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Temporal marking and (in)accessibility in Capeverdean

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Recent descriptions have argued that what seem to be past tense markers in Capeverdean, a Portuguese-related language spoken in Cabo Verde, are instead allomorphs of a temporal agreement morpheme (Pratas 2018a). The rationale for this goes as follows. It is true that both *-ba*, from the variety of Santiago, and the related (and more complex) form *tava*, from São Vicente, are sometimes associated with a past tense in the terms of Klein (1994): the Topic Time is located before the Time of Utterance (Pratas 2014). This is the case in (i) past progressives and past habituais. But they also appear in (ii) subordinate clauses where no past interpretation is certain, such as some conditionals and other modal contexts. Since this subordinate lexical item is often licensed in the context of past situations denoted by their respective main clauses, it seems indeed better accounted for by this recent agreement proposal. That analysis, however, still leaves open the question of what this morpheme agrees with, and this is even more intriguing when it occurs fully separated from past situations. Alternatively, the approach taken in Pratas (2021) identifies a common point between (i) and (ii): all these structures denote situations with a low degree of accessibility from the speaker's perspective. This (in)accessibility is perceived in terms of time: in the first case, we cannot go back to the past; in the second case, external factors may (have) provide(d) an (in)accessible time location. The main goal of this paper then is to further defend this novel insight on that apparent mismatch, which can bring clues to similar problems crosslinguistically.

Keywords: temporal meaning, mood, aspect, accessibility, micro-variation

1. Introduction

This paper deals with the puzzling distribution of two variants of a temporal morpheme in Capeverdean, the Portuguese-related language spoken in Cabo Verde. One of these allomorphs, the postverbal *-ba* in the Santiago island variety, has been previously identified as an anterior tense marker (Suzuki, manuscript; Baptista

2002) and as a past marker (Pratas 2007, 2012, 2014). It often occurs, however, in embedded clauses where it has no past meaning, such as some conditionals and some purpose adverbial clauses. Similarly, the preverbal and more complex *tava*, which exists in São Vicente and brings together *ta* and *va* (see § 3.2.2 for an explanation), often marks past progressives and past habituais and also appears regularly in nonpast structures, such as conditionals and imagined situations.

This common connection of those forms with some nonpast meanings is amongst the arguments presented in this paper regarding its two main goals: (i) to summarize the proposal that what seem to be past markers in the language are in fact temporal agreement morphemes (Pratas 2018a); and (ii) to provide new evidence from Portuguese that confirm the crosslinguistic potential of the idea advanced in Pratas (2021) that many constructions traditionally taken as being morphologically marked for past are rather associated with a low degree of accessibility; in other words, the clauses in which they participate denote situations that are considered inaccessible from the speaker's point of view (some past situations and conditionals, among others), as opposed to those viewed as accessible (present and future situations). And so, in Capeverdean, this notion immediately puts together both past habituais and past progressives (no accessibility whatsoever), on the one hand, and some conditionals and other modal contexts (several levels of low accessibility), on the other hand. In the former, the inaccessibility corresponds to the past meaning of the whole sentence, where the said morpheme is also involved. In the latter, the temporal meaning is not necessarily past, but the same morpheme is there, equally expressing the low accessibility of the situation in question.¹

Note that the notion of accessibility used in this novel approach is different from the one in Arregui (2005), which determines a relation between tense and aspect in English *would*-conditionals and the nature of the worlds accessible (available) to the modal for quantification. The distinct use of this notion here is twofold: (i) here the accessibility relation is established not between possible worlds and a modal, but rather between the situation denoted by the sentence and the speaker; this is a deictic relation in nature, defined by the speaker according to their views about time: it is a well-known fact under different philosophical theories of time that the past is perceived by the human mind as no longer accessible (although we

1. This is different than what has been summarized in Binnick (2010): “some linguists have proposed defining the non-present tenses not in terms of temporal precedence or sequence but rather of detachment, understood as either detachment from the present or detachment from reality” (2010: 515). This is also different than what is been proposed in Klein (2010) as “non-canonical usages” of the present (2010: 48–51). The distinctive point here is that these morphemes are not viewed as tense morphemes, but rather direct markers of low accessibility – and so their uses are indeed canonical.

can think of it and ‘re-live’ it in our memories, we cannot return to it – time-travel is still viewed as impossible), whereas the present and the future are accessible (we are living it in the first case, and are headed for it in the second);² (ii) it extends to domains not traditionally considered as modals, like progressives in the past.

This common treatment of constructions which have been treated under a tense and aspect analysis and others which are easily taken as having a modal meaning represents a novel approach to these intriguing Capeverdean data. And if this analysis is on the right track, it will be worth testing also for other temporal morphemes in other languages.

The structure of the paper is as follows. Section 2 describes the main methodological and theoretical assumptions underlying the following discussion. Section 3 summarizes the proposal advanced in Pratas (2018a) on temporal morphemes in the main varieties under discussion here, spoken in the islands of Santiago and São Vicente. That proposal states that the Santiago postverbal morpheme *-ba* is not an anterior or a past tense marker, but rather a temporal agreement morpheme, and the same holds for the corresponding variant in São Vicente. This section is enriched with evidence from modal contexts. Finally, § 4 presents more arguments in favour of my current line of inquiry which takes these allomorphs to mark instead some degree of temporal inaccessibility: all these clauses denote situations which the speaker sees as more or less inaccessible; this latter analysis has also been defended in Pratas (2021) and is here improved with the inclusion of evidence from Portuguese. Section 5 concludes the paper.

