## Fernanda Pratas

 THE EXPRESSION OF TEMPORAL MEANING IN CABOVERDEAN
## TRENDS IN LINGUISTICS

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Fernanda Pratas<br>The Expression of Temporal Meaning in Caboverdean

# Trends in Linguistics Studies and Monographs 

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## Volume 332

Fernanda Pratas

## The Expression of Temporal Meaning in Caboverdean

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To Luís and Adriana, my best friends forever.

## Preface

This book started as a mistake, like so many things in both life and fiction. In my first decision to convert my dissertation into a publishable manuscript I misjudged the adaptations needed, and then its submission did not go well also for other reasons which at that moment were barely clear to me. So that plan was sent to a hidden folder in my computer, and it remained unseen for a few years, while I was busy writing papers and designing research projects that might bring me a stable job position.

The idea was suddenly revived during a dinner with a good friend and advisor, who recalled once again that a monograph was missing in my list of academic achievements. This time some trick of the mind made the whole project mature under a different drive, which gave it the flavour of a fresh start. The practical trigger was still that empty space in my $c v$, but my goal was now bigger than filling it. Now I wanted to write a book. As the papers on "how to convert a thesis into a monograph" often put it, I was determined to find my own voice.

And then a new proposal emerged which was based on my recent results within my favourite topic of research. I sent it to another publishing house and got a very positive response from the editors. And here it is, that new item in my $c v$. I cannot confirm it reflects my own voice, though; even if I were sure of what that means exactly, I would probably be unable to fully say it in these foreign words and clauses. But this background goal was a nice motivation anyway.

This enthusiasm has been put to the test every single day of hard work in these latter months, which would be close to intolerable without the permanent support from both my husband, Luís, and our daughter, Adriana-their sharp minds, independent spirits and sweet hearts are my constant fount of inspiration and wonder.

I can never express enough gratitude to each of the numerous Cabo Verdean friends and consultants who have so kindly helped me along the way, in so many ways, as well as to my dearest colleagues and family members-and you know who you are!-for layers of reasons dispersed over many years and places.

A great amount of thankfulness goes to the persons at De Gruyter who have dealt with this project at different stages, all and always with impeccable professionalism and generosity, and to the anonymous reviewer whose insightful remarks and suggestions played a key role in this final version.

Now it would be too pretentious to expect that all the beautiful things I believe about my work are as appealing to others as they are to me. But I dare wish that these six chapters contribute a little to explain how we, humans, use words to express temporal meaning.

Fernanda Pratas

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## 1 Questions and goals

When I'm gone / When I'm gone / You're gonna miss me when I'm gone. ${ }^{1}$

In the best-known ancient tales from diverse cultural traditions, tragic facts bring about moral teachings and intrigue. Lovers, for instance, may really die, and thus force into bereavement their survivors on earth. Others will rather become spirits and move themselves to new dimensions, from where they keep steering those left behind. Or they may as well be converted into stars, and then just shine forever in the Milky Way. So there is much variation in how each person copes with loss, but these key life changes are everywhere.

And this may be viewed as evidence that we are this kind of natural-born presentists, often anxious about the future and nostalgic of things past. Imagine however that, along with this conscious impression, we also prove to be quite at ease with this quantum universe where, according to physicists and philosophers, no timeline exists. We have recently discovered a lot about how the brain measures time at different scales (neuroscience), and about how we distort time according to the pleasure or pain of each experience (cognitive sciences), but whether our collective perception is better captured by presentism or eternalism is still open to debate.

This book contains no philosophical discussion of how we seem to value the present when we come to think of life and death and the meaning of it all. To that end, any study under a linguistic perspective should certainly include the most overt statements about the topic, as well as metaphors which play around with secondary meanings-our goals being in the conceptual domain of time, favourite metaphors include those denoting properties about its passage, generally through a parallelism with motion, and thus with space (sand sifting, a river flowing, an arrow flying), and also about its effects on existing beings (a trap, a healer, a curse, a mighty sculptor). These metaphors, together with overt propositions about time, are the subject of another research project, to be carried out in collaboration with areas as distinct as philosophy of language, neu-

[^0]roscience, cognitive sciences, anthropology and literary studies, or even in multidisciplinary teams bringing together the findings from all these fields. The focus here is instead on the linguistic representations of different temporal values. They may hint at those notions, and this is one point to be defended, but human language is nevertheless the main area of research.

One may observe a quite familiar utterance as the last verse quoted above, from an American folk-pop song. It points to at least two instants in the future, which is itself very complex-under some analyses, we are talking about a nonexistence. And yet the predicates there are said to be marked for present. Moreover, when the recipient of a message like this gives it a second thought, they may recall narratives and arguments about past, present, and future situations, and others which might have been-if a few things had turned out differently, perhaps the sentence would have never been uttered in the first place. In this scenario, how exactly should we organise the mentioned situations on the single, straight timeline we know from textbooks? To put this another way, we may be located in that special moment we call present, but how this relates to some situations we discuss is unclear, as is the case in another verse: 'it sure would be prettier with you.' What time is the speaker talking about? And we all know a myriad of settings that raise the same sensation of parallel meanings. ${ }^{2}$

The rationale guiding this study is thus as follows. Our faculty of language generates expressions which establish still poorly understood links between what we pronounce, on the one side, and our thoughts and abstract notions, on the other. So there is a certain wormhole quality to it: one promising way to explore concepts of time mostly ingrained in the human mind is by diving into the detailed analysis of the temporal meanings in these linguistic expressions, as they are produced within spontaneous descriptions and narratives-that is, when we are not exactly talking about time but employ all sorts of time notions in our discourse about other matters. And in fact we constantly tell about unfolding situations as related to each other, in complex dynamic designs with different layers, always mixing and changing and pulling one another. The first assumption here is therefore that these narrative skills seem to relate much better to the recent descriptions of our quantum world than to any conventional timeline symbolised by an expanding arrow, as if it were drawn by a moving train constantly dropping passengers along the way. In other words, the current study will lead to the hypothesis that our expression of situations rather hints at our relationship with time as that intricate web constantly evolving around us.

[^1]More specifically, the premise explored is that the temporal location of situations, as we denote them in our everyday discourse, is somehow anchored to the viewpoint we assume (and this is quite uncontroversial) but this relation is better apprehended by linguistic analyses that consider those layers disorderly changing everywhere (and this is the innovation here). This reasoning applies to temporal meanings expressed by diverse constellations of lexical items, and these may of course include temporal morphemes.

In practice, this translates into this main proposal: linguistic manifestations previously identified through 'past' labels-even their appearance in other temporal environments has been taken as if they were expressing some type of 'fake past'-rather express a value at an entirely distinct layer of temporal substance, which is related to the notion of (low) accessibility. Under my current terms, low accessibility indeed concerns a variety of past situations, but also (and equally) many situations among those clearly not located in the past. When we try to understand the temporal locations of the latter-that is, when it comes to account for the quite trivial temporal notions in our daily lives, which is of course different than when we arrange a given list of historical facts chronologicallyany conventional timeline is the least suitable of all possible models.

One cautionary claim is needed at this point. Although, as was said above, a lot is still to be known about the connections between the abstract notions in our minds and the expressions generated by our faculty of language, this monograph is certainly distanced from any premise that the particular languages we acquire in childhood shape our conceptions of the world. ${ }^{3}$ This rejection means that we may start the exploration of this wormhole by using the entries made available in any particular language, as long as the desired universal implications are well motivated and sustained. For reasons to be defined in the next subsections, this attempt is here empirically supported with data from Caboverdean, a Portuguese-related language whose abundant grammatical challenges are still largely understudied. The theoretical approach is grounded on the central questions of generative grammar, and therefore, if this line of inquiry proves itself as valid, it may be used in other crosslinguistic analyses.

This introductory chapter presents a brief alignment of the central questions guiding this study (1.1), followed by the framework used in dealing with

[^2]the linguistic discussions (1.2), a description of relevant aspects of the history of the language (1.3), the methodology to gather the linguistic data (1.4), and an overview of the next chapters (1.5).

### 1.1 Starting points

Any revelations of modern physics and philosophy about the nature of our universe, be they the laws of spacetime or the increasing entropy of a quantum world, immediately motivate the perplexing admission of how wrong our mind is. This can be put as a question: how is the notion of a present moment so obvious that we value this instant beyond reason, when at least some of us are finding remarkable evidence that no time variable is included in the fundamental equations of the universe?

First, after the general relativity theory of Einstein, which elaborated on Minkowski's spacetime and provided a synthesis for Aristotle's and Newton's logical ideas, time in the universe was revealed as a fourth dimension, interlaced with the three spatial dimensions that we already knew. And then, more recently, the theories of quantum gravity go even further and deny the existence of spacetime. This is how the physicist and philosopher Carlo Rovelli puts it: "At the most fundamental level that we currently know of [...] there is little that resembles time as we experience it. There is no special variable 'time', there is no difference between past and future, there is no spacetime" (Rovelli 2018: 110). Under this scientific approach the universe is a complex structure of layers that stretch, bend, push and pull one another, creating dynamic patterns and relations which happen disorderly. There is no time variable but there are "variables that change in relation to each other. Time, as Aristotle suggested, is the measure of change" (Rovelli 2018: 56). ${ }^{4}$

So where did we get this idea that only the present is real, or special? An obvious answer is that we live a profound, collective illusion: our universe behaves in its own way and we, poor limited beings, live according to totally different parameters. But... do we? This question requires a multi-layered approach, for two main reasons here stated as strategic, complementary doubts:

[^3](i) given that we belong to this same universe, and that we (discount the abusive first-person plural here) are the ones finding the laws of thermodynamics, the notion of spacetime, and then the intricate properties of a quantum world, is it logically possible that we persistently live under such an erroneous impression?
(ii) since the notion of a present moment on a single timeline is also classically invoked in linguistic studies, in all their forms and theoretical approaches, could it be the case that this traditional body of knowledge, supported by old views about the universe and our relationship with it, is obfuscating/obstructing any possible advancements as to how we essentially process time, beyond the impressions caused by our discourse about its passage?

We know that any tick of the clock, rise of the sun, and beat of the heart are among the constant signs of change in our daily world. From our perspective, these phenomena-their relative regularity-can be taken to measure time, which in turn we need to consciously locate other situations. This means that we daily use events to establish a time reference for other events' location and duration, and to feed expectations about what comes next. According to physicists, philosophers, and neuroscientists, among others, this is how our memory works, and this is what we do with history-or with the tempos in music. How this functions exactly is still unbeknownst to us, but it does not seem incompatible with an observation as this: honestly, when we are not speaking about time-like complaining about its swiftness, or proclaiming how it heals or killsbut rather use time notions to report on other subjects that are important to us, what we express relates more to an intricate design that is all but a wellarranged line of past, present, and future facts.

The basic question that guides this book may therefore be moving in either direction, as follows:
(a) how does our perception of time shape the linguistic expressions we choose while narrating all sorts of situations or telling about beliefs and desires?
(b) how can we productively use these linguistic expressions as the said wormhole granting us access to the time notions mostly ingrained in our minds?

The remainder of this section elaborates on such points.

### 1.1.1 Time in physics and philosophy

The physicist Richard Feynman said that "Maybe [we can] face the fact that time is one of the things we probably cannot define (in the dictionary sense), and just say that it is what we already know it to be: it is how long we wait!" (Feynman 2010[1963]: 5-2). Then he adds: "What really matters anyway is not how we define time, but how we measure it. One way of measuring time is to utilize something which happens over and over again in a regular fashion-something which is periodic" (ibid). And this is of course circular, since to know that something is periodic, or regular, we need to first measure the time that separates subsequent instances. This means that whenever we speak about time we necessarily end up talking about events, and if we speak about time measuring we end up talking about repeated events. Sometimes we want to know which occurred first, and which one later, if any pair occurred at the same time, or if any parts of them overlapped while others did not. Importantly, we use the moment where we are when we do these calculations as a reference for everything else. This is however different than being part of any collective illusion:
> [...] our vision of the world is blurred because the physical interactions between the part of the world to which we belong and the rest are blind to many variables.
> This blurring is at the heart of Boltzmann's theory. From this blurring, the concepts of heat and entropy are born-and these are linked to the phenomena that characterize the flow of time. The entropy of a system depends explicitly on blurring. It depends on what I do not register, because it depends on the number of indistinguishable configurations. [...] This does not mean that blurring is a mental construct; it depends on actual, existing physical interactions. Entropy is not an arbitrary quantity, nor a subjective one. Rovelli (2018: 83)

That our blurred vision of the world is not equivalent to an illusion or a mental construct has been attested for different areas of cognitive studies, such as the processing of shapes around us from the visual information our brain receives. A recent series of experiments allowed their authors to conclude that external objects have for us a dual character-"their objective shape 'out there', and their perspectival shape 'from here'" (see 6.2 for a description of this)-and the fact that the brain knows about this nonunique nature of the world as we see it relates to the reasoning about time at stake here.

Returning to time itself, besides the recent, albeit controversial, developments in theoretical physics, which provide strong mathematical reasons to entirely deny the existence of time in our quantum universe as related to the notions of entropy and disorder (so even the idea of time as the fourth dimension in spacetime has lost its appeal), some ongoing philosophical disputes also
target this hot topic. One of the most prominent debates in this respect is between the so-called presentists and eternalists, roughly associated with the Aseries and the B-series, respectively, thus named in the beginning of the $20^{\text {th }}$ century by the British metaphysician J.M.E. McTaggart. In 1908 McTaggart gave the name A-series "to that series of positions which runs from the far past through the near past to the present, and then from the present through the near future to the far future, or conversely." To the "series of positions which runs from earlier to later, or conversely," he gave the name B-series (citations from the reprint in Le Poidevin \& Macbeath 1993: 24). ${ }^{5}$ The order between events being the same, the difference between the two is about focus. McTaggart defended that the A-properties, although not consistent with the fact that time does not exist, are closer to common sense (and thus are the basis to our concept of time), which he classifies as a paradox. Other approaches to time ontologies have been developed, including much specific ones, as the block-universe theory and the growing-block theory. ${ }^{6}$ The American philosopher Brad Skow, for instance, proposes a new version of the moving spotlight theory, which he says also resembles the growing-block universe theory and "makes a connection between the passage of time (the motion of the Now) and change. In fact, it uses facts about change to explain facts about the passage of time" (Skow 2012: 223).

One detail that is of great interest here is that even for eternalists, at the instant of evaluation we only experience a part of the present and do not have full access to the past-if we want to visit anything in the past we can do it only through our memory. And this idea about the past also plays a core role in the main theoretical proposal in this study, with an addition: this lack of full access regards more time notions than the past-it affects as well times that we access only through complex cognitive processes, which of course are far from entirely understood. In this vein, we often seem to annul this lack of full access to past or other, unspecific times by expressing them under a different tense value. Some previous analyses pointed out the 'noncanonical' uses of the 'past tense' and the 'present tense', when they convey nonpast and nonpresent situations, respectively (see next section). The novel part to be advanced in this mono-

[^4]graph is that, at least in Caboverdean (for now), there is only something 'noncanonical' about the uses of certain constellations of items when the speaker is pretending-that his, when they are expressing a different value than the one they actually perceive, for instance to attain some desired effect. These cases are however the less common. Most times, these uses simply express the speaker's actual perception of accessibility-and so the same value may indeed involve situations that have already occurred, but also others whose time location is unspecific, regardless of them being in the past or not.

### 1.1.2 Time in linguistics

The neuroscientist Dean Buonomano, who specialises in how the human brain processes time at different scales, also speaks about language, which he says "assumes an inherently presentist perspective. As in presentism, in verb conjugation the present is a privileged frame of reference. Indeed, the terms presentism and eternalism are related to what some philosophers refer to as tensed and untensed time respectively. Tensed time is always grounded in the present [...]. In contrast, a dry inventory of events such as '8AM January 1st 2016, at gym; 8AM January 2nd 2016, at gym,' is an example of untensed time" (Buonomano 2017: 115). This segment is important here for a possibly unobvious rea-son-it illustrates a widespread confusion between two key concepts:
(i) morphological markings for 'tense' (spoiler: not all languages have them);
(ii) the present as a core notion within the human mind, and thus in natural language as well (main claim here: it shows in more subtle ways, which may or may not include verb markings).

Within linguistics, there has been a long and fruitful theoretical debate, sometimes including heated discussions among scholars, around topics such as what it means for a language to be tenseless. The view assumed here is that tenseless languages do not mark tense morphologically but anyhow value the presentroughly, the time of speech (or the time of utterance)-as a fundamental concept, even if it is overtly distinguished by other means. This is generally in line, as far as I understand, with the idea in Comrie (1985), although it has not always been acknowledged this way. Note that he also assumes "time can be represented as a straight line, with the past represented conventionally to the left and the future to the right" (Comrie 1985: 2), and this is a premise that I abandon. The part of his definition that I undertake here is that temporal locations may be expressed in three different ways: (i) lexically composite expressions, of the
type 'five minutes after John left'; (ii) lexical items such as 'now' or 'yesterday' (and note that also (i) and (ii) can have diverse representations in different languages); and finally (iii) "grammatical categories, [...] the least sensitive of the three" (Comrie 1985: 8). His much-used definition of tense as the grammaticalized expression of location in time (Comrie 1985: 9) is thus exclusively about type (iii). For languages considered tenseless under this view, there are always types (i) and (ii) to locate situations in that diagram of past, present, and future.

In order to know whether the language we are studying lacks this type (iii) strategy for expressing the time location of situations, Comrie himself states how we should proceed: "we would look at a particular form in a language, decide whether it does in fact express location in time and whether it is indeed a grammatical category, and then pronounce it to be tense or not" (ibid). He is, therefore, speaking about grammatical forms, even though his latter division between what "grammaticalized" means as opposed to "lexicalized" is not utterly clear. ${ }^{7}$ He also says:
> it is conceivable that, using the above definition of tense, we might examine grammatical categories across languages and find that there are none which match the definition, i.e. we might be forced to the conclusion that tense does not exist, and should therefore not be part of linguistic theory. It is therefore an empirical claim of this book that tense does exist, i.e. that there are languages which express location in time by means of grammatical categories. Indeed, given that no restrictions are placed by the definition on what kind of location in time is to be considered, it is probable that most of the world's languages will turn out to have tense, although there will still probably remain a small residue of languages that do not [...], just as there are some languages with no grammatical category of aspect or number.

> Comrie (1985: 9)

And so the point here is that he is certainly not speaking about languages that cannot distinguish between time locations. In the above excerpt he discusses, not the absence of location in time, but rather the possibility of there being no grammatical tense in natural language-and even this possibility is basically refuted. What he acknowledges (his section 2.5) is the existence of languages which "lack tense altogether"-but always in that sense of the grammaticalized strategy referred in (iii):

What Burmese shows us, then, is a language where time reference per se is not grammaticalised, i.e. there is no tense. It is, of course, possible for time reference to be expressed in

[^5]other ways (for instance lexically, by the use of adverbials like mane?hpan 'tomorrow'), and for deductions about time reference to be made from other aspects of the sentence, perhaps in conjunction with knowledge of the world, as when sentences with the irrealis particle are frequently interpreted to have future time reference. But all of this is without reference to any grammatical category that has future time reference as part of its meaning. What has been said about Burmese could be extended equally to Dyirbal [...]

Comrie (1985: 51)
Chapter 4 of this monograph sums up approaches to other tenseless languages: Blackfoot, Halkomelem, Hausa, Kalaallisut, Mandarin, Paraguayan Guaraní, and Yucatec. For now, key ideas in Bohnemeyer (2009) and in Tonhauser (2015) are invoked to highlight this distinction between dedicated tense morphemes and temporal meanings:

It is safe to assume that it is as important for Yucatec speakers as it is for English speakers to be able to distinguish narrative accounts of past events from predictions of future events or declarations of intentions about future events and, for example, descriptions of habits and statements of general rules.

Bohnemeyer (2009: 113)
Cross-linguistically, temporal reference is constrained by context and temporal adverbials (in all languages) and tenses (in some languages).

Tonhauser (2015: 138)
But even when the main discussion assumes that tenseless languages can distinguish among tenses by other means, a lack of understanding of what tenselessness means exactly may affect other details. Another property of these languages which has sometimes been advanced against all evidence is that, since they do not show tense morphology, they must counterbalance this by overusing other temporal markers (of the first and second sets of expressions described in Comrie 1985: 8). But Bohnemeyer (2009) disputes this as well:

A standard claim made in discussions of tenselessness is that adverbials can be used to compensate for the lack of tense markers. While certainly not false, this is misleading to the extent that it suggests that adverbials are more frequent or play a more important role in discourses of tenseless languages than in those of tensed ones. At least as far as Yucatec is concerned, this is not the case. The events narrated in Yucatec folk tales are not anymore anchored to a calendrical time scale than those of Hansel and Gretel [...], and if a Yucatec speaker wishes to convey that the bus I have been waiting for has already left or that a house is on fire in another part of the village or that they are planning to get married, they are perfectly able and in fact likely to do so without using any temporal adverbials.

From my own recent analyses, Caboverdean greatly contributes to the tenselessness debate. The bare forms of most predicates, including some statives, ${ }^{8}$ denote situations that have already occurred, the preverbal morpheme $t a$ is used with various habituals, generalisations and futures, an ongoing interpretation is not expressed through anything as a present marker but rather through the progressive, and other morphemes that may relate to a time in the past also participate in the description of nonpast situations. After several years struggling to understand Caboverdean strategies to express temporal meanings under the more conventional idea that languages mark tense, overtly or covertly, and even admitting the existence of 'fake pasts' (e.g. in Iatridou 2000 for Modern Greek), all sorts of fake presents (such as 'narrative present' or 'futurate present'), and at least one fake future (the epistemic construction where we use future morphology to express a guess about a present situation), another way to account for all these began taking shape.

First it was necessary to admit that "[...] 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 generalizations, and also predictions, including predictions about the future" (this is again Comrie, 1985: 45). This seems exactly what we have here: (i) irrealis in its various values (habituals, generics and some futures), and (ii) realis as expressed through (a) the perfect reading of bare verbs, or (b) the progressive. ${ }^{9}$ Then I proposed that, to be shifted into a past interpretation, all those irrealis and realis meanings need the right environment, which indirectly locates the situation in a time prior to the utterance; ${ }^{10}$ in the absence of this information a reading where both times coincide is obtained. A couple of morphemes are indeed associated with some (underlined: not all) past environments, which at that point I considered were no tense markers per se but rather a type of temporal agreement (Pratas 2018a,b; 2019). In sum, Caboverdean started to resemble a tenseless language, since it distinguishes between past, present, and future by other means than grammaticalized tense.

But then a few challenges to this view also emerged. If we look into muchstudied languages, such as English, for regularities and for their inherent com-

[^6]parative basis, we may find affirmations such as the ones in the excerpt belowthe choice of it is motivated by two distinct facts: (i) English is assumed to be tensed (many tenseless languages' strategies are contrasted in the literature with its past marker 'ed' on regular verbs); (ii) this particular paper is concerned with the most documented concepts as a basis for annotation systems of digital corpora, so it is certainly a good source for these generalised views:


#### Abstract

In English, it is usually assumed that there are two morphologically expressed tenses, present and past, while there are grammatically three tenses, with the inclusion of future. The present tense usually locates events as occurring at the speech time, and a typical use is the 'reporting present', as seen in live sports broadcasts. There are also informal uses of the present to convey a past event [...]. Present can also be used for imminent or projected future events [...]. The past tense usually refers to a time prior to speech time. [...] The past tense can also involve definiteness, i.e., the speaker has a particular time in mind [...]. The future tense usually refers to a time after the speech time though, like the other tenses, it can also be used as an epistemic present [...]. Furthermore, our concept of the future is not really symmetric with that of the past, since the future involves branching possibilities. This lack of a simple correspondence between morphological tenses and the categorization of locations in time is one of the reasons that temporal annotation is difficult and important.

