FS in examples like (6)-(8) (and also (12)-(14)) does not follow primarily from the temporal features associated to this tense form, since, as Gennari says, the FS consistently conveys a temporal posteriority relation, but rather from the interaction of these temporal features with the aspectual properties of statives, namely their ability to last beyond their reference times. This treatment also accounts for the attested possibility of the existence of sentences in which states are clearly located in a future interval, as illustrated by (15)-(16):

- (15) Portuguese (CetemPúblico, par=ext1066077-des-93a-2)
- |       |          |            |         |           |            |      |
|-------|----------|------------|---------|-----------|------------|------|
| Em    | Portugal | o          | Safrane | estará    | disponível | com  |
| in    | Portugal | the        | Safrane | be.FS.3SG | available  | with |
| três  | motores  | distintos, | dois    | a         | gasolina e | um   |
| three | engines  | different, | two     | at        | petrol and | one  |
| a     | diesel.  |            |         |           |            |      |
| at    | diesel   |            |         |           |            |      |
- ‘In Portugal, the Safrane will be available with three separate engines, two petrol engines and one diesel engine.’
- (16) Portuguese (CetemPúblico, par=ext583036-pol-92a-2)
- |                |                      |               |               |           |            |         |
|----------------|----------------------|---------------|---------------|-----------|------------|---------|
| Assim, as      | perspetivas          | da            | África do     | Sul       | para       | o fim   |
| thus, the      | prospects            | of the        | Africa of the | South     | for        | the end |
| do século      | XX indicam           |               | um país       |           |            | em      |
| of the century | XX indicate.PRES.3PL |               | a country     |           |            | in      |
| que todos      | poderão              | ter           | efetivamente  | o         | direito de |         |
| which everyone | can.FS.3PL           | have          | effectively   | the       | right of   |         |
| votar          | mas em que           | a             | maioria       | da        | população  |         |
| vote.INF       | but in which         | the           | majority      | of the    | population |         |
| viverá         | com grandes          | dificuldades, | por           | falta de  |            |         |
| live.FS.3SG    | with great           | difficulties  | by            | lack of   |            |         |
| terra, de      | emprego              | ou            | de habitação  | adequada. |            |         |
| land, of       | employment           | or            | of housing    | adequate  |            |         |

‘Thus, South Africa's prospects for the end of the 20th century indicate a country in which everyone will effectively have the right to vote, but in which the majority of the population will live in great difficulty, due to lack of land, employment or adequate housing.’

So, the overall behaviour exhibited by the FS suggests that it may be characterised as an actual future tense, though conveying relevant modal information and interacting dynamically with the aspectual features of the situations with which it cooccurs, as well as with other linguistic factors.

Although there exist a great number of alternative proposals for the semantic characterisation of the FS, namely treatments that sustain the idea that this form is ambiguous between a temporal and a modal operator (e.g., Mari 2009; Giomi 2010; Falas & Laca 2014; Laca 2016; Marques 2020), analyses that consider that the FS is primarily an epistemic modal (e.g. Giannakidou & Mari 2013; 2018) or studies that envisage this tense form as a manifestation of evidentiality (e.g. Escandell-Vidal 2010; 2014), the solution presented by Gennari (2000; 2002) seems to be the most appropriate for the purposes of this paper. Since it is not my goal here to extend the debate about the several approaches available for the study of the construction at hand, I refer the interested reader to the comparative discussion concerning the different possibilities of treatment for the FS in Portuguese offered by Cunha (2019; 2021).

### 3.2. The structure *ir* (‘go’) + Infinitive

Similarly to the FS, the main function of the structure *ir* (‘go’) (inflected in the present tense) + Infinitive is to locate a situation in an interval that follows the time of utterance (cf. Oliveira & Lopes 1995; Oliveira 2013; Cunha 2015; Mória 2017), as shown by examples (17)-(18)<sup>4</sup>:

- (17) Portuguese (CetemPúblico, par=ext32389-des-97b-2)  
 O Boavista anunciou que vai construir  
 the Boavista announce.PPERF.3SG that go.PRES.3SG build.INF  
 junto das instalações do clube um espaço para a  
 next ofthe facilities of the club a space for the  
 prática de desportos radicais.  
 practice of sports extreme  
 ‘Boavista announced that it will build a space next to the club's facilities for the practice of extreme sports.’
- (18) Portuguese (CetemPúblico, par=ext496054-clt-96a-2)  
 Formado por Rui de Luna (barítono) e Rosário Ferreira  
 formed by Rui de Luna (baritone) and Rosário Ferreira

<sup>4</sup> In this respect, the EP structure *ir* (‘go’) + Infinitive differs considerably from its counterparts in other languages, such as Spanish or English, in which, according to some authors, the equivalent constructions *ir* (‘go’) + Infinitive and *be going to* + Infinitive convey primarily aspectual information of prospectivity (see, e.g., Bravo Martín (2008) or Moreno Burgos (2014) on Spanish and Brisard (2001) and Wada (2009) on English).

(soprano), o duo vai cantar, na primeira  
 (soprano), the duo go.PRES.3SG sing.INF, in the first  
 parte do concerto, canções e duetos de Cole  
 part of the concert, songs and duets of Cole  
 Porter, Kurt Weill e Bernstein e, na segunda,  
 Porter, Kurt Weill and Bernstein and, in the second  
 árias de Mozart, Rossini, Bizet, Verdi e Puccini.  
 arias of Mozart, Rossini, Bizet, Verdi and Puccini

‘Formed by Rui de Luna (baritone) and Rosário Ferreira (soprano), the duo will sing, in the first part of the concert, songs and duets by Cole Porter, Kurt Weill and Bernstein, and, in the second, arias by Mozart, Rossini, Bizet, Verdi and Puccini.’

Despite these temporal similarities, the two structures under analysis differ in some relevant respects.

Apart from notorious divergences at the discursive and pragmatic level, which will not be considered in this paper<sup>5</sup>, the FS and the structure *ir* (‘go’) + Infinitive show some discrepancies concerning their semantic properties.

In this view, we observe that the construction *ir* (‘go’) + Infinitive is not suited to convey a conjectural or hypothetical meaning overlapping the ST, even when stative predicates are involved, as shown by the following sentences:

(19) Portuguese (state)

# O João vai estar agora no escritório.  
 # the João go.PRES.3SG be.INF now in the office  
 ‘João may be in the office now.’

(20) Portuguese (state)

# A Maria vai viver agora em Paris.  
 # the Maria go.PRES.3SG live.INF now in Paris  
 ‘Maria may be living in Paris now.’

If they are acceptable at all, sentences like (19) and (20) can only get a clearly upcoming interpretation, in which *agora* (‘now’) will be understood as meaning *a partir de agora* (‘from now on’) and the structure *ir* (‘go’) + Infinitive locates the situations in a future interval. A present-like interpretation, available, as we pointed out, for the FS, is entirely ruled out in this context.

Moreover, the construction *ir* (‘go’) + Infinitive is less apt to convey modal information when compared with the simple future. For instance, the epistemic readings that characterise most of the sentences with the FS seem to be lost when the periphrastic structure is used. Compare the following examples:

<sup>5</sup> Authors such as López García (1990), Cartagena (1996; 1999) or Sedano (2005), for Spanish, and Silva (1997), Barbosa (2007) or Oliveira (2011), for Brazilian Portuguese, assume that the dissimilar distribution of the FS and the structure *ir* (‘go’) + Infinitive results from the fact that the former is used preferentially in formal and written contexts, while the latter occurs mostly in informal and spoken environments.