2. Methodological and theoretical assumptions

This section describes Capeverdean in terms relevant for my current purposes (§ 2.1), and then presents some theoretical (§ 2.2) and methodological assumptions (§ 2.3) regarding linguistic variation.

2.1 Brief sociohistorical notes

Capeverdean emerged in the former Portuguese colony of Cabo Verde and inherited most of its lexicon from Portuguese, also revealing influence from West African languages, especially Mandinka and Wolof. It has been conventionally acknowledged as a creole, but since this classification has been the source of persistent

2. See Pratas (2021) for details regarding this relation between human conceptions of time and the linguistic expression of these values.

misconceptions (see Mufwene 2010 and Aboh & DeGraff 2017), it is here simply called Capeverdean.

The language now has two main varieties, roughly associated with the two most populated islands of the archipelago: (i) the Sotavento variety, which developed in the 16th century, in Santiago, and then in two other southern islands, Fogo and Brava (Lang 2014 and references therein), from contact between Portuguese and several different languages from the Mande and Atlantic families spoken by African slaves brought there by Portuguese slave traders; and (ii) the Barlavento variety, which developed in the 17th century in Santo Antão, the biggest and most productive among the northern islands, mainly peopled by migrants from the south (Swolkien & Cobbinah 2019 and references therein), and was further influenced by contact with Portuguese, due to the continuously arriving Portuguese settlers, among migrants from various other European countries. São Vicente was the last island to be populated, which only succeeded in the early 19th century, mainly (but not only) by migrants from other northern islands (Swolkien 2015 and references therein). These varieties are thus also spoken in other islands, with some variation of their own, but the main data presented here are from these two.

Capeverdean is not an official language in its own country, despite intense political debate. There is no standard variety, and attempts to establish an official spelling are still delayed by several problems. This absence produces interesting results when speakers write in Capeverdean, such as in social networks and blog posts, which deserve their own dedicated study (Gillier 2019).

2.2 Three main theoretical assumptions

The case of linguistic variation under analysis here is approached under three scientific assumptions. A general assumption is that language variation involves “alternative ways of ‘saying the same thing’” (Labov 1969: 738 fn. 20). There are then two other specific assumptions, which identify the theoretical framework used here, the generative enterprise in some of its more contemporary approaches: (i) the Borer-Chomsky conjecture, as it is called and stated in Baker (2008: 156): “All parameters of variation are attributable to differences in features of particular items in the lexicon (e.g., the functional heads)”; (ii) the notion that variation, in the ‘Labovian’ sense, involves “underspecification in the mapping between [functional] categories and morphological forms” (Adger & Smith 2010: 1109). This means that the same semantic features (of a given functional head in the lexicon) may be spelled out by different morphological units.

2.3 Methodology

The data analysed here were gathered during my own fieldwork, either in recorded semi-informal interviews or in programmed elicitation sessions, both in Santiago, with several fieldtrips between 2001 and 2016, and in São Vicente, during my first trip to this island at the end of January 2018. The mixing of examples from these semi-spontaneous conversations and experimental data – that is, specifically elicited for this research – is inspired by Matthewson (2004), on semantic fieldwork: although “elicitation ... does not involve direct inquiry about meaning”, we still need to confirm, the best we can, the exact meaning of the speakers’ utterances. The “fieldworker must obtain indirect clues to truth conditions and to felicity conditions” (Matthewson 2004: 379–380). I use two of these indirect means: (i) creating a scenario/context and then asking for the translation of the Portuguese sentence which is felicitous in that scenario; (ii) creating a scenario/context and asking for an acceptable linguistic production in that scenario.

3. Interactions of tense, aspect and mood

In this section, I summarize some key points about the crucial role played by aspect in this language (§ 3.1), provide empirical evidence as to why none of the available morphemes is a tense marker (§ 3.2), and describe my recent integrated proposal for all the combinations (§ 3.3).

3.1 The perfect and the progressive: The non-modal domain

The examples in (1a) and (1b) illustrate an interesting puzzle which has been the topic of several studies and subject of much debate (see Silva 1985, 1990; Suzuki manuscript; Veiga 1995; Baptista 2002; Swolkien 2015, among others).

- (1) a. *N sata/tita bebi/bebê agu.*
 1SG SATA/TITA drink water
 “I am drinking water.”
- b. *N bebi/bebê agu.*
 1SG drink water
 Intended meaning: “I drank (the) water.”

The past interpretation of the bare dynamic predicate in (1b) would be very difficult to explain through any other means than a perfect-like reading, in which case the

meaning is:³ “You have drunk (the) water.” Namely, it cannot be argued that the bare verb is inherently past, since if it were the case, we would have a past progressive in (1a) – the same verb form marked by the preverbal progressive morpheme. But it turns out that progressives in the past are different, as we see in (2).

- (2) (Santiago)
- a. [...] *Bu sata bebeba agu.*⁴
 2SG SATA drink:BA water
 (São Vicente)
- b. [...] *Bo tava ta bebê agu.*
 2SG TAVA TA drink water
 “You were drinking water.”

