EU ACABEI DE ESCREVER O ARTIGO (I HAVE JUST WRITTEN THE PAPER/I FINISHED WRITING THE PAPER) – A STUDY OF AMBIGUITY IN SENTENCES WITH THE VERB ACABAR

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- ABSTRACT: Sentences including the verb *acabar* followed by an infinitive clause headed by the preposition *de* have two readings: one, which I will call culminative reading, points out to the smallest final sub-event of an event denoted by the verb of the infinitive clause; the other, which I will call recency reading, places the time of the event of the infinitive clause immediately before another time taken as reference. In this paper, I propose that the two readings involve structures and interpretations of the verb *acabar* radically different. This work, assuming the theoretical framework of Distributed Morphology, shows evidences that:

 (1) in culminative reading, we typically have control, while in the recency reading, raising;

 (2) the infinitive sentences in the recency reading convey temporal/aspectual information not conveyed by the infinitives in culminative reading; (3) while in culminative reading the verb *acabar* introduces a sub-event of the event denoted by the infinitive sentence, in the recency reading the verb only conveys a set of temporal relations.
- KEYWORDS: Raising. Control. Culmination. Recency. Argument structure.

Introduction

In Brazilian Portuguese (henceforth BP) there are two possible readings for the sentence (1) below: one in which the event denoted by the infinitive clause culminates or reaches a natural or contextually defined endpoint – let us call it *culminative* reading; and the other in which the event described by the infinitive clause culminates or has a subdivision about which the speaker of (1) is talking, and its ending occurs a little earlier (in a time scale relative to the situation and to the event type) than a time reference (in this case, the time of utterance) – let us call it *recency* reading.¹

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The recency interpretation typically involves a stress or emphasis on the verb *acabar*.

(1) Pedro acab-ou de pinta-r o muro.

Pedro finish-IND.PST.3SG of paint.INF the wall

"Pedro finished painting the wall" (culminative reading)

"Pedro has just painted the wall" (recency reading)

From a syntactic point of view, aspectual verbs such as *acabar* generally behave like raising verbs. However, there is an asymmetry between the two readings we are discussing here regarding this syntactic quality:

(2) Recency reading:

- a. Eu acab-ei de escreve-r o artigo. I finish-IND.PST.1SG of write-INF the.M paper "I've just written the paper"
 - O artigo acab-ou de cai-r da escrivaninha. the.M paper finish-IND.PST.3SG of fall-INF from.the.F desk "The paper has just fallen from the desk"
- b. O artigo acab-ou de ser escrito por mim. the.M paper finish-PST.3SG of be.INF written by me "The paper has just been written by me."
- c. A cobra acab-ou de fuma-r.
 the.F snake finish-PST.3SG of smoke-INF
 "Things have just gone pretty bad"
 A vaca acab-ou de ir para o brejo.
 the.F cow finish-PST.3SG of go.INF to the.M swamp
 "Things have just gotten wrong"
- d. *Foi (de) escreve-r o artigo que eu acab-ei. be.PST.3SG (of) write-INF the.M paper that I finish-PST.1SG "It was writing the paper that I've just done".

In (a) what determines the interpretation of the subject (its semantic function or thematic role in the sentence) is not the predicate headed by the verb *acabar*, but the embedded predicate, since the two subjects (*eu* and *o artigo*) have different roles depending on the infinitive verb. In (b) we see that the passive voice of the embedded clause is just perfect. In (c) we can see that the presence of the verb *acabar* does not suppress the subject's idiomatic meaning. The sentence (d) shows that it is not possible to cleave the non-finite clause complement of the verb *acabar*. All these empirical evidences support analyses for which the subject of the sentence is generated within the embedded infinitive clause and raised to become the subject of the matrix clause (DAVIES; DUBINSKY, 2004; LANDAU, 2013) – that is, in the recency reading, *acabar* is a **raising verb**.

In the case of culminative reading, however, such properties are simply not preserved:

(3) Culminative reading:

- a. Eu acab-ei de escreve-r o artigo
 I finish-PST.1SG of write-INF the.M paper
 "I finished writing the paper"
 ?O bolo acab-ou de cresce-r
 the.M cake finish-PST.3SG of grow-INF
 "The cake finished growing"
- b. ?*O artigo acab-ou de ser escrito por mim. the.M paper finish-PST.3SG of be.INF written by me "I finished writing the paper".
- c. #A cobra acab-ou de fuma-r.
 the.F snake finish-PST.3SG of smoke-INF
 "The snake finished smoking"

 #A vaca acab-ou de ir para o brejo.
 the.F cow finish-PST.3SG of go.INF to the.M swamp
 "The cow finished going to the swamp"
- d. ??Foi (?*de) escreve-r o artigo (o) que eu acab-ei. be.PST.3SG of write-INF the.M paper (the) that I finish-PST.1SG "It was writing the paper that I finished"

In (3a) the sentence in which the subject cannot be an agent, because it is inanimate, is somewhat marginal in comparison with that in which the subject is agent – which means that, perhaps, the verb *acabar* typically assigns a role to the subject in the culminative reading. More sharply, in comparison with (2b), the passive voice in (3b) is unacceptable. In (3c) the idiomatic reading of the subject is at best marginal or unexpected, and in (3d) the grammaticality judgment for the cleft sentence improves slightly in comparison to what we found in (2d) – once the preposition is absent.

The comparison reveals that there are different syntactic structures for the two readings, respectively control for the culminative reading and raising for the recency reading, even assuming that for the culminative reading we can also have raising marginally (that is, we have some kind of structural ambiguity in this case).²

In addition to these syntactic distinctions, there are differences with respect to the selection of aspectual properties of the infinitive clause's predicates. The culminative reading clearly tells us that the event denoted by the infinitive clause reaches its *telos*, its intrinsic endpoint, when it exists, or a point contextually (or adverbially) defined

In this paper I will not discuss a possible classification of the verb acabar (whatever the reading under analysis) as a restructuring verb, although I recognize that at least some of the properties of restructuring verbs can be found on the verb acabar in both readings. On restructuring verbs, see Cinque (2006), Fukuda (2006), Rech (2011), among others.

as the endpoint of the event. Thus, for this reading to be licensed, the predicate in the infinitive clause must denote a type of event which includes a clearly identifiable final sub-event (BERTUCCI, 2011). This has consequences for the type of event selected when considering this interpretation. For instance, if the event is already a culmination (an *achievement*, in VENDLER'S, 1967 aspectual classification), the culminative reading is blocked, as we see in (4) below:

(4) Eu acab-ei de chega-r no parque. I finish-PST.1SG of arrive-INF in.the.M park "I have just arrived at the park".

That is, in order for the culminative reading to be licensed, the embedded infinitive clause itself has to denote an event with special characteristics, typically it must have the *aktionsarten* properties of *accomplishments* (VENDLER, 1967).

However, for the recency reading, the situation is totally different. Any kind of eventuality is allowed as a complement to the verb *acabar*, except for some states. Let us examine the examples in (5):

- (5) a. Eu acab-ei de corre-r na praia.
 - I finish-PST.1SG of run-INF in.the.F beach
 - "I've just jogged at the beach".
 - b. Eu acab-ei de chega-r no parque.
 - I finish-PST.1SG of arrive-INF in.the.M park
 - "I've just arrived at the park".
 - c. Eu acab-ei de fecha-r a loja.
 - I finish-PST.1SG of close-INF the.F store
 - "I've just closed the store".
 - d. Eu acabei de varre-r a sala.
 - I finish-PST.1SG of sweep-INF the.F room
 - "I've just swept the room".
 - e. ??Eu acab-ei de esta-r doente.
 - I finish-PST.1SG of be-INF ill
 - "I've just been ill".
 - f. ?*Eu acabei de ter /possuir uma casa.
 - I finish-PST.1SG of have-INF/ own-INF a.F house
 - "I've just had/owned a house".
 - g. Eu acab-ei de tossi-r.
 - I finish-PST.1SG of cough-INF
 - "I've just coughed".

- h. Eu acab-ei de pula-r muit-a-s vez-es. I finish-PST.1SG of jump-INF many-F-PL time-PL "I've just jumped many times".
- i. Eu acab-ei de ve-r o lobo.

 I finish-PST.1SG of see-INF the.M wolf
 "I've just seen the wolf".
- j. Eu acab-ei de me orgulhar do meu filho. I finish-PST.1SG of me proud-INF from.the.M my.M son "I've just got proud of my son".

That is, while the verb *acabar* in the culminative reading selects the type of predicate in its complement clause, the verb *acabar* in the recency reading does not. Moreover, in the recency reading even the intrinsic endpoint of the event (its *telos*) conveyed by the infinitive clause needs not to be reached. For example, in (6) below, the use of the verb *acabar* is perfect, provided we have recency:

(6) Eu acab-ei de pinta-r a-s parede-s dessa casa por mais de seis I finish-PST.1SG of paint-INF the.F-PL wall-PL this.F house for more of six horas e só agora você me avisa-Ø que a cor não era hours and only now you me warn-PRES.3SG that the.F color not be.PST.3SG essa? this.F

"I have just painted this house's walls for more than six hours and only now you tell me it is not the right color?"