- (21) Portuguese (CetemPúblico, par=ext59813-eco-93b-1)  
 O desemprego médio na Comunidade Europeia  
 the unemployment middle in the Community European  
 atingirá os 12 por cento em finais de 1994, de  
 reach.FS.3SG THE 12 per cent in endings of 1994, of  
 acordo com um relatório da Comissão Europeia  
 accordance with a report of the Commission European  
 ontem divulgado em Bruxelas.  
 yesterday released in Brussels  
 ‘Average unemployment in the European Community {will / may} reach 12 percent by the end of 1994, according to a European Commission report released yesterday in Brussels.’
- (22) Portuguese  
 O desemprego médio na Comunidade Europeia  
 the unemployment middle in the Community European  
 vai atingir os 12 por cento em finais de  
 go.PRES.3SG reach.INF THE 12 per cent in endings of  
 1994, de acordo com um relatório da  
 1994, of accordance with a report of the  
 Comissão Europeia ontem divulgado em Bruxelas.  
 Commission European yesterday released in Brussels  
 ‘Average unemployment in the European Community {will / # may} reach 12 percent by the end of 1994, according to a European Commission report released yesterday in Brussels.’

Example (21), with the FS, contrasts with (22), in that it may naturally be interpreted as conveying, besides future locating information, an epistemic modal value of uncertainty or doubt. The use of the *ir* (‘go’) + Infinitive construction, in contrast, seems to be restricted to the basic temporal prospective meaning, not displaying any kind of modal inferences.

In confirmation of the contrast just made, note that, in several contexts, only the FS combines unproblematically with modal verbs such as *poder* (‘may’, ‘can’) or *dever* (‘must’), while the structure *ir* (‘go’) + Infinitive is typically rejected:<sup>6</sup>

<sup>6</sup> Notice, though, that it is perfectly possible to combine *poder* (‘may,’ ‘can’) with the structure *ir* (‘go’) + Infinitive, provided that the interpretation of the modal verb is not an epistemic one; with deontic and root values, this combination is licensed, as shown in (i):

- (i) Portuguese (CetemPúblico, par=ext84356-soc-96b-1)  
 O estacionamento vai poder ser usado por  
 the parking go.PRES.3SG can.INF be.INF used by  
 todos: pelos que vão ao restaurante ou  
 everyone: by those that go.PRES.3PL atthe restaurant or  
 por outra pessoa qualquer.  
 By other person whatsoever  
 ‘The parking lot can be used by everyone: by those who go to the restaurant or by anyone else.’

- (23) Portuguese (CetemPúblico, par=ext1099088-pol-92a-2)  
 No caso suíço, a opinião pública é muito importante, pois a adesão, ou não, poderá estar dependente de um referendo.  
 inthe case Swiss, the opinion public be.PRES.3SG very important, since the membership, or not, may.FS.3SG be.INF dependent of a referendum  
 ‘In the case of Switzerland, public opinion is very important, as its accession may or may not be dependent on a referendum.’
- (24) Portuguese  
 ??/\* No caso suíço, a opinião pública é muito importante, pois a adesão, ou não, vai poder estar dependente de um referendo.  
 ??/\* inthe case Swiss, the opinion public be.PRES.3SG very important, since the membership, or not, go.PRES.3SG may.INF be.INF dependent of a referendum
- (25) Portuguese (CetemPúblico, par=ext1001067-eco-94b-2)  
 Este novo accionista deverá comprar cerca de 20 por cento do banco, mas os valores exactos, assim como os candidatos, ainda estão em estudo.  
 this new shareholder must.FS.3SG buy.INF about of 20 per cent of the bank, but the amounts exact, aswell as the candidates, still be.PRES.3PL in study  
 ‘This new shareholder is expected to buy about 20 percent of the bank, but the exact amounts, as well as the candidates, are still under consideration.’
- (26) Portuguese  
 \* Este novo accionista vai dever comprar  
 \* this new shareholder go.PRES.3SG must.INF buy.INF  
 cerca de 20 por cento do banco, mas os valores  
 About of 20 per cent of the bank, but the amounts  
 exatos, assim como os candidatos, ainda estão em  
 exact, aswell as the candidates, still be.PRES.3.PL in  
 estudo.  
 study

I will not pursue further the investigation of the (in)compatibilities of the structure *ir* (‘go’) + Infinitive with modals; what I want to stress for now is that the periphrastic construction is subject to stronger restrictions regarding the expression of modality than the FS, which characteristically can be associated with the expression of modal meanings.

In short, although both forms refer to the forthcoming location of the eventualities with which they co-occur, the FS and the structure *ir* (‘go’) + Infinitive cannot be conceived as semantically identical, a fact that will be taken up again later, when we establish a systematic comparison between the past and future tenses under analysis in this paper.

### 3.3. The Pretérito Imperfeito (Imp)

In general terms, I will say that the Imp in EP can be characterised as a past tense that presents a given eventuality as being in progress, i.e., making no specific reference to its initial or final endpoints (cf. Oliveira 1987; 2013; Delfitto & Bertinetto 1995; Patard 2007; Smith 1991; Giorgi & Pianesi 1997, among others).

Regarding its semantic behaviour, I will assume the following crucial well-known postulates.

First, Imp is a relative or an anaphoric tense, since it requires the presence of a given (past) interval that serves as an anchoring point or as a reference time to its full interpretation (cf. Kamp & Rohrer 1983; Declerck 1991; 2006; Oliveira & Lopes 1995; Matos 1996). This interval can be provided by an explicit temporal adverbial, as in (27), by a temporal clause, as in (28), by the main verb of a complement clause, as in (29), or retrieved through contextual information.

- (27) Portuguese  
 A Maria vivia em Paris em 1999.  
 the Maria live.IMP.3SG in Paris in 1999  
 ‘Maria lived / was living in Paris in 1999.’
- (28) Portuguese  
 Quando a conheci, a Maria vivia em  
 when her meet.PPERF.1SG, the Maria live.IMP.3SG in  
 Paris.  
 Paris  
 ‘When I met her, Maria lived / was living in Paris.’
- (29) Portuguese  
 A sua melhor amiga disse-me que a Maria  
 the her best friend tell.PPERF.3SG-me that the Maria  
 vivia em Paris.  
 live.IMP.3SG in Paris  
 ‘Her best friend told me that Maria lived / was living in Paris.’

In this view, several authors consider the Imp as constituting the expression of a “present in the past” tense (cf. e.g., Cunha & Cintra 1984), or, more accurately, as describing an overlapping relation of a situation with respect to a given past interval that is taken as its reference time (cf. Peres 1993; Giorgi & Pianesi 1997).

Another noteworthy property of the Imp is that, in languages such as EP, this tense behaves as a true stativizer, insofar as, like lexical states, it does not seem to introduce a new reference time in the discourse, selecting for a given pre-existing interval with which it establishes an overlapping relation (cf. Kamp & Rohrer 1983; Oliveira 1990) and, when combined with events, modifies significantly their basic aspectual profile, imposing distinctive semantic characteristics of stative predicates, either by forcing a habitual reading, as in (30), or by imposing a semi-progressive interpretation, as in (31) (cf. Oliveira & Lopes 1995; Cunha 2004/2007; Oliveira 2013).