The perfect-like interpretation in (1b) is indeed in complementary distribution with the progressive meaning in (1a), which maps onto slightly different morphological forms: the preverbal *sata* or *aita* in Santiago, and *tita* or *tite* in São Vicente.⁵ This differs from the observation in typological studies for which “perfects and progressives are overwhelmingly periphrastic” (Dahl & Velupillai 2005: 2). In most cases in English, for instance, both progressive and perfect values are indeed obtained through an auxiliary + main verb (*be+V-ing* for the progressive, *have+participle* for the perfect).⁶ In Capeverdean there are also a few periphrastic forms expressing various temporal meanings which involve auxiliaries, but these are mostly used when a further value is added. In Santiago, this is the case of the habitual progressive: *ta+sta+ta+V* (in contexts like *N ta sta (senpri) ta durmi oki bu ta txiga* “I’m (always) sleeping when you arrive”). In São Vicente, there is also a periphrastic form for the progressive that combines with similar layers of aspectual / modal meanings (*ta+stod+ta+V*).

As semantically complex categories, the progressive and the perfect involve certain temporal characteristics (Smith 1991). Moreover, unlike the English Perfect, the perfect-like reading in Capeverdean is not incompatible with adverbials like *yesterday*. Still summarizing this analysis in Pratas (2018a), this perfect proposal

3. The event types assumed are the ones described in Vendler (1957). Activities, accomplishments and achievements are subsumed under the label ‘dynamic predicates’, as opposed to statives, which are not dynamic.

4. [...] is a notation for the obligatory context, which was not included here for reasons of space.

5. As in the proposals on linguistic variation in line with Adger & Smith (2010), as summarized in § 2.2.

6. See also Bertinetto, Ebert & de Groot (2000) for an overview of the progressive in European languages.

considers two different states resulting from the past situation, which still hold at the Topic Time (as defined in Klein 1994, see below):

- i. a resultant state, which is “an abstract state of the event’s ‘having occurred’” (Portner 2011: 1230) and is equivalent to the “post-time of the situation described by the predicates” (Klein 2014: 962). This is what we get with all dynamic predicates and with some types of stative predicates (therefore, for *kridita* ‘believe’ or *gosta* ‘like’, which have some stative and some non-stative interpretations, the resultant state is compatible with either case). According to the predicate in question, the resultant state/post-time of the situations described by the predicates has different implications regarding the current state of affairs, which does not interfere with the temporal reading of the situation;
- ii. a result state, which is part of the event structure (Moens & Steedman 1988; Smith 1991). This is what we get with some other statives, like *sta duenti* “be sick” (stage-level), *e altu* “be tall” (individual-level), some instances of modals like *podu* “can”, and some instances of *sabi* “know”, whose bare forms have a present interpretation. In this case, we have a past resultative situation of the type ‘get sick’, ‘get tall’, ‘get permission’, ‘get to know’, the temporal reading being directly anchored on the current result state (for a previous analysis of states in the language, see Pratas 2012, 2014).

The temporal interpretation through these aspectual distinctions is explained with the help of the following specifications. Three different Times are relevant to the construction of temporal reference, which were defined in Klein (1994) as: (i) Time of Utterance (TU); (ii) Situation Time (T-Sit); (iii) Topic Time (TT).⁷ This mediating time is defined by Klein as the time span about which an assertion is made (see also Stowell 2014 for discussion of this terminology, and cf. Demirdache & Uribe-Etxebarria 2000, et seq.). Klein later raises important questions about the notion of Time of Utterance (e.g., the speech event itself takes time; so, what slice of it are we considering?), but here it simply means ‘now’, the deictic temporal anchor of root clauses. The ordering of TU regarding TT thus corresponds to a past, a present or a future time reference, and the ordering of T-Sit regarding TT corresponds to a prospective aspect, the progressive, and the perfect, respectively.

7. Reichenbach (1947) proposed three time points – (i) Speech Time (S); (ii) Event Time (E); (iii) Reference Time (R) – and did not account for a relation later established as fundamental, which is inclusion. Also, the reference time/point was never well defined by the author. The terminology in Klein (1994) resolves these aspects and also includes a new distinction, i.e., between past perfective and past imperfective. This is not as salient here as the one between the perfect and the progressive, but the perfect has perfective features and the progressive is one among the imperfective meanings. For all these reasons, I adopt Klein’s terminology.

Therefore, the temporal orderings for Capeverdean dynamic predicates in root clauses are the following. Regarding aspect: (a) the bare form of the predicate means that T-Sit precedes TT – we get a perfect-like reading – and (b) a progressive morpheme means that T-Sit includes/coincides with TT. Regarding time reference: (c) when something in the context (note that past meanings always need a context) orders TU after TT, we have past perfect and past progressive readings, respectively, and (d) in the absence of that information, the coincidence between TU and TT is assumed through a pragmatic inference, thus corresponding to a present perfect and a present progressive. These relations are illustrated in Table 1.

Table 1. The perfect and the progressive (from Pratas 2018a: 109)

	Temporal ordering	Temporal ordering	Temporal meaning
bare verb (perfect-like reading)	T-Sit precedes TT	TU and TT coincide	Present Perfect
		TU is after TT	Past Perfect
progressive morphology	T-Sit includes/ coincides with TT	TU and TT coincide	Present progressive
		TU is after TT	Past progressive

These aspectual distinctions will be inserted into a more complicated picture below, which includes the more salient variation regarding other functional items (Pratas 2018a,b).

