

# STATIVE PREDICATES IN THE PROGRESSIVE IN BRAZILIAN PORTUGUESE

# PREDICADOS ESTATIVOS NO PROGRESSIVO EM PORTUGUÊS BRASILEIRO

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#### **ABSTRACT**

This paper aims to investigate in which contexts stative predicates are possible in the progressive in Brazilian Portuguese (BrP). In the literature, especially on English, this is unexpected, because progressive aspect is applied on events composed by stages (event predicates). States, however, are known as segmentally homogeneous, which means that: i) they have no stages and ii) they have the subinterval property of being true at minimal instants. In the present paper, we argue that the progressive aspect can be acceptable if a stage structure is grammatically licensed on the events denoted by the stative predicate. Moreover, we also found some similarities between the constraints on progressive statives in BrP and those on progressive habitual predicates in English. Then we propose that the difference in the acceptability between stative predicates in the progressive in BrP (*estar amando*) and in English (*is loving*) comes from grammatical constraints on the composition of a stage structure between these languages, rather than semantic distinctions in the progressive.

**KEYWORDS**: states; progressive; habitual predicates.

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#### **RESUMO**

O presente artigo tem como objetivo investigar em quais contextos o aspecto progressivo é possível com predicados estativos em português brasileiro (BrP). Na literatura, em especial em inglês, esse é um fato inesperado, porque o aspecto progressivo ocorre apenas com eventos compostos por estágios (predicados eventivos). Estados, no entanto, são segmentalmente homogêneos, o que significa que: i) eles não têm estágios; ii) eles são verdadeiros em instantes mínimos (propriedade de subintervalo). Neste artigo, argumentamos que o progressivo nesse contexto pode ser aceito se uma estrutura de estágio for gramaticalmente licenciada para os eventos denotados pelos predicados estativos. Além disso, também encontramos similaridades entre as restrições do progressivo no BrP e os predicados habituais no progressivo em inglês. Assim, propomos que a diferença de aceitabilidade entre predicados estativos no progressivo em BrP (*estar amando*) e em inglês (*is loving*) derive do de restrições gramaticais na composição de uma estrutura de estágio entre essas línguas, mas que distinções do progressivo em si.

PALAVRAS-CHAVE: estativos; progressivo; predicados habituais.

## The problem

This paper investigates stative predicates in Brazilian Portuguese (BrP), focusing on the fact that, unlike in English, many of them appear in the progressive and with aspectual verbs. The contrast between (1b-c), in BrP, and (2b-c), in English, shows this.

(1) a. Pedro ama Maria.<sup>3</sup>
Peter love.PRS.3SG Mary

Lit.: 'Peter loves Mary'

b. Pedro está amando Maria.

Peter be.prs.3sg love.ger Mary

Lit.: 'Peter is loving Mary'

c. Peter começou a amar Maria.

Peter begin.PST.PRF.3SG PREP love.INF Mary

Lit.: 'Peter began to love Mary'

- (2) a. Peter loves Mary.
  - b. #Peter is loving Mary.
  - c. #Peter began to love Mary.

The predicate *love*, in English, denotes a state and, thus, is odd in environments like (2b-c). However, its equivalent *amar*, in BrP, is perfectly acceptable, as we seen in (1b-c), although it must be applied in restricted circumstances and are not freely available. In the simple present (1a), *amar* is used if Peter's love for Mary is already established. Normally it

<sup>3</sup> Abbreviations: 3= third person, BrP= Brazilian Portuguese, GER= gerund, INF= infinitival, PL= plural, PREP= preposition, PRF= perfective aspect, PRS= present tense, PST= past tense, REFL= reflexive pronoun, SG= singular.

is not used to describe the beginning of the relation between a couple; on the other hand, the progressive of *amar* (1b) triggers this reading, i.e., Peter has just fallen in love with Mary, his love is in the beginning. Conversely, we will see that the progressive of *amar* can't be used at any instant during the period at which the state of Peter's loving Mary holds, but only in restricted circumstances such as just described. Although fine, the sentence in (1c) must be uttered retrospectively, that is, when someone is telling the history of Peter's love for Mary, and not as a description of a recent event.

Some of these restrictions presented about mental state verbs such as *amar* have been verified on habitual predicates in the progressive aspect. Both in BrP and in English, event predicates in the simple present trigger a habitual reading (3a; 4a). In the progressive, however, they have either an episodic reading (3b) or a habitual one (3c;) only in BrP. In English, whereas the episodic is acceptable (4b), the habitual reading is not (4c).<sup>4</sup>

(3) a. Pedro fuma.

Peter smoke.prs.3sg

Lit.: 'Peter smokes'

b. Pedro está fumando neste exato momento.

Peter be.PRS.3SG smoke.GER at exact moment

Lit.: 'Peter is smoking right now'

c. Pedro está fumando ultimamente.

Peter be.PRS.3SG smoke.GER lately

Lit.: 'Peter is smoking lately'

- (4) a. Peter smokes.
  - b. Peter is smoking now.
  - c.#Peter is smoking lately.

In (3b), the addition of an adverbial like *neste exato momento* 'right now' makes the sentence to get a natural episodic reading. On the other hand, in (3c), the addition of *ultimamente* 'lately' assigns only a habitual reading. In English, the episodic reading is preferred for (4b), but the habitual reading is possible if the sentence clearly indicates that it makes references to the beginning of a habit as in *John is smoking again*; *Is John smoking yet*?; or *Oh dear, I think John is smoking!* 

In this paper, we will argue that the parallelism between the restrictions on the progressive aspect on mental stative predicates in BrP and habitual predicates in BrP and English is not accidental. Then we will propose an explanation which accounts for that, especially with respect

<sup>4</sup> The felicitous counterpart of (4c) uses the progressive perfect as in (i), which is ambiguous between the episodic and habitual readings:

<sup>(</sup>i) Peter has been smoking recently

to the composition of stages on these predicates.

It is also worth to observe that states in progressive are more acceptable in BrP than in English. In English, expressions such as *more and more* are required in order to licence predicates like *resemble* (5), as discussed in Zucchi (1998):

- (5) a. \*John is resembling his father.
  - b. John is resembling his father more and more.

Zucchi (1998, p. 359) claims that "the addition of *more and more* can turn a non-interval predicate into an interval one". This shift from a non-interval to an interval predicate is required by the progressive in English, because it is a way to add a stage. In BrP, however, modifiers such as *more and more* are not required in equivalent environments, as shown in (6a). Moreover, while (6b) is completely acceptable in BrP, its correlate in English is completely ungrammatical (6c).

