# Phase states and their Interaction with individual-level and stage-level predicates<sup>1</sup>

Luís Filipe Cunha

It is now well known that, regarding their aspectual profile, stative predications do not form an unvarying category. Conversely, they constitute a complex and heterogeneous aspectual class. In fact, the situations that traditionally are labelled "states" exhibit a great variability in their linguistic behaviour patterns, suggesting that it is important to recognise some variation at their internal temporal structure.

The main goal of this paper will be, therefore, to provide evidence in favour of a new distinction between phase states – those which share some properties with events – and non-phase states – those that never pattern with eventive-like predications (cf. Cunha, 1998b; 2004). I will then show that, although this distinction cannot be confused with the individual-level / stage-level opposition, as proposed, e.g., by Carlson (1977a), Kratzer (1995) or Chierchia (1995), both interact with each other in some interesting ways. Finally, in order to exemplify the interrelations in which these two distinctions are involved, I will briefly focus on some particularities of *ser* ('be') and *estar* ('be') constructions in European Portuguese.

The paper is organised as follows. In section 1, departing from observations made by e.g. Kratzer (1995), I will consider the individual-level / stage-level opposition as it arises in the stative domain; in section 2, I will introduce the phase vs. non-phase distinction. Then, I will investigate some properties of *ser* ('be') and *estar* ('be') predications in European Portuguese which will demonstrate that not only the above-mentioned subclassification of statives, but also other factors, will be important to explain their linguistic behaviour.

### 1. Individual-level vs. stage-level states: a preliminary approach

The opposition between individual-level and stage-level predicates seems to play an important role with regard to the classification of states since, in some ways,

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it is reflected in their linguistic behaviour. Departing from the analyses developed by Carlson (1977a), Dowty (1979), Kratzer (1995) and Chierchia (1995), among others, let us consider the influence of such property in different contexts involving stative predications.

Individual-level predicates apply directly to the entities they combine, expressing essentially permanent or stable properties. This means that, at least in the most common cases, the characteristics associated with an individual-level predicate accompany the entities they are attributed along their temporal and spatial existence.

Stage-level predicates, on the other hand, establish with their accompanying individuals an obligatorily indirect relationship, since they express only spacio-temporal limited characteristics. Thus, we can say that they describe transitory or episodic properties, strictly dependent on shorter or longer intervals of time.

Taking all these facts into account, Kratzer (1995) argues that stage-level predicates must always be accompanied by an argumental position specifying a given spatio-temporal location, contrasting with individual-level predicates, which should not include such an argumental position in their formal representation, since, as we have seen, they apply directly to the individuals they predicate.<sup>2</sup>

Based on Kratzer and Chierchia's proposals, we suggest the following linguistic criteria in order to distinguish individual-level from stage-level statives in languages like Portuguese:<sup>3</sup>

A. Only stage-level states combine freely with all kinds of durational and locating temporal adverbials (cf. (1)-(2) vs. (3)-(4)):

- (1) Ontem / no sábado, a Maria esteve contente. (stage-level state)
  - 'Yesterday / on-the Saturday, the Maria estarPPerf happy'
  - 'Yesterday / on Saturday, Maria was happy'
- (2) A Maria teve febre durante três dias. (stage-level state)
  - 'The Maria havePPerf fever for three days'
  - 'Maria had fever for three days'
- (3) \* Ontem / no sábado, a Maria foi portuguesa. (individual-level state)
  - 'Yesterday / on-the Saturday, the Maria serPPerf Portuguese'
  - 'Yesterday / on Saturday, Maria was Portuguese'
- (4) \* A Maria soube Latim durante três dias. (individual-level state)
  - 'The Maria knowPPerf Latin for threee days'
  - 'Maria knew Latin for three days'

<sup>&</sup>lt;sup>2</sup> It is not surprising, thus, that only statives can describe individual-level predicates: being the only eventualities that are not constituted by successive phases, they can persist indefinitely in time, in contrast with events, which are inherently restricted by the conditions associated to their internal constitution. Stage-level predicates, however, can be eventive or stative, given that both classes support easily an intrinsic or extrinsic temporal delimitation.

<sup>&</sup>lt;sup>3</sup> Note that some of the criteria for the distinction between individual-level and stage-level predicates developed by Chierchia (1995) and Kratzer (1995) do not apply to languages like Portuguese. It is the case, for instance, of the there-sentences test or the bare plural in subject position test. We will, therefore, ignore them here.