Pustejovsky et al. (2017: 29-30)


Among the several points of this segment, one deserves particular attention: is the so-called 'reporting present' a typical use of the English present? This would imply that when English speakers use the present tense, they are most probably engaged in reporting events which are taking place close to that moment, such as happens in sports broadcasts? In Portuguese this is not the case at all (and in fact neither is this the case in English). Dynamic events occurring at the speech time are typically expressed by the progressive, whereas the simple present is used to convey generalisations, habits, qualities. True, the simple present is also used in live sports broadcasts (which can be equally described as "informal uses of the present to convey a past event", since the speaker reports about movements that have just happened), but I would not call this use 'typical'. And, importantly, it is used as well in other narratives where a live feeling is also intended, or to cause any other specific impression, but in these latter cases we are clearly not considering that the time of the situation coincides with the time of speech. And this is a fundamental point regarding the expression of temporal meanings crosslinguistically: couldn't it be the case that these constellations of items express further layers of temporal meanings, which are directly related to our deepest time notions?

In a parallel (in the sense of nonconvergent) proposal about the relations between language and human conceptions of time, the philosopher K.M. Jaszczolt assumes that "humans conceptualize time in terms of certainty and
possibility" (Jaszczolt 2009: 32). Under her Default Semantics model, which is related to the Discourse Representation Theory, "[both] real and internal time are argued to be inherently modal, in the sense of metaphysical probability and epistemic possibility respectively." She then analyses the concepts of the future, present and past, and also looks at linguistic expressions of these meanings, and concludes "that the explanation of time as modality applies to such temporal expressions, both grammatical and lexical, and they should be assigned a modal semantics" (Jaszczolt 2009: 2-3). Although that book discusses interesting points about 'real time' and 'internal time', the possible roots for the latter and, in this respect, also about the distinction among internal times in various cultures, her proposal that time is reducible to modality in the sense of certainty and possibility is definitely not what I defend here. ${ }^{11}$

If we take the definition in Palmer (2006: 1) that modality "differs from tense and aspect in that it does not refer to any property of the situation but rather to the status of the proposition", what I propose may be indeed related to modality, but not in the sense of separating certainty from possibility-the same value of accessibility at stake here may apply to situations reported as certain as well as to others reported as possible. It so happens that the human views about time are much more complicated than the time arrow diagram lets us infer. Our perspective involves not only viewing, at a given time, situations as having occurred, as ongoing, or as predicted, but also others about which we equally think in terms of greater or lesser accessibility, depending on the way we want/ can remember, experience, or anyhow perceive them. These values are not therefore about different degrees of certainty, or about probability or possibility. They are about a different sort of abstract judgment, allowed by our complex web of cognitive powers. This judgement may show up in natural language at many levels, and one of them is indeed temporal in nature, under the approach to time notions assumed here. That we are able to express this as related to temporal meanings is thus defended in this study.

Some of these expressions have been analysed by other authors also under a modal approach. Given "the dual temporal/modal functions of the past and future tense markers, 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: ‘non-actuality’ (Strang 1968), 'dissociation’ (Steele 1975), or, in deictic terms, 'distality’ (Langacker 1978) or 'remoteness’ (Joos 1964), as opposed to the 'proximality ' of the present" (Binnick 2010: 515, in his review of Jaszczolt’s 2009

[^7]book). And the past and the future are not alone in having, in the literature, this dual temporal/modal function. As was referred above, the present displays this too, with its "non-canonical usages" pointed out in Klein (2010: 48-51). But, again, my approach here differs from this. And it does so in two decisive ways:
(i) these uses of temporal expressions are not 'noncanonical' in that sense; they always involve the full or low accessibility of a given time location;
(ii) this value is not about grammatical tense, it is more about a special kind of temporal meaning-be it expressed in tensed or tenseless languageswhich basically consists in the situations being depicted as fully accessible or not.

One welcome collateral effect of this proposal is that it completely liberates us from the difficult definition of the present: the full accessibility often associated with it does not rely on precise limits of this elusive entity, be it an instant or instead the short period called 'specious present' by the psychologist E.R. Clay and mostly developed by the psychologist William James in the $19^{\text {th }}$ century.

### 1.1.3 Presentism... to a certain point

According to Buonomano (2017), our brain is equipped to process sequences in a scale of milliseconds or even seconds, detecting effects between situations, and thus expecting certain follow-ups to the events which have just been stored in the memory. The type of relationship instantly established between these events also applies to language: not only do our pronunciations of some segments differ according to the sounds we are going to produce immediately after them (phonology), we also tend to predict certain expressions from what we have just heard (syntax and semantics)-and many humorous productions basically consist in betraying these instinctive expectations in quite amusing ways (see the section Patterns in Time, in Buonomano 2017).

Moreover, just from the order of the relevant clauses we tend to infer temporal meanings that have not been overtly expressed. Note this type of temporal information conveyed by linguistic productions in English. In a section on conveyed meanings and inferences of his introductory book on philosophy of language, Lycan (2008) mentions a well-known temporal effect of a certain use of the word 'and' (or even of simple sequences of event descriptions), which is responsible for a difference between 'John and Marsha fell in love and they got married' and 'John and Marsha got married and they fell in love'. "Even though
[the former] does not entail that John and Marsha fell in love and got married in that order, the temporal inference is invited" (Lycan 2008: 158). ${ }^{12}$

And here we have the right to feel confused by the following question: if we can measure time and deal with sequences and change in such a spontaneous way, how is it possible that we belong to a timeless universe? We will be back to this point. For now let us proceed with the working hypothesis that when we focus on-and try to express-the situations unfolding around us, we see them as related to each other in a complexity of dynamic layers as referred in 1.1. Under this view, the only role of the present is merely functional: the time of evaluation/the time of utterance (as was just observed, let us assume it is a 'specious present'-not exactly an instant but rather a short interval).

A further point about this is as follows. Cognitive scientists (and also neuroscientists, anthropologists and philosophers, to only mention well-established scientific disciplines) have proposed that we perceive the temporal duration of some events in quite a distorted manner: when they're happening, stress moments seem to slow down whereas happy moments seem to be shortened; when we recall them, the temporal distortions are reversed-we remember the happy moments as long and salient, and tend to shorten the stressful periods. And so, also given this demonstrated fact about how our mind treats temporal information, are there any chances that we also master other effects which, when we think of them, could be described as the complex designs in a quantum universe? ${ }^{13}$

If this line of reasoning makes any sense, then we may even dispense with the choice between the A-series and the B-series, since we are familiar with the relations from earlier to later or conversely (B-series), but also position ourselves at one specific point within the dynamic strata described by modern physicists. Neither do we need to reduce temporality to modality. Modal meanings are related to the degrees of commitment from the speaker regarding their knowledge of a situation, and what we are talking about here is somewhat related to this. But this value must combine with temporal meanings that are not about modality, and it does so in ways that we will see in the final chapters.

12 For a formal semantics approach to many related invited meanings and inferences in English narratives, an essential and more recent work is Altshuler (2016).
13 In her work, Jaszczolt seems to be raising similar questions. But besides the ones pointed out in 1.1.2, a basic difference characterises our approaches, as far as I understand: she assumes distinct properties for real time and internal time, whereas here it is assumed that, although our perception of the world is blurred, this "does not mean that blurring is a mental construct; it depends on actual, existing physical interactions" (Rovelli 2018: 83).

In another point of his book Buonomano admits: "one thousand and six hundred years after Saint Augustine vented about the challenge of defining time, we still don't know the answer to questions as fundamental as whether the past, present, and future are equally real, or whether our perception of the passage of time is an illusion" (Buonomano 2017: 12). ${ }^{14}$ As was said above, these questions lie at the inception of my current research, which proposes to use the several sources of information provided by linguistic productions as hints about the most ingrained concepts of time in our mind, rather than still analysing language productions in the light of previous paradigms which have certainly proved insufficient. And then maybe we discover that, on top of being those natural-born presentists in the words of Buonomano, we are also comfortable with our quantum, disorderly universe.

### 1.1.4 Why Caboverdean

All these questions and reasonings about time in language have slowly taken over my research on Caboverdean also because of details internal to its varieties. When trying to find satisfactory answers, I therefore start by using a different picture of the data that raised these questions in the first place. This line of inquiry may be extended to other languages as well, which is briefly touched upon over the next chapters, but more comparative work of this sort is planned for future projects.

Traditionally acknowledged as a creole, this language indeed developed through a naturalistic process of language learning and language change, inheriting most part of its lexicon from Portuguese and revealing various points of influence from West African languages, especially Wolof and Mandinka (Lang 2015). ${ }^{15}$ Its origins are located in the island of Santiago, where to the Portuguese started bringing African slaves in the $15^{\text {th }}$ century. And then successive migrations and stochastic (random) processes of populations mixing together resulted in the peopling of eight more islands of the archipelago, thus creating a web of intricate ecologies and giving rise to the development of new varieties. Cabo Verde is an independent country since 1975, and in these past decades it has

[^8]prospered and conquered a fair reputation as a peaceful and healthy democracy. Its national language, however, is still to gain true official status, and the attempts to standardize its orthography have not yet reached most speakers. Since there is no enforcement at schools, where Portuguese is the main working language (bilingual programs have been implemented in some areas, but a long way is still to go before they benefit a considerable part of the country), most people resort to creative solutions when they write, for instance, text messages or blog posts (Gillier 2019).

The contemporary internal variation of Caboverdean, still largely undocumented, operates mainly at the phonological level, also showing some effects in other linguistic areas, such as lexical semantics and, in a few cases, morphosyntax. Therefore, the lack of dedicated tense morphemes in the traditional sensethis view will be discussed in detail-together with the limited availability of previous studies on most structures, which means that few pre-assumptions must be considered, makes the language an attractive laboratory for research on this topic. This connection between all its properties and the guiding questions regarding the expression of temporal meaning in natural language will hopefully become clear.

### 1.2 Framework

This section points out the theoretical approach adopted, synthesizing major aspects that frame the current study-and then more particular working notions are developed locally in various sections (e.g. word order, functional domain, subordination, finiteness, veridicality, and the various times involved in the construction of temporal reference).

Generative Grammar assumes a simple answer to a central problem in linguistic theory. One possible enunciation of this Logical Problem of Language Acquisition is as follows: how is it possible that children can acquire, so early and so fast, such a specific and complex grammatical competence, given the impoverished nature of the data available? And the simple answer from a generative grammar perspective is this: all healthy children are endowed with universal principles of grammar. This set of abstract principles comes along with open parameters (an entity which has been subject to much scrutiny, but here counts roughly as related to language variation), for which the child will have to set a value according to the primary linguistic data, i.e. the input provided by the specific language(s) spoken around them. Here are two basic properties of this input:
(i) it occurs early (from the first days of a baby's life, or even during gestation)
(ii) it is very limited in quantity, and often imperfect (adults also produce noncomplete sentences, for instance), especially if we compare it with the richness and complexity of the child's linguistic knowledge at very early stages.

This is an elegant approach to the apparent contradiction contained in this idea of a set of abstract principles as applied to different languages. Besides the the-ory-internal discussions around the definition of such concepts, these principles and parameters have also been the topic of intense debate between some generativists, on the one side, and linguists who oppose generative grammar, on the other side.

Government and Binding (GB), developed by Chomsky in the 1980’s (since Chomsky 1981), is a well-known approach to demonstrate the viability of the 'generative enterprise'. Then in the following decade some concerns were added to the search for a scientific solution to that central problem. These concerns could be synthesized as a lemma: less can be more. They also assumed the biggest of all questions: why? Since Chomsky (1993, 1995), this approach known as Minimalist Program (MP) has developed and reinforced the notion of economy, applying it to two distinct plans: the methodological plan (speaking of theories, the least the best: where we can account for some phenomenon with the description of one relation, for instance, we should refrain from doing it using two or more) and the linguistic plan (speaking of language, grammar is designed/conceived in a way which maximizes resources, obtaining the best results with the least effort). This research program-which, importantly, is not a theory but rather a package of theoretical concerns (and, as can be seen in the current debates, the translation of these concerns into practical methods is all but pacific)-has discarded some of the important devices achieved by GB, but many linguists have avoided following these rejections. ${ }^{16}$

The generative tradition, however, originally focused on syntactic studies, the analyses of temporal relations as expressed in natural language being for a while an area reserved to formal semantics (Bennett \& Partee 1972; Bach 1981; Kamp \& Reyle 1993, among many others). Nevertheless, the temporal structuring of situations eventually became a matter at the syntax-semantics interface (Dowty 1977; Giorgi \& Pianesi 1997; Ramchand 1997; Demirdache \& UribeExtebarria 2000; among many others, including subsequent works by the same

[^9]authors). Besides the core of their individual proposals, these works also differ from each other in the specific tools they use from generative syntax studies.

The in-depth study in this monograph ultimately seeks some universals in human language, and the research results and analyses included here are guided by minimalist concerns of economy, simplicity, and descriptive adequacy. To deal with these empirical data and their syntactic descriptions, as related to their meaning and cognitive implications, I use modern theoretical instruments that contribute to simpler and more principled assumptions. Therefore, my approach to the description of Caboverdean, with a comparative perspective always in mind, involves structural and hierarchical properties, and sometimes resorts to what seem well established theoretical tools (whose authors are locally referred), but for now avoids trying to make sense of every syntactic projection or every covert morpheme that has been posited for other languages. Occasionally, some concrete tools are discarded with an explanation, and hopefully the arguments presented are clear enough for the current purposes. Overall, the most important theoretical statements here are in line with Sigurðsson (2011), on language uniformity and diversity under the developments of the minimalist program (Hauser et al. 2002): "[universal grammar] is maximally minimal" (Sigurðsson 2011: 193), and "language variation is mainly or entirely confined to externalization" (Sigurðsson 2011: 205).

To sum up, the theoretical approach which roughly frames the contents of this book includes the more comprehensive ideas about language universals and their connection with linguistic variation, which are common to both GB and MP-and this comes as no surprise, for elegance and simplicity are also pursued in scientific fields as mathematics and physics. And the quest for this more general goal requires, in my view, the adoption of analytic devices that better serve the phenomena under study, even though they come from a different era than the one assumed in the following section or chapter.

Anyhow, "[minimalist] demands have at least the merit of [...] sharpening the question of whether we have a genuine explanation or a restatement of a problem in other terms" (Chomsky 1995: 233-4). To attain the level where we are looking for true explanations and evident laws, we must start from below. Or, in the case under study here, "[if] we want to understand how time is encoded in natural languages, we must first look at how a clause-internal temporal structure is built up in a particular language" (Klein 2010: 75). Klein also gives some practical advice on what our path to that description must be, starting with the verb and following with other elements in the clause. This is a pretty good picture of what I have been doing all along.

### 1.3 The language

One of the most emblematic individuals regarding linguistic fieldwork will always be Ken Hale. Writing about his experience while establishing a research program on Ulwa (Southern Sumu), an indigenous language of the Nicaraguan Atlantic Coast, the late linguist allows for no doubts: "Do whatever you need to do in order to learn the language" (Hale 2001: 81). Despite having tried to follow this advice, and although at some points I may believe to have some intuitions on the grammaticality of some sentences or expressions, these 'feelings' have indeed been serving only as a kind of clue, inspiring decisions on the topics for empirical research. Never, ever, have I blindly trusted any of these intuitions, and as such all Caboverdean sentences used here have been uttered by Cabo Verdean consultants.

Regarding other matters, however, I needed to strictly follow my intuitions, for instance when speaking about the language, which I explain in 1.3.1. Subsection 1.3.2 presents the relevant notes about its history.

### 1.3.1 The name

> You could have just said Ngozi is your tribal name and Ifemelu is your jungle name and throw in one more as your spiritual name. They'll believe all kinds of shit about Africa.

> Ginika, in Americanah, a novel
> by Chimamanda Ngozi Adichie (2013)

For some analysts of various kinds-sociologists, anthropologists, sociolinguists, and certainly politicians-not being a speaker of a language under analysis is a reason to avoid taking any stance about some hot topics concerning it. In other words, this must be left to the intellectual elites who live in the language's native country. At least one of those topics (not the most controversial, though) must be addressed here: should this language be named creole? Should it be named Cabo Verdean Creole? The practical reason of having to refer the language (in my theses, conference papers, and published articles) using this or that proper name made me take a position anyway. I took it a long time ago: the name was Capeverdean, which I have now updated to Caboverdean, following the current international official name of the country.

This decision is based on something very clear to me, already valid for that former version. A name like this is the most logical one when we consider the names of other languages, for two main reasons: (i) it relates to its country of origin, which makes it a very adequate proper name; (ii) it is a translation of its
national name, kabuverdianu (https://www.ethnologue.com/language/kea), and of its Portuguese name, caboverdiano. One could use Cape Verdean or Cabo Verdean, but I reserve the expression Cabo Verdean for a person, not the language. As for the word creole, although it is true that the language is also called Kriolu by its native speakers, I entirely dispense with this label here, and the rationale for this is as follows. In some Portuguese-speaking contexts people could understand crioulo as the national language from Guinea-Bissau, another former Portuguese colony (whose history, due to their geographical proximity, is closely related to Cabo Verde). Not unexpectedly, the speakers of the latter language in Guinea-Bissau may name it simply as Kriol (or Kiriol). This would be even more confusing in a broader context, like the United States, where a vast community of Cabo Verdeans speak the language (see Lima 2012, Pilgrim 2008, and Sánchez Gibau 2005 for anthropological studies on the role of this language use). Which creole would we be there talking about? It could be Caboverdean or, say, Haitian (French-related), to name just two possibilities. So the issue here is about the mother tongue of every single person born in Cabo Verde (the country has around half a million inhabitants) and of many of the estimated one million of Cabo Verdeans in the diaspora. This is, albeit its inherited lexical units, an independent language with its own internal variation phenomena, distributed by the various islands and migrant communities. It deserves a proper name that is not mistaken for any other.

Furthermore, the constant mention in its name that it is a creole (a classification that certain scholars defend should be restricted to historical facts; again, see for instance Mufwene 2008 and Aboh \& DeGraff 2017) is inadequate to my scientific goals. Over the years I have always studied Caboverdean as a natural language which may be compared to any other, for the sake of a better comprehension of language as a human faculty. The fact that its origins have the specificities of a contact language-born in circumstances that have been reported elsewhere, for this and other languages-is often relevant for my analyses, pointing to a diachronic path of a given word or structure (e.g. the progressive cycle of the preverbal marker ta; see chapter 2). These origins are relevant as well if one wants to fully account for the sociolinguistic situation in the country, given that Portuguese is the language of the colonizer. But these analyses are achieved in the same manner as those on Portuguese linguistic phenomena use historical connections with Latin, or with contemporary Romance languages, and in these cases no one speaks about Portuguese Romance or French Romance or anything of this sort.

My permanent commitment is therefore to care about the possible effects that my work may produce in the lives of the people who have Caboverdean as
their mother tongue, and who have been submitted to a school education in Portuguese-they have been taught such early and basic skills as how to read and write, or even the basic mathematical operations, in a language that was unknown to them until the day they put step on school. And here is another piece of advice by Ken Hale that will always be present in my mind: "In carrying out field research, linguists are inevitably responsible to the larger human community which its results could affect" (Hale 2001: 76).

### 1.3.2 Some historical details

So Caboverdean emerged in the $16^{\text {th }}$ century in Santiago, the biggest island in the West African archipelago of Cabo Verde, at that time a Portuguese colony. Some decades earlier, it had been peopled by some speakers of various European Portuguese dialects and a much bigger number of African slaves who were violently brought there from their continental homelands along the Guinea Rivers. Some of these slaves would be traded and taken further away, while others would be kept as a local workforce (Carreira 1983). The substrate (African) languages of this Portuguese-related language are mainly from the Atlantic and Mande families (Wolof and Mandinka, respectively; see Lang 2015 on the different inputs from these languages). ${ }^{17}$

The 'Sotavento varieties' of Caboverdean are mainly spoken in the leeward group of islands: Santiago and its neighbouring Maio, Brava and Fogo. The capital city of Santiago is Praia, also the capital of the country. The 'Barlavento varieties' are mainly spoken in the windward group of islands: São Vicente, Santo Antão, São Nicolau, Boavista and Sal. São Vicente, whose capital is Mindelo, was one of the last to be peopled-only in the beginning of $19^{\text {th }}$ century have the first communities settled there. Despite this, the intense commercial activities of its large harbour converted the island into the most central of its group, and it is now the second in population among the nine inhabited islands, after Santiago. Therefore, even though its own language variety is the youngest, having received influences from the contact with several others and also with foreign languages such as English, as well as modern European and Brazilian Portuguese, it is often the one instantly considered when the so-called Barlavento varieties are referred.

[^10]As was mentioned in 1.1.4, Caboverdean is still not constrained by any rules of standardization nor by the formal instruction of the specifics in its grammar. It exhibits interesting variation phenomena-in the sense of Labov's definition that variation involves "alternative ways of 'saying the same thing’" (Labov 1969: 738, fn. 20)-and internal diachronic change. As was also said earlier, this variation is quite salient at the phonological level but, as my recent comparative studies have been showing, extremely reduced at the morphosyntactic level, with just a few cases of allomorphy and even fewer of syntactic implications of these. It is certainly the phonological and some lexical variation that gives the strong impression of a divide, with speakers occasionally observing that they do not understand other varieties, offering popular examples of words they find weird or funny, and pointing out how people from other islands have "strange ways of pronouncing" the shared ones. No lack of intelligibility between varieties has however been verified under controlled circumstances.

Some studies, while focused on one of the varieties, use various data from others to compare a few morphological properties (e.g. Silva 1985, 1990, Suzuki 1994, Veiga 1995, Baptista 2002, Swolkien 2015), but to my knowledge a comparative study of the type included in my recent works, and even more in this monograph, has never been done before.

As becomes evident when we look at corpus data (see subsection 1.4.1), the Sotavento and Barlavento varieties are also not internally homogeneous (see also Baptista 2019 and references therein). Despite this, this divide has been among the excuses for the postponement of making Caboverdean a local official language along with Portuguese, with the political and socioeconomic challenges between Santiago and São Vicente also affecting the discussions about its national status. A proposed writing system, the Alfabeto Cabo-verdiano (previously called ALUPEC, Alfabeto Unificado Para a Escrita do Cabo-verdiano http://alupec.kauberdi.org/pdf/decreto-lei-8-2009.pdf) does not entirely fulfill its ideal of coordinating both etymology and phonology, since it reveals some problems for the Barlavento varieties. The proof for this is that, when one needs a minimally consistent form of transcribing oral data, the graphic representation of these windward words must be decided all over again. This monograph follows most of my prior orthographic decisions for Santiago, together with the ones under trial in the project LUDViC for all the varieties. The latter include adaptations to both respect their phonology and attempt a degree of uniformization in the written language for the current purposes. This is therefore an option for this study only, and new editions may occur in future transcripts, when other factors are contemplated.

As a final note on this topic, the other peripheral reason to avoid the national official status of Caboverdean may relate to the more conservative views on creoles, that they are not endowed with enough complexities and formal properties to ensure all the tasks involved in writing laws and official documents, school handbooks, etc. Both these reasonings, as well as their unfortunate implications in terms of socioeconomic inequality, are still under internal debate. ${ }^{18}$

### 1.4 Corpus and methods

All linguistic properties under description and analysis in this monograph are supported by my systematic fieldwork sessions with Cabo Verdean consultants. These sessions were more intense during seven periods in Cabo Verde-in 2001, 2004, 2006, 2008, 2011, 2016 (Santiago), and 2018 (São Vicente)-then completed by many other interspersed meetings mainly in Lisbon, but also in two recent short periods in Providence and Boston, in the United States (October 2018 and November 2019). Despite this, pieces of Caboverdean data are cited from other authors' works, and in these cases their source is locally identified. In these two subsections, I summarise the main details about data recordings (1.4.1) and list a few observations on the specifics of my fieldwork (1.4.2).