- (6) a. Pedro está parecendo (mais e mais) com o pai.

  Peter be.PRS.3sG resemble.GER (more and more) with the father

  'Peter is resembling his father (more and more)'
  - b. Depois de 20 anos casados, Pedro está amando a Maria mais que nunca. after of 20 years married, Peter be.PRS.3SG love.GER. the Mary more than never 'After 20 years of marriage, Peter is loving (loves) Mary more than ever'
  - c. After 20 years of marriage Peter #is loving/loves Mary more than ever.

The sentence in (6a) is acceptable if Peter is either looking, or acting like his father. Differently from English, the presence (or absence) of an expression such as *more and more* does not change acceptability of the sentence. The sentence in (6b) means that the intensity of Peter's love for Mary is higher now than it was 20 years ago (or even before). In both cases, we should argue that a sort of "stage" was added, which would allow the progressive in BrP.

Furthermore, we observe cases in which English does allow the progressive aspect in stative predicates, but BrP does not. Dowty (1979) observes predicates of location such as *sit*, *lie*, *stand*, among others can appear in this aspect.

- (7) a. The car is lying near the beach.
  - b. #The house is lying near the beach.
  - c. The TV sits in the living room.
  - d. #The TV is sitting in the living room.

Thus, the progressive aspect (lying) is possible if the subject is a movable and

non-permanent entity, like *the car* (7a); but it is bad with permanent one, like *the house* (7b). In this case, simple present must be used, as the opposition between (7c) and (7d) reinforces.<sup>5</sup>

In BrP, the equivalent verb *ficar* 'sit, lie, stand' also appears both in the progressive and in simple present. However, we observe that the episodic reading is not possible (8a) while the habitual one is available (8b).

- (8) a. #Meu carro está ficando perto da praia agora.

  my car be.prs.3sg lie.ger near of-the beach now

  Lit.: 'My car is lying near the beach now'
- b. Meu carro está ficando perto da praia ultimamente. my car be.prs.3sg lie.ger near of-the beach lately Lit.: 'My car is lying near the beach lately'

Finally, predicates composed by a copula and a manner adjective, such as *ser educado* 'to be polite' appear in the progressive aspect in both BrP and English.

(9) Pedro está sendo educado.<sup>6</sup>
Peter be.PRS.3SG be.GER polite
'Peter is being polite'

In both languages, a sentence such as (9) asserts that Peter is doing something which characterizes him as a polite man – he is offering a chair for an elderly person, for instance (episodic reading). This reading is available because *ser educado* 'to be polite' denotes the way someone acts, which is related to some kind of activity (PARTEE, 1977; DOWTY, 1979; ROTHSTEIN, 1999). However, in BrP, this sentence also has a habitual reading, meaning that Peter has been polite lately, unlike he used to be; such a reading describes the beginning of a habit which is not yet fully established.

The paper is organized as follows: firstly, we present the data in more detail, focusing on mental state predicates and habituals and specifying the contexts in which progressive uses are acceptable. Secondly, we present the account of homogeneity and the notion of *onset*. Finally, we present our analysis, and we conclude the paper in the following section.

### Contexts for states in the progressive

In this section, we present the contexts which allow states in the progressive in BrP,

<sup>5</sup> Sentences like (7d) are felicitous only in episodic situations. For example, if one tells the technician *The TV is sitting in the living room waiting for you to take it away and repair it.* 

<sup>6</sup> In Portuguese, there are two verbs that can be translated as 'to be': *estar*, the copula for the progressive and transitory properties, and *ser*, the copula for permanent properties. We suggest Schmitt (2005), Zagona (2010), and references therein for discussions and proposals concerning them, ignored here by reasons of space.

showing that they generally (but not always) make assertions about the beginning of a new state, and we show that in this they are like habitual predicates.

## States in the progressive

We start with mental states, such as *amar* 'to love', *gostar* 'to like', *odiar* 'to hate', *entender* 'to understand' and *saber/conhecer* 'to know'. In the progressive aspect, they are acceptable in two main contexts: first, if the situation described has just begun, and it is not completely established (10a); second, if the situation is going to change (10b).

(10) a. Pedro está amando Maria. Peter be.prs.3sg love.ger Mary

Lit.: 'Peter is loving Mary'

b. Pedro está amando a vida de casado/ o livro Peter be.prs.3sG love.GER the life of married/ the book

Lit.: 'Peter is loving his married life/ the book'

The sentence in (10a) is fine either if Peter has just fallen in love with Mary, or if Mary is his new colleague, for instance, and he is enjoying working with her. Note that *amar* in (10b) can be better translated as *enjoy*, and the sentence is felicitous if Peter either has just gotten married, or he has begun to enjoy his married life only recently. If the direct object is *the book*, it is necessarily the case that he has not finished the book yet, that is, the event of "enjoying the book" is possible because the reading goes on.

All these cases have in common the fact that the state of loving is not completely established. Therefore, one could argue that *amar* is ambiguous in BrP: either it means "love", like the equivalent state in English, or "enjoy", which could be classified as a 'mental activity'. However, we note firstly that *is enjoying* is not an appropriate translation for *está amando* in (10a); secondly, the pattern illustrated in (10) is not specific to *amar* but is a general property of mental state verbs in BrP. So, it is unlikely that all these cases would be ambiguous. We provide another example with *entender* 'understand' in (11).

(11) a. Pedro está entendendo as questões.

Peter be.PRS.3SG understand.GER the questions

Lit.: 'Peter is understanding the questions'

b. Pedro está entendendo semântica.
Peter be.PRS.3SG understand.GER Semantics

Lit.: 'Peter is understanding Semantics'

<sup>7</sup> We agree to a referee who suggested that the first interpretation (his married life has just begun) is preferred in BrP.

The sentence in (11a) is felicitous, for instance, if Peter has some questions to answer and he has already understood some of them. Thus, each single understanding event is related to a different question. The sentence in (11b) is fine, for instance, if Peter is in the middle of a Semantic course at the university and he has understood the topics already discussed on Semantics. Both cases are odd if the questions or the course has already finished, just like (10b).

As we showed above in (8), repeated here as (12a), locative stative verbs expressing a position are always related to a habitual situation, like 'ficar' in (12a). However, *morar* 'to live' is much more like the mental state verbs (12b).

(12) a. Meu carro está ficando perto da praia.

My car be.PRS.3SG lie.GER near of-the beach

Lit.: 'My car is lying near the beach'

b. Pedro está morando em Madrid/ em uma casa grande.