- B. Stage-level statives cooccur, in the most part, freely with locatives, contrasting with individual-level predicates, which show strong restrictions in those contexts (cf. (5)-(6) vs. (7)-(8)):
  - (5) A Maria esteve contente na escola. (stage-level state)
    - 'The Maria estarPPerf happy in-the school'
    - 'Maria was happy at school'
  - (6) A Maria teve febre em casa da avó. (stage-level state)
    - 'The Maria havePPerf fever in home of-the grandmother'
    - 'Maria had fever at her grandmother's home'
  - (7) \* A Maria foi portuguesa na escola. (individual-level state)
    - 'The Maria serPPerf Portuguese in-the school'
    - 'Maria was Portuguese at school'
  - (8) \* A Maria soube Latim em casa da avó. (individual-level state)
    - 'The Maria knowPPerf Latin in home of the grandmother'
    - 'Maria knew Latin at her grandmother's home'
- C. Only stage-level statives may occur in combination with punctual adverbials, leading to a well-formed construction that typically conveys a reading expressing the inclusion of the adverbials into the time interval of the situation accompanying them (cf. (9)-(10) vs. (11)-(12)):
  - (9) A Maria esteve contente às cinco horas (stage-level state)
    - 'The Maria *estar*PPerf happy at-the five hours'
    - 'Maria was happy at five o'clock'
  - (10) A Maria teve febre às duas da manhã. (stage-level state)
    - 'The Maria havePPerf fever at-the two of-the morning'
    - 'Maria had fever at two o'clock in the morning'
  - (11) \* A Maria foi portuguesa às cinco horas. (individual-level state)
    - 'The Maria serPPerf Portuguese at-the five hours'
    - 'Maria was Portuguese at five o'clock'
  - (12) \* A Maria soube Latim às duas da manhã. (individual-level state)
    - 'The Maria knowPPerf Latin at-the two of-the morning'
    - 'Maria knew Latin at two o'clock in the morning'
- D. Only stage-level statives may be compatible with expressions that quantify over eventualities like *sempre que* ('whenever'), *todas as vezes que* ('every time that'), etc. (cf. (13)-(14) vs. (15)-(16)):
  - (13) Sempre que está contente, a Maria canta. (stage-level state)
    - 'Whenever that *estar* Pres happy, the Maria sing Pres'
    - 'Whenever she is happy, Maria sings'
  - (14) Todas as vezes que tem febre, a Maria toma uma aspirina. (stage-level state)
    - 'Every the times that havePres fever, the Maria takePres an aspirin'
    - 'Every time she has fever, Maria takes an aspirin'

- (15) \* Sempre que é portuguesa, a Maria vai a Lisboa. (individual-level state)
  - 'Whenever that serPres Portuguese, the Maria goPres to Lisbon'
  - 'Whenever she is portuguese, Maria goes to Lisbon'
- (16)\* Todas as vezes que sabe Latim, a Maria traduz um texto. (individual-level state)
  - 'Every the times that knowPres Latin, the Maria translatePres a text'
  - 'Every time she knows Latin, Maria translates a text'

The above-mentioned criteria derive directly from the different properties defining the two kinds of predicates under analysis: the fact that individual-level statives apply directly to the entities they predicate, and not to any of their spatio-temporal slices, difficults their occurrence with structures that, in some way, imply spatio-temporal restrictions, as locating and measuring adverbials, spatial locatives and punctual adverbials. Moreover, quantifying expressions like whenever or every time, which clearly quantify over spatio-temporal limited periods, can only be combined with stage-level predicates, excluding, as expected, individual-level ones. However, as we will see later on, other factors interact with the stage-level / individual-level opposition, turning some of these tests somehow problematic.

If the opposition between stage-level and individual-level predicates describes adequately the temporal contrasts just mentioned, it cannot explain satisfactorily some configurations in which statives assume the characteristic behaviour of events, that is, in which aspectual factors play the essential role. In particular, we are taking into account the cooccurrence of statives with aspectual operators that require "processuality" features at their input level, as the Progressive or *começar* a ('begin') (cf. (17)-(18)), or their appearance in structures exhibiting a successive reading between situations, be it in the context of *when*-clauses (cf. (19)) or in linear ordered discourses (cf. (20)):

- (17) A Maria está a ser simpática.
  - 'The Maria *estar* Pres to *ser* Inf nice'
  - 'Maria is being nice'
- (18) A Maria começou a ser simpática.
  - 'The Maria beginPPerf to serInf nice'
  - 'Maria began being nice'
- (19) Quando o Pedro lhe pediu ajuda, a Maria foi simpática.
  - 'When the Pedro her askPPerf help, the Maria serPPerf nice'
  - 'When Pedro asked her help, Maria was nice'
- (20) O Pedro pediu ajuda. A Maria foi simpática e emprestou-lhe dinheiro.<sup>4</sup>
  - 'The Pedro askPPerf help. The Maria *ser*PPerf nice and lendPPerf him money'
  - 'Pedro asked her help. Maria was nice and lent him some money'

An essentially temporal opposition, such as the one between stage-level and

<sup>&</sup>lt;sup>4</sup> Note that the relevant reading associated with examples like these is the exclusively temporal one; we will ignore, thus, other interpretations, such as the causal one, which require a differentiated treatment (cf. the proposals developed by Lascarides & Asher, 1993; Asher & Lascarides, 2003; Cunha & Silvano, 2008, concerning the use of Rhetorical Relations).

individual-level predicates, is not sufficient, by itself, to provide adequate answers to the different questions raised by the above examples. In particular, it does not give any clue to explain the fact that some states can combine with aspectual operators like the Progressive and others cannot. A reclassification of stative predications, which explicitly takes into account the role played by aspectual differences, seems to be needed in order to properly accommodate these contrasts.