3.2 The relevant temporal morphemes

This section describes the relevant temporal morphemes in active clauses and the corresponding meanings in both varieties.

Summarizing the data which are common to both varieties, with only some minor morphophonological differences, we have the present progressive and the present perfect, as in (1), above, repeated here as (3) for convenience, but now with a more direct translation for the perfect-like reading.

- (3) a. *N sata/tita bebi/bebê agu.*
 1SG SATA/TITA drink water
 “I am drinking water.”
- b. *N bebi/bebê agu.*
 1SG drink water
 “I have drunk (the) water.”

Also common to both varieties are the present attitudinal / present habitual / future, which are marked with preverbal *ta* (may be *te* in São Vicente), as illustrated in (4).⁸

8. For a detailed description of more temporal morphemes in São Vicente, see Swolkien (2015).

- (4) *N ta dá aula di portuges.*
 1SG TA give class of Portuguese
 “I am a Portuguese teacher.”
 “I teach Portuguese.”
 “I will give a Portuguese class.” (e.g., if preceded by an adverb, like *tomorrow*)

When something in the linguistic context orders TU after TT, all these values exhibit morphological differences between the two varieties, including some distinct position of the morphemes regarding the verb. This is the case of the perfect in the past, which in Santiago is *V-ba* and in São Vicente is *tinha* (suppletive past form of Portuguese *ter* “have”) + participle, illustrated in (5) and (6).

- (5) [...] *N bebeba agu.*
 [...] 1SG drink:BA water
 “[before I went to bed] I had drunk (the) water.”
- (6) [...] *N tinha kmid pex.*
 [...] 1SG had eaten fish
 “[before I went to bed] I had eaten (the) fish.”

This is also the case with the attitudinal/habitual in the past. Depending on the context, the same configurations may have a conditional interpretation. In Santiago, we have these values marked with *ta V-ba*, and in São Vicente with *tava V* (with its own variant *tá V*), illustrated in (7) and (8).

- (7) *N ta viveba ma nha madrasta i nha pai [...]*
 1SG TA live:BA with my stepmother and my father [...]
 “I used to/would live with my stepmother and my father [...].”
- (8) *N tava vivê ma nha madrasta i nha pai [...]*
 1SG TAVA live with my stepmother and my father [...]
 “I used to/would live with my stepmother and my father [...].”

Finally, this is the case also with the progressive in the past, which is marked with *sata V-ba* in Santiago, and with *tava* or *tá + ta* or *te V* in São Vicente. We have seen this in the simple sentences in (2) and confirm it with the complex sentences in (9) and (10).

- (9) *Kantu bu txiga N sata trabadjaba.*
 When 2SG arrive 1SG SATA work:BA
 “When you arrived I was working.”
- (10) *Kond João txegá, Ana el inda tava ta trabaia.*
 When João arrive, Ana 3SG still TAVA TA work
 “When João arrived, Ana was still working.”

Table 2 summarizes the correspondences between the different morpheme combinations and the temporal meanings of the clauses in which they appear.

Table 2. Temporal morphemes in both varieties (from Pratas 2018b)

	Santiago	São Vicente
zero/null	gives the bare form of some predicates what seems a past reading (1b)	gives the bare form of some predicates what seems a past reading (1b)
preverbal progressive	<i>sata/aita</i> used <u>in non-past and past</u> progressives ((1a) and (2a), (9))	<i>tital/tite</i> used <u>in non-past</u> progressives (1a)
preverbal <i>ta</i>	used <u>in non-past and past</u> habituais, attitudinals, generics, futures ((4), (7))	may also be <i>te</i> ; used <u>in non-past</u> habituais, attitudinals, generics, subsequents (4)
postverbal <i>-ba</i>	combines with the above morphemes and appears associated <u>with past</u> situations ((5), (9), (7), respectively)	-----
preverbal <i>tava/tá</i>	-----	used <u>in past</u> habituais, attitudinals, generics and subsequents (8) combines with <i>ta</i> or <u><i>te in past</i></u> progressives (10)

Given that past tense is defined, as above, as the ordering of the Time of Utterance after the Topic Time (Klein 1994, 2010), Santiago *-ba* looks pretty much like a tense marker – a position defended in Pratas (2007, 2012, 2014). The contribution of São Vicente preverbal allomorphs *tava/tá* seems less straightforward, since it marks more than just the order of TU regarding TT. But at least the case of *-ba* had to be addressed, and the point in my recent works, also assumed here, is that there are reasons to defend a different view. The main argument for this change of perspective is this: Santiago *-ba* occurs in clauses where it has no regular past meaning, as shown in the following example in bold. Note that this example corresponds to nonfinite environments in languages with a clear finite/nonfinite distinction, such as English and Portuguese.