- (30) Portuguese (CetemPúblico, par=ext215012-nd-91b-2)  
 Aí, na companhia das netas, passeava a  
 there, in the company of the granddaughters, ride.IMP.3SG at  
 cavalo, lia, escrevia, pintava e, provavelmente  
 horse, read.IMP.3SG, write.IMP.3SG, paint.IMP.3SG and, probably  
 saudoso de tempos mais activos, limpava a sua  
 nostalgic of times more active clean.IMP.3SG the his  
 bela colecção de armas.  
 beautiful collection of weapons  
 ‘There, in the company of his granddaughters, he used to ride horses, to read,  
 to write, to paint, and, probably nostalgic for more active times, to clean up his  
 beautiful collection of weapons.’
- (31) Portuguese (CetemPúblico, par=ext30332-clt-93a-1)  
 Noutra ocasião ainda, enquanto passeava (= estava a  
 in another occasion yet, while walk.IMP.3SG (= was at  
 passear) pelo campo, Vlad encontrou um lavrador  
 walking) by the countryside, Vlad meet.PPERF.3SG a farmer  
 com a camisa rasgada.  
 with the shirt torn  
 ‘On yet another occasion, while walking through the countryside, Vlad met a  
 farmer with a torn shirt.’

Given the characterisation just provided, we can say that the Imp requires the presence of a state that establishes an overlapping relation with an interval that, in turn, is located before the moment of utterance. Or, making use of the notation proposed by Reichenbach (1947), TSit, TR – TU.<sup>78</sup>

Finally, as we will see in more detail in the next section, the Imp is quite frequently used in contexts bearing modality, expressing an extensive range of modal meanings.

### 3.4. The Pretérito Perfeito do Indicativo (PPerf)

Generally speaking, the PPerf can be characterised as a past tense that locates a situation, perceived as terminated, in an interval that completely precedes the ST (cf. Cunha 2004/2007; Oliveira 2013).

Regarding its semantic shape, I will highlight the following defining properties.

Since the PPerf conveys primarily temporal information, its main function is to locate a given eventuality in an interval that comes before the utterance time.

Contrary to what happens with the Imp, the PPerf does not change substantially the aspectual profile of the eventualities with which it combines, so it can be

<sup>7</sup> In which TSit corresponds to the Time of the Situation; TR to the Time of Reference; and TU to the Time of Utterance.

<sup>8</sup> Notice that I am only dealing, in this paper, with the standard uses of the Imp; there are, though, contexts in which this tense presents quite different behaviours, such as the so-called “Imparfait de rupture” (imperfect of rupture), the “Imparfait narratif” (the Imperfect of narration; cf. de Saussure & Sthioul, 1999; Okubo, 2003; Labeau, 2005) or the Imperfect conditional that won’t be exploited here.



considered an aspectually neutral element. To prove this statement, we can invoke the fact that the basic internal temporal properties of the relevant predications are mainly preserved in structures incorporating this tense form, as the different patterns of combination with the temporal adverbials presented in (32)-(35) confirm:<sup>9</sup>

## (32) Portuguese (state)

A Maria esteve doente {durante uma semana/ \*  
 the Maria be.PPERF.3SG sick {for a week / \*  
 numa semana/ ?? às cinco da tarde}.  
 in a week / ?? at the five of the afternoon}  
 ‘Maria was sick {for a week / \* in a week / ?? at five pm}.’

## (33) Portuguese (process)

A Maria passeou no jardim {durante duas  
 the Maria walk.PPERF.3SG in the garden {for two  
 horas / \* em duas horas / ?? às cinco da tarde}.  
 hours / \* in two hours / ?? at the five of the afternoon}  
 ‘Maria walked in the garden {for two hours / \* in two hours / ?? at five pm}.’

## (34) Portuguese (culminated process)

O leão devorou o gnu {?? durante meia  
 the lion devour.PPERF.3SG the gnu {?? for half  
 hora / em meia hora / # às cinco da tarde}.  
 hour / in half hour / # at the five of the afternoon}  
 ‘The lion devoured the gnu {?? for half an hour / in half an hour / # at five pm}.’

## (35) Portuguese (culmination)

O Rui partiu o vaso {\* durante dez minutos  
 the Rui break.PPERF.3SG the vase {\* for ten minutes  
 / # em dez minutos / às cinco da tarde}.<sup>10</sup>  
 / # in ten minutes / at the five of the afternoon}  
 ‘Rui broke the vase {\* for ten minutes / # in ten minutes / at five pm}.’

On the other hand, the PPerf must be considered a “terminative” tense, in the sense that it requires that the situations with which it combines are obligatorily confined to an interval that precedes the utterance time, irrespective of their aspectual characteristics (cf. Cipria & Roberts 2000; Cunha 2004/2007; Oliveira 2013). In this respect, it is important to emphasize that the notion of terminativity that we are proposing here only imposes a final limit on the eventualities at issue, not interfering with their internal temporal structure. In other words, the fact that a given situation is

<sup>9</sup> I resort here to the classic tests that are used, in the literature, to identify the different aspectual classes of predicates. For a detailed discussion about the foundation and adequacy of these criteria, see, e.g., Vendler (1967), Moens (1987) or Smith (1991).

<sup>10</sup> For simplicity, I will not take into account for now readings that are obtained by aspectual derivation or aspectual coercion; nevertheless, they are signalled by “#” in the relevant cases.

conceived as being terminated does not mean, in any way, that it is concluded or complete, in the aspectual sense of the term.

To confirm this intuition, we can refer to the full compatibility of the PPerf with the progressive aspect: if “Ontem, o João esteve a escrever o relatório” (“yesterday, João was writing the report” implies that the situation ended before the ST, this does not mean that it has reached its culmination, i.e., does not entail that “O relatório foi / está escrito” (“the report is / was written”). So, the fact that the PPerf indicates that a given eventuality has attained its ending does not require that it has accomplished a culmination point.

Finally, we can say that the PPerf seems to be a deictic tense, since it is not dependent on another external past interval in order to be fully interpreted and it can provide its own reference time. This explains its ability to move the discourse forward, as shown, e.g., by Kamp & Rohrer (1983) or by Kamp & Reyle (1993).

Using Reichenbach’s (1947) notation, and ignoring, for now, the complexities inherent to the terminative requirement, the PPerf would be characterised as follows: TSit – TR, TU.<sup>11</sup>

Given the characterisation we have just provided, we can conclude that the main function of the PPerf is to locate a given situation in an interval prior to the utterance time, requiring only that it be terminated before *t0*.

This section was, of course, not intended to offer a complete and in-depth semantic description of the different tenses under analysis. It only aimed to launch some clues that will be useful for the comparison that will be carried on in the next paragraphs.

#### 4. Comparing past and future tenses: towards a unified analysis

The hypothesis we will develop throughout this section will be that certain past and future tenses, although acting in distinct temporal domains, reveal important semantic features that make them quite close.

In fact, despite the divergences we have already mentioned, there are also relevant properties that clearly bring some past and future tenses together. In particular, we will see that the Imp and the FS, on the one hand, and the PPerf and the structure *ir* (‘go’) + Infinitive, on the other, share several linguistic behaviours whose investigation may contribute to a better understanding of the overall organization and functioning of the temporal system of EP. Below, we will look at the most significant attributes that allow us to assemble these tenses together.<sup>12</sup>

##### 4.1. The relation with the speech time

<sup>11</sup> It is important to bear in mind that the notion of Time of Reference presented by Reichenbach corresponds *grosso modo* to the Temporal Perspective Point in Kamp and Reyle’s proposal, i.e., it refers to the interval from which a given situation is perceived and located.