In the following section, I will develop a hypothesis that, I think, will shed some light on the intriguing process-like behaviour of an important set of states.

## 2. Phase vs. non-phase states

It is very interesting to point out that, in appropriate contexts, some statives behave just like events, i.e. they follow the pattern that is traditionally invoked in the literature to characterise the aspectual class of processes. Thus, we observe that those states, equally to event situations, occur unproblematically with aspectual operators that select an eventive or processual "input" – it is, for instance, the case of the Progressive or of *começar a* ('begin') – and allow a successive reading in the context of *when*-clauses and linear ordered discourses (cf. Dowty, 1979; Vlach, 1981; Kamp & Rohrer, 1983, among others).

In order to accommodate such unusual behaviours, Cunha (1998b; 2004) proposes the inclusion of the idea of "phaseability" in the general conception of stative predications: due to the possibility of integration in the aspectual network proposed by Moens (1987), some states, which were labelled phase states, can be coerced into processes, incorporating, in this way, the feature [+dynamic], which, typically, identifies the different kinds of event predications.

It is important to point out that the inclusion in the aspectual network – and, consequently, the coercion into events – is restricted to a limited number of statives, those we labelled phase states, not being available for all the elements of this set of eventualities. Those states that cannot integrate the aspectual network, being, thus, prevented from acquiring eventive characteristics, will be called non-phase states.

Taking into account the above discussion, we postulate the existence of another property underlying the class of statives, apart from the individual-level/ stage-level distinction: I will call it phaseability. Phase states will be those states that can integrate the aspectual network and thus reveal an event-like behaviour, in that they can easily be coerced into processes; non-phase states, in contrast, have not this property, behaving always and consistently as stative situations, independently of their context of occurrence.

The following criteria can be taken to distinguish these two subclasses of states:

A. Only non-phase statives are completely incompatible with aspectual operators requiring a dynamic input, such as the Progressive or *começar a ('begin')* (cf. (21)-(22) vs. (23)-(24)):

## (21) A Rita está a viver na Holanda. (phase state)

'The Rita *estar* Pres to liveInf in-the Netherlands'

'Rita is living in the Netherlands'

(22) O meu cão começou a ser agressivo. (phase state)

'The my dog beginPPerf to serInf aggressive'

'My dog began to be aggressive'

(23) \* O João está a ter olhos azuis. (non-phase state)

'The João estarPres to haveInf eyes blue'

'João is having blue eyes'

(24) \* O meu casaco começou a ser verde. (non-phase state)

'The my coat beginPPerf to serInf green'

'My coat began to be green'

- B. Only non-phase states are completely impossible, combined with the Pretérito Perfeito tense, in the main clauses of temporal constructions introduced by *quando* ('when'), displaying a preferential successive reading (cf. (25)-(26) vs. (27)-(28)):
  - (25) Quando saiu de Portugal, a Rita viveu na Holanda. (phase state)
    - 'When leavePPerf from Portugal, the Rita livePPerf in-the Netherlands'
    - 'When she left Portugal, Rita lived in the Netherlands'
  - (26) Quando viu o ladrão, o meu cão foi agressivo. (phase state)
    - 'When seePPerf the thief, the my dog serPPerf aggressive'
    - 'When it saw the thief, my dog was aggressive'
  - (27) \* Quando chegou à escola, o João teve olhos azuis. (non-phase state)
    - 'When arrivePPerf to the school, the João havePPerf eyes blue'
    - 'When he arrived at school, João had blue eyes'
  - (28) \* Quando eu o vesti, o meu casaco foi verde. (non-phase state)
    - 'When I it dressPPerf, the my coat serPPerf green'
    - 'When I dressed it, my coat was green'
- C. Only non-phase statives, in the Pretérito Perfeito tense, cannot be admitted in sequences of linearly ordered discourses exhibiting a successive reading (cf. (29)-(30) vs. (31)-(32)):
  - (29) A Rita casou-se com o João. Viveu na Holanda durante dois anos. (phase state)

'The Rita marryPPerf-herself with the João. LivePPerf in-the Netherlands for two years'

'Rita married João. She lived in the Netherlands for two years'

- (30) Eu levei o meu cão ao veterinário. Ele foi agressivo e mordeu-lhe a mão. (phase state)
  - 'I takePPerf the my dog at-the doctor. It *ser*PPerf aggressive and bitePPerf-him the hand'
  - 'I took my dog to the doctor. It was aggressive and bit his hand'
- (31) \* O João chegou à escola. Teve olhos azuis. (non-phase state)

- 'The João arrivePPerf at-the school. HavePPerf eyes blue'
- 'João arrived at school. He had blue eyes'
- (32) \* Eu vesti o meu casaco. Ele foi verde. (non-phase state)
  - 'I dressPPerf the my coat. It serPPerf green'
  - 'I dressed my coat. It was/has been green'

As I have already pointed out, the linguistic criteria that identify phase states correspond, in some extent, to those describing the behaviour exhibited by events in general and, in particular, by processes, as the following sentences confirm:

- (33) A Maria está / começou a chorar.
  - 'The Maria estarPres / beginPPerf to cryInf'
  - 'Maria is crying / began to cry'
- (34) Quando o pai a deixou na escola, a Maria chorou.
  - 'When the father her leavePPerf in-the school, the Maria cryPPerf'
  - 'When his father left her at school, Maria cried'
- (35) O Pedro insultou a Maria. Ela chorou.
  - 'The Pedro insultPPerf the Maria. She cryPPerf'
  - 'Pedro insulted Maria. She cried'

In view of the examples just mentioned, we may ask in which respects phase states really differ from processes, in order to be considered true stative constructions. Or, in other words, which linguistic criteria enable us to distinguish states from events? I will address this problem in the following section.