Here the adverbial phrase *por mais de seis horas* (for more than six hours) indicates that the predicate *pintar a parede dessa casa* (to paint the wall of this house), which could be interpreted as an *accomplishment*, did not necessarily culminate, despite the presence of the verb *acabar*. The culminative reading, however, would be in clear contradiction with the implications of the presence of adverbial phrases like this one.³

Two distinct constructions with the verb *acabar* have the same property (MEDEIROS, 2018a):

Unless the task was to paint the walls for more than six hours. In this case, I can say that I have finished painting the walls for more than six hours without contradiction and the adverbial phrase for more than six hours seems to be actually defining a manner for the event, not just an interval which would necessarily exclude the culmination of this event. In fact, I can say: eu já acabei de pintar o muro por mais de seis horas conforme você me pediu (I've already finished painting the wall for more than six hours as you asked me to do).

- (7) a. Pedro acab-ou pinta-ndo o muro (por horas).

 Pedro finish-PST.3SG paint-GER the.M wall (for hours)

 "Pedro ended up painting the wall (for hours)".
 - b. Acab-ou que Pedro já tinha pinta-do o muro antes.⁴ Finish-PST.3SG that Pedro already had paint-PRT the.M wall before "In the end, Pedro had already painted the wall before".

In (7a), the situation is similar to that found in the recency reading – the event did not necessarily reach its natural endpoint, though the presence of the verb *acabar*; in (7b), whatever ended, it ended after I had painted the wall – and it is not the verb *acabar* that points to the endpoint of the event of the embedded sentence, but the verbal tense in it.

Other properties are noteworthy, as can be seen in the examples below:

- (8) a. ?Acab-ou de eles preencherem o formulário.

 Finish-PST.3SG of they fill.INF.3PL the.M form

 "They've just filled out the form".
 - b. ?Acaba-ram eles de preencher o formulário.
 Finish-PST.3PL they of fill.INF the.M form
 "They've just filled out the form".
 "They finished filling out the form".
 - c. ??Acab-ou eles de preencherem o formulário. Finish-PST.3SG they of fill.INF.3PL the.M form "They've just filled out the form".
 - d. ??Acab-ou eles de preencher o formulário. Finish-PST.3SG they of fill.INF the.M form "They've just filled out the form".
 - e. ?*Acab-ou de eles preencher o formulário. Finish-PST.3.SG of they fill.INF the.M form
 - f. *Acaba-ram de eles preencher o formulário. Finish-PS.3.PL of they fill.INF the.M form.

The marginal example (8a) has the recency reading, but not the culminative one. The example (8b), which is marginal as well, is ambiguous, allowing both readings. Although marginal, the two examples are less degraded than (8c), where there is no agreement between the verb *acabar* and its postponed subject, the preposition that introduces the embedded sentence comes after the subject, and the infinitive sentence

⁴ One of the reviewers suggests that there is a discursive value in sentences like (7a) which is absent in sentences like (1): in (7a), despite Pedro is the agent of painting the wall, a set of circumstances in fact culminated in his painting the wall, as if such circumstances made him to do it. Although I do not consider it a "distinct discursive value", this property is true, but it is not the result of a pragmatic contrast. I argue, in Medeiros (2020), that it is a particular semantic specification of the verb *acabar* in the context of certain types of clausal complement (CPs headed by the conjunction *que*, gerund clauses and infinitive clauses headed by the preposition *por*).

includes an inflected infinitive agreeing with the postponed subject; and less degraded than (8d), in which the infinitive of the embedded sentence expresses no agreement at all and the subject is plural and postponed to the verb *acabar*.

One thing seems to be clear in these examples: that only the agreement of the inflectional system would be able to assign structural Case to the subjects when they are within the embedded sentence, not the preposition *de*. For if the preposition were capable of assigning a Case to the subject of the infinitive clause, we would expect the following sentence (9) to be acceptable, as with certain English constructions where there is a preposition as a complementizer.⁵

(9) *Acabou de mim preencher o formulário. Finished of me fill.INF the form

Another important thing concerns the adverbs and their position in relation to the preposition *de*. Observe the sentences below, with an adverb so:

- (10) a. Eles acaba-ram de pinta-r o muro cuidadosamente.

 They finish-PST.3PL of paint-INF the.M wall carefully

 "They finished painting the wall carefully".

 "They've just painted the wall carefully".
 - b. Eles acaba-ram de cuidadosamente pinta-r o muro.

 They finish-PST.3PL of carefully paint-INF the.M wall.

 "They've just painted the wall carefully"
 - c. Eles acaba-ram cuidadosamente de pinta-r o muro.

 They finish-PST.3PL carefully of paint-INF the.M wall

 "They carefully finished painting the wall"
 - d. Cuidadosamente eles acaba-ram de pinta-r o muro.

 Carefully they finish-PST.3PL of paint-INF the.M wall

 "They finished painting the wall carefully".

 "They've just painted the wall carefully".

The example (10a) presents three possible readings: one in which they finished carefully the activity of painting the wall (that is, what is guaranteed is that at least the final sub-event of the activity of painting the wall, the sub-event that includes the

The classic example of spoken BP where a preposition assigns the morphological case to the subject of an infinitive clause is the phrase para mim fazer (for me to do that), which is very frequent. I found, however, similar behavior with the preposition de, in numerous occurrences of the sequence apesar de mim ter... (despite of me have – "although I have...") on the internet. This shows that, at least for certain items (apesar) and syntactic circumstances, many speakers assign an oblique Case to the subject of an infinitive clause adjacent to the preposition de. An example from the web is: "Fiz uma cirurgia de varizes a uma semana atrás com ele, estava com medo, mas correu tudo bem, apesar de mim ter ficado nervosa. Muito bom médico..." (I had a varicose vein surgery a week ago with him (a doctor), I was scared, but it went well, even though I was nervous. Very good doctor...) This example can be found at: https://www.doctoralia.com.br/medico/luiz+akira+okamoto-10596097/opinioes.

culmination of the event, was carried out carefully), another in which the activity of painting the wall carefully was completed by them and a third one in which they recently painted the wall carefully. The strongly preferred reading in (10b) is one in which they recently painted the wall carefully; but the reading in which the activity of painting the wall by them was carefully executed is acceptable, though marginally. The reading in which they finished carefully the activity of painting the wall is not possible. Example (10c) only admits the reading in which they finished carefully the activity of painting the wall. The example (10d) is ambiguous as (10a).

The example (10c) guarantees that when a manner adverb is placed between the verb *acabar* and the preposition *de* we have no raising of the subject. This is important because, with such an example, we are able to see that the verb *acabar*, in the culminative reading, typically has an active component, modifiable by an agent-oriented adverb. On the other hand, the presence of the adverb between the preposition and the infinitival clause (which can mean that the adverb is left-dislocated), as we find in (10b), shows, following Rizzi (1997), that the preposition is not the realization of the head Fin⁰ of the expanded CP layer, but a higher node – which is the opposite of the preposition *di* followed by an infinitive clauses in Italian (RIZZI, 1997). In the following sections we will deal with these issues in more detail.

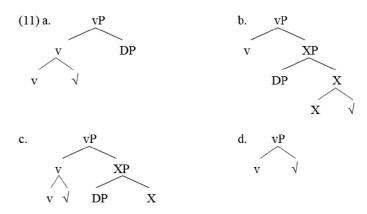
In this article, I propose an analysis which explains the differences in interpretation (culminative reading *versus* recency reading) and syntactic behavior (control *versus* raising). The two main ideas I will explore here are the following: (a) the root of the verb *acabar*, √kab-, may occur in different positions in the structure of the vP that takes the infinitive sentence as its complement – and if the root is merged directly to v, it forces the attachment of the head Voice to this vP (KRATZER, 1996; MARANTZ, 2013a), thus generating an eventive/agentive reading of the verb *acabar*; (b) there are two non-finite CPs, one in which the prepositional complementizer directly takes a verbal structure without the mediation of an inflectional head F (culminative reading), and another in which the F head, with (typically inherited) tense/aspect features, is present (recency reading).

This paper has the following organization. In the first section, I briefly present a proposal of a theory of argument structure developed in Medeiros (2018b) that will be used to deal with the event structures in which the root of the verb *acabar* is licensed. Further, I conduct a discussion and make a proposal for the internal structure of the infinitive clauses in the two readings discussed above (recency and culminative). In the other sections, I develop the syntactic-semantic analysis which explains the properties depicted along the paper. In the final section I discuss the interrelation between the verbal tense of *acabar* and the recency and culminative readings, and try to explain the constraints so depicted.