Peter be.prs.3sg live.ger in Madrid/ in a house big

Lit.: 'Peter is living in Madrid/ a big house'

Unlike its equivalent in English, the sentence in (12a) is infelicitous in an episodic reading; thus, it is a bad answer for a question like "where is your car (lying) now?". It can only be used to assert that a kind of situation, in (13a) that the car lying near the beach, has already occurred a few times and it is probably going to become a habit. In contrast, (12b) is fine either if Peter has recently started living in Madrid (or in a big house) or if he has been living there. However, if the state or habit is already established, and Peter has lived in Madrid for a long time, the simple present must be used (13):

(13) a. Meu carro fica perto da praia My car lies.prs.3sg near of-the beach

Lit: 'My car lies near the beach.' Colloquial: 'I park my car near the beach.'

b. Pedro mora em Madrid/ em uma casa grande. Peter lives.PRS.3s in Madrid/ in a house big

Lit.: 'Peter lives in Madrid/ a big house'

As we noted in the introduction, progressive activity verbs can trigger both episodic (14a) and habitual readings (14b).

(14) a. Pedro está fumando neste exato momento.

Peter be.PRS.3SG smoke.GER at exact moment

Lit.: 'Peter is smoking right now'

b. Pedro está fumando ultimamente. Peter be.prs.3sg smoke.GER lately

Lit.: 'Peter is smoking lately'

- c. Peter is smoking more and more recently.
- d. Peter was smoking last year, but he stopped on January 1st.

With respect to copular constructions, as noted above in (9), BrP, like English, allows the progressive aspect in predicates like *ser educado* 'to be polite' with an activity interpretation. Both *está sendo educado* and *is being polite* have the interpretation "acting in a polite manner". However there are stative copula predicates which do not appear in the progressive (or with aspectual verbs), especially predicates denoting properties, such as *ser alto/brasileiro* 'to be tall/ Brazilian' (15a), and those denoting spatial localization, such as *estar em Madrid* 'be in Madrid' (15b). The adjective *alto* can mean either "tall" or "high"; the first meaning does not appear in the progressive (15c), whereas the latter do (15d).

(15) a. #Pedro está sendo brasileiro.

Peter be.PRS.3SG be.GER Brazilian

Lit.: 'Peter is being Brazilian'

b. \*Pedro está estando em Madri.

Peter be.PRS.3SG be.GER in Madrid

Lit.: 'Peter is being in Madrid'

c. \*Pedro está sendo alto. Peter be.prs.3sG be.ger tall

Lit.: 'Peter is being tall'

d. Os lucros estão sendo altos. the profits be.PRS.3PL be.GER high

Lit.: 'Profits are being high'

The sentence in (15a) can be improved in an ironic context if it shifts to an activity interpretation and is used to assert that Peter is acting in a way typical of a Brazilian guy. The ungrammaticality of (15b) is a good example to show that the availability of states in the progressive is not to do with transitoriness: *estar em Madri* 'to be in Madrid' denotes, *per se*, a transitory situation, in which a subject *x* is in Madrid for a period of time (or even a moment). Moreover, it contrasts minimally with *morar* 'to live', which is perfectly possible in the progressive. Thus (15b) shows that transitoriness is not enough to allow the progressive. This leads us to investigate how the notion of 'onset' or beginning stage is relevant in explaining how and when the progressive form of statives is licensed.

So far we have seen, there is a clear parallelism between the interpretation of the progressive habituals and of the progressives of mental states. In both cases, the progressive is acceptable during the period in which the state/habit is getting established. Intuitively this means from the point at which the state/habit started until before the moment in which we have

enough evidence to assert securely that it is a habit.

The progressive aspect is also felicitous in contexts regarding the change of intensity (14c), and to describe the time before the habit ends (14d). Since habits are generally assumed to be a kind of state, this is not surprising. Therefore, it leads us to assume that a single explanation will account for the distribution of the progressive in both cases. However, while it is very plausible that mental state verbs and habits pattern in the same way, this leaves some of crucial questions. One is how to account for the fact that while the progressive habituals are acceptable in both English and BrP, progressive mental states are acceptable only in BrP. The second question is about what licences states (mental or habitual) in the progressive at all.

#### The notion of stages

It is widely accepted that the progressive does not apply to stative predicates because these are homogeneous down to instants (i.e., they have no stages). The progressive is generally assumed to be an operator which refers to identifiable event-parts. Landman (1992) argues for the *part-of* notion related the event stages: an event e' is a stage-of event e if e' and e have the same initial point; if the running time of e' is a subinterval of the running time of e; and e' develops into e.

Look at the sentences in (16), where (16a) involves the progressive of an activity verb, while (16b) involves the progressive of an accomplishment verb:

(16) a. John is running

b. John is building a house.

The sentence in (16a) asserts that a stage of an event in the denotation of JOHN RUN is taking place, while (16b) asserts that a stage of an event in the denotation of JOHN-BUILD-A-HOUSE is taking place. An important difference, however, is that a stage of running also counts as an event of running, whereas a stage building a house is not necessarily an event of building a house. In other words, the sentence in (16a) entails *John has run*, while (16b) does not entail *John has built a house*. This is well known as imperfective paradox.

It has generally been assumed that states are unacceptable in the progressive, exactly because they lack stages. See the examples in (17a-b) show.

(17) a. #Mary is being in Amsterdam

b. #John is loving Mary (repeated from 2b above).

Rothstein (2004) argues that this is because states are homogeneous down to instants, and therefore individuable stages cannot be identified. Landman (2008) takes the same approach, making it part of the semantics of the progressive operator that it applies only to events with stages. While this is a plausible explanation for (17), it does not explain either the fact that

habits are acceptable in the progressive or that mental stative predicates also appear in this aspect in BrP. Thus, one could hypothesize that either the progressive aspect is different in BrP (not applying only for stages, for instance) or that there is some sort of stages in states.

In this paper, we will pursue the second hypothesis, since the facts we have seen imply that states do not have 'normal' stages in the same way that activities and accomplishments do. Intuitively, the progressive in mental states and habitual predicates do have recognizable stages. Most obviously, they have initial stages, where they are not securely established, and they have stages which vary with respect to intensity. In the section about homogeneity and stages, we will discuss the theory of homogeneity by Landman (2008), Landman and Rothstein (2010, 2012a,b), which allows us to explain the data we have presented. But before we do this, we briefly discuss another relevant issue, namely that progressive statives cannot be identified with progressives of any other Vendlerian class (VENDLER, 1957; 1967).