#### 3. States vs. events

We have already seen that, in appropriate circumstances, there are some states that behave like processes. We have argued, however, that these structures are basically stative, being their eventive behaviour the result of the application of some coercion possibilities.

In order to validate this analysis, however, it will be necessary to find out some criteria that enable us to identify the class of statives in its own right, distinguishing it clearly from eventive situations. Concerning languages like European Portuguese, the tests that seem to be operative regarding this opposition are presented in the following paragraphs:

A. Only states, in the Presente do Indicativo tense (simple present), exhibit a preferential reading expressing a "real present" meaning, i.e., a purely temporal locating interpretation, although some of them, in appropriate contexts, admit also a habitual reading; in the same circumstances, events only receive the quantificational habitual interpretation (cf. (36)-(38) vs. (39)):

(36) A Maria é alta neste momento / \* habitualmente. (state)

'The Maria serPres tall in-this moment / habitually'

'Maria is tall right now / habitually'

(37) A Maria é simpática neste momento / habitualmente. (state)

'The Maria serPres nice in this moment / habitually'

'Maria is nice right now / habitually'

(38) A Maria está contente neste momento / (??) habitualmente. (state)

'The Maria *estar* Pres happy in this moment / habitually'

'Maria is happy right now / habitually'

(39) A Maria canta # neste momento / habitualmente. (process)

'The Maria singPres in this moment / habitually'

'Maria sings right now / habitually'

- B. Only states, in the Imperfeito tense, receive an exclusively temporal reading; events, on the contrary, lead almost always to habitual or semiprogressive interpretations (cf. (40)-(42) vs. (43)):
  - (40) Em 1999, a Maria era alta. (state)

'In 1999, the Maria serImp tall'

'In 1999, Maria was tall'

(41) Em 1999, a Maria era simpática. (state)

'In 1999, the Maria serImp nice'

'In 1999, Maria was nice'

(42) Em 1999, a Maria estava contente. (state)

'In 1999, the Maria estarImp happy'

'In 1999, Maria was happy'

(43) Em 1999, a Maria cantava (habitualmente / muitas vezes) (process)

'In 1999, the Maria singImp (habitually / many times)'

'In 1999, Maria sang (habitually / many times)'

- C. Only states, embedded in subordinate sentences introduced by temporal *quando* ('when') even combined with the Pretérito Perfeito –, or include the events occurring in the main sentence or lead to semantic anomaly; events, in similar conditions, favour a successive reading (cf. (44)-(46) vs. (47)):
  - (44) \* Quando foi alta, a Maria jogou basquetebol. (state)

'When serPPerf tall, the Maria playPPerf basketball'

'When she was tall, Maria played basketball'

(45) Quando a Maria foi simpática, os seus amigos ajudaram-na. (state)

'When the Maria serPPerf nice, the her friends helpPPerf her'

'When Maria was nice, her friends helped her'

(46) ? Quando esteve contente, a Maria cantou e dançou. (state)

'When estarPPerf happy, the Maria singPPerf and dancePPerf'

'When she was happy, Maria sang and danced'

- (47) Quando a Maria cantou, todos a elogiaram. (process)<sup>5</sup> 'When the Maria singPPerf, everybody her praisePPerf'
  - 'When Maria sang, everybody praised her'
- D. Only states (and culminations) are completely incompatible with aspectual operators like *acabar de* ('finish') and *parar de* ('stop') (cf. (48)-(50) vs. (51)):
  - (48) \* A Maria parou / acabou de ser alta. (state)
    - 'The Maria stopPPerf / finishPPerf from serInf tall'
    - 'Maria stopped / finished being tall'
  - (49) \* A Maria parou / acabou de ser simpática. (state)
    - 'The Maria stopPPerf / finishPPerf from serInf nice'
    - 'Maria stopped / finished being nice'
  - (50) \* A Maria parou / acabou de estar contente. (state)
    - 'The Maria stopPPerf / finishPPerf from estarInf happy'
    - 'Maria stopped / finished being happy'
  - (51) A Maria parou / acabou de cantar. (process)
    - 'The Maria stopPPerf / finishPPerf from singInf'
    - 'Maria stopped / finished singing'

The examples that we have just presented support the claim that it is important to distinguish clearly states from events. In fact, we have found linguistic behaviours that in principle are common to all subclasses of states, separating this class from all other kinds of eventuality.