Arguments and structure

In Medeiros (2018b) I propose a theory of argument structure in which the verbal phrases can have up to three syntactic levels, denoting up to three sub-eventualities, and a causal/implicational or identity relations among these eventualities. In general lines, we have the following.

Verbal phrases include the verbal head v, which typically introduces an event (which may be durative, without an intrinsic endpoint, or a culmination), and sometimes a head X that can introduce an event or a state into the vP. Roots are either modifiers of X nodes (when there is an X, but not necessarily when it is there) or of v nodes. When they are v-modifiers, a Voice head, which introduces an external argument (KRATZER, 1996), is mandatorily attached to the vP (MARANTZ, 2006, 2013a); when the root is a X-modifier, a Voice head can be attached to the vP, but it is not mandatory. Bimorphemic verbs will typically have X (which will often be spelled-out by a prefix) and v in their underlying syntactic structure. Verb complements may be included either inside the XP or as a daughter of the vP. Thus, the argument structures (or *the event structures*) of BP non-stative verbs are reduced to the following syntactic arrangements:



As I said earlier, the head X can be phonologically realized by a prefix. In a sense, such a proposal agrees with some claims in the literature that bimorphemic verbs have an obligatory complement – in (11), whenever there is a X, a DP must be merged to it, since X introduces a sub-eventuality either reached by the referent of the DP (in this case, a state) or of which the referent of the DP is an *undergoer* (in this case, such a sub-eventuality is dynamic).

The verb *acabar* is bimorphemic, with a root, $\sqrt{\text{kab-}}$, which also can be found in nouns like *cabo* (whose interpretation varies between "handle" and "term, end"), in the adjective *cabal* (meaning "final", "definitive"), etc., and a prefix, a-, which occurs in several denominal verbs such as *acarpetar* (to carpet) and *atormentar* (to torment).

Adopting the syntactic structures above, we will explore the hypothesis that structures (11b) and (11c) are the origin of recency and culminative interpretations

respectively. However, some adjustments are needed. First of all, once the verb *acabar* selects clauses in examples like (1) above, DPs in (11) must be substituted by CPs. Moreover, at least for the recency reading, the highest v (the verbalizer of the root $\sqrt{\text{kab-}}$) will not introduce an event variable (it would be perhaps a null allosem of v, in the sense of MARANTZ, 2013b), contrary to the original proposal (MEDEIROS, 2018b).

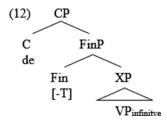
But before discussing the structure of vP headed by the verb *acabar*, let us briefly investigate the properties of its complement infinitive sentences.

The fine structure of the infinitive clause

In the introduction, I showed that different readings imply different syntactic structures, with the culminative reading involving obligatory control, and the recency reading involving raising. But what would be the structures of the infinitive clauses in the two readings? Would there be different types of infinitive clauses depending on the reading?

The first property of the non-finite sentences in sentences with the verb acabar is that they admit left-dislocation of at least some adverb types and adverbial phases, as we saw in (10b), whether in recency reading or culminative reading. Assuming Rizzi's (1997) cartographic theory, the adverb dislocation indicates that the preposition cannot be the lexical expression of the lowest head of the expanded CP layer, the Fin⁰ head, since the dislocated adverb would be topicalized or focalized, and topic and focus heads are placed between FinP and ForceP heads in Rizzi's cartography of syntactic structures, respectively the lowest and the highest node of the expanded CP layer. That is, if de were the realization of Fin⁰, the adverb-de order, with the adverb modifying some constituent internal to the infinitive clause, would be licensed – but this is never the case. Therefore, whatever the CP layer head the preposition realizes, it must be above the heads which introduce topics and foci in the left periphery of the clause. This is the exact opposite of what happens in Italian, according to Rizzi (1997), for whom the preposition di, as opposed to the conjunction che, would project the Fin⁰ node and would directly select a non-finite sentence as complement (in fact, an infinitive IP). In Portuguese, we have to assume that there is a C, headed by de, that selects a Fin⁰ which takes infinitive clauses; and that the assignment of Case to the subject of the infinitive clause (see note 4) is blocked by the fact that the preposition is the realization of a (higher) head of the CP layer.

Thus, the infinitive sentences taken by the verb *acabar* will have at least the following structure, regardless the reading considered:



Suppose that the presence of a CP layer in the embedded sentence blocks the transference of the nominative Case to the embedded subject in a (null) expletiveassociate chain. Thus, unless the infinitival inflection (personal infinitive) agrees with the embedded subject, as in (8a), or the verb acabar agrees with the subject postponed to it, as in (8b), sentences like (8e, f), repeated below in (13), will be more degraded or highly degraded. The sentences (13e) and (13f) are unacceptable because there is no available Case assignor for the pronoun eles. The other sentences in (13) would be degraded for different reasons, but reasons related to the structure (12). In (13c) there is a displacement of the subject of the infinitive clause into a post-verbal position external to the embedded CP, but, as we have already seen in the discussion above, such displacement should be prohibited. In (13d), either we have culminative reading, with the agent subject postponed to the verb acabar, which does not agree with its subject – and such postponement involving no agreement are restricted to unaccusative verbs in Brazilian Portuguese (FIGUEIREDO SILVA, 1996 for a discussion) -, or we have recency and the pronoun *eles* is topicalized above CP, which is, as we have seen, precluded.

(13)	c.	??Acab-ou	eles de preenche-rem	O	formulário.
		Finish-PST.3SG	they of fill-INF.3PL	the.M	form
	d.	??Acab-ou	eles de preenche-r	o	formulário.
		Finish-PST.3SG	they of fill-INF	the.M	form
	e.	?*Acab-ou	de eles preenche-r	0	formulário.
		Finish-PST.3SG	of they fill-INF	the.M	form
	f.	*Acaba-ram	de eles preenche-r	O	formulário.
		Finish-PST.3PL	of they fill-INF	the.M	form

Sentences with raising verbs like *parecer* (to seem) are unacceptable when the subject remains in the embedded infinite sentence. For example: *Parece eles construir a casa (seems they build.INF the house). Compare it with the grammatical sentence: eles parecem construir a casa (they seem to build the house). On the other hand, when acabar is merged to a gerund, the suject is allowed to remain in the gerund clause. We see it in: acabou eles escrevendo o artigo (pro end.PST.3PL they writing the paper - "They ended up writing the paper"). Maybe, verbs like parecer select CPs, which prevents the transference of Nominative Case via a null expletive to its embedded subject; on the other hand, sentences with gerund clauses as complements do not involve embedded CPs (MEDEIROS, 2020; STOWELL, 1982), and therefore the transference is possible. The discussion is interesting, but it falls outside the scope of this work.

Everything discussed so far may suggest that the infinitive clauses in the two readings are identical, but I will show they are not.

In the culminative reading, only predicates denoting *accomplishments* (or *activities* which some contextual endpoint is assigned to) are licensed, which suggests that the verb *acabar* is able to make a semantic selection of the predicate within the infinitive clause. The same is not true for the recency reading, where the verb *acabar* does not make any demands on aspectual or *aktionsart* properties of the event denoted by the embedded VP. One way to deal with this difference is to suppose that the syntactic structure of the embedded clause allows the verb *acabar* a more direct (or less mediated) access to the VP of the infinitive clause in the culminative reading than in the recency reading. The argument is interesting, but would there be any other evidence, perhaps stronger, to postulate different structures for the infinitive clauses?

Let us take adverbial phrases that serve to diagnose telicity: *em X tempo* (in X time):

- (14) a. Ele acab-ou de pinta-r o muro em duas horas.

 He finish-PST.3SG of paint-INF the.M wall in two hours

 "He has just painted the wall in two hours".

 "He finished painting the wall in two hours".
 - b. ?Ele acab-ou de em duas horas pinta-r o muro. He finish-PST.3SG of in two hours paint-INF the.M wall. "He has just painted the wall in two hours".
 - c. Ele acab-ou em duas horas de pinta-r o muro He finish-PST.3SG in two hours of paint-INF the.M wall "He finished painting the wall in two hours".
 - d. Em duas horas ele acab-ou de pinta-r o muro. In two hours he finish-PST.3SG of paint-INF the.M wall "He finished painting the wall in two hours".

In (14a) there are two readings: one in which *he* completed in two hours the activity of painting the wall (culminative reading, where a sub-event of painting the wall that includes its final sub-event lasted two hours, not necessarily the whole event) and another in which very recently he painted the wall in two hours (recency reading). In (14b) only the recency reading is licensed.⁷ In (14c) and (14d) only the first reading above (culminative) is licensed.