### 1.4.1 The data

The semi-spontaneous interviews recorded in different moments and places, thus representing all varieties of the language, are being brought together in the medium-sized oral corpus LUDViC, ${ }^{19}$ for which around 30,000 words have already been transcribed by students who have Caboverdean as their mother tongue, and then revised and tagged in a XML metalanguage, with a TEI (Text Encoding Initiative) standard for oral texts, with the following distribution:

[^11]around 17,000 words from Santiago (9,000 women and 8,000 men) and 15,500 words from São Vicente ( 8,000 women and 7,500 men). ${ }^{20}$

This corpus constitutes the main source of data here illustrating my current language descriptions, for now centred on one island from each group just for reasons of clarity-after the descriptions of these two get well established, I will embrace others as well. Among the 150 (semi-)spontaneous Caboverdean sentences here included, more than 110 belong to this resource alone. These examples usually show the pseudonym of the consultant, and their distribution by island is this: roughly half of the examples from Santiago (two thirds by women, one third by men) and half from São Vicente (one half by women, another by men). The other source for spontaneous Santiago data used here is the dictionary elaborated under the responsibility of Jürgen Lang and cited as Brüser et al. (2002). This is needed whenever I am seeking a particular combination that does not yet appear in the LUDViC corpus (this occurs mainly in chapter 3, and, again, exclusively for Santiago data; these are thus more numerous when we add these two sources, which will be more balanced in future studies). Finally, whenever a specific word order must be tested with the goal of confirming some grammatical property, examples are used which were produced by my consultants during elicitation sessions over the years, some of which have already been registered and described in different sections in my dissertations and papers-in this case, the speakers are almost never identified. Note that the glosses, translations, and linguistic descriptions of all Caboverdean examples in this monograph are my own, including the ones from that other source, to which I have also added some adaptations in the orthography and punctuation. I try to always provide grammatical sentences in English as translations of the examples; when this goal implies more substantial deviations from the structure of the Caboverdean sentence, I signal this with an 'intended' note. Also, if any comparisons with Portuguese become relevant to my purposes, by default I use for this the standard European variety of the language-sometimes the discussion specifically concerns Brazilian Portuguese as well, and this is locally identified.

As was said above, the use of these sources of linguistic data depends on my fieldwork experience in Cabo Verde, which first focused on the variety which is sometimes locally called kriolu txambu-roughly, deep creole-in the inland of Santiago. At that time recordings were made, some of them with spontaneous discourse and some during elicitation sessions, but they lacked the digital qualities required for an online platform-these recordings were mainly for easiness of transcription afterwards. I gathered data this way in the munici-

20 This medium-size corpus will soon have 100,000 words, from all Caboverdean varieties.
pality of Santa Catarina, which includes the town of Somada and the village of Picos, where I first did fieldwork for my MA, in September 2001, and in the municipality of Calheta de São Miguel, namely the village of Flamengos, where I was in March 2004 and in October 2008. In the fieldwork periods accomplished in 2006, 2008 and 2011, the linguistic phenomena under study expanded my geographical choices, and so I also interviewed speakers in the city of Praia.

Then since 2018 I have been focusing on variation phenomena, extending my studies to the island of São Vicente, and this resulted in the first detailed comparative proposal regarding the expression of temporal meaning in the language. Later in the same year I also started studying the possible effects of the contact with English, within the large community of Caboverdean speakers in New England, whose history dates back to the migrations in the $19^{\text {th }}$ century. ${ }^{21}$

To plan these fieldwork sessions, linguistic facts registered by previous authors have been fundamental. With different perspectives and results, all these earlier studies described the grammar of the language. On the variety of Santiago: Lopes da Silva (1957), Almada (1961), Silva (1985, 1990), Suzuki (1994), Veiga (1995), Baptista (2002; this is the only one with a generative perspective), Brüser et al. (2002), Lang (2015). More recently, Swolkien (2015) has been a source for the variety mainly spoken in São Vicente.

When I was planning a first sample of consultants for the latter interviews, already designed with the current digital corpus in mind, I followed a stratified random sample technique, also known as judgement sample (Milroy \& Gordon 2003). The well-defined goals of the study, the specifics of linguistic usage (more homogeneous than other human behaviours) and my primary knowledge of the communities under study, all pointed to this sampling technique as the more adequate. As an integral part of the study, the sample must be regularly revised according to the initial results; some of the consultants talk more quickly or for longer periods than others, for instance, which modifies the number of words predicted for that part of the sample. Moreover, my awareness of the risks involved in this option allows for methodological corrections when needed.

In this sample, both ethnographic information about the (all adult) participants and other relevant factors were considered that allow for the representa-

[^12]tive character of the corpus, such as: age, gender, variety spoken, degree of instruction, duration of exposure to other varieties, among others. For the case under study in this monograph, however, no precise sociolinguistic perspective is assumed, and the examples have been chosen according to the grammatical points I want to demonstrate in each section. The only caution is about choosing examples among younger and older consultants, and with both women and men represented in each of these age strata, as was specified earlier.

All this implies that this corpus is being planned in a dialectic manner; its plan was certainly incomplete at the beginning of the study. Biber (1993) says that "[the] bottom-line [...] is that the parameters of a fully representative corpus cannot be determined at the outset. Rather, corpus work proceeds in a cyclical fashion" (Biber 1993: 255-256). This cyclicity involves, first, a pilot empirical investigation and theoretical analysis, then a first corpus design, then the compilation of a portion of the corpus, then the empirical investigation within this portion, and then the return to the corpus design.

This is the diagram for the planning of a new corpus according to Biber (1993: 256), which has been adopted in this case:


All these data gathering activities imply ethical issues in two specific aspects, since they require the participation of other human beings and involve the collection and management of personal data. Regarding the participation of other human beings, I have always tried to ensure total respect for all the consultants and their dignity. I also hope that the results of my linguistic studies may contribute to a fair distribution of benefits, as far as the well-being of their communities is concerned-a more scientifically-based knowledge about each language variety can certainly help build a more inclusive society. I have also been committed to protect the values, rights, and interests of these research participants. A special attention has been given to:
(i) the maximum protection of the consultants' identities and data, and to
(ii) their informed consent.

Regarding point (i), all procedures were taken to pseudoanonymise these oral productions:
(a) by giving a pseudonym to every participant
(b) by keeping separately all the additional information about them
(c) by ensuring that all the legal rules are well-known to third parties

This is important since, although the sociolinguistic features that may be relevant to my purposes do not seem problematic (for instance, no sexual orientation or political commitments are at stake here), some other details may make consultants easy to identify-at least by some other people within the communi-ty-such as age, gender, professional activities or number of children, as well as information about their travels, among others. And this is why their participation is entirely voluntary, never under pressure or any type of coercion, and always after knowing about the aims, methods and implications of my research, the nature of their collaboration, and any benefits or risks involved. In spite of their previous consent, written or not (because of illiteracy, for example, nonwritten consents were independently witnessed), the consultants can, with no consequences, withdraw their samples or data, at any time before their publication (at least a period of several months separate the register of the interviews and the moment they are made available online).

Over the past decades many other linguists have embraced a systematic and theoretically guided gathering of new data from scarcely studied or even from endangered languages, and a huge number of new oral corpora are under construction. In the latter case, researchers do it with an exceptional motivation, for they are working under the extreme urgency that some human patrimony and some possibly determinant clues might soon be lost forever. When we judge by the numbers of speakers, Caboverdean is not at risk of disappearing over the next decades. It is, however, subject to many of the language contact phenomena that have been leading to some well-documented changes in other languages, and one of the most interesting laboratories in this respect concerns the above mentioned Cabo Verdean community in Massachusetts and Rhode Island, in the United States, where the varieties of the language are in contact with English in potentially tougher circumstances than their contact situation at home: there, English is dominant among many families with second, third, and even further generations of speakers; the use of Caboverdean thus shows points in common with heritage languages (see Kupisch \& Rothman 2016 for a working definition of this concept within current language acquisition studies), including a critical role in their defence of a distinct ethnic and cultural identity within a deeply racist society (see Lima 2012, Pilgrim 2008, Sánchez Gibau 2005, as
well as the ongoing linguistic study first sketched in Pratas 2019). Also, despite its enduring inequality status both in Cabo Verde and in the various communities in the diaspora, nothing hints at a massive case of language shift (complete loss of the heritage language). In the words of Mufwene, "[...] shift happens when opportunities for using one's heritage vernacular decrease to zero and/or when speakers cannot remember the heritage language when an opportunity does arise. The speed at which a population experiences the shift varies from one contact setting to another, apparently faster in exogenous colonies with a high level of societal multilingualism and population-mixing than in others" (Mufwene 2015: 359). Judging from diverse Cabo Verdean communities, the worst scenarios are fortunately still at bay.

### 1.4.2 Notes on fieldwork

Even though Cabo Verde is an undemanding place to be at work, there is always the risk of some light difficulties, entirely inherent to field research. These may show up also in other places, such as the relevant neighbourhoods in the New England area, United States. Every one of them can be solved or strategically circumvented, thanks to the right advice from experienced linguists. For an extensive discussion on various practical problems regarding fieldwork, two manuals have been precious to me since the very beginning: Newman \& Ratliff (2001) and Vaux \& Cooper (2003[1999])-later, any inexperienced field linguist could use the important Bowern (2008) too. Those first two that were available when I started helped me avoid many distressing little troubles-each of them in its own way-and this section points out some practical advice found in the latter among these two, on a par with a few episodes of my own.

The occasional incidents in my fieldwork experiences were fewer than I could have expected, given all the linguistic and historical particularities of the relation between this language and its European lexifier-which may get reflected in the relations between Caboverdean speakers and myself, as a native speaker of Portuguese-and also given all the careful steps that must be involved in the gathering of the relevant data from a language that I do not master. Regarding this latter aspect, in their chapter on the necessary cares to deal with acoustic phonetics, Vaux \& Cooper (2003) tell the story about a bridge in Madras, India, which was initially named after the engineer who built it, a man named Hamilton. "This name contained several sounds and sequences not present in Tamil, the local language, and consequently was interpreted by the local residents as a more familiar sequence [ambuton]" (Vaux \& Cooper 2003:
83). This ended up becoming associated with the Tamil word ambattan 'barber', and the bridge started to be called Barber's Bridge. The story intends to show that we all may mishear sounds and words in another language, and in the need of interpreting them some wrong conclusions may be accepted. When complex phonological/prosodic phenomena are involved, things get even more complicated. This is the case with truncation, where speakers chop parts of words. And it is also the case with, for instance, the pronunciation of a vowel where a diphthong might be expected. In my first fieldwork period in the inland of Santiago I was listening to a group of young women talking to each other at a funeral, and really felt the danger of misinterpreting some of the sounds and words included in their exchanges. The case with the sequence which sounded like [pobáj] has been the most striking. It in fact corresponds to four words, E pa u bai... (literally 'Is for you go...', intending 'It's for you to go', and in Portuguese É para ires...). The tricky part is not on the verb bai 'go', which I immediately recognised, but rather on the phenomena involved in the phonological sequence [po], considering what I did not know at that time: the second person singular pronominal form in Santiago can be different than the one always described as being at stake in subject positions, $b u$; depending on the word that appears to its left, it can indeed be the one mostly used as complement, $u$. In this case, the sequence $p a u>p o$ is easy to explain on phonological grounds. But for a foreigner like me it was at first very difficult to recognise any pronoun among these sounds: this segment preceded a verb and yet there was no $b u$ in there. To make things harder, the sequence [po] is also available for the verb 'put', as in $N$ po livru riba mesa 'I've put the book on the table'. This episode, among others of this sort, taught me that no quick inferences should ever be made, and that the meekness of my attitude towards the language could never be exaggerated.

Another advice also taken from the same manual which I have always used as a guiding motto in my field experiences is this: accuracy should take priority over efficiency. Or: quality is more important than quantity. I discovered the true value of this when I was dealing with such delicate matters as verb paradigms, the building of temporal reference, and the various subtleties involved in the possible relations in the same sentence. This means that a detailed description of the various morphemes and their interactions with different verbs and expressions was needed. As Vaux \& Cooper (2003: 132) point out, although the pair of sentences 'he is crying'/'the man from the village was crying' might seem a good pair for testing temporal meanings (and sometimes one might feel compelled to vary sentences a little so as to avoid a complete boredom from our consultants), other consequences may hide in the change of the subject from a pronominal to a full noun phrase. Detailed testing has some risks, and surely
one of them is that whatever we may do to sidestep this, consultants may become extremely tired in eliciting sessions, after repetitions of sentences with one slight change at each time. And then the work can result in bad judgements when the mind of the consultant is no longer there. But to avoid this we must prevent dramatic changes within the sentences under study, and take other strategic steps instead, such as simply refraining from marathon meetings.

One of the priceless ingredients of a linguist's intuition is the precise feeling about some lapse in the communication with the consultant. This may happen not only because one of them has not gotten the sounds right (again a matter of acoustic phonetics?), but also because someone did not get the accurate message. In fact, topics such as temporal values may be very slippery. It takes a lot of care in planning eliciting sessions to later become sure, for instance, about the meaning of Djon podi sta diskansadu 'Djon may be tranquil'. For many more helpful details on fieldwork in semantics, Matthewson (2004), Cover \& Tonhauser (2015), and Matthewson \& Tonhauser (2016) have more lately been of great importance to the planning of my elicitation sessions.

Doing fieldwork in syntax presents its own requirements and difficulties. Sometimes we are willing to know about the consultants' grammaticality judgments rather than the exact meanings of morphemes, words, or sentences. This might seem easier at first sight, since we can have a long list of sentences and only ask if they are good or bad in their language-but extreme caution is recommended with sentences that involve problematic concepts (e.g. about gender issues, food tabus, or local politics or football), which might cause a rejection despite being perfectly well-formed. Moreover, the creation of a discourse context may be of most importance. In Caboverdean, if one asks some consultants about the simple sentence $N$ ta sabeba! (with sabe 'know' marked by morphology traditionally described as being typical of past habitual non-statives), the possible immediate response can be of non-acceptability (the form for the stative sabi used in past clauses is simply $N$ sabeba 'I knew/used to know'). When however the construction with the preverbal $t a$ is the consequent in a past conditional environment, it is perfectly grammatical, and even the consultant may be amazed, for they had possibly never noticed this before: Si es kebraba nha kopu $N$ ta sabeba 'If they broke my glass I would know'. Then the explanation of this is the burden of linguistics, and it can be done with the fact that, in this utterance, sabi rather denotes a change of state, 'get to know'/‘learn’, with a temporal meaning that can be described as conditional.

Things may get truly difficult when grammatical judgements are needed on such complex topics as binding relations or extraction, for instance, and serious trouble may arise when searching for the well-formedness of potentially bizarre
questions like 'Which man did you say your cousin believed had killed what?' So I simply keep a safe distance from this kind of test.

Even though "when informants invent or embellish data, they are generally aiming to help" (Vaux \& Cooper 2003: 64), in complex situations of language variation where no standard may be taken as a reference we have to be extracareful, since many factors may more or less freely interfere in their productions and judgments. Almost by the end of one good and productive eliciting session with a consultant in Santiago, after I had registered some interesting data with verbs and object pronominals they came up with an unexpected set of data: the object clitic for first person singular, $m$, was inserted between the verb stem and the postverbal temporal marker ba, as in E ta odjamba (supposedly 'He used to see me'). I knew, however, that the only grammatical version for this clause has the following shape: $t a+\mathrm{V}-b a+$ free form of the pronominal (not the clitic): E ta odjaba mi (see section 2.1.2 for the summary of one joint proposal on why the object clitic is barred in this sequence). But it turns out that this consultant had lived in the neigbouring Guinea-Bissau for a while. In Ginensi-traditionally called Kriyol or Kriol-the postverbal $b a$ is not a bound morpheme (a suffix) as in the Santiago variety of Caboverdean, but rather a free marker for anteriority (Kihm 1994). Hence, this could explain why the object clitic would not sound badly between the verb stem and the temporal morpheme to that consultant-in Ginensi even other categories, such as noun phrases, are allowed before ba. ${ }^{22}$

The following sequence is quite usual: the linguist wants to know more about two forms for the same sentence, and so they ask for a judgment on one of them; the consultant says it is okay; then the linguist asks about the other form; the consultant says this is okay too; but then the linguist asks the consultant to say the sentence themselves, and they systematically pronounce one of the forms and never the other.

### 1.5 Outline

The next four chapters might be divided into two pairs. Chapters 2 and 3 mainly focus on several clausal properties of this understudied language, thus containing a lot of data and many descriptive lines. These descriptions are here associ-

22 In Kihm (1994) some contexts illustrate this, as the one in (i):
(i) I kunpra pon ba.

3SG buy bread PAST
'She had bought bread.'
ated with Santiago or São Vicente for reasons of simplicity only-more finegrained presentations are a work in progress within the scope of LUDViC, but for now it is worth noting that each of the more local properties described is generally shared by a great number of speakers in other islands of the same group, and of course by some speakers in islands of the other group as well, as a result of frequent migrations and a permanent contact among varieties.

The first part of chapter 2 (sections 2.1 and 2.2) is mostly based on portions of my old dissertation, including the reasonings about a selection of proposals I made then on the syntax of root clauses in Santiago (their selection is guided by the interest they may have to my current studies). Some of these phenomena have been shared with colleagues along the way, and so at least one prior joint work is described. This first part of the chapter may be of more interest to syntacticians and, in particular 2.1.2.2, to morphologists and phonologists.

And then section 2.3 is mostly based on my sole works from the past ten years on the distribution and meanings of temporal morphemes, which in the last couple of years include two varieties of the language; no syntactic analysis is provided, only the descriptions that will be useful for the increasingly complex discussion in the ensuing chapters. This part, as well as the remainder of this monograph, may be of greater interest for researchers focused on temporal meanings and/or typology.

Following the doubts raised by these investigations from the past ten years, chapter 3 mainly presents a collection of brand-new data and descriptions of complex sentences, to which any studies on temporal meaning in Caboverdean may need to give some attention.

In the other pair of chapters, 4 and 5, the discussion goes back to the main topics just presented in this introduction: the former provides further theoretical arguments which pave the way for the points to be finally put together in the latter, thus returning to the starting point in this monograph-now hopefully with a more informed perspective. Both these chapters may again be of interest to linguists working on the expression of temporal meaning, as well as to typologists.

More concretely, each of these four chapters present the following contents. Chapter 2 describes a list of lexical items that may surround the main verb in Caboverdean, and linguistic examples with root clauses illustrate this. Subject and object pronouns and clitics are included, and so is clausal negation and the temporal morphemes available in the varieties under study. The possible positions for adverbs will become clear, as well as the implications that some properties of the verbs may have on the distribution of these functional elements.

Chapter 3 introduces complexities about subordination: complement clauses, relative clauses, and adverbial clauses, and then multi-verb constructions. This includes the description of lexical items that may appear in each of these subordinate types, as well as an overview of how these restrictions relate to the temporal interpretation of the whole sentence. The notion of finiteness is also briefly implicated, but its discussion is left for the following chapters.

My recent accounts for the various temporal morphemes and temporal interpretations are reviewed in chapter 4, accompanied by the key questions that led my search for more explanatory developments. As related to this, a short synopsis of diverse works by other authors for various tenseless languages is provided, as well as a summary regarding the concept of finiteness in the literature. To justify some lines of reasoning, linguistic examples from the previous chapters are locally repeated, maintaining their original numbers so that this duplication is clearly identified.

Chapter 5 starts with an additional exploration of finiteness, and then offers the core idea in this monograph. This idea contains details from previous approaches, which are also pointed out, but to my knowledge this is the first time it is defended under this concrete point of view. The most relevant detail from those earlier studies is that some tense markings are often used noncanonically. The new standpoint here is that the diverse usages of some Caboverdean potential tense morphemes are all regular: rather than marking tense in some cases and modality in others, they indeed always mark a particular value associated with temporal meaning. Accessibility-under the simple definition of 'the property of being accessible'-is the candidate favoured as being this value, something related to the perception/intention from the speaker that involves the whole nature of the complex 'blurred' perspective we have about time, from the point in the universe where we came into existence.

Finally, chapter 6 lists some hypotheses to further pursue this line of research, and includes a few personal notes. ${ }^{23}$ Hopefully, these may help frame a little better the questions and goals behind the very existence of this whole study. ${ }^{24}$

[^13]
## 2 Lexical items in the functional domain

I think that little by little I'll be able to solve my problems and survive!!
Frida Kahlo, in a letter to Nickolas Muray (1939) ${ }^{25}$

A list of lexical items that may surround the verb in Caboverdean is described in this chapter. It deals largely with root clauses for clearness, with most particularities on subordinate clauses being left for the next chapter. Among the items that may appear in the immediacy of the verb-besides other verbs (see section 3.4 for multi-verb constructions) and full noun phrases-we have: subject and object pronouns, including clitics (2.1), the clausal negation marker ka (2.2), and the various temporal morphemes (2.3). The possible positions for adverbs will become clear along these sections, as well as the implications of some verb properties on the distribution of these functional elements. ${ }^{26}$

### 2.1 Personal pronominal forms

The full description of personal pronouns, including clitics, illuminates a significant part of the functional domain in Caboverdean, since from this task alone we get information about:
(i) the inexistence of morphological case;
(ii) a variety of word order restrictions.

[^14]Only overt pronouns and their distribution are reviewed here, not any form of null pronouns. Referential null subjects in declarative root clauses have never been registered in my corpus, either with spontaneous discourse or elicited sentences, as has been shown in Pratas (2004, 2007), contra Baptista (2002). No expletive null subjects have been attested either: in the so-called expletive constructions that contain no overt subject (this means that they lack a subject at both the meaning and the phonological levels), no such position is needed. ${ }^{27}$

Each of the characteristics mentioned in (i) and (ii) will be treated in these terms: 2.1.1 describes the array of personal pronouns available and their distributional properties, showing that the language has no case marking, and 2.1.2 illustrates two other levels of word order phenomena: the restrictions on the position of adverbs regarding the pronominal arguments of the verb (2.1.2.1), and an idiosyncratic property concerning temporal suffixes and pronominal objects in the variety spoken in Santiago (2.1.2.2).

### 2.1.1 Subject and object pronouns

Table 1, in the next page, displays the relevant Caboverdean personal pronouns, as an adaptation from the ones in both Pratas (2007: 132) for Santiago (which itself resulted from the one in Baptista 2002: 214), and Swolkien (2015: 163) for São Vicente. The current edition presents two important differences from those previous versions. One strictly regards the graphic representation in the columns for clitics: here the dash (-) means that the free form is used instead. The other, more substantial, advancement involves a new take about personal pronouns in the language: the inexistence of separate columns for subject and object clitics, for they are here assumed to acquire the same shape. The apparent distinction between subject clitics and their object counterparts owes less to their syntactic function than to their morphophonological environment. The explanation for this is as follows. Object clitics do lean onto their left-they appear postverbally and compose a phonological unit with the verb. And subject clitics often show phonological effects from the word to their right, which is

27 For an extensive review of all the arguments on this topic, plus the analysis of a case of null subjects in embedded clauses which are analysed as bound variables (so, not null pronouns), see Costa \& Pratas (2013)-and I will always be thankful to João Costa, the supervisor of both my theses, for all the nice discussions we had on this and other puzzling syntactic phenomena. For different reasons-i.e. not on the nature of clitics themselves but rather on the properties of that binding relation across clauses-these null subjects will be briefly mentioned again in section 2.2. Null subjects in other subordinate clauses (e.g. in 3.3.4) are left for future studies.
either the verb or any of the rare item types allowed in that intermediate position (see the next sections). These generic facts are certainly behind that traditional descriptive distinction between these subject and object dependent forms. The problem with this separation, however, is that also subject clitics may combine phonologically with the word to their left, in which case they may assume a form like the one appearing in the complement position. This behaviour has succinctly been acknowledged before (Pratas 2007: 133) but it has never been used to motivate the proposal advanced here, of a convergence between subject and object clitics, the distinct shapes observed being mostly due to morphophonological processes-we will see examples below. And here is the new table with the personal pronouns most productive in these two varieties.