- (11) *Otu algen ta fikaba lá na igrexa pa ka moreba.*
 Other people TA stay:BA LOC PREP church PREP NEG die:BA
lit. “[when there were floods] other people would take refuge in the church, to not die.” (so that they would not die)

Moreover, in conditionals *-ba* may associate with preverbal *ta* and similarly not convey an obligatory past tense. This is illustrated in (12), from Pratas (2007: 72), where neither the main clause nor the conditional one has a strict past interpretation:

- (12) *Si N fikaba un anu na Kauberdi, N ta papiaba kriolu dretu.*
 If 1SG stay.BA one year in Cabo Verde, 1SG TA speak.BA Kriolu right
 “If I stayed for a year in Cabo Verde, I would speak Creole perfectly.”

At this point a description of the language’s temporal readings under modals may help us clarify the temporal readings of these morphemes in more complex sentences, and this is the topic of the next subsection.

3.2.1 *Temporal readings under modals*

The following data were partly included in Pratas & van de Vate (2012) with a different goal: we wanted to compare the sentence structure of epistemic vs. deontic modals in Capeverdean and Saamáka. Here, they specifically illustrate the temporal meanings of these embedded clauses, to which some other examples have been added.

Following Condoravdi (2002) and Laca (manuscript), a modal clause has two time intervals: (i) a temporal perspective, or the modal anchor time; and (ii) a temporal orientation, which refers to “the time at which the temporal property is instantiated”, i.e., the modal evaluation time (Laca manuscript: 4).

In Table 3, we have the different relations between the modal base and the aspectual groups of the embedded predicate,⁹ and the temporal orientation in each case. An epistemic modal conveys the knowledge of the speaker about the situation denoted under it, while non-epistemic stands for other values, such as the circumstantial (the claim of the speaker given the circumstances of the world), the deontic (an expectation or desire of the speaker related to how the world should be), etc. – the different sub-types among those here called non-epistemic are not relevant to the current description.

Table 3. Temporal readings under modals (from Pratas 2018b)

	Non-epistemic	Epistemic
stative situations	subsequence	simultaneity
dynamic situations (activities, accomplishments and achievements)	subsequence	precedence

9. As noted in footnote 3, the event types assumed are the ones described in Vendler (1957). Activities, accomplishments and achievements are subsumed under the label ‘dynamic predicates’, since the differences among them are not relevant for the current purposes.

This is illustrated in the examples below, from Santiago.

Non-epistemic (permission/possibility and obligation, respectively)

- (13) *Bu pode sta diskansadu, N ta txiga sedu.*
 2SG MOD be rested, 1SG TA arrive early
 “You can rest easy, I will arrive early.”
 [non-epistemic + stative = subsequence]

- (14) *Bu ka debe fla kasi pa bo mosa.*
 2SG NEG MOD say/tell lie PREP your girl
 “You must not lie to your girlfriend.”
 [non-epistemic + dynamic = subsequence]

Note that the modal *pode* “can” in (13) is one of permission/possibility and, thus, it is bare. The same superficial verb, but with an ability reading, must be marked by *ta* in the present, which is a hint about its non-stative reading (like in *be able to pay the rent* – present reading: *ta pode* in both varieties; past reading: *ta podeba* in Santiago and *tava podê* in São Vicente).¹⁰

Epistemic

- (15) *E ka debe sta dretu di kabesa.*
 3SG NEG MOD BE well of head
 “S/he must be out of her/his mind.”
 [epistemic + stative = simultaneity]

In the above sentence we get a simultaneous interpretation for the modal and the stative situation denoted by the bare predicate below it.

In the next one there is a precedence reading of the relevant situation denoted by the bare dynamic predicate. Despite this, however, and given that this precedence is denoted by a bare verb, the moment of evaluation also coincides with the time of the modal – in other words, we again have a perfect-like interpretation.¹¹

- (16) Context: two friends meet in the evening and one of them wonders whether a third friend has worked on that holiday; knowing their friend’s habits, the second one says:

Luisa debe trabadja.

Luisa MOD work

“Luisa must have worked.”

[epistemic + dynamic = precedence (of the relevant dynamic situation)]

(adapted from Pratas & van de Vate 2012: 416)

10. I am thankful to Dominika Swolkien (p.c.) for calling my attention to this for São Vicente.

11. For a proposal that perhaps all situations in Capeverdean are either basic or derived states, see Pratas (2010: 229). Here, we would again have a state, since the temporal reading of perfects is related to the post-state of the situation itself, as described in § 3.1.

This also leads us to another fact about epistemic modals in the language: they occur in biclausal structures with the lower subject raising to the matrix subject position (the underlying meaning of these sentences is something like “It is possible/probable that ...”). We see that there is a biclausal structure because the embedded verb may be marked by the progressive morpheme.

- (17) *Ka bu faze raboliso pamodi Maria pode sata durmi.*
 NEG 2SG make noise because Maria MOD SATA sleep
 “Don’t you make any noise because Maria may be sleeping.”

(adapted from Pratas & van de Vate 2012: 426)

Under non-epistemic modals the perfect-like is not available. This suggests that what we have in this case is indeed a monoclausal configuration, and the temporal orientation of subsequence depends on other semantic features of the modal – it establishes conditions that are to be met after TT (the modal anchor time).

Now it becomes even clearer – and this is the relevant point for current purposes – that any *-ba* occurring under the modal is not tense. In fact, the same relations hold when the temporal perspective changes, that is, when TU is after TT.