An obvious question is whether states in the progressive have just shifted to the type of activities, accomplishments or achievements, since all these classes appear in the progressive. In fact, Partee (1977) argues that *be polite* is felicitous in the progressive, as illustrated in (9) above, because *be* has an agentive interpretation and *be polite* should be an activity predicate. However, while this does explain the progressive in (9), it does not explain the felicity of many other cases discussed here. We will show now that these progressive states behave differently from these other classes and bring further evidence that they pattern with habits.

We begin by asking whether mental states in the progressive are like achievements in the progressive. The answer is "no", because achievements in the progressive are related to preparatory stages (SMITH, 1991; ROTHSTEIN, 2004). If (18a) is true, then it must be the case that Peter is not yet at home, but that he is *about* to arrive there. This means that the progressive allows us to take an extended perspective and look at stages occurring before the change of state denoted by the achievement itself. This reading is not available in sentences with states in the progressive (18b) or in sentences describing habits (18c).

(18) a. Peter is arriving home.

b. Pedro está amando Maria. Peter be.prs.3sg love.ger Mary

Lit.: 'Peter is loving Mary'

c. Pedro está fumando ultimamente. Peter be.prs.3sg smoke.ger lately

Lit.: 'Peter is smoking lately'

Observe that (18a) asserts that Peter is arriving home but entails that he has not arrived home. In (18b), it is not the case that Peter is *about* to love Mary. He is probably in love with her, but that is the initial stage of his love (as a state) for her. Moreover, (18b) does not entail

*Pedro não ama Maria* "Pedro doesn't love Maria". The same observations apply to (18c): it is not the case that Peter is *about* to smoke (he indeed has started smoking), but that he is in the beginning of a habit. Thus, even if we assert (18c) because we do not feel comfortable about asserting the habit with the simple present *Pedro fuma* "Pedro smokes", the sentence (18c) does not entail *Pedro não fuma* "Pedro doesn't smoke". This is in sharp contrast to the progressive of the achievement in (18a), which avoid us to assume that stative and habitual predicates in the progressive denote preparatory stages, as we find in achievements. <sup>8</sup>

The second point is whether states behave like activities or accomplishments in the progressive. Here, the answer is again "no", since both activities and accomplishments in the progressive denote an ongoing situation. In the case of activities (19a), the ongoing situation can be indefinitely extended; in the case of accomplishments (19b), the ongoing situation leads to a change of state or culmination point.

- (19) a. Peter is running.
  - b. Peter is writing a book.

These sentences can be uttered felicitously at different moments during the running event or the writing a book event. At any point during a running event e, there is a stage of a running event going on, and at every point from the beginning until the last moment of a book-writing event by Peter (when there is a finished book), it is true that there is an event going on which is a stage of a Peter-write-a-book event. However, as pointed out before, sentences with habits and states are not felicitously uttered at any moment, but usually at the beginning of the situation. After the state/habit has been securely established, the simple present is naturally used to describe the situation rather than the progressive. So, it is not the case that stative and habitual predicates behave like activities or accomplishments in the progressive.

These restrictions discussed about the statives predicates in the progressive aspect lead us to the notion of homogeneity, which will be detailed in the next section.

#### Segmental Homogeneity, Incremental Homogeneity and Event Stages

The central problem can be summed up as follows. On the one hand the progressive aspect requires event stages. On the other, states (including habits) are homogeneous down to instants (i.e. they should have no stages). Then, we do not expect them in the progressive. However,

<sup>8</sup> One could ask whether "Pedro has not loved Maria (yet)" shouldn't be a better comparison to (18a), since in that case we will guarantee a parallelism between these constructions. However, this sentence (in the present perfect) is not completely acceptable in English, because "love" is a stative predicate in this language; then, we decided to the simple present ("Pedro doesn't love Maria"). The same holds to (18c), in which we use the simple present. See that in (18c), the entailment sentence in the present perfect ("Peter has not smoked (yet)") must be avoided, since if (18c) is true, is also true that Peter has smoked (at least once in his life). Then, only the habitual meaning lacks in (18c). We thank a referee of this journal who asked us to clarify these points.

mental states and habits are acceptable in the progressive in BrP, as we have seen. So, we need a theory of event structure which can explain how states can be homogeneous down to instants and yet have enough stage-structure in order to account for this apparently contradiction.

In this paper, we propose that *incremental homogeneity* (LANDMAN; ROTHSTEIN, 2010; 2012a,b) and *onset* (LANDMAN, 2008) can account for the cases of states in the progressive.

Landman and Rothstein (2010; 2012a,b) explain the constraints related to aspectual *for*-phrases in English. They observe that predicates denoting states (20a), activities (20b), and habits (20c) can be modified by these phrases.

- (20) a. Peter lived in Madrid for 20 years.
  - b. Peter *ran* for one hour.
  - c. Peter smoked for 20 years.

The basic assumption is that aspectual *for*-phrases modify only homogeneous predicates, an unproblematic fact for states, because they are assumed to have the subinterval property, i.e., they are totally homogeneous down instants (TAYLOR, 1977; DOWTY, 1979; ROTHSTEIN, 2004 among others). This means that if Peter is tall or lived in Madrid or loved Mary at interval *i*, it is true that he is tall, lived in Madrid and loved Mary at every instant during *i*. An instant is long enough to verify whether the state holds. Habits are also explained in these terms, because they denote states generalized over patterns of events. If there are enough episodic events of Peter smoking, then we are entitled to generalise this to the statement that Peter habitually smokes. A habit, like a state, is homogeneous down to instants, because a habit is a disposition (QUINE, 1960; DOWTY, 1979). Therefore, if Peter has the disposition or habit of smoking during interval *i*, then he has it at all instants during that interval, even if it is not instantiated by an episodic smoking event at every instant of *i*.

Landman (2008) and Landman and Rothstein (2010; 2012a,b) discuss the problem of the homogeneity of activities. They explain that they can also be modified by temporal *for*-phrases, which means they are homogeneous too. However, there are differences in homogeneity of states and activities.

Activities do not hold at instants, in the sense that it takes more than an instant to "contain" an activity event. As we already saw, if Peter is tall, or lives in Amsterdam or loves Mary at an interval *i*, then this property holds of him at every instant during the interval *i*, because crucially stative predicates are not dynamic and do not take time. Thus, each instant during *i* can be said to host an instantiation of the relevant state, albeit a short one. However, if Peter waltzed or swam during interval *i*, the instants during *i* do not host an instantiation of a waltzing or swimming event, since the smallest waltzing event or swimming event takes place over time, and can therefore only be hosted by an interval.