Table 1: Caboverdean personal pronouns in Santiago (ST) and São Vicente (SV) ${ }^{28}$

|  |  |  |  |  | Clitics |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Emphatic forms |  | Free forms |  | No phonological host to the left |  | Phonological host to the left |  |
|  | ST | SV | ST | SV | ST | SV | ST | SV |
| 1sg. | ami | - | mi | mi | N | N | m | m |
| 2sg | abo | - | bo | bo | bu | - | u/bu | b |
| 2sg (polite, m./f.) | anho/anha | - | nho/nha | bosê | - | - | - | - |
| 3sg | ael | - | el | el | e | - | 1 | 1 |
| 1 pl | anos | - | nos | nos | nu | no | nu | no |
| 2 pl | anhos | - | nhos | bzot/ bosês | - | - | - | - |
| 3 pl | aes | - | es | es | - | - | S | S |

As we see in the table above, emphatic forms only exist in the variety of Santiago, which is thus the only one to lexicalize the three types predicted in Cardinaletti \& Starke (1999). ${ }^{29}$ These emphatic forms are used in clitic doubling and in some focused positions, as well as fragment answers. When a clitic and a free

28 This and the next sections are the only ones where the glosses for the personal pronouns will include a reference to their category-as clitics, free forms, or emphatic-given that their morphosyntactic status is implicated in word order restrictions. In all other sections of this book, however, their glosses will only use the notation 1SG, 1PL and so on.
29 For a previous proposal on these three types of pronouns for Santiago, see Baptista (2002).
form for the same item exist, the free form is used where clitics are prohibited for various reasons, including fragment answers. In the remainder of this section their distribution and grammatical properties are discussed.

There are indeed reasons to defend that Caboverdean clitics behave like argumental clitics-they display signs of a characteristic morphosyntactic dependency from the relevant verb. Because of this strict connection, object clitics are here always linked to their verb with a hyphen. As for subject clitics, despite that structural dependency from the verb-which naturally manifests itself in a different way-they sometimes lean phonologically onto their left, as was said above, thus forming a phonological word with an adverb or a connective that precedes them. As was also mentioned, in this case they are sometimes pronounced with the form typical of enclitics, and this may involve phonological effects on the host as well, namely a vowel deletion or, in a phenomenon particularly frequent in São Vicente, some instances of vowel change in specific contexts. Whenever possible this variation in subject clitics is here reflected in the transcription, although unmarked with any hyphen (for clarity in annotation the hyphen is left for the connection between object clitics and the verb).

Also worth noting is the consistent transcription of the first person singular subject clitic, when it does not lean onto a word to its left, as $N$, as is established in ALUPEC (cf. section 1.3.2), ignoring the way it may be pronounced, as for instance with a bilabial feature (so it sounds more like [m]), which is acquired from a verb starting with [p] or [b], as in $N$ bai 'I've gone'. This option follows from how hard it is to distinguish exactly between the nasal sounds [n] and [m] even given its phonological right neighbour. Any accurate distinctions must be made through detailed phonological studies, and this is beyond the goals in the present work. For the other person/number combinations the different shapes are sometimes much easier to tell, and only in these circumstances does the transcription here reflect the different sounds, to make clear that the different forms may in fact be used in subject as well as in object positions.

In (1) we have instances of the phonological leaning of the subject clitic onto a temporal adverbial, á (a variant of já/djá) 'already', ${ }^{30}$ and onto the complementizer ma-in clauses produced respectively within a narrative (1a), in which the speaker is telling about an episode in his childhood (when he arrived home to find his father mad at him because he was late), and as direct speech (1b), where the speaker is reproaching her little son because of something he said. ${ }^{31}$

[^15]a. Á 1 tava detod.<br>(Firmino, São Vicente) ${ }^{32}$<br>ADV 3SG.Clit be.PAST lying.down 'He was already in bed.'<br>b. N sabe ma u konta-m kasi. (Filomena, Santiago) 1SG know that 2SG.CLIT tell-1SG lie Intended: ‘I know that you’ve lied to me.’

The shape of the resulting phonological sequences above may vary depending on the geographical areas and the speakers. The following are some frequent phenomena of this type. The sequence ma $u$ (complementizer + 2sG.CLIT), from Santiago, is sometimes pronounced [mo], from a common phonological change in the vowels involved in the diphthong. The sequence pae (preposition + 3sg.CLIT), also from Santiago, is often pronounced [pe] (thus deleting the vowel of the connective). And the sequence pa bo (PREP + 2SG), from São Vicente, is sometimes pronounced [pob], showing again that phenomenon of contextual vowel change referred before, which is very productive in the windward varieties (see (64b) and (128), in chapter 3). The fact that the host word to the left of subject clitics may be a preposition motivates a clarification regarding the previous generalization that "prepositions cannot support clitics" (Baptista 2002: 249). The clause in (2) was elicited in Santiago (from my consultants).

> (2) É pa u bai kaza sedu. be PREP 2SG.CLIT go home early 'It's for you to go home early.'

That former assumption might however be based on sequences like the following, also elicited in Santiago, in which the pronoun is itself a complement of the preposition (so the preposition is here not linking two clauses):

[^16](3) N ten un livru pa bo. /*pa bu /*pa u 1SG have one book PREP 2SG.FF 'I have a book for you.'

It's comparison with (2) shows that the restriction in (3) is due to a general incompatibility between prepositions and clitics, rather hinting at reasons for this at the syntactic level: when the pronoun is the complement of the preposition only the free form is allowed, as in (3); when the complement of the preposition is a whole clause (so the preposition is here in fact a connective-see chapter 3 for more instances of $p a$ heading subordinate clauses), the pronominal subject of this clause is often a clitic which then can phonologically lean onto that introductory word, as in (2).

Their behaviour like minimal elements has allowed subject clitics in other languages to be analysed as grammatical agreement. In De Cat (2005) some reasonings are however provided that show several unsolved problems for this morphological view when applied to French clitics, leading the author to defend a syntactic proposal instead. With a few different details that are irrelevant for the present discussion, the same arguments can be claimed here-therefore favouring the syntactic analysis of Caboverdean subject clitics.

One note is necessary at this point: the most visible difference from French is that Caboverdean verbs display no agreement morphology, and so no person/number redundancy can be used against the view of clitics as agreement markers. But other arguments for French nicely apply to Caboverdean as well. One of them is that subject clitics are available for syntactic operations (this would be impossible if they were affixes). Consider syntactic operations such as the ones needed in questions (in subject questions no clitic stays in the subject position). This is illustrated in (4), an elicited sentence from my consultants in Santiago.
(4) Ki alunusi ki ( ${ }^{*} \mathrm{es}_{\mathrm{i}}$ ) lê kel livru li? (in Pratas 2007: 135) which pupils that (*3PL) read DET book here 'Which pupils have read this book?'

For languages where subject clitics are grammatical agreement markers rather than syntactic clitics-or, as is the case of Chichewa (Bantu), as shown in Bresnan \& Mchombo (1987), incorporated pronouns (i.e. they are related to arguments despite appearing as verbal affixes)-these items should be overt even when the arguments (they are related with) are questioned. This indeed applies
to Chicheŵa's subject markers, but not to object markers, neither does it to subject clitics in both Caboverdean (4) and French (5) (De Cat’s 2005 (40b)).
(5) Quels soldats ${ }_{i}\left({ }^{*}{ }^{1 s_{i}}\right)$ sont partis?
(De Cat 2005: 1212)
which soldiers (*they) be left
'Which soldiers have left?'

A different diagnostics for the grammatical agreement marker status, according to Bresnan \& Mchombo (1987) and De Cat (2005), concerns locality: these items cannot be associated with a noun phrase in a higher clause, whereas no such restriction exists for what the authors thus call anaphoric agreement (again, syntactic clitics or incorporated pronouns). ${ }^{33}$ In Caboverdean, an associated clitic is possible in long distance contexts, which favours their status as syntactic clitics. We see this in the next example from Santiago, in which a young professor makes a comment on the lack of activities for young people when they leave high school-this is a very colloquial discourse segment, in which he mixes the reference to a supposed/virtual person both in the third person singular clitic and the second person singular; this example is especially interesting for the current purposes, since more than one clitic will do in these positions coindexed with the indefinite nominal expression in the beginning of the sentence.
(6) Oki un algen ${ }_{i}$ termina désimu segundu (Edson, Santiago) when one person end twelfth
$\mathrm{e}_{\mathrm{i}} \quad \mathrm{ka}$ teni kel manerasdi bu $\mathrm{i}_{\mathrm{i}}$ okupa kel tenpu. 3SG.CLIT NEG have that ways of 2sG.CLIT occupy that time Intended: 'When someone ends their $12^{\text {th }}$ year, they don't have ways of occupying their time.'

A tempting alternative interpretation of (6) would be that $e$ is an overt expletive subject, with teni corresponding to an existential 'have' (this would mean 'there is not'). But I would rather avoid this for two reasons: (i) so far I know of no other overt expletive subjects in the language, and (ii) the third person singular

[^17]reference makes sense as a nice bridge between the antecedent un algen and the generic subject below, expressed by bu 'you'. So this $e$ is a referential subject.

Another argument against French subject clitics as agreement morphemes is that, if they were such, no other element could occur between them and the verb. This does not hold, since the clitics en, $y$, object clitics and the negation ne all may appear in that intermediate position. As in (7) (De Cat's 2005 (9b)):
(7) Je ne t' en veux pas.
(De Cat 2005: 1200)
1SG.CLIT ne to-you' of-it want not
'I don't begrudge you.'

And that does not apply to Caboverdean either, where the negation $k a$ and temporal markers, such as $t a$ in (8), appear between the clitic and the verb. ${ }^{34}$ This is again an elicited clause from Santiago.
(8) E ka ta gosta di filmi.

3SG NEG TA like of movie
'She won't like the movie.'

Finally, a common claim in favour of subject clitics being grammatical agree-ment-and not, as I am defending for Caboverdean, argumental clitics-relies on the information structure of clitic doubling. Under the grammatical agreement (morphological) view, the topic interpretation (left-dislocation) of the noun phrase is unexpected, given that clitics are heads generated in a different position than the subject as a full noun phrase, and thus no competition exists between them. Under the view that subject clitics are argumental (syntactic entities), whenever a full noun phrase and a clitic coexist, the former (coreferent with the clitic) is left-dislocated, thus appearing in a topic position.

Various diagnostics may help determine whether each noun phrase is or not left-dislocated (interpreted as the topic-in the sense of what the sentence is about). De Cat (2005) contends that the decisive one is "not the presence of a pause between the [noun phrase] and the rest of the sentence, but a combination of factors of which the most important are the presence of a stress (increased intensity) on the last syllable of the dislocated element, and pitch (me-

34 Also the status of $k a$ as a syntactic entity could be argued against, but the distribution of $k a$ is indeed subject to syntactic constraints. For instance an embedded ka only takes negation scope over the embedded verb, following the syntactic prediction that negation cannot take scope higher than the clause containing it.
lodic) prominence on that syllable" (De Cat 2005: 1213). In Caboverdean, these phonological criteria are hard to apply with an emphatic pronominal form. With a full noun phrase, however, at least a distinction of stress may be perceived on its last syllable. Check the contrast in these elicited sentences from Santiago.
(9) a. Ami $\mathrm{N}_{\mathrm{i}}$ ta bai pasa Natal ku nha mai. 1SG.EMPH 1SG.CLIT TA go spend Christmas with PPOSS.1SG mother 'As for me, I'm going to spend Christmas with my mother.'
b. Nha primu di Lisboai, $e_{i}$ ta ben pposs.1sG cousin of Lisboa 3sg.clit TA come pa $e_{i}$ pasa Natal ku nos. for 3SG spend Christmas with 1PL 'My cousin from Lisboa, she is coming to spend Christmas with us.'

For (9a), which has no clear pause, the stress diagnostic confronts some difficulty in determining the topic status of the emphatic pronoun. It is therefore hard to decide whether the subject clitic is grammatical agreement (it would hold if Ami is not a topic) or a syntactic clitic (it would hold if Ami is leftdislocated/a topic). In (9b) the stress distinction becomes clearer, and favours the left-dislocation analysis, allowing for the syntactic proposal for clitics. Now consider the set of clauses in (10)-their transcription and punctuation is adapted (and, as noted in 1.4.1, all the glosses and translations of Caboverdean examples in this monograph are my responsibility).
(10) a. Abo, bu djuga seti di oru, ami N djuga ás. (Brüser et al. 2SG.EMPH 2SG play 7 of diamonds 1SG.EMPH 1SG play ace 2002: 448) 'You have played the seven of diamonds, I have played the ace.'
b. Mos, abo bu stá duenti. (Brüser et al. 2002: 321) boy 2SG.EMPH 2SG.CLIT be sick Literal: ‘Boy, you are sick.' Intended: ‘Boy, you must be sick.’
c. Ami djá N stá bedju.
(Brüser et al. 2002: 249)
1SG.EMPH ADV 1SG be old 'I am already old.'
d. Ami oxi ka ta dá
(Brüser et al. 2002: 328)
2SG.EMPH today NEG TA give
pa N bai sinema ku bo.
for 1SG go cinema with 2SG
Intended: 'For me it is not possible to go with you to the movies today.'

The sentence in (10a) shows a contrast traditionally offered in favour of topicalization as always connected with the pause-and so without a pause there is none. As for (10b) it is clearer that the emphatic pronoun is left-dislocated, even if there is no obvious pause, since the 2SG clitic fails to lean phonologically onto abo (*abo u)-given all we know about the phonological cliticization of subjects, this leaning would be expected if there was no pause between the two words. Furthermore, some words may even appear between the emphatic form and the clitic, which reinforces the evidence for a pause. We see this already in (10c) with a light adverb, and even more in (10d), with several elements.

This description shows that Caboverdean subject clitics are syntactic units:
(i) they are available for syntactic operations (e.g. in questions, as in (4));
(ii) they can relate to a noun phrase in another clause (as in (6));
(iii) other syntactic heads may occur between the subject clitic and the verb (8);
(iv) whenever they cooccur with other nominals, these other nominals are leftdislocated, as we saw in (10) and will confirm in (11), below.

Another property of pronouns (already pointed out in Baptista 2002: 257 for the Santiago variety) is that full noun phrases and free pronominal forms (so, not clitics) are in complementary distribution: they rarely cooccur and, when they do, a clear pause separates them (the full noun phrase is obviously leftdislocated). Check these elicited judgements:


The full noun phrase and the clitic, on the other hand, do not compete for the same syntactic position because, even though they are coreferent and both are syntactic entities, they hold distinct properties.

As an additional note on topicalized subjects, a tangential question relates to a type of predicative constructions. It has been assumed in the literature that these predicates never appear in thetic contexts-where the whole sentence is focalized, with a structure typical of answers to 'What happened?'. More specifically, subjects of these predicates are said to always be interpreted as topics. Therefore, the sentence in (12a) should be ill-formed, (12b) being the grammatical version. As is seen in the notations, though, this is not the case.
(12) a. Juãu é bunitu.

Juãu be pretty
b. *Juãui, $e_{i}$ é bunitu.

Juãu 3sG.CLIT be pretty
'Juãu is pretty.'

I propose that this type of Caboverdean sequences in (12b)-the sequence 35G $e$ + present copula é-displays phonological properties that may lead to wrong predictions. In (12a), for the left-dislocation hypothesis to be maintained there would have been a phonological coalescence that hides the clitic (we cannot say that the hidden element is the copula, since what we hear is an $[\varepsilon]$ (the copula) and not an [e] (the 3sG clitic). Moreover, copula deletion in the language is mostly disallowed out of negative clauses (see next section). The phonological coalescence should thus be obligatory, since (12b) is prohibited. But it so happens that clitics are rejected with the copulas é and era in other person/number combinations, as we see in (13), which constitutes independent evidence as to why the sentence in (12b) is ill-formed. ${ }^{35}$
a. Mi é/era pastor. /*N é/era pastor.

1SG.FF be shepherd / 1sG.clit be shepherd 'I am/used to be [a] shepherd.'
b. Bo é/era pastor. /*Bu é/era pastor. 2SG.FF be shepherd / 2SG.clit be shepherd 'You are/used to be [a] shepherd.'

This section has demonstrated that Caboverdean clitics display no morphological distinction for case, that subject clitics are syntactic heads, and that they are incompatible with the verb 'be' (individual-level). Besides the properties of clitics and any morphological case distinctions, the distribution of adverbs has likewise been debated in the literature regarding the position of subjects and complements, and this is among the themes of the next subsection.

[^18]
### 2.1.2 Word order restrictions

Two other sources of language-specific word order phenomena involve subject and object pronouns. Both the distribution of adverbs in both varieties (2.1.2.1) and a restriction about clitics and temporal suffixes in Santiago (2.1.2.2) illustrate the tight connection between these argumental pronouns and the verb.

### 2.1.2.1 Adverbs are unallowed between clitics and the verb

Some syntactically based proposals predict a crosslinguistic hierarchy which accommodates any possible functional morpheme and allows for a one-to-one licensing relationship between adverbs and precise functional heads (Alexiadou 1997, Cinque 1999). In Cinque's (1999) system, the main takes on adverbs as diagnostics for that rich universal functional domain are the following:
(i) the interpretation of adverbs depends on their position;
(ii) there is a hierarchy for adverb placement;
(iii) this hierarchy correlates with similar hierarchies found for heads.

The details of this hierarchy are described in Cinque (1999: 106). One big problem for this universal approach for adverbs is that many languages fail to follow its predictions. Therefore other authors prefer a more semantically based proposal on the distribution of these expressions, defending a scope theory against a feature theory and predicting that adverbs appear in adjunction either to the left or to the right of different points in the structure. Several syntactic rules and constraints are implicated regarding their directionality and their prosodic weight, but the main point is that lexical properties play a central role in the wide-ranging positions they may assume.

That adverbs are often generated in adjunction configurations roughly means they are beyond the core structure of the clause, which is coherent with their frequent status as optional modifiers (they may also be complements to certain verbs, which is not the case in study here). ${ }^{36}$ The position where this adjunction takes place varies according to the proposals for different languages. Working with adverbial clauses in European Portuguese, Lobo (2002) presents a detailed description of their position in relation to their information status. The author points out that 'background' clauses are adjoined to the left (of the tense phrase, for instance), on a peripheral position, and that clauses containing

[^19]unexpected information (which, therefore, can be focalized) are adjoined to the right of a lower position, e.g. the verb phrase.

The analysis in Costa (2004), centered on words rather than clauses, shows that in European Portuguese adverbs with related meanings may distribute differently depending on the element they are modifying. Moreover, adverbs which are ambiguous between a subject-oriented and a manner interpretation exhibit a more restricted distribution than those which are unambiguous. This can be observed in the contrast between the adverb corresponding to 'stupidly', which is ambiguous and thus modifies different elements according to its position within the clause (it may be oriented to the subject or to the event itself), and the adverb 'intentionally', which shows no such ambiguity and thus may freely appear anywhere. This supports the argument that adverb placement and interpretation are constrained by the lexical properties of each of these words, favouring the views also defended in Ernst (2002).

As for Caboverdean, most adverbs are prohibited in any position between the subject and the verb, which is more rigorous if the subject is a pronoun, either a free form or, even more so, a clitic. This restriction shows that adverbs are not associated to specific heads in the functional domain. Their adjunction may instead take place to the left of the clause core (the adverb appears in a peripheral position, even though it comes after a topicalized pronoun, as in (14)), to the right of the verb phrase (the adverb appears pronounced after the verb complement, as in (15)), or in some cases between the verb and its complement (as in (16)). These examples are from Santiago and from São Vicente, since no salient regional variation regarding the main points in this distribution has been detected so far (but this must be subject to future research, with many more details for each word and expression). Temporal adverbs are chosen because with them any inconvenient ambiguity is in principle avoided.
(14) Mi senpr N gostá d skola.
(Liziane, São Vicente)
1SG.FF always 1SG like of school Intended: ‘I have always liked school.’
(15) Es sata subi inpostu tudu dia.
(Brüser et al. 2002: 259) 3PL PROG raise tax everyday Intended: ‘They are always raising taxes.’
(16) Bu ta skesi senpri bu kartera. (Brüser et al. 2002: 231)
2SG TA forget always PPOSS.2SG wallet Intended: 'You always forget your wallet.'

And this brings us to another argument against the universality proposal: certain adverbs in some languages display a head-behaviour, distributing differently from their more complex counterparts-tudu dia could never occur in the position assumed by senpri (although they are often equivalent in meaning), in (16). This is coherent with the fact that intermediate adverb positions are mostly occupied by light words, such as só 'only', as in (17a), rather than by heavier ones, such as for instance unikamenti 'merily' (cf. (17b), following a grammaticality judgement from another consultant).
(17) a. N teni só novi netu.

1SG have only nine grandchild
'I have only nine grandchildren.'
b. * N teni unikamenti novi netu

1SG havemerely nine grandchild
This confirms the view that, besides lexical specifications such as directionality and ambiguity, also the categorial status, as related to prosodic weight, may be relevant to predict different adverb distributions for the same semantic class. ${ }^{37}$

And this line of reasoning regarding the category and prosodic weight of adverbs is essential to illustrate the degree of the adjacency requirements for subject and object pronouns regarding the verb, which concerns this whole subsection. This can be summarised as follows: even light adverbs tend to appear mostly in peripheral positions, either to the right of the verb phrase, or to the left of the sentence, as in the example below.
(18) Es ta vezita-m senpr.
(Inês, São Vicente)
3PL TA visit-1sG always
'They always visit me.'

Although this area deserves a dedicated study, the preliminary conclusion is that in Caboverdean most adverbs cannot appear between the verb and its pronominal arguments. These data are coherent with much more flexible approaches to the syntax of adverbs than any universal hierarchy, namely the ones which consider various factors for their distributional properties. Besides lexical specifications such as directionality and ambiguity, adverbs have their position conditioned by their prosodic weight and/or their categorial status.

37 For a discussion on this topic for European Portuguese adverbs, see Castro \& Costa (2003).

### 2.1.2.2 The curious case of object pronouns in Santiago

In the variety of Caboverdean spoken in Santiago the temporal suffixes -ba, -du and -da raise a puzzling incompatibility regarding object clitics. ${ }^{38}$ The clauses in (19) illustrate these morphemes. The first one, -ba, will be much discussed on section 2.3 and in the next chapters. The other two, $-d u$ and $-d a$, which here mark passive constructions (note that they are obtained with no other verb), will be sometimes included in this discussion (see also Rendall 2015 for a study on passives in Santiago). The elderly female speaker who uttered these clauses is telling about her past professional life, including the places where she had worked-as a nurse and as an accountant (in (19a) and (19c))-and the more recent moment of her retirement (in (19b)). As was said earlier, an appropriate gloss for the morpheme - $b a$ will be assigned after the discussion of its full value, in 5.3.2. For now, the much more limited PAST is used.
(19) a. N ta daba mais splikasons di duensas. (Lurdes, Santiago)

1SG TA give:PAST mothers explanation of diseases
'I used to give mothers explanations about diseases.'
b. N ben dadu un penson.

1SG come give:PART one pension
'I have been given a pension.'
c. Kel bes ta flada resebedoria.
that time TA say:PART.PAST receiving.office
'At that time it was said receiving office.'

The incompatibility of these suffixes with object clitics was analysed in Baptista (2002) and dealt with in several following works on the language, such as Pratas (2007) and the joint work Pratas \& Salanova (2005), later published in a Portu-

[^20]guese version as Salanova \& Pratas (2014). It was in this joint study that the most satisfactory solution to this puzzle has been advanced, and this subsection reviews its relevant details, with some adaptations locally identified. This summary skips the tools from Optimality Theory which we also considered then, for they are here unnecessary. And it concludes with my current view on this phenomenon, perhaps simpler than the one proposed in those prior works.

To illustrate the puzzle itself, the examples in (20) show that when a transitive verb is hosting no temporal suffix, the pronominal object is a clitic (20b). The occurrence of object clitics pulls the word stress to the right, and here this phenomenon is, just for this purpose, signaled with an accent. But whenever one of them, say -ba (but then see (26) for an illustration of the others) is attached to the right edge of the verb, the clitic is ungrammatical (20c), regardless of the word's stress position, and the free form is used instead (20d).
(20) a. N ódja Maria.

1SG see Maria
'I have seen Maria.'
b. N odjá-l.

1SG see-3SG.clit
'I have seen her.'
c. N *ódjaba-l /*odjába-l/*odjabá-l

1SG see:PAST-3SG.CLIT
d. N odjába el.

1SG see:PAST 3SG.FF
'I had seen her.'