The above-mentioned criteria provide evidence that, irrespective of the subclass they belong to, all statives seem to share a common semantic behaviour. This leads us to consider them as pertaining to a consistent and unique aspectual category, that of states, although, in many respects, as we have pointed out in sections 1 and 2, they may diverge significantly.

## 4. Some remarks about the *ser* ('be') vs. *estar* ('be') opposition in predicative contexts

The distinction between *ser* ('be') and *estar* ('be') has been subjected to a long and intricate debate in the linguistic literature that greatly exceeds the purposes of this paper. It is not my aim, here, to fully discuss the different proposals developed in order to account for this opposition. So, I will content myself with the adoption of some basic assumptions that I will briefly present below, trying to show that the reclassification of stative predications that I have

<sup>&</sup>lt;sup>5</sup> Note that, typically, while in (45) we have an inclusive reading, i.e., the period of time in which Maria was nice precedes and, in principle, goes beyond the interval in which their friends helped her, in (47) succession is, undoubtedly, the preferred relationship between the two clauses: all praised Maria only after she had sung.

been arguing for is indeed relevant to an adequate description of the phenomenon at issue.<sup>6</sup>

Following proposals made by Mateus *et al.* (1989) or Cunha (2004), I will assume that the *ser* ('be') vs. *estar* ('be') opposition encodes the stage-level vs. individual-level distinction as presented in section 1. The above-mentioned linguists support the idea that the difference between *ser* ('be') and *estar* ('be'), in the predicative context, can be seen as the reflex of the most general opposition between individual-level and stage-level predicates. In this view, structures involving *ser* ('be') would be individual-level and structures involving *estar* ('be') would be stage-level.

This analysis seems to be appropriate to account for some cases where the only alternation of *ser* ('be') and *estar* ('be') gives rise to a completely different behaviour concerning the criteria that we have identified as denoting the individual-level and stage-level distinction. Consider the following examples:

- (52) O meu computador esteve lento ontem / no sábado.
  - 'The my computer estarPPerf slow yesterday / on-the Saturday'
  - 'My computer was slow yesterday / on Saturday'
- (53) O meu computador esteve lento no escritório.
  - 'The my computer estarPPerf slow in-the office'
  - 'My computer was slow at the office'
- (54) O meu computador esteve lento às 5 da tarde.
  - 'The my computer *estar*PPerf slow at-the five of-the evening'
  - 'My computer was slow at 5 pm'
- (55) Sempre que o meu computador está lento, eu fecho alguns programas.
  - 'Always that the my computer estarPres slow, I closePres some programs'
  - 'Whenever my computer is slow, I close some programs'
- (56) \* O meu computador foi lento ontem / no sábado.
  - 'The my computer serPPerf slow yesterday / on-the Saturday'
  - 'My computer was slow yesterday / on Saturday'
- (57) \* O meu computador foi lento no escritório.
  - 'The my computer serPPerf slow in-the office'
  - 'My computer was slow at the office'
- (58) \* O meu computador foi lento às 5 da tarde.
  - 'The my computer serPPerf slow at-the five of-the evening'
  - 'My computer was slow at 5 pm'
- (59) \* Sempre que o meu computador é lento, eu fecho alguns programas.
  - 'Always that the my computer ser Pres slow, I close Pres some programs'
  - 'Whenever my computer is slow, I close some programs'
- (60) A Maria esteve alegre ontem / no sábado.
  - 'The Maria estarPPerf happy yesterday / on-the Saturday'
  - 'Maria was happy yesterday / on Saturday'
- (61) A Maria esteve alegre na festa da irmã.

<sup>&</sup>lt;sup>6</sup> Although *ser* ('be') and *estar* ('be'), in predicative contexts, may occur with a great number of different elements – prepositional phrases, nominal expressions, adverbials, past participles, among others, – here I will only be concerned with adjetival predicates. The extension of my observations to other contexts will be left for future research.

'The Maria estarPPerf happy in-the party of-the sister'

'Maria was happy at her sister's party'

(62) A Maria esteve alegre às 5 da tarde.

'The Maria *estar*PPerf happy at-the five of-the evening' 'Maria was happy at 5 pm'

(63) Sempre que está alegre, a Maria canta uma canção.

'Always that estarPres happy, the Maria singPres a song'

'Whenever she is happy, Maria sings a song'

(64) \* A Maria foi alegre ontem / no sábado.

'The Maria serPPerf happy yesterday / on-the Saturday'

'Maria was happy yesterday / on Saturday'

(65) \* A Maria foi alegre na festa da irmã.

'The Maria serPPerf happy in-the party of-the sister'

'Maria was happy at her sister's party'

(66) \* A Maria foi alegre às 5 da tarde.

'The Maria serPPerf happy at-the five of-the evening'

'Maria was happy at 5 pm'

(67) \* Sempre que é alegre, a Maria canta uma canção.