The recency reading is not licensed when the tense of the verb acabar is future. Thus, sentences like ele vai acabar de pintar o muro em duas horas (he will finish of paint the wall in two hours "the will finish painting the wall in two hours") only express the culminative reading. Interestingly, when we displace the adverbial phrase em duas horas (in two hours) to the left periphery of the infinitive clause when the tense of acabar is future, the result is much more degraded, precisely because the future tense is not compatible with the recency reading:

⁽i) *Ele vai acaba-r de em duas horas pinta-r o muro. He go.PRS.3SG finish-INF of in two hours paint-INF the.M wall

It is also worth saying that (14b) improves in acceptability when a stress is assigned to the verb *acabar* and there are pauses around the adverbial phrase *em duas horas* (in two hours). Such stress or emphasis on the verb *acabar* marks the recency reading; cf. footnote 1.

The order of constituents in (14b) is the result of the displacement of the prepositional phrase *em duas horas* (in two hours) to the left periphery of the infinitive clause – which means that the adverbial prepositional phrase is part of the infinitive clause, not of the main clause. The most important aspect in the examples (14) is the fact that the culminative reading is not licensed for (14b). This suggests that the PP *em duas horas* (in two hours) in the culminative reading targets some constituent of the main clause, whose verb is *acabar*, not of the infinitive clause – for if in the culminative reading the PP was part of the infinitive clause, there would be no explanation for the fact that the culminative reading is not licensed when the PP is dislocated to the left periphery of the infinitive clause. That is, the two readings of (14a) would be represented by the following constituent structures:

(15) a. [ele acab-ou [de pinta-r o muro] [em duas horas]]

He finish-PST.3SG of paint-INF the.M wall in two hours

"He finished painting the wall in two hours." (culminative Reading)

b. [ele acab-ou [de pinta-r o muro [em duas horas]]]

he finish-PST.3SG of paint-INF the.M wall in two hours

"he has just painted the wall in two hours." (recency reading)

Now suppose that adverbial PPs such as em X tempo (in X time) or por X tempo (for X time) are typically attached at some point of the inflectional system of a sentence, or are only licensed by the existence of an inflectional node expressing tense or aspect notions in a sentence. In fact, PPs like em X tempo (in X time) are sensitive to the tense/aspect information expressed by the clause. For example, sentences like *Pedro* está pintando o muro em cinco minutos (Pedro is painting the wall in five minutes) are acceptable only if the PP em cinco minutos (in five minutes) points to a time interval immediately before the beginning of the event of painting the wall, not to a time interval needed for the event to culminate – that is: the progressive tense and PPs of the form em X tempo (in X time) are simply incompatible, and therefore such adverbial constituents are sensitive to tense/aspect information in the sentence. This leads us to conclude that there is an inflectional (non-finite) system also in the infinitive sentence when we have recency (see (14b) above). Let's call this inflectional layer FP. As we shall see later, this F somehow encodes at least time antecedence: the event time encoded in the infinitive VP precedes some given temporal reference. In order to see it, let us examine at the examples below:

(16) a. Pedro vai acaba-r de pinta-r a parede quando João chegar.
 Pedro go.PRS.3SG finish-INF of paint-INF the.F wall when João arrive
 "Pedro will finish painting the wall when João arrives".

 b. Pedro vai te-r acaba-do de pinta-r a parede quando João chegar.

Pedro go.PRS.3SG have-INF finish-PRT of paint-INF the wall when João arrive

- "Pedro will have finished painting the wall when João arrives".
- "Pedro will have just painted the wall when João arrives".
- c. Pedro vai acaba-r de te-r pintado a parede quando João chegar.

Pedro go.PRS.3SG finish-INF of have-INF paint-PRT the wall when João arrive

"Pedro will have just painted the wall when João arrives".

In (16a) the only allowed reading is the culminative one; (16b) is ambiguous; in (16c) we have only the recency reading. The most interesting fact about the examples above is that when we have a periphrastic past form within the infinitive sentence (16c), only recency is licensed. This clearly indicates that in the recency reading the infinitive is not temporally neutral, but it encodes some form of temporal anchoring in a "past". Later we will try to explain why (16a) has no recency reading and why (16b) is ambiguous.

That is, in recency reading there is an inflectional head encoding some kind of temporal or aspectual information within the infinitive clause, in addition to the heads of the expanded CP layer; in culminative reading there is no such inflectional layer, and the lowest head of the CP complex directly takes the verbal phrase (or the Voice-P, as we shall see below).

The verb acabar and the culminative and recency readings

In paragraphs (a) and (b) below, I tried to establish what are the truth-conditions of the sentence (17) in the two readings. From the truth-conditions defined below I will try to show how they are derived from the syntactic structures I will propose in the sequence.

(17) Pedro acab-ou de pinta-r o muro.

Pedro finish-PST.3SG of paint-INF the.M wall

"Pedro finished painting the wall".

"Pedro has just painted the wall".

⁸ It seems to me that there is a rather marginal culminative reading in this example, when the verb acabar is not stressed. It also seems to me that the periphrastic form in the CP is not establishing temporal relations when the reading is culminative – it is as if the periphrastic form of the verb in the infinitive clause was only a kind of reinforcement to the fact that the painting of the wall was completed.

(a) culminative reading:

Pedro acabou de pintar o muro (Pedro finished painting the wall) is true if and only if there is an event e', of which Pedro is the agent or originator, and there is an event e of painting the wall, such that $e' \subseteq e$ and e' contains the smallest final sub-event of e (BERTUCCI, 2011) and the time of e' is prior to the speech time (REICHENBACH, 1966).

(b) Recency reading:

Pedro acabou de pintar o muro (Pedro has just painted the wall) is true if and only if there is an event e of painting the wall of which Pedro is the agent or originator, and the time interval of the event e (or a contextually relevant subpart thereof) immediately precedes a time interval t which is prior to a reference time t and t coincides with the speech time and t tends to zero in the context.

Some points about the statements in (a) and (b) need to be clarified. Regarding the culminative reading in (a), it is important to make it clear that sentence (17) states that Pedro is the agent of at least the smallest final sub-event of the event of painting the wall, not necessarily of the entire event. That is clear, since the phrase (17) is also true in a context in which Pedro only finishes the painting work that someone else has begun. It is obvious that if Pedro is the agent of at least the smallest final sub-event of painting the wall in (17), nothing prevents him from having done the whole work. Therefore, the sentence (17), with the truth conditions given in (a), is also true in a scenario in which Pedro performed the whole painting of the wall.

The formulation in (a) also takes into account what I have already mentioned before: that the verb *acabar* itself introduces an event of which the subject of the sentence is the agent; and this event can be modified by adverbs, as shown in examples (10).

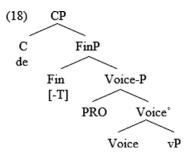
As regards the recency reading in (b), Pedro is the agent of painting the wall, or of its contextually relevant subpart. But the most important aspects of truth conditions in (b) are: (1) that there is no sub-event of painting the wall whose agent is the subject of the sentence – the subject is the agent (or is included among the agents) of the event denoted by the predicate of the infinitive clause and the truth-conditions in (b) only express a relation between times; and (2) that the event denoted by *pintar o muro* (to paint the wall), or one of its contextually relevant subparts, is somehow interpreted perfectively, that is, its temporality is closed at some time prior to another time. This partially explains the fact that the recency reading is sensitive to the time of the main verb, but not to the *aktiosart* properties of the VP inside the embedded CP. We will discuss this specific point in more detail in the following sections.

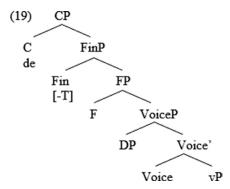
That in the recency reading there is no sub-event headed by the verb *acabar* (aspect (1) pointed out in the previous paragraph) is evidenced by the fact that manner adverbs only modify events denoted by the infinitive clause. Therefore, the verb *acabar*, if we

adopt a semantics of events (DAVISON, 1967; PARSONS, 1990), will not introduce an event variable here.

Syntax and the verb acabar

Taking into account the discussion conducted in the last sections, I propose that the syntactic structures of the infinitive clauses in the culminative and recency readings are respectively (18) and (19):





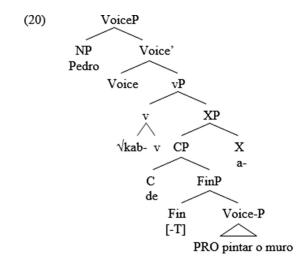
If we adopt the framework of Distributed Morphology (HALLE; MARANTZ, 1993; MARANTZ, 1997), we can suppose that, in (18), the infinitive form of the verb is a default morphological realization of uninflected verbs. Thus, the verb would obtain its obligatory inflectional marks in the MS (Morphological Structure), which is post-syntactic.

We also see that in (18) there is a PRO⁹ in the specifier of Voice-P. Let us assume that this PRO is controlled by the subject of the sentence, but that the PRO can also, in

I am leaving aside in this work the discussion on the null Case assigned to PRO (CHOMSKY, 1995); in the context of (18), PRO would not be able to check, value or receive this null Case. I also leave aside discussions about the ungoverned nature of PRO, as proposed by the GB literature (CHOMSKY, 1981).