<sup>12</sup> Although the closeness between past and future tenses is often referred to in the literature, I am not aware of any approach that establishes a systematic comparison between the Portuguese past and future domains in the way considered in the present paper. In this sense, the analysis developed here is a first attempt to reclassify the tenses in question.

As I have already mentioned briefly in 3.1, one of the most relevant characteristics that differentiate the simple future from the structure *ir* ('go') + Infinitive has to do with the (im)possibility of establishing an overlapping relation between the described situation and the speech time.

So, it is possible to see that, in appropriate conditions, and when stative predications are involved, the FS can give rise to readings in which an overlapping relation with the speech time is obtained (cf. (36)-(37)). These are the so-called conjectural or hypothetical uses of the future, discussed in detail by Martin 1981, Dendale 2001, Revaz 2009, Laca 2016, among many others.

- (36) Portuguese (CetemPúblico, par=ext1072604-eco-97a-1)  
 «As pessoas estarão agora bastante confiantes»,  
 «the people be.FS.3PL now quite confident»,  
 comentou um analista britânico, sem  
 comment.PPERF.3SG a analyst British,without  
 deixar o aviso: «até que Wall Street volte  
 leave.INF the caveat: «until that Wall Street turn.PRESSUBJ.3SG  
 a descer».  
 to go down.INF»  
 '«People will be pretty confident now,» commented a British analyst, without leaving the caveat: «until Wall Street goes down again.»'
- (37) Portuguese (CetemPúblico, par=ext399485-nd-91b-2)  
 Assim, a maior parte dos trabalhadores despedidos nessa  
 thus, the major part of the workers fired inthat  
 altura viverá agora com «mais problemas», e a  
 period live.FS.3SG now with «more problems», and the  
 doença, a insegurança e a solidão  
 illness, the insecurity and the loneliness  
 são as situações mais evidenciadas.  
 be.PRES.3PL the situations more reported  
 'Thus, most of the workers laid off at that time may now live with «more problems,» and illness, insecurity, and loneliness are the most reported situations.'

Although the FS is the tense elected in these sentences, its main function is not to locate the situations with which it combines in an interval following the speech time; on the contrary, the self-assurance of the people in (36) or the living conditions of the workers in (37) take place simultaneously with the time of the utterance (even if, under normal conditions, they continue into the future). In these cases, the main function of the future tense is a modal one, expressing a certain degree of doubt or uncertainty about the occurrence of the eventualities.

The possibility of an overlapping relation with the speech time seems to be completely forbidden to the construction *ir* ('go') + Infinitive, which, in the relevant contexts, only admits a purely temporal posteriority reading, as (38) and (39) make clear.

- (38) Portuguese  
 # «As pessoas vão estar agora bastante  
 # «the people go.PRES.3PL be.INF now quite  
 confiantes», comentou um analista britânico.  
 confident», comment.PPERF.3SG a analyst British  
 ‘«People will now be quite confident,» commented a British analyst.’
- (39) Portuguese  
 # A maior parte dos trabalhadores despedidos nessa altura  
 # the major part of the workers fired in that period  
 vai viver agora com mais problemas.  
 go.PRES.3SG live.INF now with more problems  
 ‘Most of the workers laid off at that time will now live with more problems.’

If accepted, the only possible interpretations for the sentences in (38) and (39) are those in which the described situations occur in a time interval necessarily subsequent to the speech time, and any reading that points to an overlapping relation is excluded.

The following contrast is particularly telling in this respect:

- (40) Portuguese  
 O João terá sessenta anos.  
 the João have.FS.3SG sixty years  
 ‘João will/may be about 60 years old.’
- (41) Portuguese  
 O João vai ter sessenta anos.  
 the João go.PRES.3SG have.INF sixty years  
 ‘João will be 60 years old.’

While in (40), with the FS, the preferred meaning conveyed by the sentence is a conjectural or hypothetical one, corresponding to a modal interpretation in which, at the time of the utterance, the speaker believes (but is not quite sure) that João is approximately 60 years old<sup>13</sup>, in (41), with *ir* (‘go’) + Infinitive, only a pure temporal reading, locating the relevant state in an interval that necessarily follows the speech time, is available.

A similar contrast seems to take place when we observe the behaviour of the past tenses we are investigating here.<sup>14</sup>

Thus, we see that the Imp, insofar as it typically acts as a stativizer (cf. Oliveira 1990; Oliveira & Lopes 1995; Cunha 2004/2007; Oliveira 2013), allows, under appropriate conditions, that the eventualities combining with it extend to an interval

<sup>13</sup> It should be noted, however, that with the simple future, this is only a preferential reading, in that an interpretation in which the situation is totally located in a future interval is also perfectly possible, depending on the context of occurrence of the sentence at hand (cf. “Daqui a seis meses, o João terá 60 anos” (“In six months / six months from now, João will be 60 years old”).

<sup>14</sup> I will follow in this paper de Swart’s (1998) treatment in assuming that both the Imp and the PPerf are essentially conceived as aspectually sensitive past tense operators.

encompassing the speech time, with which they may eventually establish an overlapping relation, at least partially (cf. (42)-(43)):

(42) Portuguese

A Ana estava na faculdade e provavelmente  
 the Ana be.IMP.3SG in the college and probably  
 ainda lá está.  
 still there be.PRES.3SG  
 ‘Ana was in college and is probably still there.’

(43) Portuguese

O Pedro tinha um cão preto muito grande;  
 the Pedro have.IMP.3SG a dog black very big;  
 tanto quanto sei, ainda o leva a  
 asmuch that know.PRES.1SG still him take.PRES.3SG to  
 passear todos os dias ao jardim.  
 walk.INF every the days to the garden  
 ‘Pedro had a very big black dog; as far as I know, he still takes him for a walk to the garden every day.’

The PPerf, on the other hand, never allows this kind of interpretation: the situations with which it combines are necessarily located in a period of time that entirely precedes the speech point and cannot extend to the time of utterance, regardless of whether states or events are involved. It is therefore not surprising that the sentences in (44) and (45), parallel to those in (42) and (43), but in which the Imp is replaced by the PPerf, are typically unacceptable:

(44) Portuguese

A Ana esteve na faculdade \* e provavelmente  
 the Ana be.PPERF.3SG in the college \* and probably  
 ainda lá está.  
 still there be.PRES.3SG

(45) Portuguese

O Pedro teve um cão preto muito grande;\*  
 the Pedro have.PPERF.3SG a dog black very big; \*  
 tanto quanto sei, ainda o leva a  
 asmuch that know.PRES.1SG, still him take.PRES.3SG to  
 passear todos os dias ao jardim.  
 walk.INF every the days to the garden

The data we have just presented suggest the postulation of following generalization:

- To the extent that they allow, in appropriate circumstances, that the situations with which they co-occur establish an overlapping relation (normally partial) with the moment of utterance, both the Imp, with respect to the past domain, and the FS, regarding the future domain, prove to be temporally less restrictive than the PPerf and the structure *ir* (‘go’) + Infinitive, which mandatorily locate

the whole eventualities with which they appear in intervals that must be completely situated before or after the speech time, respectively.