'Always that serPres happy, the Maria singPres a song'

'Whenever she is happy, Maria sings a song'

Although adjetives such as *lento* ('slow') or *alegre* ('happy') are perfectly compatible both with *ser* ('be') and with *estar* ('be'), the corresponding predications in which they occur behave quite differently with respect to the tests we have presented to distinguish stage-level from individual-level statives. In fact, while sentences integrating *estar* ('be') admit the presence of temporal and spatial adverbials, as well as expressions quantifying over eventualities (cf. (52)-(55) and (60)-(63)), the equivalent constructions with *ser* ('be') do not allow the appearance of such linguistic structures (cf. (56)-(59) and (64)-(67)).

Since the only difference between the above-mentioned patterns lies on the estar ('be') and ser ('be') alternation, we may conclude that these copular verbs play a crucial role concerning the stage-level and individual-level characterisation of the predications in which they occur. In particular, as the well-formedness of sentences (52)-(55) and (60)-(63) suggests, estar ('be') gives rise to a stage-level state, while ser ('be'), as indicated by the ungrammaticality of sentences (56)-(59) and (64)-(67), is typically associated with an individual-level one.

Given the above assumptions, it becomes clear that we do not follow pragmatic approaches to the difference between *ser* ('be') and *estar* ('be') like the one developed by Maienborn (2005).

In her paper, Maienborn assumes that *ser* ('be') and *estar* ('be') share basically the same meaning, showing no divergences at the semantic level. *Estar* ('be') differs only from *ser* ('be') insofar as it carries an additional presupposition linking the predication to a specific discourse situation. That is, unlike *ser* ('be'), *estar* ('be') must refer to a particular topic situation in the discourse; *estar* ('be') is a discourse dependent variant of *ser* ('be').

As Maienborn herself recognises, a consequence of this treatment is that "(...) no

selectional restrictions are imposed on either *ser* or *estar*, and the two copula forms do not differ in argument structure. That is, in principle, both *ser* and *estar* can combine with any predicate whatsoever." (p. 168). However, it is easy to find adjetives that only select either *ser* ('be') or *estar* ('be'), as the following examples illustrate:

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(68) A Maria está / * é grávida.
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'The Maria *estar* Pres / \* *ser* Pres pregnant'

'Maria is pregnant'

(69) A maçã está / \* é madura.

'The apple *estar*Pres / \* *ser*Pres ripe'

'The apple is ripe'

(70) O João \* está / é português.

'The João \* estarPres / serPres Portuguese'

'João is Portuguese'

(71) O meu saco \* está / é biodegradável.

'The my bag \* estarPres / serPres biodegradable'

'My bag is biodegradable'

Adjetives like *grávida* ('pregnant') in (68) or *madura* ('ripe') in (69) combine exclusively with *estar* ('be'), rejecting the cooccurrence with *ser* ('be'); conversely, adjetives like *português* ('Portuguese') in (70) or *biodegradável* ('biodegradable') in (71) select *ser* ('be'), being ungrammatical with *estar* ('be').

If we adopted a merely pragmatic approach such as Maienborn's, we would have no adequate explanation for these combinatorial restrictions since the licensing of *ser* ('be') or *estar* ('be') would depend solely on discourse factors – in particular on the presence or absence of a specific topic situation. Given the appropriate conditions, all adjetives should, in principle, be compatible with both copular verbs.

The individual-level vs. stage-level approach, on the other hand, can easily deal with this kind of examples, if we assume that some adjetives are inherently stage-level (e.g. *grávida* ('pregnant') or *madura* ('ripe')), while other adjetives are inherently individual-level (e.g. *português* ('Portuguese') or *biodegradável* ('biodegradable')). Consequently, the former select exclusively *estar* ('be'), the stage-level copula, while the latter combine solely with *ser* ('be'), the individual-level one.

The solution proposed by Schmitt (2005) in order to describe the different behaviour of constructions involving *ser* ('be') and *estar* ('be') raises equally some important problems.

Schmitt (2005) claims that *ser* ('be') is a "transparent" operator, that is, it carries no specific semantic information, contrasting with *estar* ('be'), which is aspectually stative, carrying a temporariness implication.

As a consequence of the above-mentioned analysis, *ser* ('be') does not denote any eventuality type; this fact would explain the occurrence of the so-called "active be" readings with this kind of verb. Moreover, *ser* ('be') predicates would be more flexible not only in terms of their distribution but also in terms of their selectional restrictions (in principle, due to the complete transparency of this copular verb, no selectional restrictions would be expected).

This analysis comes into trouble in several ways. First, ser ('be') should be

compatible with all kinds of adjetives, since it does not impose any relevant semantic restrictions. Thus, examples like (70) and (71) get no explanation in this framework.

Second, ser ('be') predications should describe all kinds of eventuality. That is, it would be possible to get not only states, but also processes, culminated processes, culminations and semelfactives involving ser ('be') predicates. This is not the case, at least in languages like European Portuguese. Typically, ser ('be') occurs consistently in stative configurations. Even the predicates with ser ('be') that show an eventive behaviour – those we labelled phase states – do not lose their stative nature, as demonstrated in section 3. (For a more detailed argumentation in favour of the view that it is crucial to consider aspectuality in the characterisation of ser ('be') predicates, see Marín, 2004: 6.1.)