Non-epistemic (desire and obligation, respectively)

- (18) *N kreba serba veterinario, mas N bai pa profesor.*
 1SG want:BA be:BA vet, but 1SG go for professor
 “I wanted to be a veterinarian, but I ended up a teacher.”
 [non-epistemic + stative = subsequence] (Pratas 2007: 104)

- (19) *Nu ten ki lababa mon... pa nu trabadjaba na midikamentu.*
 1PL have that wash:BA hand... PREP 1PL work:BA PREP medicine
 “We had to wash our hands... to work with medicine.”
 [non-epistemic + dynamic = subsequence] (Pratas 2018b)

Epistemic

- (20) *N diskunfia ma kel omi debeba serba nha tio.*
 1SG guess that REL man mod:BA be:BA my uncle
 “I have guessed that that man should be my uncle.”
 [epistemic + stative = simultaneity] (Pratas 2018b)

Therefore, the rationale for the alternative proposal in Pratas (2018a; b) is the following. If the verbs embedded by non-epistemic modals do not allow the perfect-like reading – which proves that there is no direct relation between this embedded TT and the TU – there are absolutely no grounds to argue that this embedded *-ba* is a tense morpheme. It is then not difficult to sustain that an alternative analysis for this *-ba* may be extended to the one embedded under all kinds of modal constructions, and also to the one occurring in purpose adverbial clauses.

Since some of these embedded predicates with *-ba* have a modal meaning – nothing is said about whether, or when, these situations truly occurred – or may even have a counterfactual value, it could be argued that what we have here is a mood agreement morpheme (of the type proposed in Matthewson (2010: 2), about a clause in which a main verb of doubt licenses subjunctive mood in the lower clause, in an Italian example from Palmer (2006: 117)). It sometimes occurs in modal contexts whose embedding situations are not in the past, but even then the strict mood agreement hypothesis seems not correct either.

The proposal then was that *-ba* is a temporal agreement/concord¹² morpheme associated with some past environments. It appears (i) in root clauses where a past interpretation is provided by the context, and (ii) on subordinate verbs whose embedding clauses often convey past situations.

The same reasoning holds for the preverbal *tava / tá* in the São Vicente variety, with some specifics related to the diachrony of *ta*. In order to account for these different morphological forms – defending that they are a case of micro-variation in the language, in line with the Borer-Chomsky conjecture (Baker 2008) – another conjecture has been formulated: Capeverdean *ta* underwent a complete progressive cycle (Pratas 2018a: 120).

3.2.2 A conjecture on the diachrony of these allomorphs

The origin of *ta* is quite undisputed. It comes from the Portuguese reduced form of *está*, the third person singular of *estar* “be” (stage-level). As was documented in Schuchardt (1882),¹³ it was initially the progressive marker in Capeverdean, which then generalized its use to a more general imperfective meaning, including habituals (as was also proposed in Kihm 1994 for the Guinea-Bissau Creole).

My take on *ta* goes further, in that *ta* underwent a complete progressive cycle, such as the one proposed for progressive markers in other languages (see Dahl 1985; Bybee & Dahl 1989; Bybee, Perkins & Pagliuca 1994; Deo 2015, among others). I argue that after that shift of *ta* to a more general imperfective use referred by Schuchardt (1882: 911, translated in Hagemeyer & Holm 2008) for Capeverdean, and Kihm (1994) for Guinea-Bissau Creole, some reinforcement emerged to fill the gap of a more specific progressive marker (Pratas 2018a; b). The account for the progressive reading of *ta* in embedded clauses headed by perceptive verbs (*N odja Maria ta badja* “I have seen Maria dancing”) then nicely follows: here *ta* keeps its original

12. This double classification here is just to avoid any confusion with syntactic agreement.

13. In Schuchardt (1882: 911, translated in Hagemeyer & Holm 2008) there is the observation that, “originally”, Capeverdean *N ta dá* means, in Portuguese, *eu estou dando* or *eu estou a dar* “I am giving”, a meaning that has later “blurred to [eu dou]” “I give” (adapted from Hagemeyer & Holm 2008: 148).

progressive meaning, for there is no possible ambiguity with the habitual. As for the progressive in root clauses, we now have both the periphrastic forms where *ta* has been reinforced by locative auxiliaries, and the alternative non-periphrastic forms which always involve *ta* (or the allomorph *te*) preceded by some other morphemes with a locative content. Specifically, in Santiago we now have the progressive forms *sta+ta+V* and the ones with variants of the preverbal morpheme *sata* (*ata*, *aita*).

In past environments, licensed by some context that locates TU after TT, there is the temporal agreement/concord *-ba* on the verb; this *-ba* sometimes appears doubled in what seem nonfinite embedded predicates. In São Vicente, we now have the progressive form *tita* (or *tite*), and a periphrastic form with *stod* (*stod+ta+V*). In the transition from the southern islands, *-ba* was lost (Swolkien 2015: 233 fn. 82). By analogy with the Portuguese first and third persons singular, past imperfective of *estar* (*estava*), this Capeverdean *tava* is a multifunctional form related to distinct past environments:¹⁴

- i. in past habituals (*tava+V*);
- ii. as the reinforcement of past progressives (*tava+ta* or *te+V*).

As observed above, this is a case of micro-variation in which different morphological forms express the meaning of the same lexical item (although this meaning may be combined in different ways with other lexical items, whether they are other temporal morphemes or just the verb itself).