## 4.2. Aspectual sensitivity

Another difference between the Imp and the FS, on the one hand, and the PPerf and the structure *ir* ('go') + Infinitive, on the other, has to do with aspectual sensitivity; more precisely, the ability to transcend the boundaries of the respective reference interval and extend to the moment of utterance seems to be strongly dependent on aspectual properties.

As discussed in section 3.1, only stative predications are compatible with readings in which the FS establishes an overlapping relation with the speech time, while events give rise to semantic anomaly, as illustrated by the contrast between (7)-(8) and (9)-(11), repeated here, for convenience, as (46)-(47) and (48)-(50), respectively.

- (46) Portuguese (state, conjectural reading)  
 O João estará agora no escritório.  
 the João be.FS.3SGnow in the office  
 'João may be in the office now.'
- (47) Portuguese (state, conjectural reading)  
 A Maria viverá agora em Paris.  
 the Maria live.FS.3SG now in Paris  
 'Maria may be living in Paris now.'
- (48) Portuguese (process)  
 # O João conversará agora com os colegas.  
 # the João talk.FS.3SG now with the colleagues  
 '# João may be talking with his colleagues now.'
- (49) Portuguese (culminated process)  
 # A Rita fará agora o jantar.  
 # the Rita make.FS.3SG now the dinner  
 '# Rita may be making dinner now.'
- (50) Portuguese (culmination)  
 # Os assaltantes arrombarão agora a porta do  
 # the burglars breakdown.FS.3PL now the door of the  
 banco.  
 bank  
 '# Burglars may be breaking down the bank's door now.'

This behaviour should not be quite surprising: as noted, e.g., by Kamp & Rohrer (1983) or by Kamp & Reyle (1993), states overlap their respective reference times, and may easily extend beyond their boundaries. Conversely, events are always included in their reference times and, due to this inclusion relation, are not allowed to exceed their limits.

Although in a slightly different way, the Imp also reveals this kind of aspectual sensibility.

Combined with this tense form, both states and events, in appropriate conditions, may seamlessly extend to the speech time, as shown by the following sentences:

(51) Portuguese (state)

A Rita vivia em Londres, e, na verdade,  
 the Rita live.IMP.3SG in London, and, in the truth,  
 ainda lá vive.  
 still there live.PRES.3SG  
 ‘Rita lived in London, and, in fact, she still lives there.’

(52) Portuguese (event)

O Carlos jogava ténis e, na verdade, ainda  
 the Carlos play.IMP.3SG tennis, and, in the truth, still  
 joga.  
 play.PRES.3SG  
 ‘Carlos played tennis, and, in fact, he still does it = Carlos used to play tennis  
 and, in fact, he still does.’

Examples like (52) could, at first glance, be considered a strong counterexample to the generalization we have just presented. Notice, however, that, in the relevant contexts, when combined with events, the Imp gives rise to a habitual reading. Now, as extensively discussed, among others, by Smith (1991), Chierchia (1995), Lenci (1995), Lenci & Bertinetto (2000), Cunha (2012), and Bertinetto & Lenci (2012), habituals exhibit all the typical properties of stative predications, so the observed behaviour is in accordance with what is expected, since the predication in the imperfect represents, in fact, a derived state.<sup>15</sup>

This aspectual sensitivity is not brought about when we take into account the *ir* (‘go’) + Infinitive construction or the PPerf. In both cases, all situations (events and states) are “closed” under their respective reference times and cannot expand to the utterance time, as shown by (53)-(54) for the *ir*-construction and (55)-(56) for the PPerf:

(53) Portuguese (event) (adapted from CetemPúblico, par=ext237964-soc-95b-2)

# À semelhança de aventuras anteriores, Branson  
 # at the similarity of adventures previous, Branson  
 vai viajar agora num balão construído  
 go.PRES.3SG travel.INF now in a balloon built  
 pela empresa do sueco Per Lindstrand.  
 by the company of the Swedish Per Lindstrand  
 ‘As in previous adventures, Branson will now travel in a balloon built by the  
 company of the Swedish Per Lindstrand.’

<sup>15</sup> More generally, as pointed out in Cunha (2004/2007) and Oliveira (2013), the Imp acts as a real stativezer, either giving rise to habitual readings or triggering semi-progressive interpretations.

- (54) Portuguese (state)  
 # A maior parte dos trabalhadores despedidos nessa altura  
 # the major part of the workers fired in that period  
 vai viver agora com mais problemas.<sup>16</sup>  
 go.PRES.3SG live.INF now with more problems  
 ‘Most of the workers laid off at that time will now live with more problems.’
- (55) Portuguese (event)  
 O Rui comeu uma fatia de bolo \* e talvez  
 the Rui eat.PPERF.3SG a piece of cake \* and perhaps  
 ainda a esteja a comer.  
 still it be.PRESSUBJ.3SG to eat.INF  
 ‘Rui ate a piece of cake \* and perhaps he is still eating it.’
- (56) Portuguese (state)  
 O Pedro teve um cão preto muito grande;  
 the Pedro have.PPERF.3SG a dog black very big;  
 \* tanto quanto sei, ainda o leva a  
 \* asmuch that know.PRES.1SG, still him take.PRES.3SG to  
 passear todos os dias ao jardim.  
 walk.INF every the days to the garden  
 ‘Pedro had<sup>17</sup> a very big black dog; \* as far as I know, he still takes him for a walk to the garden every day.’

In all these sentences, the whole of the situation, irrespective of its aspectual profile, is located either in an earlier interval or in a later interval with respect to the speech time and can never extend beyond its pre-established boundaries. In other words, we always get an entirely future reading when the *ir* (‘go’) + Infinitive construction is involved, and, conversely, an entirely past reading when we use the PPerf.

In view of the discussion we have just carried out, I will propose the following generalization:

- In EP, the Imp and the FS diverge from the PPerf and the *ir* (‘go’) + Infinitive construction in that they are sensitive to the aspectual differences exhibited by the situations with which they combine. In particular, these tenses welcome (partial) overlapping readings with respect to the speech time just in case predications of a (basic or derived) stative nature are concerned. In contrast, both the PPerf and the *ir* (‘go’) + Infinitive construction are “neutral” with respect to the aspectual classes of the eventualities, since they consistently

<sup>16</sup> The ‘#’ symbol is used here to emphasise that the intended reading, i.e., the one in which the eventuality overlaps the utterance time, is anomalous; however, an interpretation in which the situation begins in a near future is perfectly acceptable, provided that its beginning occurs after the speech time.

<sup>17</sup> Notice that the English simple past may be translated either by the Imp or by the PPerf in Portuguese, according to the context. In this case, the PPerf in EP, even with states, prevents the extension of the eventuality to the speech time.



place them, as a whole, in an interval entirely located in the past or in the future of *t<sub>0</sub>*, regardless of the properties inherent to their internal temporal structure.

### 4.3. The expression of modal meanings

Another feature that clearly distinguishes the simple future from the *ir* ('go') + Infinitive structure relates to the facility with which the former of these tenses takes part in constructions that express modal meanings (cf., among others, Oliveira 1986; Silva 1997; Giannakidou & Mari 2018; Marques 2020).