Dowty (1979) discusses this in detail with respect to waltzing. Consider that each minimal waltzing step is composed by three synchronized steps. If someone is learning waltz, but s/he has performed only one or two steps and stopped for any reason, we can't say that s/he has waltzed. On the other hand, if s/he manages to perform the three required steps, we can say: "Congratulations! You have now waltzed!". Since an instance of waltzing must include at least three steps, an event like *waltz* cannot hold at an instant, but at an interval.

The fact that activities do not hold at instants but at minimal intervals triggers another property: they take time to get established. This means that the entailment from progressive to perfect discussed in (16) does not hold during the first initial stage of an activity event. In the first initial stage of a waltzing event, *Peter is waltzing* does not entail *Peter has waltzed*, however, once the event has 'become established' and the first minimal stage is completed, the entailment holds (DOWTY 1979).

Landman (1992, 2008) points out another difference between activities and states: activities, but not states allow for pauses. Thus, I can truly assert *I worked all day*, using an activity predicate, even if I took a short pause to eat a sandwich. On the other hand, I cannot truly assert *I was at home all day*, using an activity. The activity predicate *work* allows for a pause, while the stative predicate *be at home* does not (LANDMAN, 2008.) Thus, activities are homogeneous in some sense, but they are not as "dense" as stative predicates.

Landman (2008) and Landman and Rothstein (2010, 2012a,b) pursue the hypothesis that states and activities are homogeneous, but in different ways. Landman and Rothstein claim that "in both cases homogeneity means a *spread* of relevant properties over subintervals, but the spread is static for states and dynamic for events, meaning that it takes the arrow of time into account" (LANDMAN; ROTHSTEIN, 2012a, p. 86). They distinguish between *segmental homogeneity* and *incremental homogeneity*, considering stative predicates as segmentally homogeneous and activity predicates as incrementally homogeneous, as originally proposed in Landman (2008). Predicates which are segmentally homogeneous are homogeneous because, if P holds at an interval *i* there is a P-eventuality going on at every temporal segment of *i* down to instants. Segmentally homogeneous predicates thus have the subinterval property, the property of being true at any instant which is part of the running time of an event (TAYLOR, 1977; DOWTY, 1979). Thus, they denote eventualities which don't have gaps, or pauses. And since every instant is identical to every other instant with respect to what is going on, they do not have distinguishable stages either. Consequently, segmentally homogeneous predicates are odd in the progressive.

In Landman and Rothstein (2012a) *incremental homogeneity* is related to all temporal segments of an eventuality but at incrementally growing temporal parts which share an initial starting point. For instance, *waltz* is a (incrementally) homogeneous predicate because every incremental extension of *e* hosts an event of waltzing. The incremental definition of homogeneity

allows us to recognise the fact that different things are going on at different points during e but that in some very real sense e is a single waltz-event. In this same example, the initial starting point is called *onset*: it is a part of e ( $e_l$ , for instance); it starts with e; and it guarantees that the activity e has happened.

From this proposal, it follows that accomplishments have onset as well, because accomplishments are complex predicates with an activity event denoted by V. Landman and Rothstein (2012a) show that accomplishments are incrementally homogeneous with respect to the bare V, but not with respect to the VP predicate. Thus after the onset, all stages of an event of eating an apple are incremental extensions of a minimal event of eating, but only the complete event is an event in the set EAT-AN-APPLE. Achievements have no onset, because they denote instantaneous change of state. Since this change is instantaneous, no stages can be distinguished. Since states have no distinguishable parts, Landman and Rothstein argue that they do not have stages, and thus no onsets.

The distribution of the progressive fits neatly into this account. Firstly, activities and accomplishments have stages, since activities are incrementally homogeneous while accomplishments are incrementally homogeneous with respect to their V head. Even the imperfective paradox, illustrated in (16) follows from this property: the VP *run* is incrementally homogeneous, and thus after the onset, *Peter is running* will always entail the perfect *Peter has run*. However, the accomplishment VP *build a house* is not incrementally homogeneous. The onset of the event is determined by the activity head *build* and thus after the onset of the event *John is building a house*.

Secondly, achievements will not appear in the progressive unless incremental preparatory stages are added. Finally, states are predicted not to be good in the progressive, because they are segmentally homogeneous and thus do not have stages at all.

This brings up back to our original question. If states are segmentally homogeneous and thus unacceptable in the progressive in English, why are they felicitous under certain circumstances in BrP? Further, if habits are stative, why are progressive habituals felicitous in both English and BrP? In the next section, we present some possible answers to these questions.

## The analysis

#### **Habits**

We showed earlier that progressive habituals are acceptable under certain conditions. The example in (21a) describes a habit in its beginning stages, which allows time phrases like *ultimamente* "lately", but not others like *faz muito tempo* "for a long time" (21d). Thus (21a) triggers (21b), but not (21c).

(21) a. Pedro está fumando (ultimamente).

Peter be.PRS.3SG smoke.GER (lately)

Lit.: 'Peter is smoking lately'

b. Pedro começou a fumar (ano passado/ #ontem).

Peter begin.PST.PRF.3SG PREP smoke.INF (last year/#yesterday)

Lit.: 'Peter began to smoke'

c. Pedro fuma (faz muito tempo).

Peter smoke.PRS.3sG (does much time)

Lit.: 'Peter smokes (for a long time)'

d. Pedro está fumando (#faz muito tempo).

Peter be.PRS.3SG smoke.GER (does much time)

Lit.: 'Peter is smoking (#for a long time)'

Similar interpretations can be addressed to English: the sentence in (22a) entails (22b). We underline that the habitual reading of the progressive in (22a) is licensed by "yet", which adds a sort of stage to the situation.

(22) a. Is Peter smoking yet?

b. Peter smoked.

We argue that the progressive describes the "onset" of a habit in both languages. Assume that Peter has recently begun to smoke. Habits take time to get fully established, which requires the addiction of several singular events of smoking. At the beginning of the habit, it is easy to stop, to change, to break it. We can think of this period as analogous to the onset of an activity. As discussed above, a waltzing event requires at least three steps to guarantee that one waltzed, i.e., that the onset took place. Similarly, we consider that singular events of smoking are like "waltzing steps". Then, the "onset" of a smoking habit requires a set of singular smoking events (iterations). After them, one can surely say: "Peter smokes". The difference is about the period: activities can start (get onset) in seconds; habits can't.

Note however that onsets of habits are often identifiable retrospectively, i.e., after a set of iterations, because it is not clear at the first episodic instantiation that a habit is about to start. Thus, *last year* suits the sentence in (21b), rather than *yesterday*. Therefore, the progressive aspect is appropriate in the onset of habits in BrP and English.