What on historical grounds could be viewed as a theme vowel (i.e. the final vowel in for instance odja 'see', krê 'want', xinti 'feel', konko 'knock', and bonbu 'carry [e.g. the baby] on the back') seems truly part of the stem, for no languageinternal morphological or phonological reasons lead us to think otherwise.

Moreover, Caboverdean displays a general weight-sensitive stress rule that assigns primary stress to the syllable containing the penultimate mora. And the next details are an adapted version here, to include cases from all varieties that were not considered in that first version: nasal vowels in final position are long vowels, and so they may have two moras; glides (semivowels) in diphthongs, and coda segments count as moraic as well (in Santiago, the latter are typically [ s$]$, [r], [l]; in the windward varieties, other consonants may also appear in this position, like all stops). And so this rule accounts for the stress pattern of most
words (note, again, that the graphic signs in (21) are not part of my current options for spelling; they are used here just to signal the words' natural stress): ${ }^{39}$
(21) a. káza 'house’
a. sodádi 'yearning'; barátu 'cheap'
b. tanbén 'also'
c. pensãu 'pension'
d. inbés 'instead of'; katxór ‘dog’; papél 'paper’
e. sodád 'yearning’; barót ‘cheap’

In exceptional cases inherited from Portuguese with no documented languageinternal change, the last [s] comes marked as extrametrical in the lexicon:

## (22) a. ménus 'less’ <br> b. trezéntus 'three hundred'

Morphologically complex words-stems + derivational affixes-behave just as expected: diminutives pull the stress to the right, as in (23a); and the inflectional suffix -s for plural is again extrametrical, as in (23b). ${ }^{40}$ Additionally, plural -s is used in the language with parsimony.

## (23) a. padjínha ‘small straw’ (from pádja) <br> b. kárus 'cars'

We can confirm the rarity of this plural -s when we observe the strategy to mark plural in complex noun phrases. As in (24), it only surfaces on the determiner:
a. kes livru bunitu

DET:PL book beautiful
'the/these beautiful books'

[^21]Some subsidiary empirical facts which were central to previous approaches to the puzzle in (20) must be described here. The first is that, as argued in Baptista (2002), no clitic clusters exist in Caboverdean. Contrast the answers below:
(25) Question Modi ki e teni kel karu li?
how that 3sG have that car here
'How does he have this car?'
Answer a. ${ }^{*}$ É si pai ki da-l-l. be pposs.3sG father Rel give-3sG.CLIT-3sG.clit
b. É si pai ki da-l el. be pPOSs.3SG father that give-3sG.CLIT 3SG.FF Literal: 'It was his father who gave him it.'

The answer version in (25a) shows that a double object cannot be expressed by two clitics, only by one clitic and one free form (25b), with the pronoun closest to the verb being the indirect object and the other being the direct object.

Encliticization is also banned with verb forms ending in $-d u$ or $-d a$ (these are participial forms, as is signaled in their glosses; in Santiago they mark passives on their own, with no auxiliary-present and past passives, respectively).

| a. * | * E dadu-l. |  |  | E da | da-1. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3SG give:PART-3 | .CLIT | / | 3SG gi | :PART.PAST-3SG |  |
| b. | E dadu | el. | / | E | dada | el. |
|  | 3SG give:PART | 3SG.FF | 1 | 3SG.FF | give:PART.PAST | 3SG.FF |
|  | 'He has/had b | given |  |  |  |  |

In the presence of one of the rare lexical items allowed to interfere in the adjacency between the verb and its arguments, encliticization is blocked as well: ${ }^{41}$
(27) N odja só el. / * N odja só l/e. 1 SG see only 3 SG.FF / 1sG see only 3SG.clit 'I've seen only her.'

[^22]This also happens when the pronoun is coordinated with a noun phrase, regardless of the order between them-the point of interest to this specific case is about (28c), where other elements occur between the verb and the complement clitic (with this $k u$ having an 'and’ interpretation): ${ }^{42}$
> a. *Nu odja-1 ku Maria. 1pl see-3SG.CLIT and Maria
> b. Nu odja-s, ael ku Maria. 1PL see-3PL.CLIT 3SG.EMPH and Maria 'We have seen them, him and Maria.'
c. Nu odja Maria ku el. / * ku-l. 1pl see Maria and 3sG.FF / and-3sG.clit 'We have seen Maria and him.'

The order in (28a) is possible, however, if $k u$ heads a prepositional phrase (a productive value for this) in right adjunction to the verb phrase (but this would not allow for the intended comparison). See the answer clause in (29):
(29) Question: Modi ki nhos ta kumi katxupa? how that 2PL TA eat katxupa 'How do you eat katxupa?'
Answer: Nu ta kume-l ku kudjer. 1PL TA eat-3SG.CLIT with spoon 'We eat it with a spoon.'

In the previous examples in this subsection we have seen the relevant data which now allow us to confront the approach presented in Baptista (2002) to the empirical puzzle in (20). According to the author there is a morphological template where the suffixes $-b a,-d u$ or $-d a$ compete for a slot with object clitics. She assumes that verb movement to a tense phrase exists in the language, and then these temporal morphemes are affixed to the verb in the syntactic component.

42 As opposed to English 'and' and to Portuguese $e$, Caboverdean $k u$-which sometimes has a prepositional value, 'with' (check the answer in (29))-connects only phrases, not clauses. The word used in clause coordination is $i$. We may say that $k u$ derived from Portuguese com 'with', and in these conjunction values it presents a reanalysis effect; $i$, on the other hand, has been derived from Portuguese $e$ 'and’ (Pratas 2007: 204). In Brito, Matos \& Pratas (2014), comitative coordination in the Santiago variety is further developed and illustrated.

Pratas \& Salanova (2005) have however showed that: (a) this competition is a plain stipulation; (b) putting syntactically together direct and indirect object clitics with temporal morphemes is both intuitively and empirically wrong. In this joint work, the argumentation rather favours the view of the ill-formedeness of (20c) as intimately tied to the stress shift involved in the encliticization process, which, as was said above, is influenced by the weight-sensitive stress rule in (i), and also by the unsurprising morphophonological constraint in (ii):
(i) the primary stress of a word falls on the syllable containing the penultimate mora;
(ii) the main stress of a word cannot fall outside the stem.

This is indeed respected in morphologically complex words-stem + derivational affixes. And now let us check the result of applying the rule (i) with the constraint (ii) to the problem we are dealing with, and then see what happens. The puzzle in (20) is here repeated for convenience.
(20) a. N ódja Maria.

1SG see Maria
'I have seen Maria.'
b. N odjá-l.

1SG see-3SG.clit
'I have seen her.'
c. N *ódjaba-1 /*odjába-l/*odjabá-1

1SG see:PAST-3SG.CLIT
d. N odjaba el.

1SG see:PAST 3SG.FF
'I had seen her.'

The stress rule in this variety would require that in odja $+b a+l$ the stress be placed on the last syllable (where we have two moras). So according to this rule the last option in (20c) would be correct. This would however violate the morphophonological constraint, since in odjabá-l the stress falls on the temporal morpheme -ba, out of the verb stem.

That the form in (20d) is the one to be chosen follows straightforwardly from the effects of crossing the stress rule and this constraint. Being el and $l$ allomorphs for the same morpheme, 3SG, this is a simple case of allomorphy determined for morphophonological reasons.

For this analysis to hold we must consider: (a) at least two allomorphs for each combination of person and number; (b) the free forms as being non-clitics,
as was shown in 2.1.1; (c) the pronominal form as being inserted when and where it must combine with the temporal morpheme.

Regarding the fact that, at least in this variety, the free form is precluded when no temporal morpheme is affixed to the verb-a simple clause such as $N$ ódja el 'I have seen him/her/it' is ungrammatical-we may argue that the insertion of the freestanding form of the object pronoun is more costly to the grammar, since it results in the creation of a separate stress domain.

A potentially bigger problem to this analysis is that no other environment in the language decisively confirms the constraint at issue (stress must fall within the verb stem), and therefore using this one as such would be circular. As said before, though, this is a common constraint crosslinguistically.

Finally, if an object pronoun follows a word other than a verb, what prevents it from leaning onto that word? More specifically, since subject clitics can lean onto adverbs, complementizers or prepositions to their left, as we saw in (1) and (2), what prevents the direct object clitic-in double object constructions, which are common in the language-from occurring after, and leaning onto, an indirect object noun phrase, as in the second option in (30), below?
(30) N dá Maria el. /*N da Maria-l.

1SG give Maria 3SG.FF / 1SG give Maria-3SG.Clit
'I’ve given it to Maria.'

In the referred joint works an independent constraint has then been added that prevents object pronouns from encliticizing to anything but the verb; or, more generally, an object clitic may only appear attached to the unit of which it is a complement. ${ }^{43}$ But under my current proposal that subject and object forms display the same morphophonological properties, the contrast between these and subject environments where the clitic leans onto the non-verbal word on its left is still to be explained.

Therefore, a description of both cases is here more based on syntax than on morphophonology, as follows. The constraint illustrated in (30) is also an effect of the syntactic nature of these clitics. As was argued in section 2.1.1, these elements have their own phonological idiosyncrasies, but they are still syntactic entities-this was defended against an agreement morphemes hypothesis. And they are strictly dependent on the verb: (a) when in the subject position, the only lexical items that may interfere with this strict connection are the clausal

43 This is like the proposal in Baptista (2002: 235) that [object] "clitics must be licensed by affixation directly onto the category governing them."
negation and temporal morphemes, all of them heads in the functional domain; (b) when in the object position, nothing has this privilege whatsoever, which means that when any other lexical item-even the morphemes -ba, $-d u$, or $-d a-$ occurs in this intermediate position, the pronoun thus separated from the verb must be pronounced as a free form. This point has the welcome additional advantage of also accounting for the prohibition of clitic clusters, which was illustrated in (25).

Two clitics together are indeed unallowed even when they could be syllabified as a single mora (Io stands for indirect object and Do for direct object).

| a. *dá-l-u | / * prizenta-s-u |
| :---: | :---: |
| give-3sc | / introduce-3sG.CLIT(IO)-2SG.CLIT(Io) |

b. N dá-l bo.

1SG give-3SG.CLIT(IO) 2SG.FF(DO)
'I gave you to her/him.'
c. N dá-u el.

1SG give-2SG.CLIT(IO)3SG.FF(DO)
'I gave her/him/it to you.'
d. N prizentá-s bo.

1SG introduce-3PL.clit(Io) 2sG.FF(Do)
'I introduced you to them.'

If we followed a plain construction of the hypothetical phonological words in (31a) there would be no problem with the stress constraint at issue here, since the main stress of the word would still fall on the verb stem-it would therefore be difficult to explain the prohibition of these words on that basis. A simpler view is therefore that, for syntactic reasons, each object clitic can only appear in the syntactic immediacy of the verb.

In this subsection encliticization in the variety of Santiago has been analysed under two hypotheses which make sense in their own way. Enclitic forms and free forms are allomorphs which are chosen following: (i) the stress rules of the language (stress cannot fall outside the verb stem), as was defended in Pratas \& Salanova (2005), and/or (ii) a syntactic rule which is reinforced here: object clitics can only occur in the strict immediacy of the verb, which means that nothing is allowed between these two intimately connected words. Both these hypotheses leave us with the detail to be retained: while preverbal temporal morphemes or clausal negation are allowed between subject clitics and the verb in all varieties, the temporal suffixes in the Santiago variety--ba, $d u$, and $-d a-$ cannot break the strict adjacency between the verb and object clitics.

### 2.2 Clausal negation

The word $k a$ conveys clausal negation in all varieties of Caboverdean (although one mainly spoken in Santo Antão also has $n$ as an equivalent; see Swolkien 2015: 253-254, for cases of negator $n$ also attested in São Vicente, where an influence from the neighbouring island is often evident). This negative item occurs in a preverbal position in almost every circumstance. The sentence in (32) was uttered within the description of the bad conditions for young people to find work after they finish high school-the speaker is citing a common complaint by her former students. As the temporal interpretation intended is prior to the utterance time (see next section), the dynamic verb is in its bare form.
(32) "N ka atxa un trabadju."
(Daiana, Santiago)
1SG NEG find one job
'I haven't found a job.'
The same order between $k a$ and the verb obtains in clauses also containing any preverbal temporal morpheme, as $t a$ in (33), a present habitual sentence (next section and the next chapters will further discuss this morpheme and then provide a proper gloss to it) that was uttered during a short narrative about a man who lives not far from the consultant, and whom she helps sometimes.
(33) E ka ta furta.
(Lurdes, Santiago)
3SG NEG TA steal
'He does not steal.'

In the same sequence, the consultant produces a sentence with present é 'be', which illustrates what is, to my knowledge, the only exception to this typical word order between $k a$ and the verb-clausal negation indeed appears after this light, suppletive form from Portuguese (34).
(34) El / *E é ka malkriadu. (Lurdes, Santiago)

3SG.FF 3SG.CLIT be.pres neg rude
'He is not rude.'

A sound like $e$ also exists in (33), but as a different morpheme-the subject clitic for the third person singular. As was pointed out in subsection 2.1.1, these two words-the subject clitic and é-never cooccur, which is reflected in (34), where the third person singular pronoun could never be a clitic, only a free pronominal form. This word order between the verb and the negation marker is thus
limited to $\dot{e}$; all the other suppletive forms of the same verb-era, foi, fosi/fose, or ser-appear to the right of clausal negation like any other verb.

A side explanation is needed here on these suppletive verb forms from Portuguese. They are considered as such for they are unrelated to any languageinternal morphology. A quite interesting phenomenon that anchors this reasoning is an even more understudied morpheme in the variety of Santo Antão, which appears in the spontaneous discourse of at least one of the elderly participants in the corpus (and is very briefly referred in Swolkien 2015: 234): -se, derived from the Portuguese past subjunctive marking for first or third persons singular, affixes to Caboverdean verb forms such as ben 'come' and ba 'go'-so we get bense and base, which do not exist in Portuguese. These and other Caboverdean verbs marked with -se appear, in that variety, in a limited subset of the environments where Santiago has -ba. The variety of Santo Antão is not included in detail in this monograph, and so its description and examples will be left for future papers, but this morpheme and its distribution nicely gives more strength to my main proposal on the expression of temporal meaning. See 4.1.3.4 for another brief reference on this, and chapter 5 for some more details.

The existence of this -se in Santo Antão is mentioned here to highlight the distinction between this productive morpheme and the verb forms which are frozen exactly as they exist in Portuguese, including subjunctives-although their distribution is distinct here. Table 2 contains several relevant cases of these suppletive forms (see Swolkien 2015: 239 for a different version), as related to certain temporal meanings. ${ }^{44}$ They are fully discussed in chapter 5.

Table 2: Suppletive Caboverdean verb forms and their temporal meanings in Portuguese

| 'be' <br> (individual-level) | 'be' <br> (stage-level) | 'have' | temporal meanings <br> in Portuguese |
| :--- | :--- | :--- | :--- |
| é | tá | ten | present |
| foi | tivi/tiv | tivi/tiv | preterit perfect |
| era | tava | tinha | past imperfective |
| fosi/fose | tivesi/tivese | tivesi/tivese | past subjunctive |
| for | tiver | tiver | future subjunctive |
| ser | ----- | ter | infinitive |

44 Notably, I know of no suppletive forms from Portuguese present subjunctive.

Resuming the account of negation, that switched order between negation and é 'be’ (present) is among the distributional properties of $k a$ favouring its categorial status as a head (Pratas 2007). That it can switch places with the phonologically light verb é may be analysed as an instance of a (optional) morphological merger between é and $k a$, an operation under adjacency first proposed in Marantz (1984): a relation between X and Y may be replaced (or expressed) by the affixation of the lexical head of $X$ to the lexical head of Y. Furthermore, in the presence of $k a$, é can be deleted, as in the elicited example in (35).
(35) Wilson ka riku.

Wilson NEG rich
'Wilson is not rich.' / * 'Wilson was not rich.'

When no audible copula exists, the accurate temporal meaning is dependent on other pieces of information in the sentence. Take for instance the next elicited clauses with passive constructions from Santiago-again, this includes no copula (or auxiliary, depending on the analysis): $-d u$ is linked to a present reference time and - $d a$ to a past reference time (this expression will be detailed later in this study). So in (36b), an impersonal passive, the temporal interpretation results from the various morphemes combined. In (36a) the temporal meaning resembles the one for bare dynamic verbs in nonpassives.
(36) a. Djon (*e) tradu di trabadju.

Djon (*be) take:PART of work 'Djon has been fired.' / 'Djon is unemployed.'
b. Kelbes ta badjada txeu (mas once TA dance:PART.PAST a.lot (but gosi ka sata badjadu mas).
now NEG PROG dance:PART more
Intended: 'Once upon a time / In the old days people used to dance a lot (but now they are no longer dancing).'

The temporal meaning of the clause in (36a) is indeed akin to a present perfect in English, whereas the overt preverbal temporal morphemes change this: $t a$ is associated with habituals or generics, and sata (tita for São Vicente) is associated with the progressive (see next section for details).

Regarding whether the present copula plus negation is allowed (that is, whether the copula deletion in negative clauses is actually optional), we must test it with person + number combinations other than 3sG. This is due to the
above-mentioned phonological similarity between the 3sG subject clitic and the present copula. Consider the following examples (with (37a) repeated from (35), the relevant contrast being in the next judgments):
(37) a. Wilson é ka riku. Wilson be NEG rich 'Wilson is not rich.' / * 'Wilson was not rich.'
b. Mi /*N é ka riku. 1SG.FF /*1SG.CLIT be NEG rich 'I am not rich.'
c. Bo /*Bu é ka riku. 2SG.FF/*2SG.CLIT be NEG rich 'You are not rich.'

Without any further information, one could ask whether (37a) rather contains a null copula in a clitic doubling sequence (noun phrase + clitic). However, (37b) and (37c) confirm that the subject clitic is unallowed here.

Other arguments which point to the same reasoning that $k a$ is a head are illustrated in the next couple of elicited clauses: it cannot be focalized (38) and it cannot occur isolated (39).
(38) Ami, N gosta txeu di katxupa,

1SG.EMPH, 1SG.CLIT like much of katxupa
mas abo, bu nau. / *ka.
but 2SG.EMPH, 2SG.CLIT no / not
'I like katxupa a lot, but you, you don't.'
(39) Question: Bu ta ben ku mi ?

2SG TA come with 1 sG ?
'Do you come /are you coming with me?'
Answer: Nau. / *Ka. no / not
'No.'

Another characteristic regarding negation in Caboverdean is that the morpheme $k a$ cooccurs with negative words, keeping the negative value of the sentence:

| (40) a. | Tioxi $\quad \mathrm{N} \star(\mathrm{ka})$ bai |
| :---: | :--- |
| never.until.today | $1 \mathrm{SG} \star(\mathrm{NEG})$ go |
| Portugal. ${ }^{45}$ |  |
| 'I have never gone to Portugal.' |  |
| b. Ningen ${ }^{\star}(\mathrm{ka})$ odja filmi. |  |
| nobody ${ }^{\star}(\mathrm{NEG})$ watch movie |  |
| 'Nobody has watched the movie.' |  |

Contrast with the corresponding sentences in Portuguese:
a. Ninguém (*não) viu $\quad$ o filme.
nobody ( ${ }^{\star} \mathrm{NEG}$ ) watch.3SG.PAST the movie
'Nobody watched the movie.'
b. Eu nunca (*não) fui a Portugal. 1sG never ( ${ }^{*} \mathrm{NEG}$ ) go.1SG.PAST to Portugal 'I have never gone to Portugal.'

The fact that the words ningen 'no.one' and nada 'nothing' $-n$-words in the sense of Laka (1990)-always cooccur with $k a$, be they in preverbal or postverbal position, raises interesting questions about the nature of this negative concord (for a discussion of different approaches to strict and non-strict negative concord, see Tubau 2008). These questions, addressed in detail in Pratas (2018c), regard the properties of the negative meaning in ningen 'no.one' and nada 'nothing', their nature as indefinites or quantifiers, and the syntactic configuration that accommodates both the clausal negator $k a$ and the $n$-word, maintaining one logical negation only.

[^23]In that paper, I provide an analysis based on generative approaches to other languages (Zanuttini 1991; Martins 2000; Giannakidou 2000, among others), and argue that the $n$-words ningen 'no.one' and nada 'nothing' are universal quantifiers with no inherent negative meaning, just as Giannakidou (2002) has proposed for Greek and Romanian, also strict negative concord languages. Their properties as quantifiers and their corresponding operator status are associated with the fact that they can bind a specific kind of variable, as was argued in Costa \& Pratas (2013) about a specific case with an empty embedded subject position-which thus covers no null pronoun (no reference is involved) but rather an instance of a variable bound by a subject $n$-word in the main clause.
a. Ningen ka ta atxa livru ki _—e perdeba.
nobody NEG TA find book REL - lose:PAST
'Nobody finds the book that they (each of them) had lost.'
b. Ningen ka ta atxa livru ki e perdeba.
nobody NEG TA find book REL 3SG lose:PAST 'Nobody finds the book that she/he had lost.'

So only (42a), where no pronoun is produced in the subject position of the relative clause, shows a connection between the subject positions of the main and embedded clauses: a special binding relation in which the antecedent is a quantifier and the lower element is a variable. In (42b), where the embedded subject is overt, no such binding relation is possible-the subjects are independent from each other (recall from last section the possible long-distance association between subject clitics and full noun phrases; this, of course, is not one of those cases, the main subject being a quantifier rather than a full noun phrase).

Furthermore, regarding the relation of these $n$-words with the clausal negator $k a$, the feature system in Martins (2000) has been adapted, resulting in the proposal that they are weak Negative Polarity Items (NPIs). They enter into an agreement relation with the polarity value of the sentence (Zanuttini 1991), and thus their being both (clausal negation and the $n$-word) part of the same logical negation is explained.

At this point information is already available which hints at the functional architecture of Caboverdean. We have analysed the behaviour of subject and object pronouns, restrictions on the distribution of adverbials, and the properties of clausal negation. Next section adds the component which is missing so far: the distribution of the few temporal morphemes in both varieties.

### 2.3 Temporal morphemes

This section introduces some properties of the main temporal morphemes in each of the varieties of Caboverdean under discussion (2.3.1). Their meanings are also briefly approached, since the examples already imply a certain interpretation, but a full proposal on how these values are attained, i.e. a wider picture of their contribution to the expression of temporal meaning, will take shape over the next chapters. What is however included here is a subsection summarizing my recent diachronic account of one intriguing morpheme, $t a$, which may now be demystified (2.3.2).

### 2.3.1 The main elements

Starting with a description of the synchronic behaviour of $t a$, one could infer that the bare verb form has an inherent past meaning (43a) and ta marks present habitual, thus playing a double role: tense and aspect (43b). These clauses were first elicited from my consultants in Santiago.
(43) a. Txoti ben kumi na jardin. birds come eat in garden 'The birds came/have come in the garden to eat.'
b. Txoti ta ben kumi na jardin. birds TA come eat in garden 'The birds come in the garden to eat.'

The clauses below were registered during a spontaneous chat among speakers in Santiago, and in (44b) ta rather looks like a future marker, again contrasting with the past meaning of the bare form in the prior clause (44a). This futureoriented interpretation is somewhat ensured by the adverbial expression otu dia 'another day', but the relevant point here is that ta may appear in non-present, non-habitual constructions as well.
(44) a. Oxi N ka leba nha fidju trabadju. (Filomena, Santiago) today 1SG NEG take my child work 'Today I haven't taken my child to work.'
b. Mas otu dia N ta leba-l bonbudu. but another day 1SG TA carry-3SG strapped.to.my.back 'But one of these days I will carry him on my back.'

And then, if we consider (43) and (44) together, the inference that rather needs to get addressed is that ta seems associated with nonpast, thus looking like a tense marker as was proposed in Silva (1985). ${ }^{46}$ In these cases we have indeed a past meaning in the absence of $t a$, and a present or a future-oriented (subsequent) meaning in the presence of $t a$. The distinction between habitual (in the present) and episodic situations (subsequent) could be attributed to our knowledge of the world, in some cases, or to other elements in the clauses, such as specific adverbials, as 'another day' in (44b).