3.3 A temporal agreement marker in both varieties

Capeverdean displays the dual modal values described in Comrie (1985: 45): “... some languages have a basic modal distinction between realis and irrealis, where realis refers to situations that have actually taken place or are actually taking place, while irrealis is used for more hypothetical situations, including situations that represent inductive generalisations, and also predictions, including also predictions about the future.” This corresponds to what has been described above:

14. This form is also used as a copula, like the reduced form of the Portuguese *estava*:

- (i) *N tava un bokod grand ...*
 1SG was one bit big
 “I was a bit grown-up ...”

And then, when we need the same copula value modified by some specific aspect / mood, the copula itself is *stod*, as said above, and we get *tava* as the temporal marker just described:

- (ii) *Un ves, pais tava stod na kaza, tud na pé d fidj ...*
 one time, parents TAVA be in house, all at foot of child
 “In the old days, parents used to be home, together with their children ...”

- i. an irrealis mood, in its various values (generics, futures, attitudinals);
- ii. a realis mood, expressed through the perfect or the progressive.

Therefore, we are free to accept that in natural language past, present or future meanings of a sentence may be expressed without any dedicated tense morphemes. This occurs in this language: there is a distinction that is strictly of mood (realis vs. irrealis) and, within the realis mood, there is an aspectual distinction between the perfect and the progressive. To be shifted into a ‘past’ interpretation, all these irrealis and realis meanings need a context (discourse, adverbs, or other sources of temporal information) which locates TU after TT. In the absence of this context, an interpretation where TU and TT coincide is obtained. Therefore, the specific morphological forms associated with the past-shifted versions of these mood and aspect meanings are not tense markers, rather behaving like temporal agreement/concord: they do not bring any past meaning in themselves – in conditionals, for instance, they may even occur in the embedded clauses which refer to the present or the future (in cases similar to those which Iatridou (2000) has described as ‘fake past’ for Modern Greek).

As noted above, there is an underspecification in the mapping between the functional head at stake here and the morphological forms (Adger & Smith 2010), allowing the language to have the different units for this lexical item (temporal concord/agreement) that we find in each variety: postverbal *-ba* in the older variety of Santiago; in the younger variety of São Vicente, there is *tava/tá*, which is more complex since it incorporates either the habitual meaning or the locative reinforcement of the progressive. Also in São Vicente, some suppletive forms from Portuguese are used in other contexts where Santiago has *-ba*, such as *tinha* ‘had’+participle for the past perfect. The following tables (from Pratas 2018a: 119) illustrate these relations.

Table 4. Mood and aspect values, also with *-ba* (Santiago)

	Realis		Irrealis
	Perfect	Progressive	Habitual or prospective
TU coincides with TT	V (present perfect) (1b)	<i>sata</i> V (present progressive) (1a)	<i>ta</i> V (present habitual or future) (4)
TU is after TT (provided by the context)	<i>V-ba</i> (past perfect) (5)	<i>sata V-ba</i> (past progressive) (9)	<i>ta V-ba</i> (past habitual or conditional) (7)

Table 5. Mood and aspect values, also with *tava/tá* (São Vicente)

	Realis		Irrealis
	Perfect	Progressive	Habitual or prospective
TU coincides with TT	V (present perfect) (1b)	<i>tita/tite</i> V (present progressive) (1a)	<i>ta</i> V (present habitual or future) (4)
TU is after TT (provided by the context)	<i>tinha</i> + participle (past perfect) (6)	<i>tava</i> or <i>tá</i> + <i>ta</i> or <i>te</i> V (past progressive) (10)	<i>tava</i> or <i>tá</i> V (past habitual or conditional) (8)

This recent proposal, however, did not explicitly state what these morphemes agree with. This is the topic of the next section.

4. Marking other values

The notion of low accessibility that I started to explore in Pratas (2021) applies to both past habituais and past progressives (inaccessibility), on the one hand, and to conditionals and other typical modal contexts (several levels of low accessibility), on the other hand.

As pointed out in the introduction, this novel approach uses a different notion of accessibility from that used in Arregui (2005). As a parallel note, this notion is also different from the proposal in Cable (2011, 2013) on what he calls Temporal Remoteness Morphemes (TRMs) in the Bantu language Gikũyũ (Kikuyu). The author argues that these are prefixes which occur in past-tensed verbs and provide further information about the distance between the event described and the time of speech. They possess the presuppositional semantics commonly hypothesized for tenses, but “some also possess an indexical semantics more characteristic of temporal adverbials. ... I propose that (like tenses), the TRMs of Kikuyu are temporal pronouns, but (unlike tenses) restrict the Event Time rather than the Topic Time” (Cable 2011: 3).

The notion of remoteness, in the sense of distancing, would also be of interest to account for the speaker’s attitude towards the situations denoted in the Capeverdean sentences under analysis here. But on the other hand it might be misleading: remoteness, when connected with what seems past morphology, might point exclusively to different degrees of temporal distance, and this is not the idea at all.