Thus, in addition to the previously mentioned examples displaying the so-called hypothetical or conjectural readings, we easily find sentences in which the FS conveys an epistemic modal value (cf. (57)) or, although less frequently, receives a deontic interpretation (cf. (58)):

- (57) Portuguese (CetemPúblico, par=ext142323-nd-96a-2)
- |           |         |        |             |               |             |      |               |               |
|-----------|---------|--------|-------------|---------------|-------------|------|---------------|---------------|
| E         | mesmo   | com    | 45          | despedimentos | anunciados  | para | este          |               |
| and       | even    | with   | 45          | layoffs       | announced   | for  | this          |               |
| semestre, | o       | «Libé» | está        | a             | preparar    | um   |               |               |
| semester, | the     | «Libé» | be.PRES.3SG | to            | prepare.INF | a    |               |               |
| novo      | plano   | social | para        | a             | empresa     | que  | atingirá      | (=            |
| new       | plan    | social | for         | the           | company     | that | affect.FS.3SG | (=            |
| {pode     | atingir | /      | deve        | atingir}}     | dezenas     | dos  | seus          | 380           |
| {may      | affect  | /      | should      | affect}}      | dozens      | of   | the           | its           |
|           |         |        |             |               |             |      |               | 380           |
|           |         |        |             |               |             |      |               | assalariados. |
|           |         |        |             |               |             |      |               | employees     |
- ‘And even with 45 layoffs announced for this semester, "Libé" is preparing a new social plan for the company that will affect (= {may affect / should affect}) dozens of its 380 employees.’
- (58) Portuguese (CetemPúblico, par=ext769053-nd-93b-2)
- |             |             |      |        |             |               |         |          |  |
|-------------|-------------|------|--------|-------------|---------------|---------|----------|--|
| O           | mandamento  | da   | avó    | de          | Russell       | não     |          |  |
| the         | commandment | of   | the    | grandmother | of            | Russell | not      |  |
| podia       | ser         | mais | claro: | não         | seguirás      | uma     | multidão |  |
| can.IMP.3SG | be.INF      | more | clear: | not         | follow.FS.2SG | a       | crowd    |  |
| para        | fazer       | o    | mal.   |             |               |         |          |  |
| to          | do.INF      | the  | evil   |             |               |         |          |  |
- ‘Russell's grandmother's commandment could not be clearer: you should not follow a crowd to do evil.’

Although the structure *ir* ('go') + Infinitive can also, given the appropriate conditions, convey modal information, in most cases its main function is limited to expressing a temporal relation of posteriority. This fact becomes quite evident if we replace the FS in (57)-(58) by the corresponding forms of the construction at hand, as illustrated in the sentences presented below:

- (59) Portuguese  
 E mesmo com 45 despedimentos anunciados para este  
 and even with 45 layoffs announced for this  
 semestre, o «Libé» está a preparar um  
 semester, the «Libé» be.PRES.3SG to prepare.INF a  
 novo plano social para a empresa que vai  
 new plan social for the company that go.PRES.3SG  
 atingir dezenas dos seus 380 assalariados.  
 affect.INF dozens of the its 380 employees  
 ‘And even with 45 layoffs announced for this semester, “Libé” is preparing a  
 new social plan for the company that will affect dozens of its 380 employees.’
- (60) Portuguese  
 O mandamento da avó de Russell não  
 the commandment of the grandmother of Russell not  
 podia ser mais claro: não vais seguir uma  
 can.IMP.3SG be.INF more clear: not go.PRES.2SG follow.INF a  
 multidão para fazer o mal.  
 crowd to do.INF the evil  
 ‘Russell’s grandmother’s commandment could not be clearer: you will not  
 follow a crowd to do evil.’

In effect, the replacement of the FS by the structure *ir* (‘go’) + Infinitive has important consequences in contexts like these. In particular, the modal meanings associated with the FS in (57)-(58) are strongly attenuated (if not completely lost) in examples like (59)-(60), with *ir* (‘go’) + Infinitive, in which the purely temporal readings are clearly predominant. So, while in (57) the impact on the employees, as a consequence of the social plan of the company, is presented as a possibility, in (59) it is better understood as a future happening. In the same vein, while in (58) the demand requiring not to follow a crowd to do evil is interpreted as an obligation or as a norm to be fulfilled, in (60) such a deontic modal meaning seems to be weakened, and the structure *ir* (‘go’) + Infinitive refers mostly to a prediction about what will come about in the future.<sup>18</sup>

<sup>18</sup> This is not to say, of course, that the structure *ir* (‘go’) + Infinitive cannot occur in predominantly modal contexts, as is the case of some conditional clauses like the one presented in (i). What I want to emphasize is simply that such interpretations are clearly disfavoured with this type of structure when compared to the FS.

- (i) Portuguese (CetemPúblico, par=ext387875-pol-96a-1)  
 Numa tentativa de retomar a iniciativa, o  
 in an attempt to regain.INF the initiative, the  
 outro candidato à segunda volta o comunista  
 other candidate to the second round, the communist  
 Guennadi Ziuganov, anunciou que, se ganhar  
 Guennadi Ziuganov, announce.PPERF.3SG that, if win.FUTSUBJ.3SG  
 as eleições, vai incluir no seu Governo  
 the elections go.PRES.3SG include.INF in the his Government  
 políticos conhecidos (...)

In parallel, and concerning the past domain, the Imp emerges as a tense particularly suited to integrate constructions in which the expression of modality is preponderant, as has been profusely observed in the literature (e.g., Oliveira 1987; 2013; Cipria & Roberts 2000; Ippolito 2004; Anand & Acquard 2009; Patard 2007).

Good examples of the modal uses of the Imp are, among many others, the so-called oneiric or fictional imperfect, in which the content of dreams, fictionalised scenes or imaginary events is described (cf. (61)); the imperfect of courtesy, used to attenuate the illocutionary force of orders or requests (cf. (62)); the planning imperfect, which projects to a future interval something that is being planned by the speaker at the moment of utterance (cf. (63)); the hypothetical or probabilistic imperfect, which describes potential situations or possibilities to be considered in alternative worlds (cf. (64)-(65)), occurring commonly in the context of conditional clauses:

- (61) Portuguese (CetemPúblico, par=ext4564-nd-95a-1)  
 Nessa noite, Simão Kimbangu, catequista, antigo aluno de uma  
 inthat night, Simão Kimbangu catechist former student of a  
 missão Baptista inglesa, sonhou que um  
 mission Baptist English dream.PPERF.3SG that an  
 anjo o visitava.  
 angel him visit.IMP.3SG  
 ‘That night, Simão Kimbangu, a catechist and a former student at an English Baptist mission, dreamed that an angel visited him.’
- (62) Portuguese  
 Queria um café e um bolo, por favor.  
 want.IMP.1SG a coffee and a cake by please  
 ‘I’d like a cup of coffee and a cake, please.’
- (63) Portuguese  
 Então, amanhã, eu encontrava-me contigo na  
 so tomorrow I meet.IMP.1SG-me with you in the  
 faculdade.  
 college  
 ‘So, tomorrow, I would meet you at the college.’
- (64) Portuguese (CetemPúblico, par=ext734550-des-95b-1)  
 «Se tivesse esse dinheiro, comprava um  
 «if have.IMPSUBJ.1SG that money buy.IMP.1SG a  
 jogador hoje.»  
 player today.»  
 ‘«If I had enough money, I’d buy a player today.»’
- (65) Portuguese (CetemPúblico, par=ext359416-pol-94b-2)

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politicians wellknown (...)

‘In an attempt to regain the initiative, the other candidate for the second round, the Communist Guennadi Ziuganov, announced that if he wins the election, he will include well-known politicians in his government.’