A twofold argument may however be raised against this: (i) the nonpast interpretation of some predicates dispenses with $t a$, and, (ii) more evidently in the Santiago variety, ta participates in the expression of past situations as well, where another morpheme is also at stake: postverbal -ba. This is illustrated in (45) and (46), respectively (elicited examples from Santiago).
(45) N ka sabi risposta.

1sG NEG know answer
'I don't know the answer.'
(46) Antigamenti Pedru ${ }^{\star}$ (ta) djugaba bola.
in.the.old.days Pedru *(TA) play:PAST ball
'In the old days Pedru used to play football.

Therefore, one salient observation from the above descriptions is that ta shows up in different temporal constellations: habitual and episodic; past, present, and subsequent interpretations. So the connection of $t a$ with any precise temporal meaning required a deeper examination. This has been attempted by Silva (1985), Suzuki (1994), Baptista (2002), and Jacobs (2011), all about the Santiago variety, but all these left some unresolved problem. In Pratas (2018a, 2019) a complete analysis has been developed that unravels all the details, and moreover accounts for the different forms in Santiago and São Vicente varieties. It puts together part of the proposal in Suzuki (1994), which argues in favour of the modal quality of $t a$ in root clauses, and the historical description in Schuchardt (1882), about the change of $t a$ from a progressive marker into a habitual morpheme, and then complements this with a further contribution, as is summarised in 2.3.2.

[^24]Another point in common between both varieties concerns the bare form of the verb, which has received various treatments (see Pratas 2010 for an overview). In clauses with dynamic predicates or with some statives, it is quite equivalent to a perfect-responsible for the past interpretation of the situations in (43a)-and this led to the proposal in Pratas (2010), further developed in subsequent works, that there is a null perfect morpheme at stake here (van de Vate 2011 also proposes a null perfect morpheme for Saamáka, but with different premises and consequences). My take now, however, is that there is no need to stipulate such null category, the perfect-like-or just 'perfect'-interpretation being dependent on other factors instead, as is discussed in chapters 4 and 5.

As for the temporal morphemes that distinguish the two varieties, we easily recognize them in a general list. Santiago variety has four overt forms, two of them preverbal (the mentioned ta, and then sata-this has regional variants, such as aita) and three others affixed to the verb (the also mentioned -ba, $-d u$, and -da). São Vicente variety has only preverbal forms; besides $t a$ (with the variant $t$ ), it has tita (corresponding to Santiago sata in some cases; this also displays some variation, mainly phonological, such as tit or tet), and tava (with the variant tá-this is distinguished from ta by the open vowel). Examples of these morphemes in the next pages illustrate their individual contributions. As most of the previous examples in this chapter, these are simple clauses so that the main temporal import of each morpheme in root clauses is illustrated. More complex examples are to be found later. Table 3 contains a summary of all this; 'and more' refers to values beyond the past, to be explored in the next chapters.

Table 3: Temporal morphemes in both varieties (from Pratas 2018b), in root clauses

|  | Santiago | São Vicente |
| :---: | :---: | :---: |
| - | bare form of most predicates, for past episodic situations |  |
| preverbal progressive | sata etc.: used in past and non-past progressives | tita/tite: used in non-past progressives |
| preverbal ta | used in past and nonpast habituals, attitudinals, generics, subsequent | may also be $t$ used in nonpast habituals, attitudinals, generics, subsequent |
| postverbal -ba | combines with the above morphemes; associated with past meanings and more | - |
| preverbal tava/tá | - | with ta/te in past progressives; habituals in the past and more |

The rest of the linguistic examples in this section are mostly taken from the oral corpus LUDViC, and so they are, as always, associated with the consultants' pseudonyms.
(47) progressive in Santiago
a. Kabu Verdi sata dizenvolvi ben.
(Daiana)
Cabo Verde prog develop well
‘Cabo Verde is developing well.’
b. Na prinsipiu N ka sata konsigiba
(Sandra)
at beginning 1 SG NEG PROG succeed:PAST
[fazi pastel di midju].
[make pastry of corn]
'At the beginning I wasn't succeeding [in making corn pastries].'
(48) progressive in São Vicente
a. N tita falo-b d nha rialidad. (Firmino)

1SG PROG speak-2SG of PPOSS.1SG reality
'I am telling you about my reality.'
b. Inda el tava ta trabaiá.
still 3SG tava ta work
'She was still working.'
(49) bare form in Santiago

N duensi.
1SG get.sick
Intended: 'I got sick.'
(50) bare form in São Vicente

N pasá un one sen traboi. (Firmino)
1SG spend one year without work
Intended: 'I spent a year unemployed.'

Observe in the sentences above that the two varieties are very similar in both the bare form and the progressive in the present, with only this disparity in the
progressive morpheme: in Santiago we have sata, in São Vicente we have tita, sometimes reduced as tite. The progressive in the past, however, presents a distinction between them, and this will be analysed bellow: in Santiago we have the preverbal sata combined with postverbal -ba, and in São Vicente we have two preverbal morphemes, tava ta, sometimes reduced as tá ta, or even as other combinations of these two $t$ with or without any of the vowels.

Preverbal ta (possibly $t$ in São Vicente) is also common to the two varieties in a set of related meanings in the present: present attitudinal, present habitual, generics, and a type of future-orientation for which the speaker shows a certain degree of certainty-this is here taken as a subsequent interpretation.
(51) ta in Santiago

N ta vendi tomati, alfasi ku pepinu.
1SGTA sell tomato lettuce with cucumber
'I sell tomatoes, lettuce and cucumbers.'
(52) $t a$ in São Vicente
Senpr N ta stimulá nhas alune. (Liziane)
always 1SG TA stimulate PPoss.1sG:PL student
'I always encourage my students.'
(53) $t a+-b a$ in Santiago

N ta pasaba difikuldadi.
1SG TA go.through:PAST difficulty
'I used to go through hard times.'
(54) tava (or tá) in São Vicente

No tá intxí korr ku kes produt.
1Pltava fill car with those product
'We used to fill the car with those products [to distribute].'
(55) past before past in Santiago: bare form + postverbal -ba

Nu moraba lisin.
1PL live:PAST here
Intended: 'We had lived here [in the old days].'
(56) past before past in São Vicente: tinha (suppletive form from the Portuguese 1SG/3SG of the past imperfective of ter) + participle

Kel dia papá tinha dod mi sen skud. (Firmino) that day dad had give:PART 1SG 100 skud
'That day my dad had given me 100 skuds.'

And then a habitual or a subsequent meaning may be applied to a progressive. Here the progressive must be marked periphrastically in both varieties, as in these combinations: ta+sta+ta+verb (Santiago); ta+stod+ta+verb (São Vicente).
(57) habitual progressive in Santiago
a. E ta stá ta txera senpri sabi.
(Brüser et al. 2002: 844)
3SG TA be TA smell always good
'She is always smelling good.'
b. Mudjeris ta staba tudora ta kantaba. (elicited; in Pratas 2007: 66) women TA be:PAST always TA sing:PAST
'(the) Women used to be always singing.'
(58) habitual progressive in São Vicente

El ta stod senpr ta skesê nom d ses net. (Francisco)
3SG TA be always TA forget name of PPOSS.3SG:PL grandchild
'She is always forgetting the names of her grandchildren.'

This subsection introduced the main temporal morphemes for both varieties, illustrated through examples that make their comparative contributions clear enough for this initial description. The further discussion of their more complex interactions and meanings will hopefully provide more dimensions to them.

Next subsection contains a summary of the recent proposal (Pratas 2018a, 2019) on the puzzling morpheme ta.

### 2.3.2 The persistence of the progressive

To better understand both the diachrony of $t a$ and the proposal that it underwent a complete progressive cycle, we need to first consider the European language from which Caboverdean inherited most of its lexicon. In Portuguese, two
typical periphrastic options are associated with the progressive in different varieties: estar 'be' $+a$ 'to' + infinitive, and estar 'be' + gerund. In the $15^{\text {th }}$ century, when the first Portuguese settlers started bringing African slaves to Santiago, both forms already existed in Portugal. Only much later would the prevalence of the former in the northern and center-coastal areas be a property of European Portuguese, as well as its standard status in this country; the version with the gerund has nevertheless been preserved in some varieties of southern continental regions, and also in Brazil, where it is still the common form to express the progressive (Martins 2016: 21). ${ }^{47}$

Whichever was the variant used by the Portuguese colonizers in Santiago, all details about the transition into the progressive forms in Caboverdean concern the Portuguese verb estar 'be', in its reduced form for the present tense, third person singular: tá (from está). The nonfinite form that came with it could be either the gerund or $a+$ infinitive, although the latter appears more coherent with the bare verb form that the new varieties started to use (the gerund morphology is less, say, neutral, and so its loss had to be particularly explained).

My analysis of Caboverdean ta creates the connection between:
(i) the initial phase of $t a$ as a progressive marker (59) (Schuchardt 1882);
(ii) a subsequent stage where it marked general imperfective; a portion of this value (habituals, attitudinals, and generics) is maintained by contemporary $t a$ when on its own (as was illustrated in (51) and (52), here repeated for convenience); and
(iii) its current participation in progressive constructions as:
a. part of the reinforced progressive morphemes in root clauses (as was illustrated in (47a) and (48a), above, here repeated too, as (47) and (48)), and
b. a stand-alone progressive in specific embedded clauses (60).

The detailed proposal for the transition is presented after the examples.

[^25](59) Adapted from Schuchardt (1882) as in Hagemeijer \& Holm (2008: 148)

N ta dá.
1SG TA give
'I am giving.'
(51) $t a$ in Santiago (repeated from (2.4.1)

N ta vendi tomati, alfasi ku pepinu.
1SG TA sell tomato lettuce with cucumber
'I sell tomatoes, lettuce and cucumbers.'
(52) $t a$ in São Vicente (repeated from (2.4.1)

Senpr $N$ ta stimulá nhas alune. (Liziane)
always 1SG TA stimulate PPOSS.1SG:PL student
'I always encourage my students.'
(47) progressive in Santiago (repeated from (2.4.1)

Kabu Verdi sata dizenvolvi ben.
Cabo Verde prog develop well
'Cabo Verde is developing getting.'
(48) progressive in São Vicente (repeated from (2.4.1)

N tita falo-b d nha rialidad. (Firmino)
1SG TITA speak-2SG of PPOSS.1SG reality
'I am speaking to you about my reality.'
(60) a. N odja-u ta fuma.
(Filomena, Santiago)
1SG see-2SG TA smoke
'I have seen you smoking.'
b. N oiá ot tren ta ben.

1SG see other train TA come
'I've seen another train coming [...].'
That Caboverdean ta underwent a full progressive cycle, such as was described for other languages in Dahl (1985), Bybee \& Dahl (1989), Bybee et al. (1994), and Deo (2015), among others, seems to nicely account for the facts observed and was first proposed in Pratas (2018a). This cycle consists of these steps, as cap-
tured from the mentioned literature: "progressive markers emerge in languages often in the form of periphrastic expressions; they later undergo a process of grammaticalization and generalize their use to less specific imperfective interpretations; new progressive markers emerge to fill the gap left by this shift of the previous marker to a general imperfective" (Pratas 2018a: 120).

We must then start with the observation in Schuchardt (1882) that "originally" $N$ ta da corresponded to the Portuguese eu estou dando or eu estou a dar 'I am giving', and that this meaning has later "blurred to eu dou" 'I give' (adapted from the translation of Schuchardt 1882 in Hagemeijer \& Holm 2008: 148). According to that old description $t a$ was first the local progressive marker, and this, as was said above, is unsurprising given the similar variants in oral Portuguese for third person singular: tá dando / tá a dar, both meaning 'is giving'.

More than a century later, Kihm (1994) has proposed for contemporary Ginensi, a related language from Guinea-Bissau, that "in some previous stage [...] ta covered the whole field of the imperfective" (Kihm 1994: 92). The "previous stage" here refers to a time when $t a$ in that language was available both for progressives and habituals. It is therefore easy to relate this to a similar "previous stage" in Caboverdean, where $t a$ was still suffering that blurring process referred by Schuchardt, then having already this more general imperfective meaning, which also included habituals. More recently, Jacobs (2011) linked the use of Caboverdean $t a$ in embedded progressives (such as the one here illustrated in (60), above) with the main progressive marker $t a$ in Papiamentu, also a Portuguese-related language in the Atlantic. Note, however, that Jacobs (2011) proposes that Caboverdean "ta started out as a general imperfective marker ([+habitual, +progressive])", and that "[gradually], alternative periphrastic progressives would then come to absorb an important part of progressive aspect in [Caboverdean]", with $t a$ being "largely [...] ousted from progressive main clauses by other (complex) markers" (Jacobs 2011: 328). Therefore, Jacobs (2011)-who is worried with prototypical [features] in creoles, a concern that has always been far from my own worries-ignores (as I believe Kihm 1994 also does for Ginensi) that very first stage of $t a$ as strictly progressive marker in root clauses (as in (59)), and denies its current participation in the progressive morphemes.

So the solution I have proposed to this puzzle is rather that: (i) $t a$ is part of the picture all along (the first progressive morpheme was $t a$ and the contemporary progressive morpheme still includes $t a$, which thus was not "ousted"), and (ii) the general imperfective value of the stand-alone $t a$ in root clauses developed at an intermediate stage. This means that, after that first shift of $t a$ into a general imperfective use referred by Schuchardt (1882), some reinforcement
emerged to fill the gap for a more specific progressive meaning. Under this account the various instances of $t a$ in Caboverdean are no longer a mystery.

Starting with progressives in root clauses, we now have both the periphrastic and the non-periphrastic forms where $t a$ (or its allomorph $t$, in São Vicente) has been reinforced by, respectively, locative verbs (in Santiago: stá 'be'; in São Vicente: a specific instance of tá 'be' or, in conditions which will be explored in the next chapters, stod, a form derived from the Portuguese participle estado 'been'-as a side observation, this is another example of vowel change, a productive phenomenon in this variety as was said earlier), or other morphemes with a locative content. We know that stá, tá and stod are verbs for different reasons. Both stá and stod may be marked with other preverbal morphemes, such as the habitual $t a$, as we have seen in (57) and (58), above, here repeated for convenience.
(57) Progressive with the verb stá in Santiago (repeated from 2.3.1)

E ta stá ta txera senpri sabi. (Brüser et al. 2002: 844)
3SG ta be TA smell always good
'She is always smelling good.'
(58) progressive with the verb stod in São Vicente (repeated from 2.3.1)

El ta stod senpr ta skesê nom d ses net. (Francisco)
3SG TA be always TA forget name of PPoss.3SG:PL grandchild 'She is always forgetting the names of her grandchildren.'

That stá, tá and stod are verbal entities allows for small adverbs to appear between each of them and the embedded ta. This is the case of senpri/senpr 'always', above, and of $l i$ 'here’ in (61), below.
(61) progressive with the verb tá in São Vicente

Inkuant $N$ tá li ta trabaiá, bo tita oiá televisãu. (Francisco) while 1SG be here TA work 2SG PROG watch tv 'While I'm here working, you're watching tv.'

Moreover, each of them may also appear on their own in stage-level predicate constructions (in root clauses, as in (62), or embedded, as in (63)).
(62) Juau stá / tá duenti.
(Santiago /São Vicente)
Juau be sick
'Juau is sick.'
(63) Bzot krê stod a vontad.
(Firmino, São Vicente)
2PL want BE comfortable
'You want to be comfortable [at home, over the weekend].'

The other morphemes which function as reinforcement when a progressive meaning is intended exhibit synchronic micro-variation as well. For their diachrony I conjecture that, in Santiago, the locative verb stá that reinforced the progressive got reduced to sa in some places, and here we get the most widespread of the current non-periphrastic progressive forms in this variety-note that this Santiago sa fails to obey any of the diagnostics for being a verb illustrated above: it cannot be marked by other morphemes, it cannot be separated from the following ta, and it cannot occur on its own (Pratas 2007: 64). A form sá is however still attested as a predicative and locative copula in another Por-tuguese-related language in the same West African area, Casamancese Creole. It is not therefore surprising that a locative sa also still exists in Santiago, although as a non-independent form (it only occurs as a reinforcement of $t a$ in progressives). And Schuchardt (1882, in Hagemeijer \& Holm 2008: 148) also refers to sâ as a form to "emphasize duration" (although the author relates itwrongly, in my view-to são 'are').

For reasons connected with complex processes of variation and change, in Santiago we now have several progressive forms: (i) $s t a+t a+\mathrm{V}$; and (ii) variants of sata (ata, aita) + V. Then, in what is still a hypothesis to be explored in future studies, it is possible that ta was, during its migration to the northern group of islands in the archipelago-first Santo Antão and São Nicolau, and later São Vicente-at some intermediate stage of its diachronic path. Those successive migration steps at that intermediate stage might help explain the different reinforcement for the progressive that developed in these northern varieties: $t i$ or $t e$ instead of sta or sa/a/ai-all of them can, nevertheless, be easily related to some reduced form of the original locative verb.

As for the progressive meaning of $t a$ in embedded clauses with perceptive verbs, such as (60), it is also now clearly explained: here $t a$ has preserved its original progressive value, and this may be so for two reasons: (i) no ambiguity requires the reinforcement of the progressive: within the scope of a perceptive verb like odja/oiá 'see’ or obi/uví 'listen', as well as under the scope of aspectual verbs such as kumesa/kumesá 'start', the requirement of an unfolding situation
is intuitive enough for the current imperfective meaning of $t a$ to be narrowed accordingly-that is, for any habitual meaning to be excluded; (ii) in these embedded clauses, the time of the situation is defined together with the main clause rather than by a locative morpheme. And thus, diachronically, a word with this exclusive contribution was never inserted here.

Two important facts are, among the two varieties under study in this monograph, specific to São Vicente. One is that the morpheme associated with habituals in the past or some past conditionals is tava (or tá), and another is that the combination for the progressive in the past is tava (or tá) $+t a$ (or $t e$ ). This could lead to the hypothesis that this tava is here a locative verb inflected for past, as it seems to be in clauses where it is the only verb. ${ }^{48}$ And this would be a reason to assume the existence of this tense morpheme in the language-the case would be that the verb tá, illustrated in (61), would be marked for past with -va.

As interesting as this hypothesis might be, it would be inconsistent with the distributional properties of tava or its reduced form tá when any of them precedes a verb, since in this case it behaves as a bound morpheme as much as $t i$, in the present progressive tita or tite. In other words, when we need to add an adverb or other morphemes between the two parts of the progressive marker, this is impossible with tava/tá; for this we must have a true periphrastic form, and then stod is the word at stake, as we saw above.

So my proposal is rather that, since this variety has no postverbal -ba (it might be lost when the language spread from the southern islands-this hypothesis is raised in Swolkien 2015: 233 fn .82 and makes sense to me, although this of course needs to be better established through detailed diachronic studies that also consider the effects of later contact situations), somewhere along the history of ta a specific morpheme may have emerged to reinforce the progressive in the past ( $t i$, as said above, played this role in the present). By analogy with the Portuguese first and third persons singular of estar, past imperfective, which is estava and has the oral reduced form tava, this Caboverdean tava developed both as a marker for past habituals or some conditionals, being here a stand-alone morpheme, and as the reinforcement of past progressives, thus followed by ta or te (but see Swolkien 2015: 200 and the references therein for a discussion of prior accounts).

48 See for instance this predicative clause:
(i) Kond N tava na Fransa.... (Inês, São Vicente) when 1SG be.PAST in France... 'When I was in France...'

One note required at this point is that all the above observations about the past will be further examined in this monograph.

This section ends with a table where the full progressive cycle of $t a$ is presented in a more schematic form.

Table 4: Scheme for the diachrony of $t a$ and the full progressive cycle

| variety | Portuguese | Santiago | Santiago | All varieties |
| :--- | :--- | :--- | :--- | :--- |
| period | $15^{\text {th }}$ century | first stages | intermediate stages | latter stages |
| source | Martins (2016) | Schuchardt (1882) | Schuchardt (1882) | Pratas (2018a, <br> 2019) |
| form(s) está / tá occursin progressives | ta marks |  |  |  |
|  |  |  | the progressive <br> for general imper- <br> fective | ta gets a reinforce- <br> ment for root pro- <br> gressives, and |
|  |  |  | continues per se in, <br> roughly, imperfec- <br> tives (as habituals <br> and generics), and <br> subsequent inter- <br> pretations |  |

This section summarised my recent proposal on the diachrony of the intriguing morpheme ta, and its relation to the current markers for progressive in the varieties of Santiago and São Vicente. This plays an important role in the wider picture about the expression of temporal meaning that will be assembled over the next chapters.

### 2.4 Concluding summary

The lexical items surrounding the main verb in Caboverdean root clauses have been presented and analysed along the different sections in this chapter. Details on subject and object pronouns and clitics were provided, including the arguments favouring the inexistence of morphological case, as well as the listing of some salient word order restrictions. Also approached were the syntactic status and distribution of the clausal negation marker $k a$, the main descriptive details of the temporal morphemes available in the two main varieties of the language,
and finally my recent diachronic analysis of $t a$, the main character of a complete progressive cycle. ${ }^{49}$

Next chapter illustrates and discusses more complex empirical facts related to subordinate clauses, which will help pave the way leading to the main topic of this monograph.

49 One point that has not been developed here is about topicalized objects, but it is nevertheless worth to leave this note: Caboverdean has frequent instances of noun phrases with the syntactic role of complement appearing in the left periphery of a clause. This is just an example, in which the elderly speaker is responding to a question about her plans to the future:
(i) Fetur, fetur já N ka ten. (Inês, São Vicente)

Future, future already 1 SG neg have
Literal: ‘Future, already I don't have.'
Intended: ‘Future, I no longer have one.’

## 3 A view from subordination

Her songs aren't about our past life, or about the emotional life of people today, but instead about the life we have never even imagined.

Xiao Yuan, in Love in the New Millennium, a novel by Can Xue (2018)

A much-discussed species is approached in this chapter: subordinate clauses. What is puzzling about them is not only that so many distinct phenomena exist under one label, but also that many types are truly difficult to account for. This resistance is evident at the syntactic level, and nearly colossal when we try to explain their temporal meanings. Far from solving these theoretical problems, the purpose of these mainly descriptive sections is to add a Caboverdean flavour to them. This new data, which can be matched with a lot more examples in the oral corpus LUDViC, may help refine some old questions and raise new ones.

Two clarifications regarding terminology are needed at the outset. First, the terms and definitions of clause types used according to their (in)dependency are: (a) root clause: a free-standing clause; (b) main/embedding clause: a clause that embeds another clause; (c) subordinate/embedded clause. The label in (b) is meant for clauses that, despite embedding others, are themselves not necessarily autonomous (although in some cases they can indeed stand alone). For instance the segment "we have never even imagined" in the sentence cited above is clearly a dependent clause (a relative clause-the relative pronoun, the direct object of the verb, is omitted), but the sequence that precedes it is not independent either. Then the label 'root' is barely used here since here the key discussions are about the relationships between types (b) and (c).

The second clarification is this. When we speak of subordinate clauses, a configuration may come to mind which has some connective introducing them (although this can be omitted in some cases, its function remains intact), be it a complementizer, a conjunction, or less functional words such as a preposition, a relative pronoun or an adverb. But other complex sentences show no such connective (not even in a silent version) and yet, under some theoretical perspectives, may include a subordinate clause-the monoclausal or biclausal nature of these structures is among their much debated properties. For descriptive reasons only, I call those headed by a connective subordinate clauses, and refer to those with no such element as multi-verb constructions.

The subordinate/embedded clauses typically headed by a connective are: nominal/complement clauses, adjective/relative clauses, and adverbial/adjunct clauses. The first name for each regards its syntactic category, which is verifiable by the type of phrase it can be replaced with, or by the way we can convert
them into questions. The second name for each regards the role it assumes in the complex sentence. As for the double subordinate/embedded classification, it also involves different descriptive levels: 'subordinate' considers the dependent nature of the clause, whereas 'embedded' focus on its position within a syntactic structure. For reasons of simplicity, I henceforth mostly use one of the labels for each, supported by the following explanations.