The idea here is this:

- The speaker identifies past situations (i.e., situations whose Topic Time is before the Time of Utterance, which is given by the context) with a sense of inaccessibility; the past is gone, and although we may access it in our memories we can never go there again; hence we may say it has a quite low accessibility.
- There is a morpheme associated with these past constructions, just because it expresses this concept of low accessibility – note that what conveys this notion is the speaker’s knowledge of the world and their perceptions about time, not any morphology of the past.
- There are other situations that, although not necessarily in the past, also suffer from a low degree of accessibility under the speaker’s perspective, and therefore they use the same linguistic forms as above to convey this low accessibility concept.
- This is how we get conditionals (which are not necessarily in the past, but point to a time viewed as lowly accessible all the same); and this is how we get desires and wishes also marked by this same morphology – because the speaker intends to convey this low accessibility meaning, such as in *N tava gostá / N ta gostaba di bai sinema* “I would like to go to the movies”, meaning “I want to” but with a reduced amount of hope regarding the success of this wish.

This proposal, which implies disentangling a past tense meaning from the temporal markers sometimes – not always – associated with it, gains even more strength with the observation that this relation between a past meaning and a low level of accessibility produces other interesting results: when the speaker wants to make past situations look more accessible, they narrate them in the present (the so-called narrative ‘present’), which helps them disguise that mismatch between the Time of Utterance and the Topic Time. They know that the narrated situations occurred in the past (this is the meaning level) but they tell them as if they were not marked by low accessibility (this is the morphology level). This type of narrative ‘present’ (among the “non-canonical usages” of the present described in Klein 2010: 48–51) is attested in many languages, and perhaps the strategy is of the same sort in all of them (this is a case for future study).

The relation between the levels involved in this computation is also interesting in that the present perfect morphology, which, as said in § 3, denotes situations which occurred prior to the Time of Utterance (the TT and TU coincide, but the T-Sit precedes TT), is never involved in these low accessibility contexts. This shows that what truly makes the difference regarding these uses in the the past (which is no longer fully accessible, and this is expressed morphologically, just like other inaccessible situations are expressed in a similar way even if they are not past) is

the precedence of the Topic Time regarding the Time of Utterance. In other words, what counts to build this notion is the TU's relation not with the T-Sit but rather with the TT.

Another novel characteristic of this proposal is that it puts together constructions which are easily taken as having a modal meaning and others which have been previously treated under a tense analysis.

One way of putting this analysis to the test is to check whether it works also for other temporal morphemes in other languages. And this is indeed the case with Portuguese past imperfective markers, which are used in past and in non-past temporal meanings, in the same way these Capeverdean morphemes do. Crucially, both Capeverdean allomorphs under study here are derived from one of the regular past imperfective morphemes in Portuguese, *-va* (as illustrated in (21b); the other common form is *-ia*, as illustrated in (21a)). Nevertheless, contexts such as the ones below have never, to my knowledge, been analysed under this perspective – that these morphemes are not any form of past markers which sometimes are used as 'fake pasts', but rather markers for an entirely distinct layer of temporal meaning.

- (21) a. *Eu comia agora um gelado.*
 I eat:LAM now an ice-cream
 "I would now eat an ice-cream."
 b. *Amanhã, se estivesse calor, eu almoçava na esplanada.*
 tomorrow, if be:SUBJ heat, I lunch:LAM at terrasse
 "If it were hot tomorrow, I would lunch alfresco."

The future study of these low accessibility morphemes (LAMs) will also consider other works on different temporal constructions that are used by the speakers to provide similar temporal meanings, although they may not have been identified as such.

5. Conclusion and a note regarding future research

In this paper I further confirm a new perspective on the expression of temporal meaning in Capeverdean which accounts for the use of apparently past morphology in contexts where a past meaning is not guaranteed. My proposal is that in both cases – the ones with a past interpretation and the ones that do not have it – this same morphology does not mark past, but rather a different level of meaning: a low degree of accessibility from the speaker's perspective. This takes as a point of departure the fact that in Capeverdean a past meaning occurs without any dedicated tense morpheme: there is a distinction that is strictly of mood (realis vs. irrealis) and,

within the realis mood, there is an aspectual distinction between the perfect and the progressive. To be shifted into a past interpretation, all these irrealis and realis meanings need a context (discourse, adverbs, other linguistic information, etc.) which locates TU after TT; in the absence of this context, a present interpretation is obtained through a pragmatic inference. The specific morphological forms associated with the past-shifted versions of these mood and aspect meanings thus behave like temporal agreement/concord rather than strict tense markers. The novelty here is that they agree, not with tense, but with that low accessibility notion which is a particular feature of some time locations – the past, certainly, but other unspecific locations as well. Therefore, both semantic content (a past meaning, provided by the context) and pragmatic inferences (principles about the functioning of the real world) are at stake in this computation. The syntactic implementation of this is left for future research, which must involve a projection for these LAMs.

Furthermore, there is an underspecification in the mapping between this functional item (temporal agreement/concord) and the morphological forms (Adger & Smith 2010), allowing the language to have the different units we find in each variety: in the older variety of Santiago, we have the postverbal *-ba*; in the younger variety of São Vicente, we have *tava/tá*, which is more complex, since it incorporates this temporal agreement and either the habitual meaning or the locative reinforcement of the progressive. Also in São Vicente, some suppletive forms from Portuguese are used in other contexts where Santiago has *-ba*, such as *tinha* + the participle for the past perfect.

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