Likewise, if we can postulate an onset to habits, we can also say they have stages, which can explain why they naturally appear in the progressive in sentences like (23).

(23) a. Pedro está fumando (mais que antes).

Peter be.PRS.3SG smoke.GER (more than before)

Lit.: 'Peter is smoking (more than before)'

b. Peter is smoking #(more than he used to).

The change in intensity licences the progressive in these cases. Intuitively, expressions like *mais que antes/ more than he used to* allow us to pick out different stages of the habit of smoking. Similarly, to onset, stages (before and after the change) are related to a period in time, which means a set of iterations.

Thus, we can distinguish between an onset stage and stages related to a change in intensity. We present another examples in which both English (24a) and BrP(24b) allow progressives in the habitual reading:

(24) a. Peter is still smoking.

b. Pedro ainda está fumandoPeter still be.PRS.3SG smoke.GER'Peter is still smoking'.

We assume that  $still\ P$  presupposes that a P- eventuality occurred in the past and asserts that the same eventuality continued beyond some contextually relevant point p until the reference time. The semantics of still allows the speaker to identify individuable stages of the P- event (the stage before the contextually relevant point p, and the extended stage from this same point at the reference time). Thus, the progressive is licensed.

We conclude this section with a difference in these languages. Unlike English (25b), Brazilian Portuguese (25a) does not require explicit lexical material to trigger the analysis into stage structure.

(25) a. Peter is resembling his father #(more and more) these days.

b. Pedro está se parecendo com o pai (mais e mais).

Peter be.PRS.3SG REFL. resemble.GER with the father (more and more)

Lit.: 'Peter is resembling his father (more and more)'

We note that the same analysis hold with respect to state predicates like *resemble*. Zucchi (1998) showed that *more and more* licences the progressive with *resemble* as in (25a). Thus, the hashtag (#) indicates the infelicity of the sentence if the comparative adverb is not explicit. In our proposal, this kind of adverbials triggers the division of the state into stages identified by changes in intensity. In contrast, BrP allows the progressive without an explicit comparative adverb, allowing context to trigger the analysis of the *resemble*-state into stages, (25b). In our analysis, the absence of *mais e mais* (*more and more*) lead us to interpret the sentence as the onset of a resembling state. The presence of it has the very same interpretation addressed to English.

#### Simple stative predicates

The differences that we just identified between progressive habituals in English and BrP

show up again when we examine simple stative predicates. Initially, the two languages seem to be parallel, and stative predicates, such as *saber* 'to know', *estar em Madrid* 'to be in Madrid', *ser alto/brasileiro* 'to be tall/Brazilian', are infelicitous in the progressive (26a-h).

(26) a. #Pedro está sabendo inglês.

Peter be.PRS.3sG know.GER English

Lit.: 'Peter is knowing English'

b. \*Pedro está estando em Madri.

Peter be.prs.3sg be.ger in Madrid

Lit.: 'Peter is being in Madrid'

c. \*Pedro está sendo alto.

Peter be.PRS.3SG be.GER tall

Lit.: 'Peter is being tall'

d. #Pedro está sendo brasileiro. Peter be.prs.3sg be.ger Brazilian

Lit.: 'Peter is being Brazilian'

e. #Peter is knowing English

f. #Peter is being in Madrid.

g. #Peter is being tall.

h. #Peter is being Brazilian.

If Peter knows English, or he is in Madrid or tall or Brazilian, these situations hold at the minimal instants during these states, and stages are not identifiable. However, observe the contrast between the felicity of (27a), in BrP, and the infelicity of (27b), in English, with the adjective *alto* 'high'.

(27) a. Os lucros estão sendo altos. the profits be.PRS.3PL be.GER high

Lit.: 'Profits are being high'

b. #Profits are being high.

In (27a), the acceptability of progressive in *ser alto* 'be high' is related to our previous explanation to habits: either it indicates the beginning of the profits, or it indicates fluctuations in the height or value of profits, equivalent to changes in intensity in the practicing of habits. Conversely, the contrast between (27a) and (27b) shows that while *ser alto* behaves as a habit, *be high* does not. Thus, while context allows imposing a stage structure on the state *ser alto*, contextual triggers are not enough in English. In English, the stage structure which we posited

for habits uses a grammatically accessible set of episodic activity events and not just contextual information about the world, and apparently in the absence of the grammatical structure, the progressive is unacceptable.

Turning our attention to mental state verbs, the contrast discussed above gives us a clue as to why these predicates are acceptable in the progressive in BrP and not in English. Among mental state predicates we include verbs such as *amar*, 'to love', *gostar* 'to like', *odiar* 'to hate', *entender* 'to understand' and *conhecer* 'to know'. As we have seen, these predicates are segmentally homogeneous, but can occur in the progressive.

In BrP, we assume that these mental state stative predicates pattern with habitual predicates: when they appear in the progressive one can identify individual stages of the state. They can be related to either the initial stage (onset) of a habit or a change in it. Thus, the progressive of *amar* 'to love' describes the onset of a mental state in BrP. The contrast between the two sentences in (28) shows that the progressive can only refer to short initial stages of a mental state.

(28) a. Pedro está amando Maria (faz pouco tempo).

Peter be.PRS.3SG love.GER Mary (does little time)

Lit.: 'Peter is loving Mary since short time ago'

b. #Pedro está amando Maria faz muitos/ cinco anos.

Peter be.PRS.3SG love.GER Mary does many/ five years

Lit.: 'Peter is loving Mary since many/five years ago'

The sentence in (28a) is acceptable because describes the beginning of the loving state; on the other hand, the sentence in (28b) is infelicitous because the progressive of a mental state is incompatible to temporal expressions such as *muitos anos* 'many years' or *cinco anos* 'five years'. The progressive aspect also refers to stages (changes in the intensity) of a mental state (29).

(29) Pedro está amando Maria mais do que amava 20 anos atrás.

Peter be.PRS.3SG love.GER Mary more than that loved 20 years ago

Lit.: 'Peter is loving Mary more than he loved her 20 years ago'

Other mental states also appear in the progressive. Observe these examples with *entender* 'to understand' (30a), and *conhecer* 'to know' in (30b).

(30) a. Pedro está entendendo semântica ultimamente/ #faz muitos anos.

Peter be.PRS.3SG understand.GER Semantics lately / does many years

Lit.: 'Peter is understanding Semantics lately/#since many years ago'

b. Pedro está conhecendo/amando Maria aos poucos/ #faz muito tempo.