Subordination is more adequate than embedding to the purposes of this study, since it better captures the notion of dependency that is central to the investigation of temporal meaning, and at the same time it requires no detailed analysis of their syntactic positions.

Crosslinguistically, nominal clauses may be subjects or complements of the main clauses, but since I will be focusing on the latter function in my descriptions, I will refer to this type as complement clauses. ${ }^{50}$

As for relative clauses-and although I will be dealing with bound relative clauses only, which have an antecedent in the main clause and are more clearly adjectival in their function-I will call them just that, relative clauses, for two reasons: to avoid confusion with other adjectival expressions, and to comply with the more common name in the literature. ${ }^{51}$

Finally, I will use the syntactic category criterion to name adverbial clauses rather than appealing to their adjunct position regarding the main clause. Adverbial clauses subsume diverse types and functions, which will be explained in the corresponding section.

The first three sections in this chapter are about these clause types, describing and illustrating some temporal morphemes and interpretations that may occur in them: complement clauses (3.1), relative clauses (3.2) and adverbial

50 An example in English containing a complex nominal clause with a subject function is found in this news story from The Guardian (December 2019). The topic are the protests in India against the Citizenship Amendment Act. The lead says: "That there are so many young people in the demonstrations against Modi's attempts to ostracise Muslims offers hope."
51 Caboverdean also displays free relative clauses (no antecedent is in sight), which may behave as nominal, prepositional, adverbial, or adjectival phrases (see Bresnan \& Grimshaw 1978 for English). In the examples below the relative clauses are arguments of the main verb:
(i) a. N ka sabê ond é k nhas fidj ta bai. (Inês, São Vicente)

1SG NEG know where be that PPOSS.1SG:PL child TA go
'I don't know where my children go.'
b. Ken ten un kaza ten un rikeza. (Inês, São Vicente) who have one house have one treasure 'Who owns a house owns a treasure.'
In (ia) the free relative clause is the complement of sabê 'know'; in (ib), a popular saying, the free relative clause is the subject of the second instance of ten 'have'.
clauses (3.3). The latter hints at a discussion which takes place in the next chapter: some clauses are included whose counterparts in other languages have raised questions about finiteness. More details on verbs that appear as infinitival in other languages are provided in the following section (3.4), which focus on types of subordination where no connective is needed-these sentences contain two or more verbs, either in adjacency or separated by other elements, such as a personal pronoun (the object of the higher verb), or temporal morphemes for the lower verb(s). The nature of these elements is portrayed and the effects of their allowance/prohibition on the finiteness debate are only sketched. In a few of these multi-verb constructions one of the verbs might be considered an auxiliary, and others contain more clearly two main verbs. Given the difficulty in aligning most cases with one or the other option, however, this section makes no claim in this respect, rather keeping its main goal of describing the data and leaving these more advanced points for future research. For each sentence type a few lines are offered regarding their more salient properties, some of them illustrated by examples and all of them laid out in local tables.

Before the examination of the different constructions-and because some necessary remarks may be useful in advance-a few sentences generically illustrate subordinate clauses right away, each of them represented in a different line than the one for the main clause: the subordinate clauses in question are in the second line for examples (64), (65) and (66b), and in the first for (66a).

So the first couple of sentences contain complement clauses in their second lines, both headed by a complementizer (other types of connectives may head complement clauses as well, and we will see some examples below).
(64) complement clauses

| a. Senpri N ta flaba | (Daiana, Santiago) |
| :--- | :--- | :--- |
| always 1SG TA say:PAST |  |
| ma N gostaba di trabadjaba asin... |  |
| CON 1SG like:PAST of work:PAST like... |  |
| 'I always used to say that I liked to work like...' |  |
| b. Es é pa bo oiá |  |
| this be for 2SG see |  |
| k sistema tita falhá. |  |
| CON system PROG fail |  |
| 'This is for you to see that the system is failing.' |  |

Two observations on (64) are needed here. One is that this connective, a complementizer, differs in the two varieties: Santiago has ma, São Vicente has $k$.

The other note regards what was said above about the nominal nature of most complement clauses (and these which have a nominal nature are mainly the ones discussed here). We can see this if we replace each of these subordinate clauses with a more visibly nominal element, such as an invariable demonstrative pronoun or another nominal phrase that makes sense here: 'I always used to say that / I always used to say the truth', and 'This is for you to see that' / 'This is for you to see the truth'. If we convert them into questions they are replaced with 'what', as in 'What did you always use to say?' and 'What is this for me to see?'.

The examples in (65) show relative clauses on their second lines.
relative clauses
a. Nu tinha bandeja di barru
1PL had tray
ki of clay

Three observations come to mind regarding the examples above. One is that although this connective, a relative pronoun, displays identical properties in both varieties, it is pronounced differently-as was said above, their graphic representation here respects that. The other note is that, as expected, each form of this relative pronoun may perform itself different syntactic functions which deserve a study of their own (and each of the above examples presents quite interesting challenges). We will see examples of other functions for relative words in section 3.2. The third observation is that all these bound relative clauses are themselves modifiers of some noun in the main clause (their antecedent), and we can verify this when we replace them with adjectives, for instance: 'We had a useful tray made of clay' and 'So it's a remarkable/traumatizing story.'

Finally, (66) shows two examples of adverbial clauses, one in the first line of the sentence (66a), the other in the second (66b).
(66) a. temporal clause
(Daiana, Santiago)
Kantu ki N kumesa trabadja
CON that 1SG start work
N odja ma rialmenti nha vokason é ser prufesor. 1SG see that really PPOSS.1SG vocation be be teacher 'When I started working, I saw that my vocation really is to be a teacher.'
b. clause of cause
(Liziane, São Vicente)
Un ves, alune tinha txeu respeit pa prufesor
one time, student had a.lot respect for teacher
purkê es tinha med.
CON 3PL had fear
'In the old days students had a lot of respect for their teacher because they were afraid.'

And, again, some observations must be provided. One is that purpose clauses, also a type of adverbial clauses which in other cases are complements as well, are left for section 3.3. They bring about further complications, namely their key role in the debate on finiteness: their equivalents in for instance English and Portuguese are among the most considered about finiteness distinctions.

The second observation is that, just like the relative words mentioned above, most connectives heading adverbial clauses are very similar in both varieties, exhibiting minor pronunciation differences which are respected in the transcription. There is one exception though: oki, which may mean 'when' but sometimes translates more correctly to the conjunctions 'once' or 'whenever’ (it literally means 'at the time when'), only exists in Santiago (and other leeward varieties). Some restrictions are imposed on the temporal meaning of clauses headed by oki, and the explanation for these will be part of the discussion in the next chapters. Before that, some descriptive details are also given in section 3.3.

The third note here regards the name 'adverbial' for these clauses. We can confirm that they have a clear adverbial function by replacing them with other adverbial expressions: 'Back then I saw that my vocation really is to be a teacher' for (66a), and 'In the old days students had a lot of respect for their teacher out of fear' for (66b).

Finally, a fourth observation is that (66) includes two suppletive verb forms from Portuguese-they show no morphological markings which might be internal to Caboverdean. One of them is ser, the Portuguese infinitival form for 'be' (individual-level), and the other is tinha, the Portuguese form for 'have' past imperfective, first and third persons singular. These and other suppletive forms of the stative verbs ser 'be' and ter 'have' were already mentioned in chapter 2 ,
and will be examined in section 5.1.2, as well as their indirect implications for the main proposals in this monograph.

These types of subordinate clauses are, as was said above, discussed in the next three sections. As was the case with chapter 2 , the meaning component is pointed out briefly whenever that information is required by the description of word order/distributional restrictions, but its full discussion is left for the chapters that follow.

### 3.1 Complement clauses

As was briefly mentioned above, Caboverdean has two variants of the complementizer corresponding to English 'that': ma, common in Santiago, and k, in São Vicente (in Santiago there is also a nondominant variant of this, which is pronounced $k i$ ). The latter is clearly a product of change regarding the Portuguese que, but the origin of $m a$ is controversial. Lang (2015) discusses a possible African influence, as well as a potential relation with the Portuguese comá, as a variant of como 'how', but so far no hypothesis has compelling arguments in its favour. We have an example with $m a$ in (67), and one with $k$ in (68).
(67) E flá ma el é di São Tomé. (Lurdes, Santiago)

3SG say CON 3SG BE of São Tomé
'He said he is from San Tome.'
(68) N ta lenbrá k prufesora da-m kel livr. (Liziane, São Vicente)

1SG TA remember CON teacher give-1SG DET book
'I remember that the teacher gave me that book.'

The complement clauses of the type illustrated above are available with bridgeverbs such as sabi/sabê 'know', kridita/kriditá 'believe', lenbra/lenbrá 'remember' or 'recall', konta/kontá 'tell', flá/dzê 'say', among others. ${ }^{52}$ As was said before, we can tell about their nominal kind of function because they may be replaced by an indefinite pronominal form, such as kel li 'this' or kel la 'that', and are interchangeable with other nominal units, as in 'He said the truth' or 'I remember that gift.' One note about these structures with bridge verbs is that in

[^26]São Vicente the complementizer may seem absent, although it is possible that this supposed omission relates instead to the almost inaudible word $k$ in certain sequences. Moreover, since omission is not firmly attested for $m a$, in Santiago (a number of cases may indeed raise this doubt, but this needs to be further confirmed), and is also virtually impossible for Portuguese que in oral contexts, the diachronic change(s) that resulted in new solutions for complement clauses in São Vicente would be an interesting topic of syntactic research. ${ }^{53}$ Under the more strictly descriptive goals of such phenomenon under the current study, below we have two sentences illustrating two different strategies. They were produced by the same speaker from São Vicente, and note again that in (69a) it may be the case that an almost inaudible $k$ follows $d z e \hat{e}$, although it would contrast with the perfectly audible $k$ that follows ten. In (69b) she resorts to indirect speech, and this is in fact a frequent strategy in this variety.
(69) the verb 'say' followed by no complementizer in São Vicente
a. Es ta dzê bo ten k ten té 25 menine. (Liziane) 3PL TA say 2 SG have that have up.to 25 child Intended: 'They say you must have up to 25 students [per class].'
b. El dzê "ok, enton kital N koloká bzot na Sal?" (Liziane)

3SG say "ok, so what about 1SG put 2PL in Sal 'He said "ok, so what if I put you guys in Sal?"’

Other morphemes in both varieties introduce other types of complement clauses. The connectives modi/mó 'how' or si ‘if', for instance, may head complement clauses (indirect questions) of pergunta/perguntá 'ask', sabi/sabê 'know', and odja/oiá 'see', among others. The latter is shown in (70), a sentence uttered by a female speaker from Santiago who states that, after several years fighting for a good life in different places around the country, she is trying to settle in one of them. The main clause is in the present progressive and the complement clause has a present meaning for the modal (we will skip for now the temporal meaning of vivi ‘live’-but see 3.4 for other multi-verb constructions).
(70) N sata odja si N ta konsigi vivi li. (Miranda, Santiago) 1SG PROG see CON 1SG TA be.able live here Literal: 'I’m seeing if I can live here.'

[^27]Note that odja/oiá 'see' can also have complement clauses headed by ma/k 'that', in which case its meaning is closer to 'conclude'/'infer'/'realize'. In (71) we have a sentence uttered by a young male speaker from São Vicente that follows the narrative of how, when he was a child, his friends once let him down about some joint venture, and it comes as a conclusion about the episode. The whole sentence expresses a complexity of past values, but the point of relevance here is the string tinha + falhod (a participle of 'fail'). As was also illustrated in chapter 2, tinha (again, the suppletive form of the Portuguese past imperfective, first and third persons singular, for ter 'have') followed by a participle denotes past before past in a form that is typical from the São Vicente vari-ety-in Santiago the common form for this temporal value has the affix -ba on an otherwise bare dynamic verb.
(71) Depos es ben oiák es tinha falhod má mi. (Firmino, São Vicente) after 3plcome seeCON 3pl had fail:PART with 1SG

Literal: 'Afterwards they came see that they had failed with me.'
Intended: 'Afterwards they ended up seeing that they had failed me.'

As was mentioned earlier, another connective available as head of complement clauses is pa 'for'//to', which is associated with the expression of an instruction or a command. ${ }^{54}$ In this example with flá 'tell', the speaker, a former nurse, is telling how she still gives advice to pregnant women whenever she meets them.
(72) N ta flá-s pa es deta(,) pa diskansa. (Lurdes, Santiago)

1SG TA tell-3pl CON 3PL lie-down CON/PREP rest
'I tell them to go lie down (,) to get a rest.'

One curious note on the two clauses headed by $p a$ is this: whereas the first is clearly a complement of flá 'tell', the second is ambiguous between a complement (in which case we have an asyndetic coordination of complement clauses) and a purpose adverbial clause (in which case it may modify the only complement clause in the sentence, or modify the whole prior sentence). ${ }^{55}$ Subsection

54 And thus here we have different dependency relations between the main and the subordinate clauses. The observation in Thráinsson (2003: 169), among others, that some English bridge verbs select 'that'-complements with main clause-like properties (and this has consequences under several analyses of dependent tenses, such as Wurmbrand 2014 and references therein) clearly applies here to $m a / k$ clauses; the ones headed by $p a$ behave differently.
55 I thank Catarina Magro for all our nice discussions about these clauses.
3.3.4 has a more extended description of the latter. For now it can be observed that complement clauses introduced by $p a$, also common to both varieties-but apparently more frequent in Santiago-and usually occurring with verbs such as flá/dzê 'tell' or manda/mandá 'order', can be distinguished from purpose adverbial clauses by trying to replace them with an invariable demonstrative pronoun-naturally only complement clauses give good results.

Another way of verifying their complement status might be through the omission of an overt subject: restrictions about overt subjects are usually taken as a sign of nonfiniteness crosslinguistically-nonfinite clauses are said to often omit or even forbid them. But this diagnostic presents confusing outcomes: whereas $m a / k$ clauses are very regular regarding this-they never allow for subject omission-clauses headed by pa sometimes display an overt subject as well; true, sometimes they do not, but elicitation tests do not always ensure when it may be omitted. This property alone might anyway be taken as an indicator that in Caboverdean ma/k complement clauses are finite while pa-clauses are not, for only the latter can sometimes omit the subject. This relation is not straightforward, though, as finiteness is a slippery notion to deal with-this is briefly discussed later in this chapter and in more detail in chapter 4.

Next section illustrates a specific kind: restrictive (bound) relative clauses (other types, such as the free relative clauses and the purpose relative clauses pointed out in footnotes 2 and 7, respectively, will not be subject to further discussion here).

### 3.2 Relative clauses

Relative words, too, are very similar in both varieties under study here, with only minor phonological distinctions and the correspondent variation in spelling. ${ }^{56}$ The next examples show restrictive relative clauses headed by $k i / k$

56 In Caboverdean, as in European Portuguese (see Duarte et al. 2016, and references therein), a third clause type headed by pa exists: purpose relative clauses, which include no relative pronoun. This is shown in (ia) and (ib), respectively (the Caboverdean sentence is elicited):
(i) a. Kel dinheru pa $u$ kunpra pon sta na meza.

DET money for 2SG buy bread be on table Intended: 'The money that is for you to buy bread is on the table.'
b. os livros para lermos...
the:PL book:PL for read:INF:1PL
Intended: 'the books that are for us to read...'
'that'/‘which'/‘who' (a subject relative in (73) and an object relative in (74)), and by 'where': the expressions undi ki in Santiago (illustrated in (75)), and ond $k$ in São Vicente (illustrated in (76)).
(73) Nu teni alunus tanben ki ta studa ben. (Daiana, Santiago) 1PL have student.pl also that TA study well 'We also have students who study well.'
(74) N tita fazê un koza k N ta gostá. (Firmino, São Vicente) 1SG PROG do one thing that 1SG TA like '[professionally] I'm doing something that I like.'
(75) Bu podi faze-l na pilon
(Edson, Santiago)
2SG can do-3SG at pestle undi ki bu ta kotxi antis. ${ }^{57}$ where 2SG TA grind before 'You can do it in the pestle where you grind [the corn] before.'
(76) N ta gosta d ser prufesora. É difísil, (Liziane, São Vicente) 1SG TA like of be teacher. be difficult prinsipalment li, na es mei ond k no tá. mainly here at this environment where 1PL be 'I like being a teacher. It is difficult, mainly here, in this environment where we are.'

As is easily perceived from the examples, articulated with what we know about bound relative clauses crosslinguistically, these subordinate clauses restrict the reference of some element in the main clause. And as was said before, in principle they might be replaced, with no syntactic clash, by an adjective, although adjectives with meanings precisely equivalent to them are often hard to find.

So subject and object relatives have a relative pronoun referring the subject or the object of the clause (that is, the pronoun has a syntactic function selected

57 As a side note, there is no clitic climbing in the language:
(i) a. * Bu pode-l leba.

2SG can-3SG take
b. Bu podi leba-l.

2SG can take-3SG
'You can take it.'
by the verb within this clause $-k i$ is the subject of studa in (73), $k$ is the object of like in (74)). When the relative clause is headed by a nonpersonal pronoun such as the equivalent to 'where', two possibilities are available. This expression may clearly perform a mere modifier function to some element within the clause, which thus has already its own subject and, for transitive verbs, its own object. This is what we have in (75), although its object is in fact omitted: undi ki 'where' refers a modifier within the clause (something was ground in the pestle). The other possible function for this relative expression is a specific type of adverbial complement selected by verbs requiring information about location, such as some instances of 'live', 'stay' or 'be'. The latter is the case in (76): undi $k i$ 'where' is the complement of tá 'be’ (and the whole clause restricts the reference for mei 'environment').

Next section is devoted to adverbial clauses, a label that acts as a generous umbrella for a variety of sequences with meanings and subtleties of their own.

### 3.3 Adverbial clauses

Regarding the connectives heading various types of adverbial clauses, the two varieties under analysis display both internal variation and variation between them. Among the latter, we find minor phonological differences, again represented in spelling, but also a few lexical distinctions.

Adverbial clauses correspond to numerous types of modifiers, and the detailed description of their internal idiosyncrasies is beyond the scope of this monograph. The goal of this section is rather to list fundamental properties they may exhibit, in particular:
(i) the meaning of the higher verb plus the (related) meaning of the connective
(ii) the lexical materials allowed in them, and
(iii) the temporal meanings resulting from (i) and (ii).

We will see that purpose clauses headed by pa 'to'/'for' and negativecircumstance clauses headed by sen 'without' present interesting challenges regarding (iii). The special characteristics about these might be approached by giving priority to (ii), which would require that we first be concerned with the syntactic restrictions that are imposed on them, and only then analyse the temporal meanings they may express. Since this approach does not give distinguishing results in Caboverdean, the description of (ii) will of course be provided (as part of their characterisation) but the focus will be on (i).

The next subsections present adverbial clauses that may contribute to the core discussion in this study. ${ }^{58}$ We start with clauses headed by pamodi/purkê 'because', which are often ambiguous between explanatory and causal (3.3.1), continue with conditional sentences whose antecedent clauses are headed by si 'if' (3.3.2), a variety of temporal clauses (3.3.3), and finally the two types of clauses just mentioned above, which more directly introduce the topic of nonfiniteness: purpose clauses headed by $p a$ and negative-circumstance clauses headed by sen (3.3.4).

### 3.3.1 Explanatory/causal clauses

Explanatory clauses and causal clauses share a subsection because they may be introduced by the same connective and indeed have a related meaning: the first type explains why the speaker affirms something, while the second points out the cause for the situation denoted in the main clause. In many cases, however, the distinction is not as straightforward, and the properties that tell them apart are the topic of much debate. The ones transcribed here for both cases are headed by pamodi (more common in Santiago, also under the form pamó) and purkê (common in São Vicente), which can both translate to 'because'. Note that both are ambiguous between an explanatory and a causal meaning (although in at least (78) the causal one seems more natural).

In (77) we have an example from Santiago, in which an elderly woman is talking about the lives of young people nowadays (the embedded verb, krê 'want', is a stative here, and so its bare form has a present interpretation); ${ }^{59}$ in (78), from for São Vicente, another elderly woman is telling about a birthday party that her family organised for her.
(77) Joven oji en dia teni difikuldadi
(Aldina, Santiago)
young nowadays have difficulty
pamó joven oji en dia ka krê trabadju.
because young nowadays NEG want work
'Young people today have problems because [they] don't want a work.'

58 All are presented in Lobo (2002) as non-peripheral adjunct clauses in European Portuguese.
59 The relation of some stative verbs with the various temporal morphemes is briefly pointed out in the next chapter (4.1.3), following Pratas (2014a, 2018a). For now, the relevant point is that the temporal meaning of a few bare stative predicates includes the reference time, although this is subject to an integrated analysis that includes all aspectual types.
(78) N txorá purkê foi un grand supreza pa mi. (Inês, São Vicente)

1SG cry because was one big surprise for me 'I cried because it was a big surprise for me.'

Despite the superficial distinction in the connective, this type of adverbial clauses behaves similarly in both varieties: they show no morphosyntactic restrictions beyond those easily predicted by their general meaning. In other words, if the adverbial clause denotes a situation which is the cause for the one in the main clause, the immediate intuition regarding temporal meanings (at least from our 'blurred' perspective, of course) is that the cause precedes the effect. This restriction on temporal meanings does obviously not apply to explanatory clauses-the motivation for uttering certain kind of reasoning may be subsequent to the time of the situation in the main clause (and note that, if this is the case, then we have no ambiguity, since for the causal meaning this latter temporal relation is not available), or even have some unspecified time location. Moreover, the supposed precedence of the cause regarding the effect may assume in these sentences an array of configurations, not as simple as, for instance, a present meaning for the effect and a past meaning for the cause. If we look at (77) under this causal perspective (rather than a more explanatory one), we correctly interpret both clauses in the present and infer that there is a plurality of individual cases-this meaning is not expressed by any habitual morpheme (no ta exists here), but rather by a combination of other items, namely the adverbial expression oji en dia 'nowadays' and the plural meaning of the subject (also not signaled morphologically). That temporal precedence of the cause regarding the causee then applies for each of these individual cases: each young person who refuses to work later experiences difficulties (or something like that).

As for (78), both situations are expressed as having occurred prior to the utterance: there is a perfect interpretation for both clauses. Under the causal interpretation for the adverbial clause, we infer that the time of the situation it denotes precedes the one in the main clause, at least by some milliseconds-the speaker realized that this was a surprise party for her, and then cried.

Two side notes must however be provided regarding the description of the example in (78). One is that the adverbial clause shows no subject-this is a case where in other languages any overt subject would most probably be an expletive (for instance 'it' in English). Caboverdean has no expletive subjects, and so the clause is simply subjectless. The other note is about 'be', which again shows up as a suppletive form from Portuguese: foi 'be.3sG.simple preterit perfect'. For clarity, it is directly translated in the gloss.

### 3.3.2 Antecedent clauses in conditionals

As their label immediately reveals, these adverbial clauses denote a condition affecting the situation expressed by the main clause. They may have very different shapes and establish distinct types of dependencies between both situations, in a vast range of possibilities that will not be discussed here. The examples provided are a minor sample of those and are all introduced by the conjunction si/s 'if', to briefly illustrate some of the temporal relations available for these conditional sentences. They are organised according to the meaning of the situation in the antecedent clause.

In some cases the head of antecedent clauses may roughly be interpreted as 'whenever', as in (79) for Santiago, and maybe also (80) for São Vicente. In the first case we have a young man explaining how to make a kind of porridge and what happens to the flour if we do not mix it quickly with the water. In the second, we have an elderly woman quoting her own teacher from her old days in primary school-the sentence is indeed this quotation, uttered by that teacher when she interceded with the consultant's family, offering help so that they could let her continue her instruction. In both examples the antecedent clause displays a bare form of the verb, and the main verb is marked by $t a$.
(79) Si bu ka mistura-l logu e ta kria karosu. (Edson, Santiago) if 2 SG NEG mix-3SG right.away 3SG TA create lump 'If you don't mix it right away it creates lumps.'
(80) "Si bo ten falta d algun koza, N ta ijda-l." (Inês, São Vicente) if 2 SG miss of some thing 1SG TA help-3SG Literally: "'If you lack anything, I will help her.""