«Tinha duas opções: ou comprava um  
 «have.IMP.1SG two options or buy.IMP.1SG a  
 grande barco e passava o resto da vida deitado  
 big boat and spend.IMP.1SG the rest of the life lying  
 ao sol, ou então dedicava-me a ajudar  
 at the sun or else dedicate.IMP.1SG-myself to help.INF  
 as pessoas do meu país.»  
 the people of the my country.»

‘«I had two choices: either I would buy a big boat and spend the rest of my life lying in the sun, or else I would dedicate myself to helping the people of my country.»’<sup>19</sup>

The expression of such a diversity of modal values is clearly absent from the constructions involving the PPerrf, as the following examples, in which this tense form replaces the corresponding Imp versions in (61)-(65), make clear:

- (66) Portuguese  
 Nessa noite, Simão Kimbangu, catequista, antigo aluno de uma  
 in that night Simão Kimbangu catechist former student of a  
 missão Baptista inglesa, sonhou que um  
 mission Baptist English dream.PPERF.3SG that an  
 anjo o visitou.  
 angel him visit.PPERF.3SG  
 ‘That night, Simão Kimbangu, a catechist and a former student at an English Baptist mission, dreamed that an angel visited him.’
- (67) Portuguese  
 \* Quis um café e um bolo, por favor.  
 \* want.PPERF.1SG a coffee and a cake by please
- (68) Portuguese  
 \* Então, amanhã, eu encontrei-me contigo  
 \* so, tomorrow I meet.PPERF.1SG-me with you  
 na faculdade.  
 in the college
- (69) Portuguese  
 \* «Se tivesse esse dinheiro, comprei um  
 \* «if have.IMP.SUBJ.1SG that money buy.PPERF.1SG a  
 jogador hoje.»  
 player today.»

<sup>19</sup> It is not my intention, of course, to discuss here all the contexts and interpretative possibilities in which the Imp conveys modal information, since such an analysis is far beyond the scope of my paper; I have therefore limited myself to illustrate the most significant and evident cases in which this tense form is clearly engaged in expressing modal meanings.

- (70) Portuguese
- |                                       |                   |              |        |
|---------------------------------------|-------------------|--------------|--------|
| * «{Tinha                             | / Tive}           | duas opções: | ou     |
| * «{have.IMP.1SG                      | / have.PPERF.1SG} | two options: | or     |
| comprei um grande barco e             | passsei           |              | o      |
| buy.PPERF.1SG a big boat and          | spend.PPERF.1SG   |              | the    |
| resto da vida deitado ao sol,         | ou então          |              |        |
| rest of the life lying at the sun,    | or else           |              |        |
| dediquei-me a ajudar as pessoas       |                   |              |        |
| dedicate.PPERF.1SG-myself to help.INF | the               |              | people |
| do meu país.»                         |                   |              |        |
| ofthe my country.»                    |                   |              |        |

With the exception of the so-called oneiric or fictional Imperfect, which can easily alternate with the PPerf (although, for almost all speakers, the meanings of the two variants diverge considerably; cf. the contrast between (61) and (66)), we observe that the modal uses we attribute to the Imp are not available for the equivalent forms of the PPerf, which give rise to ungrammatical sentences in the relevant contexts.

Based on the discussion we have carried out so far, I will propose the following generalization, correlating the temporal and modal contributions ascribed to the tenses under analysis:

- Those tenses that are less restrictive regarding the temporal location of the predications with which they combine, i.e., that admit, in appropriate conditions and in addition to their basic (past or future) reading, the possibility of an overlapping relation with the speech time, namely the *Pretérito Imperfeito do Indicativo* (Imp), in the past domain, and the *Futuro Simples* (FS), in the future domain, are particularly suited to receive and participate in modal interpretations.
- In contrast, those tenses that display more significant restrictions regarding the temporal location of the predications with which they cooccur, i.e., that impose obligatory past or future readings to the situations in their scope, namely the *Pretérito Perfeito Simples do Indicativo* (PPerf) and the structure *ir* ('go') + Infinitive, do not seem to be particularly appropriate for the expression of modality, which does not mean, however, that, in specific circumstances, they cannot also receive this kind of interpretation.

## 5. Towards a basic temporal semantic description of the EP tenses

Before proceeding with a semantic treatment for the four tenses we are dealing with in this paper, let's summarise their main temporal properties:

- (i) The FS locates the situation with which it occurs in an interval that follows the speech time (or an equivalent TPpt), allowing, nevertheless, for (optional) overlapping readings given the appropriate conditions (namely, that the relevant eventualities are basic or derived states);
- (ii) The structure *ir* ('go') + Infinitive locates the situations with which it occurs in an interval that follows the speech time (or an equivalent TPpt), requiring,

additionally, that a partial or complete overlapping relation with this interval is always ruled out.

- (iii) The Imp locates the situation with which it occurs in an interval that precedes the speech time (or an equivalent TPpt), allowing, nevertheless, for (optional) overlapping readings, given their aspectual status of a true stativiser.
- (iv) The PS locates the situations with which it occurs in an interval that precedes the speech time (or an equivalent TPpt), requiring, additionally, that a partial or complete overlapping relation with this interval is always ruled out.

Taking into account the characterisation just given, I will claim, once again, that it makes sense to group the Imp and the FS, on the one hand, and the PPerf and the structure *ir* ('go') + Infinitive, on the other.

Note, firstly, that the FS, in the future domain, and the Imp, in the past one, are temporally less restrictive than the structure *ir* ('go') + Infinitive and the PPerf, since the temporal information that they convey may be influenced, or even changed, by other linguistic factors, predominantly associated with aspect and modality.

So, both the Imp and the FS seem to simply locate the situations with which they combine in the past or in the future domain, respectively, without imposing any further constraints in terms of their temporal behaviour. This would explain, for instance, the sensitivity to the aspectual profile of the eventualities involved, particularly with respect to the possibility that statives may extend beyond their realisation times, thus overlapping, totally or partially, the speech time, as predicted by proposals such as those developed by Kamp & Rohrer (1983) or by Kamp & Reyle (1993).

The PPerf and the structure *ir* ('go') + Infinitive, on the other hand, in addition to promoting the location of the propositions in past or future intervals, respectively, seem to require an additional restriction, namely the imposition of a temporal boundary beyond which the eventualities with which they co-occur cannot expand. This restriction thus prevents the extension of the situations in question up to the moment of utterance, even if the aspectual conditions that would allow this move are met.<sup>20</sup>

Thus, in order to incorporate this difference in the semantics of the tenses under discussion, I will argue, regarding the PPerf and following Cunha (2004/2007), for the existence of a final boundary in the past, prior to the speech time, beyond which the relevant eventualities cannot continue. This would explain the idea of terminativity that is often ascribed in the literature to this tense form (cf. e.g. Oliveira 2013).

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<sup>20</sup> Despite the notorious divergences that emerge between the tense systems of French and European Portuguese, the above-mentioned distinction between the Imp and the PPerf seems to be comparable, to some extent, to the opposition between the *passé simple* and the *imparfait*. In particular, Camussi-Ni (2006) suggests that the *imparfait* is characterised by the feature [-défini] ([-defined]), contrasting with the *passé simple* which would be identified by the feature [+défini] ([+defined]). This approach amounts, *grosso modo*, to the postulation of the absence, in the case of the Imp, versus the presence, in the case of the PPerf, of explicitly defined temporal boundaries for the relevant situations. For an overview of the French tense system, see, e.g., Verkuyl *et al.* (2004); for a more comprehensive comparison between the discursive behaviour of the *passé simple* and the *imparfait*, see, among others, Kamp & Rohrer (1983), Molendijk (1990), de Swart (1998), Patard (2007), Molendijk *et al.* (2004) or Grisot & Blochowiak (2021).