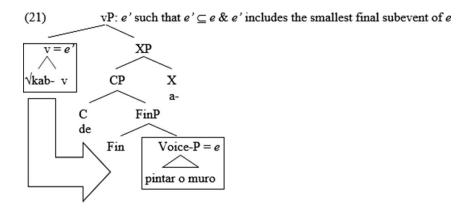
certain contexts, be partially controlled. Thus, we are able to account for the fact that the sentence (17) is also true in a context in which Pedro is only one of the agents of painting the wall (the last one in time). One question that may now occur to the reader is: why do we not simply assume that the verbal phrase within the CP is a vP, without Voice and PRO? There are at least two difficulties for such a solution. The first one is that the structural Case of the object of the vP in the complement clause would have to be assigned by the Voice head above the main verb, *acabar*, which is, structurally, too far from the direct object inside the infinitive clause. The second and most important difficulty for this proposal is that, in assuming it, we would expect that there would be a passive form of the verb *acabar* expressing the culminative reading: *o muro foi acabado de pintar* (the wall was finished of paint – meaning: "someone finished painting the wall"). But this passive is somewhat degraded, and it licenses only the recency reading – see note 11.

But, then, how is the structure (18) merged to the projection of the verb *acabar*? Take structure (11c) above. By adopting this structure for culminative reading, the root √kab- will modify v and will entail two things: (1) that a Voice head be attached above vP, introducing an external argument for the verb *acabar* (MARANTZ, 2006; MEDEIROS, 2018b); and (2) that v introduces an event variable (MEDEIROS, 2018b). The X head below will be phonologically realized by the prefix *a*- and will project a position for an (obligatory) object – which will be a CP. Let us assume that, in the case of obligatory clausal complements, X does not necessarily introduce a sub-eventuality (that is, in these cases, X just tells us that there is a mandatory internal argument, in this case a CP). The structure below illustrates the proposal for the sentence in (17):



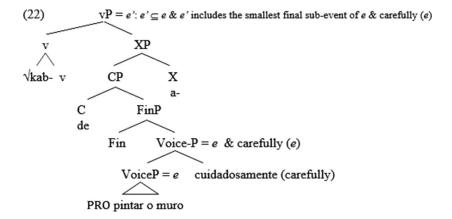
Note that X may not be semantically null in sentences like *Pedro acabou a pintura do muro* (Pedro has finished the painting of the wall). In such a case, the sentence does not point to the final sub-event of the process of painting the wall, but it expresses, among other things, an end state of the painting of the wall.

The presence of the root √kab- as a modifier of the head v causes the subject introduced by Voice to be interpreted as an active initiator of the event introduced into the structure by v (MEDEIROS, 2018b). Let us now suppose that the merging of the root \(\shat{kab-}\) with the highest v, [\(\shat{kab}\) kab v], lexically defines a constraint on the interpretation of the event introduced by this v, so that it is interpreted as a sub-event that necessarily includes the final sub-event of the first event c-commaded by the constituent [, kab v] in the structure. That is, I am proposing that there be a 'partial identification' of two events, the one introduced by the highest v and the one introduced by the lowest Voice-P/ vP within the CP. Let us suppose, furthermore, that if there is an inflectional head with some temporal or aspectual specification for the vP within the CP complement, it is not possible for [, kab v] to have access to the most embedded event to establish this 'partial identification'. The C and Fin⁰ heads, which do not quantify event variables, will be simply "transparent", allowing a direct "semantic" access of the verb acabar to the embedded Voice-P. The assumption seems plausible if we imagine that inflectional heads create temporal or aspectual specifications that could make the event of the complement CP incompatible with the requirements of the verb acabar (we will resume this discussion when dealing with the recency reading):

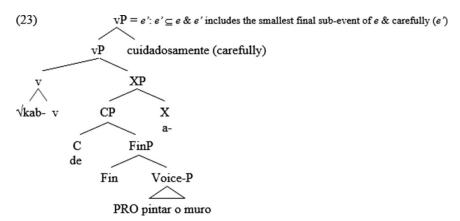


Notice that in order for there to be a 'partial identification' between e and e' in (21), the event e must be such that it properly contains an endpoint, a final sub-event.

This structure also explains the different interpretations assigned to different attachments of the same manner adverb (see examples (10) in the introduction). Suppose the adverb *cuidadosamente* (carefully) is attached to the Voice-P within the infinitive clause. In this case it will be a modifier of e, not of e'. But, since e' is a part of e, there is no way for e to be carried out carefully without e' being carried out carefully as well. The diagram below illustrates the point:



When *cuidadosamente* (carefully) is attached to the highest vP, we have a reading in which the event *e*' in the representations so far is modified by *cuidadosamente* (carefully). As we can see in the following tree:

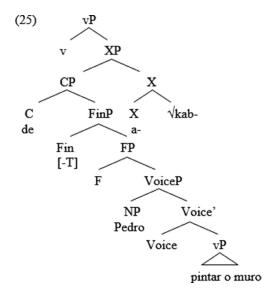


The tree in (23) shows the adverb *cuidadosamente* attached to the highest vP and thus modifying the event e', denoted by the constituent [$_{v}$ kab v]. As we wished it to be, this adverb has scope on the sub-event e', which makes the sentence (17) true in a situation where only the final sub-event of the wall-painting event was performed carefully.

Following Kratzer (1996)'s proposal, the attachment of a higher Voice head, which introduces another event variable, to de the vP will trigger the *event identification* rule (KRATZER, 1996, p.122), which identifies the event introduced by Voice and the event introduced by the vP; the Voice head will also project a thematic position (initiator or agent) for the subject of the verb *acabar*. That is, the subject of the sentence will be the agent of *e*'. Therefore, in culminative reading, a structure as (22) above would block non-agent subjects and, consequently, non-agentive verbal phrases in the embedded CP.

Now let us examine at the recency reading.

For this reading I propose that the underlying structure of the vP projected by *acabar* is the one presented in (11b), with a CP in the object position of XP:



Important differences between (25) and (20) are: (a) the root is attached below XP, not to the highest v, which implies that a Voice head need not be attached above this vP (MARANTZ, 2006; MEDEIROS, 2018b); (b) in the infinitive clause we have an inflectional head F; (c) the highest v head will not introduce an event (event variable).

It is not true that all types of verbs denote events or states. Certain raising verbs, such as auxiliaries and some aspectual verbs, indicate possibility, necessity, temporal relations and stages of processes referred to by other predicates. That is, the head v is a verbalizer morpheme, which generates verbal stems from acategorial roots (MARANTZ, 1997), but being a verbal stem does not necessarily mean introducing an event or state variable – although it seems to mean that it has at least some relation with some event or state.

Thus, suppose that the highest v in structure (25), which has recency reading, does not introduce an event (cf. (c) above). Its only functions are to create a verb from the acategorial root $\sqrt{\text{kab}}$ - and to establish a sort of "bridge" between the time of the main clause (T) and the head F of the subordinate clause in (25).

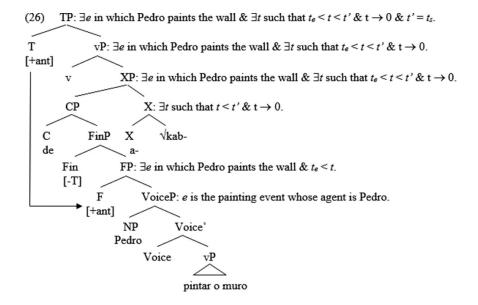
Let us suppose that the constituent $[[x \ a \ kab]]$ is licensed in (25) only if there is a tense feature which expresses antecedence, [+ ant], in the functional node F inside the infinitive clause – at least when the derivation reaches LF. This feature can be "inherited" from the T head which takes the highest vP as its complement or assigned from the very beginning to F – in this case we will have a periphrastic form with the main verb in the past participle (cf. (16c)). The head F, with this feature, quantifies (existentially)

the event variable introduced by the verbal phrase taken by it, and says that the time of this event, t_e , *immediately* precedes a time interval t – that is, the difference between the end point of t_e and the starting point of the interval t is zero.

But what does the constituent [$_X$ a kab] offer as a contribution to the structure (25)? In view of the above discussion, [$_X$ a kab] will take the CP and establish that there exists a (time interval) t which immediately precedes a time t' (that is, the difference between the end point of t_e and starting point of t' is zero, as in the previous case) and the time interval t tends to zero ($t \rightarrow 0$) – which means that, considering the time scales provided by the context, t is relatively short.

Thus all the time of the event or of a relevant sub-event of it which one is talking about, whether it has reached its natural end state or not, is prior to some very short interval contextually defined, and this interval is prior to a time to be anchored by T or by the time of another event (e. g., one introduced by an adjunct) at (25).