Peter be.PRS.3SG know.GER /love. GER Mary by bits / does much time

Lit.: 'Peter is knowing/loving Mary gradually/#since much time ago'

The sentence in (30a) is fine if Peter is in the middle of a Semantic course and he has understood the topics already discussed. Thus, the expression *ultimamente* 'lately' suits perfectly, because it reinforces that Peter has recently begun to understand Semantics. On the other hand, the expression *muitos anos* 'many years' makes the sentence infelicitous because it implies that Peter already understands semantics in a stable way, in which case the meaning is not distinguishable from the simple present (a habit). The same approach can be addressed to (30b). Consider that Peter is getting some pieces of evidence about who Mary really is. In this case, the sentence is felicitous with a gradual expression such as *aos poucos* 'gradually', which reinforces such an incremental/progressive meaning. Consequently, *muito tempo* 'much time' is a bad complement, because it implies that Peter knows Mary very well.

Note that both mental states and habits require that the onset is identifiable retrospectively. Felicity conditions on the use of the aspectual verb *começar* 'to begin' show this.

(31) a. Pedro começou a amar Maria.

Peter begin.PST.PRF.3SG PREP love.INF Mary

Lit.: 'Peter began to love Mary'

b. #Pedro começou a amar Maria ontem/ semana passada.

Peter begin.pst.prf.3sg prep love.inf Mary yesterday/ week last

Lit.: 'Peter began to love Mary yesterday/ last week'

c. Pedro começou a amar Maria quando a conheceu.

Peter begin.PST.PRF.3SG PREP love.INF Mary when her met

Lit.: 'Peter began to love Mary when he met her for the first time'

The sentence in (31a) is felicitous in a retrospective context like (31c), preferable far from the utterance time. On the other hand, a reference to an initial point near to the speech time makes the sentence odd (31b). We consider that states like *amar* take time to get established (as habits do). Then, since the onset is gradual/incremental in this case, we recognise it only retrospectively.

Again, we support our observation by bringing examples with other mental state predicates in BrP. Observe that the onset of events denoted by predicates such as *entender* 'to understand', and *conhecer* 'to know' can naturally be identifiable by means of the periphrasis *começar* a + VP in BrP (BERTUCCI, 2011).

- (32) a. Pedro começou a entender semântica ano passado/#ontem.

  Peter begin.PST.PRF.3SG PREP understand.INF Semantics year last / yesterday
- Lit.: 'Peter began to understands Semantics last year/#ontem'
  - b. Pedro começou a conhecer a Maria ano passado/#ontem.

    Peter begin.pst.prf.3sg prep know.inf the Mary last year/ yesterday

Lit.: 'Peter began to know Mary last year/#yesterday'

These examples parallel those in (31): since the onset of an understanding or knowing event is gradual it is more appropriate to indicate it by a temporal expression such as *ano passado* 'last year', rather than *ontem* 'yesterday'.

#### **Discussion**

Given this data, we must ask why progressives of mental states are allowed in BrP and not in English. We suggest the following explanation. While the stage structure of habits is derived from the spread of episodic events which witness the habit, there is no such set of privileged witness events available for mental state predicates, and the stage structure is derived instead from what we know to be the case about variations in stability and intensity which normally accompany mental states. This information is partly lexical (to do with our knowledge of what loving, hating and understanding are) and partly contextual (to do with how particular states of loving, hating and understanding develop in particular situations). This is apparently the difference between BrP and English.

Brazilian Portuguese allows the stage structure to be imposed on a stative predicate on the basis of grammatical information recoverable through 'undoing' a grammatical operation, in particular the spread and properties of the episodic events over which habits generalize, and it also allow the creation of stage structure on the basis of lexical and contextual information, as in the case of mental state verbs – and also examples like (27a). Thus, in all these cases, the progressive is licensed. In contrast, English allows an imposition of stage structure on a segmentally homogeneous predicate only based on information recoverable from semantic operations, and where the recoverability is triggered by grammatical operators such as *more and more*. Thus, it does not allow a stage structure.

An additional argument about the notion of stages comes from the felicity of other aspectual verb: *parar* 'to stop'. It is typically used with verbs denoting eventualities with stages, such as activities and accomplishments (BERTUCCI *et al.*, 2010; BERTUCCI, 2011). Thus, we get the contrasts in (33), where *parar* is completely acceptable with an activity (33a) and an accomplishment (33b), but infelicitous with a stative.

(33) a. Pedro parou de correr.

Peter stop.pst.prf.3sg prep run.inf

Lit.: 'Peter stopped running.'

b. Pedro parou de construir uma casa
Peter stop.PST.PRF.3SG PREP build.INF a house.

Lit.: 'Peter stopped building a house.'

c. #Pedro parou de saber inglês.

Peter stop.PST.PRF.3SG PREP knowl.INF English

Lit.: 'Peter stopped knowing English.'

Bertucci (2011) pointed out that in some cases, stative can appear as the complement of *parar*; but did not give an explanation. We are now able to provide it. As we have seen in this paper, habituals are generalizations over instances or iterations, and can also be analyzed as involving stages. Predictably, they can also naturally appear as complements of *parar* as in (34):

(34) Pedro parou de fumar.

Peter stop.pst.prf.3sg prep smoke.inf

Lit.: 'Peter stopped smoking'

Considering our proposal, if a stative predicate denotes a habitual or set of iterations, it has stages and consequently it can appear as a complement of *parar*. The examples in (35) support this.

(35) a. Pedro parou de ser educado.

Peter stop.PST.PRF.3SG PREP be.INF polite

Lit.: 'Peter stopped being polite'

b. Pedro parou de amar as ideias da Maria.

Peter stop.PST.PRF.3SG PREP love.INF the ideas of-the Mary

Lit.: 'Peter stopped loving Mary's ideas'

In (35a), ser educado is a stative denoting a set of iterations (actions of being polite) and in (35b) these iterations could be identified as Mary's ideas. Thus, the iterative structure of the habituals licences both the progressive and parar. Certainly, the direct object plays a fundamental role in the licensing, since the plural implies iterations (ROTHSTEIN, 2004).

As we presented, mental state predicates have limited stage structure, and thus the progressive is allowed in some circumstances. We can identify onsets and changes in intensity, but we cannot assign a full iterative structure to them. Predictably, co-occurrence with *parar* is not as good as with habituals, but better than with statives which do not allow the progressive, such as *saber inglês* as in (33c). This is shown in (36a-b).

(36) a. ?Pedro parou de amar Maria.