Finally, if *estar* ('be') denotes a state, carrying a temporariness implication, it would be important to clarify in which circumstances should such implication be "activated" and in which circumstances should it be cancelled, in order to justify the fact that this temporariness effect is not considered to take part in the semantics of the copular verb.

In spite of its attractiveness, the stage-level vs. individual-level proposal faces serious problems, as we will see shortly. This kind of analysis seems, at first glance, very interesting, since it enables us to account for the fact that constructions integrating *ser* ('be') express stable properties, contrasting with constructions involving *estar* ('be'), which point preferentially to episodic situations (cf. (72) vs. (73)):

- (72) A minha casa é fria.
  - 'The my house serPres cold'
  - 'My house is cold'
- (73) A minha casa está fria.
  - 'The my house estarPres cold'
  - 'My house is cold'

The proposal that has been explored here may explain, however, some important puzzles. Taking into account the different criteria developed in section 1, we notice that the following sentences, although involving *ser* ('be'), behave like stage-level predicates:

- (74) O meu cão foi agressivo ontem / no sábado.
  - 'The my dog serPPerf aggressive yestarday / on-the Saturday'
  - 'My dog was aggressive yesterday / on Saturday'
- (75) O meu cão foi agressivo no consultório do veterinário.
  - 'The my dog serPPerf aggressive in-the room of-the doctor'
  - 'My dog was aggressive at the doctor's room'
- (76) O meu cão foi agressivo às 5 da tarde.
  - 'The my dog serPPerf aggressive at-the five of-the evening'
  - 'My dog was aggressive at 5 pm'
- (77) Sempre que o meu cão é agressivo, eu prendo-o na cozinha.
  - 'Always that the my dog serPres aggressive, I shutPres-it in-the kitchen'
  - 'Whenever my dog is aggressive, I shut it in the kitchen'

The simple adoption of the individual-level vs. stage-level opposition to account for the difference between *ser* ('be') and *estar* ('be') seems thus to be insufficient in order to adequately describe such examples. Let's explain why this is so.

If we assume that a sentence like "O meu cão é agressivo" ('My dog serPres aggressive') expresses a stage-level state, we will be saying, counter-intuitively, that it is, in a certain way, totally equivalent to a sentence like "O meu cão está agressivo" ('My dog estarPres aggressive'). However, Portuguese speakers ascribe to these two sentences quite different interpretations: given a "neutral" context, the former expresses preferably a stable property of the subject, while the latter conveys an episodic one.

If, on the other hand, we think of the above-mentioned first sentence as expressing an individual-level predicate, we will not be able to explain the behaviour illustrated by the pattern in (74)-(77), which, as we have said, conforms to the stage-level paradigm.

However, if we take seriously into account the interactions that arise between the two parameters of classification applying to stative predications we have discussed along this paper, we will find an elegant solution to this problem.

Note, firstly, that the state represented in a sentence like "O meu cão é agressivo" ('My dog *ser*Pres aggressive') can be easily coerced into a process, i.e., it is a phase state, as the application of the relevant tests confirms:

- (78) O meu cão está / começou a ser agressivo.
  - 'The my dog estarPres / beginPPerf to serInf aggressive'
  - 'My dog is / began being aggressive'
- (79) Quando os meus amigos entraram em casa, o meu cão foi agressivo.
  - 'When the my friends enterPPerf in house, the my dog serPPerf aggressive'
  - 'When my friends came in the house, my dog was aggressive'
- (80) O carteiro entrou no jardim. O meu cão foi agressivo e mordeu-o.
  - 'The postman comePPerf in-the garden. The my dog *ser*PPerf aggressive and bitPPerf him'
  - 'The postman came into the garden. My dog was aggressive and bit him'

We will now provide a tentative explanation for the problems posed by examples (74)-(77). Taking into account that phase states can assume the typical characteristics of processes and that these situations, pertaining to the class of events, exhibit, by nature, all properties of stage-level predicates (cf. Carlson, 1977), we will propose that it is the "phaseability" inherent to statives like these which, allowing coercion, legitimates an eventive reading to the sentence – and not the fact that *ser* ('be') describes originally a stage-level predicate.

Our hypothesis makes possible, on the one hand, to maintain the basic proposal adopted by Mateus *et al.* (1989) that says that predicative constructions involving *ser* ('be') correspond, in their basic interpretation, to individual-level predicates, thus enabling us to tackle the speakers' intuitions subjacent to the opposition between sentences like "O meu cão é agressivo" ('My dog *ser*Pres aggressive'), describing stable properties, and sentences like "O meu cão está agressivo" ('My dog *estar*Pres aggressive'), denoting episodic properties; and, on the other hand, it solves the problem of the stage-level like behaviour of some of the sentences involving *ser* 

('be'), due to the assumption of their previous coercion into processes, making available the emergence of a linguistic derived behaviour in some ways similar to that of stage-level predicates.

Unfortunately, the individual-level vs. stage-level approach to the distinction between *ser* ('be') and *estar* ('be') constructions must overtake other important problems.