Let us take a look at (26) for sentence (17). Here t_e is the event time and t_s is the speech time.



The logic expression of the TP node in (26) says that there is an event of painting the wall by John and there is a time t such that this t comes immediately after the time

Notice that 'short' is a relative notion and what is short in one context may not be in another. For example, let's take the phrase João acabou de atingir a maioridade e já conseguiu seu primeiro milhão (which means: John has just come of age and got his first million). Here, the interval between the time of John's becoming a grown-up and the speech time of the sentence may be of months or even a few years, but it is considered too short either in relation to John's expected lifetime or regarding the expected time it takes for an adult to get his first million. An interval of months, however, would not do in a context where I see a coffee stain on my armchair and someone explains that João acabou de derramar café aí (John has just knocked coffee down on the armchair).

of the painting event, t_e ; is immediately prior to the speech time, t_s ; and tends to zero in the context (that is, it is a very short interval considering some relevant time scale). This result is achieved compositionally, as we can see from (26) and will see in more detail below, and it reflects the truth-conditions described in (b) above.

Now, let us detail the composition of the truth-conditions in (26). Suppose that T in the BP past tense hosts a feature which, when T takes an event directly (that is, when v introduces an event variable), establishes a relation of temporal precedence between the time of that event and another time to be defined. Let us assume either that the simple past in Portuguese typically expresses a temporal relation similar to that of the English present perfect (GIORGI; PIANESI, 1997), in which the event time precedes a sort of reference time (REICHENBACH, 1966) which, in turn, coincides with the speech time – this will be the case in (26). Then, in our terms, the BP past tense will be the combination of an antecedence feature [+ant] and a temporal coincidence feature [+coinc]. Suppose, further, that F in (26) is a tense head which can enter the derivation with no tense/aspect features, being, thus, dependent on tense features of another head in the syntactic structure. The idea, basically, is that the tense head T in (26) needs another time or an event to establish a relation between times; but the higher v gives neither event nor time; so, T transfers, in LF, at least some of its features to F, which immediately dominates a verbal head that provides an event. Inheriting the antecedence feature, F, selecting Voice-P, will say that there is an event e (in (26), the event of Pedro's painting the wall), that there is a time in which this event occurs and that the time of this event is prior to a(n interval of) time t. Notice that since F only receives its [+ant] feature in LF, it suffers the spell-out without this feature, and its morphology will be the default infinitive.

If in (26) F inherits the feature [+ant] from T, the constituent under X, [$_X$ a kab], is semantically licensed (see below), taking CP as its complement, and X will convey the time relations depicted in the tree above, that is, X will take the CP that includes variable t, says that t exists (that is, quantifies t with an existential operator), is prior to t and tends to zero. When we merge CP and X we have, as a result, the following: there is an event e (of painting the wall by Pedro), there is a time of this event, t_e , and a time t such that it follows the event time and precedes a time t, and t tends to zero (and $t = t' - t_e$). The highest v head will be semantically null, or it will function as an identity function, causing vP and XP to have the same extension (see representation in (26)). The T head above vP, with no feature [+ant] in LF, but keeping the feature of time coincidence, will identify the time t, a variable of XP, with the speech time, t_s . Then the event time of painting the wall will precede a contextually defined very short t, which is prior to the speech time. That is, as we expect from (17), the painting of the wall by John occurred at a recent time considering the time and context in which the sentence is spoken.

Now we have to answer the following question: why is $[x \ a \ kab]$ only defined or licensed if there is a [+ant] feature inside the CP complement in LF? Assuming the theoretical framework of Distributed Morphology, the question must be put in other

terms: in what contexts is the root $\sqrt{\text{kab-}}$ licensed and has a listed meaning? Restricting ourselves to the verbal environment, the root will have listed meanings (or will be licensed) when the complements of $[_x \ a \ kab]$ are CPs like the one in (26), gerund clauses (*Pedro acabou pintando o muro* – Pedro ended up painting the wall), finite sentences (*Acabou que Pedro pintou o muro* – In the end, Pedro painted the wall), underlying nominal complements ($[A \ pintura \ do \ muro]_i \ acabou \ t_i$ – [The painting of the wall], ended t_i), when the constituent $[_v \ kab \ v]$ has as its complement an infinitive clause as in (20), a nominal complement (*Pedro acabou a pintura do muro* – Pedro finished the painting of the wall) or, finally, when it takes a small clause as complement ($[A \ investigação]_i \ acabou \ em \ pizza \ t_i$ – [The investigation]i ended up in pizza; RODERO, 2010; MEDEIROS, 2018a). Thus, $[_x \ a \ kab]$ will be defined in the context in (26) because the root \sqrt{kab} has a defined (listed) meaning in that syntactic context which includes the feature [+ant] inside its CP complement.

A rather simplified way of understanding the contribution of the root is to think that the root and the head X together (the root is an adverbial modifier of the head X, which in fact establishes a (sub)predication for verb complements; RODERO, 2010; MEDEIROS, 2018a) create a predication for the event denoted by the CP. This predication says that event *e* (the event of painting the wall by Pedro in (26)) is very "recent" in relation to another time, which may be the time of another event or the speech time. That is, the constituent X, which includes the root, assigns a property or state to an event expressed by the CP. This property or state is "recency".

Another question that must be clarified concerns the *raising* syntactic property of the verb *acabar*. In theories such as Pylkkänen (2008), Marantz (2006), Medeiros (2018b), among others, vP structures such as (11b) and (26) can optionally have a causative version if a Voice head attaches to them. But this does not happen in (26), and *acabar* is exclusively a raising verb. Why?¹²

We have seen above that the highest vP in (26) has as its head a semantically null v, that is, a v head which does not introduce event or state variables in the derivation. According to the theory proposed in Medeiros (2018b), the Voice head above a vP either establishes a causal relation between the event introduced by the Voice head and the one introduced by v or these two events are identified (KRATZER, 1996). So, if v does not introduce events, then none of these relations can be established between Voice and v. But why, then, couldn't any of these semantic relations be established between a hypothetical higher Voice head (attached to the highest null vP) and the eventive v (or Voice-P) within CP? Suppose that the Voice head, because it is a node of the verbal

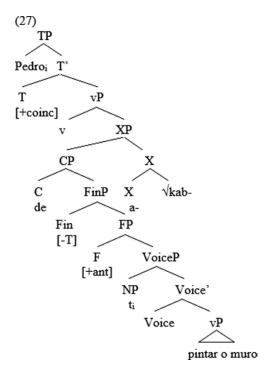
I have, however, found some occurrences like the one below. Here we have recency, but the passive voice of the verb acabar. The form seems degraded to me, but it is frequent in the internet. I do not have much to say about it unless this kind of passive voice is a possibility for the so-called restructuring verbs (see note 4).

Rafael Jardim Glória - Juiz de Fora, MG. Apartamento sem moveis, **foi acabado de pintar**, só precisa ser limpo para entrega-lo a imobiliária. Ícone de sucesso... "Apartment with no furniture, it was just painted, it just needs to be cleaned. A success icon

https://www.getninjas.com.br/familia/diarista/mg/juiz-de-fora/orcamentos/2505989-sou-de-confianca-responsavel-pontual. Access on: 22 Jul. 2020.

projection, cannot have any semantic interaction with the inflectional system of a more embedded vP (or Voice-P), where the event is quantified and temporarily anchored. As shown in (26), a semantic operation involving the Voice head, attached to the highest vP, and the lowest vP (or Voice-P), within the CP complement, would have to be intermediated by the FP (which quantifies the embedded event and establishes a time relation between this event's time and some other time). Therefore, since above the vP (or Voice-P) of the infinitival clause there is an inflectional head F, the Voice head would not be licensed in (26), for it could not establish any semantic relation with any other event in the structure.

Regarding the final position of the agent argument of the embedded predicate, since in the infinitival clause there is no way for the NP *Pedro* to be assigned Case, it must be raised to the specifier of the TP where it obtains Nominative Case:



Finally, it is worth saying that the existence of an internal inflectional node within the CP in the recency reading explains why (8a), repeated below, only has recency reading. Precisely because there is an F, this head can, even if marginally, have \race-features, since Portuguese has personal infinitives. Thus, the pronoun *eles* (they) is licensed within the CP in (8a), receiving Nominative Case from F (as it typically happens when there is subject agreement), and there is a null expletive in TP specifier, inflecting the verb *acabar* in the third person singular. The same cannot happen in the structure (22), where there is no inflectional node inside the CP.

(8) a. ?Acab-ou de eles preenche-rem o formulário.
Finish-PST.3SG of they fill-INF.3PL the.M form
"They have just filled out the form."

The discussion conducted above explains a large set of (semantic and syntactic) properties the two readings of (17) have. In the next section we will deal with the temporal constraints on these two readings under analysis.