In the case of the structure *ir* ('go') + Infinitive, for which I did not find any detailed characterisation in the literature relative to this kind of constrains, I will suggest the introduction, in its temporal profile, of an initial boundary, located in the future, beyond which the relevant situation cannot extend, constituting, so to speak, a kind of mirror image with respect to the final boundary that is proposed for the PPerf. This would allow us to explain, in a principled way, the impossibility of the so-called conjectural or hypothetical readings with *ir* ('go') + Infinitive, since the overlapping with the moment of utterance would be blocked by the initial boundary imposed by the semantics of the construction itself.

The ascription of these boundaries to the PPerf and to the construction *ir* ('go') + Infinitive contrasts with the analysis I propose to the Imp and the FS in terms of simple past and future locations: the absence of any special temporal restriction accords with the fact that, as we have seen, these tense forms are compatible with a more flexible range of temporal readings.

Putting these ideas more formally: the basic temporal information conveyed by the Imp and the FS with respect to the speech time would be simply a relation of anteriority or posteriority, respectively:

(71) Imp:  $t < n$

(72) FS:  $t > n$ .<sup>21</sup>

Given this quite general characterisation, it will not be surprising that the context, aspectual factors, and modal flavours work together with this basic temporal profile, and, depending on the circumstances that are met, favour the emergence either of precedence/sequential readings of the situations involved, or, less frequently, overlapping ones.

Now, considering that the Imp acts as a stativiser, as I have already mentioned, and that states establish an overlapping relation with their respective reference times ( $s \circ t$ ), as suggested by Kamp & Rohrer (1983) and by Kamp & Reyle (1993), we may correctly predict that, given the adequate conditions, all sentences in the imperfect may (but need not) extend up to the speech time. In fact, despite their reference time is located in a past interval, nothing prevents the (stative) eventualities brought about by the Imp form to extend to (and intersect) the utterance time.

Similarly, the structure ascribed to the FS is also compatible with readings in which the relevant predications establish an overlapping relation with the speech time – the so-called hypothetical or conjectural readings. However, since the FS is not a stativiser by itself, only (basic or derived) statives may be involved in this kind of interpretation. Since events are included in their reference times ( $e \subset t$ ) and the temporal representation in (72) requires a posteriority relation ( $t > n$ ), predications pertaining to this aspectual category may only be involved in future readings, as discussed in section 4.2.

<sup>21</sup> I am, of course, perfectly aware that the temporal relations in which all these tenses are involved are much more complex, as they may, for example, involve the consideration of other time intervals or require a richer formalisation; bearing in mind, however, the goals of this work, I have decided to simplify my formal representations as much as possible, in order to highlight the differences and similarities that can be observed between the tense forms under analysis.

The PPerf and the structure *ir* ('go') + Infinitive, in contrast, consistently give rise to readings in which the eventualities obligatorily precede or follow the speech time, irrespective of their aspectual profile or the context in which they occur. In this sense, the information in question should be included in the semantic description of the tenses under consideration.

Since, as I have suggested, the PPerf imposes a terminus to the eventualities with which it combines, an hypothesis of formalisation for the temporal information conveyed by this tense form could be the following:

$$(73) \quad t < n \ \& \ \text{end}(sit) \subset t$$

in which  $t$  represents a time interval,  $n$  the speech time and  $\text{end}(sit)$  the end of a given situation.<sup>22</sup> Roughly speaking, this formalisation indicates that, due to the fact that the end of the relevant situation is included in an interval that precedes the moment of the utterance, any eventuality in the PPerf must be obligatorily terminated before the speech time, independently of the aspectual or contextual information brought about by the sentence.

In parallel, the structure *ir* ('go') + Infinitive may receive the following formal representation:

$$(74) \quad t > n \ \& \ \text{beg}(sit) \subset t$$

where  $t$  represents a time interval,  $n$  the speech time and  $\text{beg}(sit)$  the beginning of a given situation. Mirroring the PPerf case, this formal proposal indicates that the eventualities combining with the structure *ir* ('go') + Infinitive can only take place after the speech time, since their beginning is included in an interval that is always located later than the moment of utterance. This representation correctly predicts that the construction at hand never covers the speech time, thus explaining the impossibility of the so-called conjectural or hypothetical readings.

## 6. Concluding remarks

Though it is undeniable that there are significant differences dividing tenses pertaining to the past domain from tenses pertaining to the future, it is equally true that it is possible to find common features that bring these forms together. It was my intention to systematise and correlate such specificities, allowing for a rearrangement of the relations inside the tense system in European Portuguese.

One of the points on which the tenses in the past domain and those in the future diverge considerably concerns the ascription of truth-values to the propositions: while the truth-value of the propositions expressed by past tenses can be unproblematically assessed at the moment of utterance, since the relevant eventualities have already taken place, the same is not true for future tenses, because a situation that has not yet occurred cannot be considered either true or false at  $t_0$ . In this sense, future tenses are,

<sup>22</sup> It should be emphasised that, in this context, the end of the situation does not necessarily represent its conclusion or culmination, but merely its terminus. See the discussion in Cunha (2004/2007) about the semantic contribution of the PPerf in European Portuguese.



by their nature, branching, i.e., they force the consideration of a set of possible histories or worlds, reflecting the variability inherent to multiple possibilities in the course of events. The ascription of a truth value to the propositions in question should thus take into account either a larger context of realisation of the situation encompassing the speech time and a succeeding time interval or a single history that will be selected and conceived as the most likely given the normal course of events.

However, if we focus more closely on the linguistic behaviour of some particular tense forms, we observe that, despite the perceived divergences, past and future markers share important common properties. In this sense, we briefly compared and discussed several features of the PPerf, the Imp, the FS, and the construction *ir* ('go') + Infinitive, all in the Indicative mood.

We have acknowledged that, in some respects, the Imp (in the past domain) and the FS (in the future domain) exhibit quite similar linguistic behaviours, while differing from the PPerf and the structure *ir* ('go') + Infinitive, which, in turn, reveal important points of contact with each other.

As far as their temporal characterisation is concerned, we assumed that the Imp and the FS convey quite general information, given that they seem to merely locate the situations with which they combine in an interval that precedes or follows the speech time (or another equivalent time interval). Their final interpretation therefore results from the interaction between that basic temporal profile and other contextual or linguistic elements of the sentence, in particular the aspectual properties of the situations involved, in line with analyses such as those developed by Kamp & Rohrer (1983) or by Kamp & Reyle (1993). The construction *ir* ('go') + Infinitive and the PPerf, in contrast, seem to require additional temporal restrictions, namely the imposition of initial or final boundaries on the co-occurring predications, in order to account for the complete impossibility of overlapping with the speech time, even when the conditions for the arising of this reading are met.

I also sought to establish a correlation between the temporal properties of the tenses under analysis and the greater or lesser appeal for the emergence of modal readings. The more specific and restrictive the temporal information conveyed, the less space seems to be left for the development of other types of interpretation, namely those referring to modality.

More generally, the most restrictions a given tense imposes on the location of the situation with which it combines, the less space is left for the interaction and the influence of other semantic factors, such as aspect and modality.

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