- (81) \* As uvas estiveram maduras ontem / no sábado.
  - 'The grapes *estar*PPerf ripe yesterday / on-the Saturday'
  - 'The grapes were ripe yesterday / on Saturday'
- (82) \* As uvas estiveram maduras no pomar.
  - 'The grapes *estar*PPerf ripe in-the orchard'
  - 'The grapes were ripe at the orchard'
- (83) \* As uvas estiveram maduras às 5 da tarde.
  - 'The grapes estarPPerf ripe at-the five of-the evening'
  - 'The grapes were ripe at 5 pm'
- (84) # Sempre que as uvas estão maduras, eu como-as.
  - 'Always that the grapes *estar* Pres ripe, I eatPres-them'
  - 'Whenever the grapes are ripe, I eat them'

In spite of integrating the copular verb *estar* ('be'), the constructions represented in examples (81)-(84) do not exhibit the typical behaviour of stage-level predicates. Does it mean that the correlation between the selection of *ser* ('be') or *estar* ('be') and the individual-level vs. stage-level distinction must be discarded?

Although the answer to this question is quite complex, I will continue to maintain the individual-level vs. stage-level hypothesis, since, as we have seen, the alternative approaches proposed in the literature raise problems that cannot be easily solved. However, it should be noticed that the final reading of the sentences at issue depends on an intricate number of factors that interact with the basic meaning of the copular verbs. In particular, it is crucial to take into account the lexical meaning of the adjetives that cooccur in the predication, as pointed out, e.g. by Marín (2004, 2010) and the mass or count nature of the sentences at issue (cf. Cunha, Ferreira & Leal, 2010b). The tests proposed to distinguish individual-level from stage-level predicates are also subject to important restrictions related to the repeatability possibilities displayed by the predications. Of course, only situations that can be repeated are compatible with expressions that quantify over eventualities.

Be that as it may, in most cases the individual-level behaviour displayed by *estar* ('be') constructions is, in fact, illusive, deriving essentially from pragmatic factors or from our world knowledge. This becomes particularly clear when we compare the following sets of examples:

- (85) \* O meu gato esteve morto ontem / no sábado.
  - 'The my cat estarPPerf dead yesterday / in-the Saturday'
  - 'My cat was dead yesterday / on Saturday'
- (86) \* O meu gato esteve morto no jardim.
  - 'The my cat estarPPerf dead in-the garden'

- 'My cat was dead in the garden'
- (87) \* O meu gato esteve morto às 5 da tarde.
  - 'The my cat estarPPerf dead at-the five of-the evening'
  - 'My cat was dead at 5 pm'
- (88) \* Sempre que o meu gato está morto, eu enterro-o numa cova.
  - 'Always that the my cat estarPres dead, I buryPres-it in-a grave'
  - 'Whenever my cat is dead, I bury it in a grave'
- (89) O meu Tamagoshi esteve morto ontem / no sábado.
  - 'The my Tamagoshi estarPPerf dead yesterday / in-the Saturday'
  - 'My Tamagoshi was dead yesterday / on Saturday'
- (90) O meu Tamagoshi esteve morto na gaveta da secretária.
  - 'The my Tamagoshi estarPPerf dead in-the drawer of-the desk'
  - 'My Tamagoshi was dead in my desk's drawer'
- (91) O meu Tamagoshi esteve morto às 5 da tarde.
  - 'The my Tamagoshi estarPPerf dead at-the five of-the evening'
  - 'My Tamagoshi was dead at 5 pm'
- (92) Sempre que o meu Tamagoshi está morto, eu compro-lhe vidas na Internet.
  - 'Always that the my Tamagoshi *estar*Pres dead, I buyPres-him lives in-the Internet'
  - 'Whenever my Tamagoshi is dead, I buy him some lives on-line'

At first glance, examples like the ones presented in (85)-(88) would lead us to conclude that *estar morto* ('be dead') constitutes an individual-level predicate; however, this is not true, as the behaviour of the sentences in (89)-(92) makes evident. The restrictions exhibited in (85)-(88) are simply due to our world knowledge (normally, cats die only once) and not to any of the specific semantic characteristics of the predicate itself.

In sum, I will conclude that it is possible to maintain the idea that *ser* ('be') constructions convey individual-level predicates, while *estar* ('be') configurations describe stage-level ones. However, it is necessary to keep in mind that the final reading of these sentences derives not only from the basic meaning of the copular verbs themselves, but also from a complex interaction of lexical, semantic and pragmatic components.

#### 5. Conclusion

The predications conceived as stative situations do not constitute a homogeneous aspectual class. In fact, their linguistic behaviour varies significantly. This leads us to establish subclasses within the domain of the above-mentioned category.

We tried to prove that the distinctions between individual-level and stage-level predicates, on the one hand, and between non-phase and phase states, on the other, — the first predominantly temporal, the second eminently aspectual — are the two main properties that set up an adequate subclassification for stative predications.

Finally, we looked at the well-known opposition between *ser* ('be') and *estar* ('be') predications in order to show that our new subclassification, in a par with other relevant linguistic factors, describes adequately the behaviour of the sentences in which these two copular verbs take part.