Tense, Aspect and the verb acabar

Let us start our discussion with the examples below and their impact for the proposals developed in this paper.

- (28) a. Pedro está acabando de pintar o muro. (culminative reading only).
 - Pedro is finishing of paint the wall
 - "Pedro is finishing painting the wall".
 - b. Pedro acaba-Ø de pinta-r o muro (both readings) Pedro finish-PRS.3SG of paint-INF the.M wall
 - "Pedro has just painted the wall".
 - "Pedro finishes painting the wall (regularly or in the near future)"
 - c. Pedro vai acaba-r de pinta-r o muro
 - Pedro go.PRS.3SG finish-INF of paint-INF the.M wall
 - "Pedro will finish painting the wall." (culminative reading only)
 - d. Pedro acab-ou de pinta-r o muro (both readings)
 - Pedro finish-PST.3SG of paint-INF the.M wall
 - "Pedro has finished painting the wall".
 - "Pedro has just painted the wall".
 - e. Pedro tinha acaba-do de pinta-r o muro (both readings).
 - Pedro have.PST.3SG finish-PRT of paint-INF the wall
 - "Pedro had finished painting the wall".
 - "Pedro had just painted the wall".
 - f. Pedro terá acaba-do de pinta-r o muro quando Pedro have-FUT.3SG finish-PRT of paint-INF the.M wall when Cláudio chega-r. (both readings)
 - Claudio arrive-FUT
 - "Pedro will have finished painting the wall when Claudio arrives".
 - "Pedro will have just painted the wall when Claudio arrives".
 - g. Pedro vai acaba-r de te-r pinta-do o muro quando Pedro go.PRS.3SG finish-INF of have-INF paint-PRT the wall when Cláudio chega-r
 - Claudio arrive-FUT
 - "Pedro will have just painted the wall when Claudio arrives".

i. *Pedro está acaba-ndo de te-r pinta-do o muro. Pedro be.PRS.3SG finish-GER of have-INF paint-PRT the wall

How do we explain the constraints on interpretation we see in the items of (28)?

If, as we have proposed above, the head F can receive its tense/aspectual specification from another tense head (at least in LF), and, in order for the root $\sqrt{\text{kab}}$ - to be licensed in the XP (and its meaning to be defined), we need the feature [+ant] to be part of the specification of F (at least in LF), then (28a), where the [+ant] feature is absent from both T and F, does not provide the conditions for the root $\sqrt{\text{kab}}$ - to obtain the proper interpretation to contribute for the recency reading. That is, in this case, the sentence in (28a) has, underlyingly, a structure like that of (21) – and therefore expresses the corresponding culminative reading.

(28b) is acceptable for the recency reading because the BP simple present tense has a marked reading in which the event is placed in the immediate past in relation to the speech time (it is a sort of "perfective present"; BERTINETTO; BIANCHI, 2003), and, thus, it is possible to put the time intervals in the order described in the truth-conditions described in (b) above, provided that t of the definition coincides with the speech time t_s . Let us suppose that in (28b) the present tense hosts the feature [+ant] (which in fact causes the present tense to be interpreted perfectively, not as an event in progress or a habit), and this feature is, as shown previously, transferred to F in LF, for the reasons already discussed. In this circumstance, the root is licensed with the interpretation of recency. It should be noted that a habitual reading of the BP simple present is incompatible with the recency reading. The example (29a) shows it. This can be explained by assuming that in its usual reading the BP simple present does not carry the feature [+ant]. Likewise, if the simple present points to a near future, as in (29b) below, the recency reading is precluded. Again, here, we do not have the feature [+ant] in F or T.

(29) a. Pedro sempre acaba-Ø de pinta-r o muro quando Pedro always finish of paint-INF the wall when chega-Ø mestre de obra-s. Arrive-PRS.3SG the.M master of work-PL "Pedro always finishes painting the wall when the foreman arrives". b. Pedro acaba-Ø de pinta-r muro amanhã (quando ele o chega-r). Pedro finish-PRS.3SG of paint-INF the wall tomorrow (when he arrive-FUT) "Pedro will finish painting the wall tomorrow (when he arrives)".

The future in (28c) will only have the culminative reading for the reasons we have already discussed: the lack of the [+ant] feature in T or in F.

In the examples (28d, e, f), there is at least one [+ant] feature, which makes recency reading available. Example (28e) contains [+ant] twice, one in the past of the auxiliary verb and the other in the participle of the verb *acabar*: one of these features is transferred to F inside the CP and the other remains at T and establishes a time precedence of t', encoded in the XP layer of the structure, with respect to t_s . Now, t' is a reference time and will identify with some other time, for example, the time of an adjunct event, such as the time of Claudio's arrival. This will cause the sentence (the entire TP) to express the following time relations: the time of the event of painting the wall (let us call it t_{el}) is prior to a time t, which tends to zero, which is prior a reference time t', which will be identical to the event time of Claudio's arrival (let us call it t_{el}), and this time t' is prior to the speech time t_s . That is, we will have the following relations: $t_{el} < t < t' = t_{el} < t_s$ and $t \to 0$. And this is indeed the reading of (28e).

Example (28f) will express the following time relations, in the recency reading: the time of the wall painting event (t_{el}) is prior to a time t, which tends to zero, which is prior to a reference time t, which will be identical to the time of Claudio's arrival (t_{el}) , and this time t comes after the speech time t. That is:

(30)
$$t_{e1} < t < t' = t_{e2}$$
 and $t_{e2} > t_{s}$ and $t \rightarrow 0$.

Thus, t_s can fall at any time interval before t_{e2} , and may even be a subinterval of t (the time interval that tends to zero). Is this last reading really available for (28f)? Yes, it is! Imagine that Pedro was hired by Claudio (who is my neighbor) to paint his wall. Claudio made a trip and instructed Pedro to finish the painting before his return. Pedro is a bit late, but finishes the job at this moment. I, who tell this story, see through my window that Pedro has just completed the work, and I know that Claudio has already left the airport and is on his way home. So, I tell my wife, with a slight stress on the verb acabar: Caramba! O Pedro vai ter acabado de pintar o muro quando o Cláudio chegar! (Wow! Pedro will have just painted the wall when Claudio arrives!) Here, t_s is contained in t, which is an interval between t_{el} and $t' = t_{e2}$ that tends to zero, and the sentence is used properly. Since $t_{e2} > t_s$, other readings – in which, for example, t_s is contained in t_{e2} or simply precedes it – are also licensed. It is easy to imagine compatible contexts.

Example (28i) is unacceptable because, as we know, there can be no expression of tense in which a progressive form takes a perfect form (such as *Pedro está tendo pintado o muro – Pedro is having painted the wall) – and, as we have seen, recency introduces perfectivity, in the sense that it express an antecedence of an antecedence.

The example (28g) is the most interesting one because, in it, we explicitly have an expression of past within the infinitive sentence, denoting some temporal antecedence of the event. Here, the feature [+ant] is hosted by the periphrastic form with the past participle. Let us conjecture, then, that in (28g) F inside the complement CP hosts the [+ant] feature from the beginning, which causes the past periphrastic form to be morphologically expressed by the verb in CP. According to what we have been arguing, if there is a temporal/aspectual specification in the infinitive clause, there will only be

recency reading. It is also worth noticing that the temporal antecedence of the event expressed by the predicate in the CP can be anchored to the event time of an adjunct phrase, as we have seen in the previous examples: the time of the painting event is in the recent past with respect to event time expressed in the clause *quando Cláudio chegar* (when Claudio arrives). In this case, the future in the verb *acabar* will place the t_s in an antecedence relationship with some available time – and such time in the sentence will be the event time of the adverbial clause. We will thus have the same temporal relations expressed by (28f): $t_s < t < t' = t_{s,2}$ and $t_s > t_s$ and $t \to 0$.

Now, if t_s is prior to t_{e2} , then we could have a situation where t_s would fall within the interval t, which tends to zero in the representation, as occurs with (28f). But that does not seem to me to be true. The context above, made up for (28f), is not completely adequate for (28g), where t_s is a subinterval of t ($t_s \subseteq t$). Why would such difference exist if, according to the representation, the two forms express the same time relations?

For sure, if t_s is prior to t_{e2} , it may also precede t and be contained in t_{e1} (a situation in which the event of painting the wall is still in progress when I say the sentence (28g)) or may be prior to t_{e1} (in this case, the sentence is said before the event of painting the wall begins), as we saw above in the discussion about (28f). These two readings are reasonably compatible with the meaning I assign to the sentence in (28g). The contexts below are compatible with the interpretations assigned to (28g) in this paragraph, according to my intuitions:

Context 1: Claudio made a trip and told Pedro, a contracted painter, that he would like the painting of his wall finished when he returned. Pedro had some setbacks, but he managed to compensate them and is already at the end of the painting when I, who knows that Claudio can arrive home at any moment, utter (with a stress on the verb acabar): Caramba! O Pedro vai acabar de ter pintado o muro quando o Cláudio chegar (Caramba! Pedro will have just painted the wall when Claudio arrives). In this case, $t_s \subseteq t_{el}$.