Peter stop.pst.prf.3sg prep love.inf Mary

Lit.: 'Peter stopped loving Mary'

b. ?Pedro parou de entender semântica.

Peter stop.PST.PRF.3SG PREP understand.INF Semantics

Lit.: 'Peter stopped understanding Semantics'

c. Pedro parou de entender as questões.

Peter stop.PST.PRF.3SG PREP understand.INF the questions

Lit.: 'Peter stopped understanding the questions'

The contrast between (36a,b) and (36c) can be explained by the singular/plural distinction, because plural direct objects introduce the possibility of iterations, and consequently a stage structure. This should make  $parar\ de + a$  stative verb acceptable.

Finally, verbs denoting simple states are predictably unacceptable in sentences with *parar*.

(37) a. \*Pedro parou de ser alto.

Peter stop.PST.PRF.3SG PREP be.INF tall

Lit.: 'Peter stopped being tall'

b.#Pedro parou de ser brasileiro.

Peter stop.pst.prf.3sg prep be.inf Brazilian

Lit.: 'Peter stopped being Brazilian'

c.\*Pedro parou de estar em Madrid.

Peter stop.pst.prf.3sg prep be.inf in Madrid

Lit.: 'Peter stopped being in Madrid'

These verbs seem to avoid both iterations and a stage structure based in change of intensity, for instance. Thus, they are unacceptable with an aspectual verb.

#### **Conclusions**

In this paper, we discussed the interaction between the progressive aspect and stative predicates, by comparing some occurrences in BrP and in English. We proposed that the progressive applies to a predicate denoting sets of events which have stages in the sense of Landman (1992, 2008). However, when a stage structure can be imposed on the events denoted by the stative, the progressive is possible.

From this paper, one can imply that states are a heterogeneous class in BrP, and that stative predicates can have a stage structure in one of several ways. If a predicate is habitual, then the stage structure is derived from the iteration of events which witness the habit. Predicates such

as ser educando 'be polite' can occur in the progressive in an episodic reading because they have an activity-like interpretation (acting in a polite way). Mental statives can also occur in the progressive. In this case, it implies the existence of a stage of the state characterised as an onset, or a change of intensity, or an extension beyond a given reference point. We characterised stage structure in terms of incremental homogeneity in the sense of Landman (2008), Landman and Rothstein (2010, 2012a,b) and showed how a state could be segmentally homogeneous from one perspective and simultaneously incrementally homogeneous from a different perspective. This is especially true for habits, which are segmentally homogeneous, in the sense it is true at minimal subintervals, but incrementally homogeneous as from the perspective of the iterations of events which witness the habit. We showed further that aspectual verbs, in particular começar, 'to begin', and parar 'to stop', are sensitive to stage structure in the same way that the progressive is. We thus also answered a question left open in Bertucci (2011), who noted that some states can occur with parar, but did not explain why. Crucially, we showed that mental states such as amar 'to love' can appear in the progressive in BrP and not in English, thus showing that the imposition of a stage structure on these mental states is a genuine grammatical operation available in some languages and not in others, and not a pragmatic phenomenon operation which one would expect to be available crosslinguistically.

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#### References

BERTUCCI, R. *Uma análise semântica para verbos aspectuais em português brasileiro* [A semantic analysis on aspectual verbs in Brazilian Portuguese]. São Paulo: Universidade de São Paulo, 2011. Tese. (Doutorado em Semiótica e Linguística Geral). Programa de Pós-Graduação em Linguística. Departamento de Linguística, USP, 2011.

BERTUCCI, R.; LUNGUINHO, M. V.; PARAGUASSU, N. Bare plurals and achievements verbs: a case study of aspectual verbs. *Journal of Portuguese Linguistics*. v. 9, n. 1, p. 117-137, 2010.

DOWTY, D. Word Meaning and Montague Grammar. Dordrecht: Kluwer, 1979.

LANDMAN, F. The progressive. *Natural Language Semantics* n. 1, p. 1-32, 1992.

LANDMAN, F. 1066: differences between tense-perspective-aspect systems of English and Dutch' In: ROTHSTEIN, S. (ed.). *Theoretical and Crosslinguistic Approaches to the Semantics* 

of Aspect. Amsterdam/Philadelphia: John Benjamins, 2008, p. 107-166.

LANDMAN, F.; ROTHSTEIN, S. Incremental homogeneity in the semantics of aspectual for-phrases. In: RAPPAPORT HOVAV, M; DORON, E.; SICHEL, I. (eds.), *Syntax, Lexical Semantics and Event Structure*. Amsterdam: Benjamins, 2010, p. 229-251.

LANDMAN, F.; ROTHSTEIN, S. The felicity of aspectual *for*-phrases – part 1: homogeneity. *Language and Linguistics Compass* n. 6, v. 2, p. 85-96, 2012a.

LANDMAN, F.; ROTHSTEIN, S. The felicity of aspectual *for*-phrases – part 2: incremental homogeneity. *Language and Linguistics Compass* n. 6, v. 2, p. 97-112, 2012b.

PARTEE, B. John is easy to please. In ZAMPOLLI, A. (ed.). *Linguistic Structures Processing*. Amsterdam: North-Holland, 1977, p. 281-312.

QUINE, W. V. O. Word and Object, The MIT Press, Cambridge, MA, 1960.

ROTHSTEIN, S. Fine-grained structure in the eventuality domain: the semantics of predicative adjective phrases and *be. Natural Language Semantics*, n. 7, p. 347-420, 1999.

ROTHSTEIN, S. Structuring events. Oxford: Blackwell, 2004.

SMITH, C. The Parameter of Aspect. Kluwer Academic Press, 1991.

SCHMITT, C. Semi-copulas – event and aspectual composition. In: KEMPCHINSKY, P.;

SLABAKOVA, R. (eds.). Aspectual Inquiries. Springer, 2005, p. 121-145.

TAYLOR, B. Tense and Continuity. *Linguistics and Philosophy*, n. 1, v. 2, p. 199-200, 1977.

VENDLER, Z. Verbs and times. *Philosophical Review*, n. 56, p. 143-160, 1957.

VENDLER, Z. Linguistics in Philosophy. Ithaca: Cornell University Press, 1967.

ZAGONA, K. Ser and estar: phrase structure and aspect. In: NISHIDA, C.; RUSSI, C. (eds.), *Selected Proceedings of Chronos 8.* Cahiers Chronos, Amsterdam: Rodopi, p. 303-327, 2010.

ZUCCHI, S. Aspect shift. In: ROTHSTEIN, S. *Events and Grammar*. Dordrecht: Kluwer, 1998, p. 349-370.