Context 2. Claudio made a trip and told Pedro, a contracted painter, that he wanted the painting of his wall finished when he returned. Pedro had many setbacks, and began to work very late. Before Pedro starts painting, I, who know the date Claudio will return from his trip, utter (again with an emphasis on the verb *acabar*): *Na melhor das hipóteses, o Pedro vai acabar de ter pintado o muro quando o Cláudio chegar* (At best, Pedro will have just painted the wall when Claudio arrives). In this case, $t_s < t_{el}$.

Now, returning to the question we need to answer: why is the reading in which $t_s \subseteq t$ difficult or simply not licensed for (28g)? My conjecture is that, because there is a past morphology within the CP, and the verb acabar, which actually assigns the recency property to the event within the CP, is in the simple future, the recency is "shifted" into the future. It should be noted that recency is ultimately expressed by the interval t; so, to say that the recency is shifted to the future is to say that the speech time, t_s , occurs before t, which licenses only readings compatible with contexts 1 and 2 above, as wished.

Before we conclude this work, one last point must be addressed. Let us examine the following examples.

(31) a. Pedro acab-ou de pinta-r o muro quando Cláudio cheg-ou.

Pedro finish-PST.3SG of paint-INF the.M wall when Claudio arriv-PST.3SG

"Pedro finished painting the wall when Claudio arrived".

Pedro acab-ou de te-r pinta-do o muro quando
 Pedro finish-PST.3SG of have-INF paint-PRT the.M wall when
 Cláudio cheg-ou

Claudio arriv-PST.3SG

"Pedro had just painted the wall when Claudio arrived".

c. Pedro acab-ou de pinta-r o muro.

Pedro finish-PST.3SG of paint-INF the.M wall

"Pedro finished painting the wall".

"Pedro has just painted the wall".

d. ?Pedro acab-ou de te-r pinta-do o muro. Pedro finish-PST.3SG of have-INF paint-PRT the.M wall "Pedro has just painted the wall (completely)".

In (31a), there is only culminative reading. In (31b) we have recency reading, but the sentence is slightly degraded. Sentence (31c) is, as we know, ambiguous. Sentence (31d) seems to me to be acceptable (although degraded) only if it is interpreted as nearly synonymous with (31c) with the recency reading.

Why has (31a) only the culminative reading, but (31b) accepts the recency reading, even with a slightly marginal acceptability? Let us begin our discussion with an explanation for the exclusion of recency reading in (31a). If this sentence had the recency reading, we would expect the embedded clause to inherit, at least in LF, the feature [+ant] of the past tense expressed in the morphology of the verb acabar, and this embedded CP would purport the following time relation: the time of the event of painting the wall, t_e , precedes a time t, that is: $t_e < t$. By combining this clause with the structure $[x, a \, kab]$, we would have the relationship t < t < t'. The reference time t' would be the time of the arrival of Claudio, which is prior to the speech time t_s (for Claudio's arrival happens undoubtedly before the utterance). Then, what would remain in T, after the transfer of [+ant] to the CP, would be the [+coinc] feature, which establishes the temporal coincidence between speech time, t_c , and the reference time t' (let us keep in mind that it is assumed in this work that the BP simple past tense assembles features of temporal antecedence and temporal coincidence, so that it expresses a relation where the event time is before a reference time which coincides with the speech time, GIORGI; PIANESI, 1997). But if the reference time t' is the same as the time of the arrival of Claudio, which is a past time, and, because of the coincidence feature in T, t'

coincides with the speech time t_s as well, we have a contradiction. Thus, the sentence (32a) cannot purport recency, only culmination, as expected.

And why does (31b) express the recency reading only? In (31b), the feature [+ant] inside the CP, which is morphologically manifested by the periphrastic form of the verb, is not inherited from T, but is already hosted by F from the beginning. This means that, in LF, T still bundles the two BP simple past tense features: [+ant, +coinc]. Thus, when T attaches above vP, it will introduce a time interval t" and put t', which is the time of Claudio's arrival at (32b), before t''. Notice that although the morpheme v just below T does not provide an event or event time for the [+ant] feature in T, somehow the adjunction of the sentence quando Claudio chegou (when Claudius arrived) provides this event or event time. Because of the coincidence feature in T, t" will coincide with t_s . That is, (31b) allows a reading in which the event of painting the wall is recent in relation to Claudio's arrival, which is in the past. The lower degree of acceptability of (31b) maybe is due to the fact that there is a synonymous expression in which the past inflection is expressed by the morphology of the verb acabar (Pedro tinha acabado de pintar o muro quando Cláudio chegou – Pedro had just painted the wall when Claudio arrived), and in which there are no three features interacting as occurs in (31b); see discussion on example (28e) above.

Let us now turn to (31d). Following the discussion we have just conducted in the preceding paragraphs, (31d) should only have a "past parfect" reading, 13 since we would have in LF the two [+ant] features, one in CP and the other in the T node above the verb acabar. But it seems to me that if there is no other event expressed by some adverbial clause, this sentence, in recency reading, 14 could only be synonymous with (31c). How to deal with that? I imagine two ways to approach this problem. The first one is supposing some sort of "agreement" or "identification" in LF between the features in F and T, being one of the occurrences of the feature [+ant] (either the one hosted by T or the one hosted by F) semantically neutralized by this "agreement" or "identification" between equal features in distinct positions of the structure. The second is to assume that the transfer or spreading of the [+ant] feature can also occur (marginally) before the spell-out, resulting in its morphological expression both in the verb inside the CP (the periphrastic form) and in the verb *acabar*, but the same interpretation of (31c) (since [+ant] is deleted in T when the derivation reaches LF, because one feature cannot be interpreted twice in the structure). I leave the two proposals for further discussion in the future.

That is, one in which t <t <t'<t_s and t → 0. But this would be the reading of a sentence as (28e), Pedro tinha acabado de pintar o muro (quando Cláudio chegou) ("Pedro had just painted the wall (when Claudio arrived)", where t' would coincide with the time of Claudio's arrival.

Here again, there is a marginal culminative reading in which the periphrastic form of the verb does not seem to be introducing temporal relations, but just saying that the event was accomplished.

Conclusions

The purpose of this paper was to explain the syntactic, semantic and morphological properties of sentences involving the verb *acabar* followed by infinitive clauses. We have seen that such sentences convey two readings: a recency reading and a culminative reading. We argue that the root of the verb *acabar* may occupy distinct positions in the syntactic structure of the vP it "heads", and that each of these positions is linked to one of these readings, and implies a distinct meaning for the root (although we can feel that there is some sort of remainder of terminative meaning expressed in the two readings: one pointing out to the final sub-event of an event; the other closing an event or part of an event in a recent time, making it clear that this event or part of event does not last any longer in the reference time). We also argue, based on empirical evidence, that the infinitive clauses themselves are distinct depending on the focused reading: for the culminative reading, the infinitive CP will include only the vP or P-Voice, above which a prepositional complementizer is attached; for the recency reading, the infinitive CP will include, in addition to the complete verbal phrase and the heads of the left periphery of the clause, a functional head that will host tense or aspect features, at least in LF.

The proposals here explain the data we have discussed throughout the paper, particularly the constraints on time interpretation associated with the two readings (see the third section above). In future researches, we will try to extend the analysis to other types of aspectual verbs, taking advantage of the insights of this work.

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MEDEIROS, A. Eu acabei de escrever o artigo – um estudo sobre ambiguidade em construções com o verbo acabar. **Alfa**, São Paulo, v.64, 2020.

■ RESUMO: Sentenças com o verbo acabar seguido de uma oração infinitiva encabeçada pela preposição de apresentam duas leituras. Uma, que chamarei de culminativa, aponta para o menor subevento final de um evento denotado pelo verbo no infinitivo; a outra, que chamarei de leitura de recência, coloca o tempo do evento da oração infinitiva relativamente próximo, e anterior, a outro tempo tomado como referência. Neste artigo, proponho que as duas leituras envolvem estruturas e interpretações para o verbo acabar radicalmente distintas. O trabalho, assumindo o arcabouço teórico da Morfologia Distribuída, apresenta evidências de que: (1) na leitura culminativa, temos, tipicamente, controle, enquanto na leitura de recência, alçamento;

(2) as orações infinitivas na leitura de recência veiculam informação temporal/aspectual não veiculada pelas infinitivas na leitura culminativa; (3) enquanto na leitura culminativa o verbo acabar introduz um subevento do evento denotado pela oração infinitiva, na leitura de recência o verbo somente veicula um conjunto de relações temporais.

■ PALAVRAS-CHAVE: Alçamento. Controle. Culminação. Recência. Estrutura argumental.

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