In the next pair of examples the head of the antecedent clause may also have an interpretation as 'whenever', but here we know for sure that the whole sentence denotes a generic relation, not an episodic one-the reason for this is the ta morpheme in the antecedent clause (even in (81), which has no ta in one of the si-clauses, has it in the other-and the temporal relation between both is itself very interesting), which we have just seen does not happen in the pair above. Example (81) is from Santiago, and (82) from São Vicente-in the latter a teacher describes why she thinks that some students behave badly at school, one of the reasons being that they do as they please at home.

As a side note, in (81) we have an impersonal passive as they are commonly expressed in Santiago.
(81) Ta fladu algen porku [...] (Brüser et al. 2002: 608, Santiago) TA say:PART someone dirty si e ka toma banhu, si e ta suja tudu. if 3 SG be take bath if 3 SG TA soil everything 'It is said someone is dirty if they didn't bath, if they soil everything.'
(82) S na kaza el ta fazê (Liziane, São Vicente) if at house 3SG TA do tudinkuant k el krê, el ta ben pa skola, everything that 3SG want 3SG TA come for school el ta pensá k li tanben é igual. 3SG TA think that here also be the.same 'If at home he/she [habitually] does everything he/she wants, he/she comes to school, he/she think that it is the same.'

In the next two sentences we find a counterfactual meaning, although this may be clearer in the first. In both, the female speakers depict situations which did not in fact happen-and, we presume, neither did their effect. In (83) the speaker reports about her moving around in the country, how she ended up in Sal, and then utters this remark. The speaker in (84), after telling how she is friends with everyone around her, expresses this way what she thinks about kindness.
(83) Si N ka staba na Sal, N staba na Praia. (Miranda, Santiago) if 1SG NEG be:PAST in Sal 1SG be:PAST in Praia 'If I wasn't [now] in Sal, I would be in Praia.'
(84) S tud jent tava vivê sima mi, mund era dret. (Inês, São Vicente) if everybody tava live like 1SG world were right 'If everybody lived like me, the world would be right.'

A distinct logical relation may be found in conditional sentences with a kind of epistemic meaning. The example (85), of the type 'if this is true, then I conclude that...', is from Santiago, and note that even without é pamó 'is because' it would express the same exact logical relation. See Haegeman (2003) for a syntactic analysis of what she calls 'premise-conditionals' in English, which are related to discourse structure, as opposed to 'event-conditionals'; she also has an account for the lack of temporal subordination in the former. This certainly needs further research in Caboverdean, and the perfect meaning of bare forms in these surely has to be considered (note that (85) has sata, though).
(85) Si e sata raprende-l,
if 3SG PROG scold-3GS
é pamó algun kuza mariadu e debi fazi.
is because some thing bad 3SG must do
'If she is scolding him, it's because something wrong he must have done.'

As a side note here, in (85) we can also see the perfect meaning of the bare dynamic verb under the modal-this is explored in the last section of this chapter, where multi-verb constructions (thus, also modal clauses) are described.

### 3.3.3 Temporal clauses

The temporal clauses included in this subsection raise interesting questions about their own temporal interpretation. A full discussion of their contribution to the temporal meaning of the whole sentence-and for the expression of temporal meaning in general-is still to be embraced in dedicated studies. Their description here is focused on the lexical items allowed in them, and on temporal meaning constraints. The first salient fact to be pointed out about them is the two variants for the connective corresponding to 'as soon as'/'at the time when'/‘whenever', which may also be simply expressed in English by 'when': oki for Santiago and kond for São Vicente. The first one results from Portuguese hora que-literally 'hour that/which'-and the second results from Portuguese quando 'when'. Note that also in Santiago variants of a temporal word derived from quando exist-kuandu and kantu, ${ }^{60}$ which generally mean 'when', in both uses as an adverb and as a connective introducing temporal clauses. The contrast in this variety between these two available words-oki and kuandu/kantuis that oki can only combine with meanings of coincidence with, or subsequence to, a given reference time; this is not the case with the other variants-including São Vicente kond-which can also denote a time prior to that reference time. ${ }^{61}$

In the following pair-(86) from Santiago and (87) from São Vicente-the reference time in question is the time of speech, and the situation denoted by

60 The latter is also used as 'how much', in which case it is derived from the Portuguese quanto. Still regarding temporal values, Caboverdean also has kantu ki, as in (66a), which may have derived from quando é que, a Portuguese interrogative expression also meaning 'when'.
61 As was the case in chapter 2, the label 'reference time' is instrumentally used here in its more general meaning, as the temporal point that is taken as a reference for defining other times; in chapter 4 it will be replaced with 'topic time' following the terminology in Klein (1994, and subsequent works), as described in 4.1.1.
each temporal clause is located at some time in the future. In the first sentence, the speaker is giving instructions on how to prepare some local dish. In the second, the speaker is talking about the treasure of owning a house, and how she wants to leave it to her children and grandchildren when she dies.
(86) Oki djá bu ká pila farinha, (Sandra, Santiago) CON already 2SG finish grind flour, bu ta ferbi batata ku sal. 2SG TA boil potato with salt
'As soon as you finish grinding the flour, you boil the potatoes with salt.'

```
(87) I á N dze-s:
    and ADV 1SG tell-3PL
    "kond N morê, el é d bzot tud."
    "CON 1SG die, 3SG be of 2PL all
    'And I've already told them: "when I die, it [my house] belongs to you all."'
```

As was said above, kond may also embed a situation located prior to that given reference time, in constructions morphologically undistinguishable from (87). In Santiago, this prior meaning must combine with kuandu/kantu. This is illustrated in the next couple of sentences; the speakers are telling about their own private stories (the temporal import of the verb ben 'come' will be briefly approached later in this chapter, but it still needs its own dedicated study).
(88) Kantu (*oki) e ben regressa, (Wosvaldo, Santiago)
CON 3sG come be.back
e ben konstrui si família.
3SG come build his family
'When he [my father] came back [from abroad], he [then] built his family.'
(89) KondN terminá désim segund, N otxá un traboi. (Firmino, São Vicente) CON 1sG finish twelfth [year] 1sG find one job 'When I finished high school, I found a job.'

Note that in all four examples above the dynamic verbs within the temporal clause are bare, and so the different temporal interpretations-(86) and (87) as subsequent to the reference (speech) time, (88) and (89) as prior to the reference (speech) time-consist in a combination of values: among the two former ones, only in (86) is the main verb marked with $t a$, with (87) having a present 'be' in
the main clause, and yet both complex sentences have a subsequent interpretation regarding the speech time; in the two latter ones, the main (bare) dynamic verbs have a perfect interpretation, as do the sentences as a whole. Also in these latter cases, the internal temporal interpretation-the relation between the main and the subordinate clauses-is of subsequence in the past: the situation denoted in the main clause occurred after the one denoted in the subordinate clause.

This same internal relation is compatible with habituals, with each instance of the situation in the main clause possibly located after each instance of the situation in the temporal clause (maybe also coincident, if the main verb is a stative, but this must be further explored as well). This is illustrated in the next examples from Santiago: one sentence with kantu and one with oki.
(90) Ta podu mininu babeti
(Brüser et al. 2002: 885)
ta put:PART child bib
pa e ka suja oki e ta kumi.
for 3SG NEG soil CON 3SG TA eat
'A bib is put to the baby for him/her not to get soiled when he/she eats.'
(91) Kantu e ta bebeba e ta staba senpri furiozu. (Brüser et al. CON 3SG TA drink:PAST 3SG TA be:PAST always furious 2002: 95) Intended: 'Whenever he drank, he always got furious.'

An internal temporal relation quite similar to one of the interpretations available for (91) is found with dynamic situations in the progressive. Observe the next elicited example from São Vicente, where a habitual situation in the temporal clause combines with a habitual progressive in the main one: so the relation of coincidence/inclusion applies to each instance of that habitual situation.
(92) Nunka no ta stod ta trabaiá kond el ta txegá. (Francisco, São Vicente) never 1PL TA be TA work CON 3SG TA arrive 'We are never working when he [the boss] arrives.'

And other combinations are possible, e.g. with the progressive within the temporal clause, which is compatible with both oki and kuandu/kantu, in Santiago, and with kond, in São Vicente. In (93) and (94) we have examples from Santiago, from Brüser et al. (2002), and in (95) we have one elicited sentence from the same consultant from São Vicente as above. In all of them, the temporal interval denoted by the subordinate clause includes the temporal location of the situation depicted in the main clause.
(93) Algen ka debe inkomoda algen di noti (Brüser et al. 2002: 508) someone NEG must disturb someone of night

| oki | e | sata | durmi. |
| :--- | :--- | :--- | :--- |
| CON | 3SG | PROG | sleep |

Intended: 'People must not disturb others at night when they are asleep.'
(94) Kantu (*oki) N sata txigaba portu di Praia (Brüser et al. 2002: 222)

CON 1SG PROG arrive:PAST harbor of Praia
N odja farol ta fritxi-fritxi.
1SG see lighthouse TA flash
'When I was arriving at Praia harbor, I saw the lighthouse flashing.'
(95) N trá un fot justinh kond João tava ta kaí. (Francisco) 1sG take one photo precisely con João tava ta fall
'I have taken a photo precisely when João was falling.'

Note again that oki would be impossible in (94), a sentence from Santiago but in the past (progressive).

More examples could be provided for different temporal combinations, but the ones above are sufficient to demonstrate this: a lexical distinction exists between two connectives in Santiago-oki and the variants of kuandu-whereas in São Vicente we only have kond. The important fact is that in both varieties these words that may translate to 'when' can bridge different temporal relations between the two clauses, depending on a variety of elements in each of them. In the case of a bare dynamic predicate in the main clause: (i) if these subordinate clauses also contain bare dynamic predicates, they impose a subsequent interpretation on the former; (ii) if they contain dynamic predicates marked for habitual, a subsequent interpretation is required (at least in cases as (90)) to each instance of the situation in the relevant main clause; (iii) if they contain a dynamic predicate marked for progressive, then the temporal relation regarding the situation in the main clause is one of inclusion, which is not unexpected given that progressive situations share temporal properties with states. Regarding their relation with the time of speech, kuandu/kantu and kond allow for their situations to be located in the past-and thus the ones in the main clause are also past-while oki only allows for a present or a subsequent interpretation.

At this point we can assert that explanatory/causal, conditional, and temporal clauses, all may express diverse temporal meanings, which depend on a constellation of factors. These are reflected on the connective chosen to intro-
duce them and, in some cases, on the temporal interpretation of the main clause they are associated with.

In the next subsection we enter a somewhat different territory, where things get a little more challenging in other ways. For the sake of (some) simplicity in their description, the comparison is with (European) Portuguese and English.

### 3.3.4 Purpose and negative-circumstance clauses

These two types of adverbial clauses share a subsection here for they have one important property in common: in Portuguese (the related European language) and English (the language used in this monograph), as in many other wellstudied languages, both purpose clauses headed by para 'to' and negativecircumstance clauses headed by sem 'without' are often invoked when finiteness is discussed. They therefore constitute a nice bridge to this hot topic, which will be further illustrated in the next section-on multi-verb constructions-and fully discussed in the next chapters.

The main goal here is, as was the case with the previous clause types, to provide a general description of them in Caboverdean. The major revelation is certainly that they challenge the finite vs. nonfinite distinction, since they:
(i) admit most functional morphemes that appear in independent clauses
(ii) in their temporal meaning, they reveal idiosyncrasies shared by some other subordinate clauses which are seen in other languages as typically finite.

One note is in order here regarding point (i): they indeed show a slight difference from independent clauses, which consists in being able to drop their subject when this is coreferent with any of the arguments in the main clause. But the fact that the subject is also allowed to be there (either as a pronoun, when it is coreferent with the main subject, or as a full noun phrase)-and that, interestingly, in Portuguese their infinitival verbs may show person and number agreement-considerably mitigates this distinction.

In section 3.1 complement clauses headed by the preposition pa 'to' were mentioned, and it was pointed out that some of these pa-clauses can be ambiguous between that and a purpose clause. The example given was (72), here repeated for convenience.
(72) N ta fla-s pa es deta(,) pa diskansa. (Lurdes, Santiago)

1SG TA tell-3pl CON 3pl lie-down CON/PREP rest
'I tell them to lie down(,) to rest.'

In this complex sentence, whereas the first $p a$-clause is clearly a complement of flá 'tell', the second may be either an extension of this complement ('I tell them to go lie down and to get a rest') or a purpose of this complement / of the whole previous sequence ('I tell them to go lie down so that they get a rest'). This example is recovered from that first section for such clauses are involved in this nonfiniteness debate as well, and so they need to be kept at hand.

When flá selects a complement headed by $p a$-rather than $m a$, which was approached in 3.1 and will again be referred in 3.4.3-various meanings are available that are of interest here, such as 'order' and 'ask', all of which express some kind of purpose, and this hints at some meaning of the connective itself. Observe this in (96), from the same speaker in Santiago.
(96) Asves e ta fla-m pa N da-l
(Lurdes, Santiago)
sometimes 3SG TA ask-1SG CON 1SG give-3SG a un vinti skudu, pa konpra bolaxa.
a 20 skudu con buy cookie
'Sometimes he asks me to give him 20 escudos, to buy cookies.'

And this brings us to a parallel, quite interesting phenomenon, attested at least in Santiago: although some consultants detect some degree of marginality in subjectless pa-clauses under flá, their rejection is much stronger when these subjectless clauses include a reflexive verb with no overt reflexive expressionin other words, when we have a transitive verb with no overt argument (neither the subject nor the object). Observe the next elicited examples, with distinct argument structures under $p a$ : an intransitive predicate (97), a transitive nonreflexive (98a), and a reflexive (98b). Only in the latter is subject drop forbidden.
(97) N flá Pedru pa (e) ben djanta. 1SG tell Pedru CON 3SG come dinner 'I told Pedru to come dinner.'
(98) a. N flá Pedru pa (e) ka xuxa ropa.

1SG tell Pedru CON 3SG NEG soil clothes
'I've told Pedru to not soil his clothes.'
b. N flá Pedru pa *(e) ka xuxa.

1SG tell Pedru CON 3SG NEG soil
'I’ve told Pedru to not soil himself. / get soiled.'

These sentences highlight an important point in the current argumentation: the obligatory presence of a subject in pa-clauses may after all not depend on finiteness requirements, but rather on an unrelated property of the language. Some Caboverdean reflexive predicates dispense with any anaphoric expression, and this has been analysed as some type of 'get'-passive in Pratas (2014b). The fact that the embedded subject is mandatory when the $p a$-clause includes one such predicate reinforces this idea: the reflexive interpretation would be lost if the entity which is simultaneously the subject and the complement of the verb were not overtly referred within the clause-and this somehow determines it is realized in its most salient position, which is the subject. ${ }^{62}$

Regarding the temporal interpretation of this subordinate clause, it is part of the meaning of flá/dzê 'tell' in the sense of 'order' that the time of the embedded situation is subsequent to the reference time defined by the main clause, rather than the perfect interpretation that holds for other combinations.

Another verb that selects clauses headed by pa is pidi/pedí 'ask', which non-surprisingly behaves like flá when this conveys a similar meaning. Most times pidi/pedí has an overt indirect object, as we see in the elicited sentence in (99), and again the pa-clause allows for a non-overtly realized subject, as long as (i) it is coreferent with that indirect object, and (ii) the embedded predicate is not a reflexive entry.
(99) N pidi nha pai pa (e) dexa-m bai sinema.

1SG ask PPoss.1sG father con 3sg let-1sG go cinema
'I asked my father to let me go to the movies.'

Now in (100) to (102) we have three more examples of clear adverbial purpose clauses (the last pa-clause in the complex sentence (96), about the cookies, is

62 With an overtly realized subject, all embedded clauses allow some specific reflexive predicates even in the absence of a reflexive expression. These are examples in Pratas (2014b: 238):
(i) Nha mai flá ma mininu ta xuxaba.
my mother say CON boy TA soil:PAST
'My mother has said that the boy would soil himself / get soiled.'
(ii) Pursora sata mandaba mininus laba.
teacher PROG order:PAST children wash
'The teacher was ordering the kids to wash themselves / get washed.'
Moreover, we get a sloppy interpretation under stripping (a very common type of ellipsis):
(iii) Rui ta laba tudu dia i Maria tanben.

Rui ta wash every day and Maria too
'Rui washes every day, and Maria does too [wash herself every day/*wash Rui every day].'
one too): the first two for Santiago and the third for São Vicente. The first displays a negation; in it the speaker tells how he has accepted some jobs, even if he might not earn much, only to avoid being unoccupied. The second one displays the morpheme $t a$, which here marks habitual. And the third includes a form of future marking-with the verb bá/bai 'go' (see next section for multiverb constructions). In (100) and (101) these embedded clauses exhibit an overt subject, which is coreferent with the subject of the main clause.
(100) N bai fazi, pa N ka fika sen nada. (Wosvaldo, Santiago) 1SGgo do CON 1SG NEG stay without nothing Literal: 'I went do [that work] to not stay without anything.'

| (101) | Dja | N | kunpra | un | sponja |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| just | 1 SG | buy | one | sponge |  |  |  |
| pa | N | ta | laba | losa | ku |  |  | el.

'I've just bought a sponge to wash the dishes with it.'

```
(102) N tiv k bá pa São Vicente (Firmino, São Vicente)
    1SG had CON go to
    pa bá fazê nhas stud.
    CON go do PPOSS.1SG:PL study
    'I had to go to São Vicente to go do my studies.'
```

And also a progressive meaning is allowed in some pa-clauses, as in (103), elicited from a speaker in Santiago: the instruction was for him to mention something he might do to obtain some result at a latter point.

```
(103) N ta djanta sedu
    1SG TA have dinner early
    pa N ka sata laba losa oki bu txiga kaza.
    CON 1SG NEG PROG wash dishes when 2SG arrive house
    'I'll have an early dinner, to not be washing the dishes when you arrive.'
```

As for negative-circumstance clauses headed by sen 'without', the properties of interest here are roughly the same: all temporal morphemes are allowed in them, as well as the subject, with the latter also optionally being dropped under coreference with either the subject or the object of the main clause. The difference regarding the above clauses is that clausal negation is excluded, but this is
not related to any nonfiniteness properties either: the reason for this is that sen 'without' itself carries clausal negation, which is shown by the negative content of the clause-we see this in the elicited example in (104), from Santiago (moreover, sen licenses weak Negative Polarity Items like ningen 'nobody' in argument positions, just as ka does; see section 2.2 on clausal negation).
(104) N xinta na mesa di restoranti

1 SG sit at table of restaurant
sen (N) sata kumi.
CON (1SG) PROG eat
Intended: 'I sat at the restaurant table without being eating.'

A sen-clause with a bare verb, as in (105), is also critical for the discussion on the temporal meanings allowed for them. This subordinate clause might have an overt subject; as long as it had the right pronominal form, it might be coreferent with the subject of the main clause; but it could as well be an independent subject expressed by a different pronoun, or even a full noun phrase (which of course should obey some pragmatic restrictions-in other words, not all overt subjects would be felicitous in this context, but some certainly would).
(105) Es ta deixa mininuta ba skola sen (es) toma kafé.

3PL TA allow child TA go school without (3PL) take coffee
'They let children go to school without (them) having taken breakfast.' (adapted from Brüser et al. 2002: 138)

Note that the connective sen does not impose a subsequent interpretation on the bare predicate-on the contrary, the construction in (105) confirms its perfect interpretation, and this will be recovered later on.

These adverbial clauses that correspond to nonfinite constructions in other languages end this section, closing the list of subordinate clauses introduced by a connective. The diverse temporal meanings of clauses belonging to different types will be reorganised in the next chapter. For the descriptive purposes here, it suffices to list the major observations regarding the various connectives:
(i) with most connectives/within most types of clauses, all temporal morphemes are allowed according to the intended meaning;
(ii) only kuandu, from Santiago, and kond, from São Vicente, accept different temporal interpretations of bare dynamic verbs; these bare verbs they embed may have either a perfect or a subsequent interpretation (under quando
in Portuguese, the former meaning is expressed by the 'simple perfect preterit', and the latter by the future subjunctive);
(iii) with oki, from Santiago, and si 'if' in typical event-conditionals or the two uses of $p a$, both common to both varieties, bare dynamic verbs cannot have a perfect interpretation, rather revealing a subsequent meaning;
(iv) apart from some cases where their subject is allowed to be dropped, no other morphological property is clearly associated with nonfiniteness; the differences we observe regarding other clauses, be they root/main or subordinate, are rather related to some temporal dependencies; some finite subordinate clauses, however, show these dependencies as well-as long as they are selected by verbs and/or connectives that impose certain time locations; such is the case of full complement clauses for 'promise' (in the sense of commitment/intention, the time of the situation in the complement is subsequent to the 'promise' time; see example (ii) in fn. 70, ahead) and also of causal clauses (the cause must obviously precede the effect).

Table 5 summarises all the properties just pointed out, which will be retrieved for full discussion over the next chapters. Two other observations are nonetheless advanced here. One is to underline what was said about si 'if' antecedent clauses, in 3.3.2: the focus here is on what Haegeman (2003) calls 'eventconditionals', where in Caboverdean bare dynamic predicates have an interpretation subsequent to a given reference time, and not on 'premise-conditionals', which have an epistemic meaning, where bare dynamic predicates have a perfect interpretation of the type 'if you did that, then...'; all these interpretations naturally need to be further investigated.

The other observation is about $p a$. Given the meaning of $p a$ 'to'/'for', its combination with -ba is certainly not about past/prior situations in relation to it. It cannot be explained by any backshifting hypothesis either. Among other details, it will be shown that these morphemes may sometimes mark lower verbs whose embedding ones do not display them, and so they are necessarily marking something of their own. ${ }^{63}$ In the final chapter a different hypothesis will be defended that hopefully explains this.

63 This does not amount to saying that there are never any sequence-of-tense effects (SOT) in Caboverdean, for instance in indirect speech. This relevant relation in the literature (Dowty 1982, Enç 1987, Abusch 1988, Ogihara 1996, among others) accounts for cases where a lower verb is marked for past even if its temporal interpretation coincides with the reference time (or sometimes even with the time of utterance), such as in English: 'Mary said she was thirsty' meaning 'Mary said: I'm thirsty'. In the words of Wurmbrand (2014: 412), "SOT refers to contexts in which a morphologically realized tense is semantically vacuous." What I am saying

Table 5: Temporal morphemes allowed for dynamic verbs in various subordinate clause types

|  | clause type | bare verb | $t a \mathrm{~V}$ | $t a \mathrm{~V}-b a$ tava V | $\begin{aligned} & \text { sata } \\ & \text { / } \\ & \text { tita } \end{aligned}$ | sata V-ba <br> tava ta V | V-ba / <br> tinha + <br> participle |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| oki | temporal | subsequent | yes | no | yes | no | no |
| kantu/kuandu/ <br> kond | temporal | perfect or subsequent | yes | yes | yes | yes | yes |
| si | in conditionals | subsequent (perfect?) | yes | yes | yes | yes | yes |
| pamodi, purkê | explanatory | perfect | yes | yes | yes | yes | yes |
| pa | purpose or | subsequent | yes | yes | yes | yes | yes (V-ba) |
|  | complement | subsequent | yes | yes | yes | yes | yes (V-ba) |
| ma, ki/k, modi, si | complement | perfect | yes | yes | yes | yes | yes |
| relative words | relative | perfect | yes | yes | yes | yes | yes |

Finally, this chapter approaches another type of complex clauses: those where two verbs exist with no connective creating a relation between them. This is the topic of the descriptions in the next section-for none of these verbs will this monograph discuss an underlying syntactic structure; the specifics about such structures for corresponding cases in other languages are subject to much debate elsewhere; I have no substantial contribution to this topic at this point.

### 3.4 Multi-verb constructions

And still on top of this I'm pretty sure it must have rained / The day before you came.
ABBA (1982)
A verb as tenta/tentá 'try' is typically followed by a complement that includes another verb. The following sentences were uttered by two different young teachers in the middle of a conversation: the first, in Santiago, is speaking about the necessary involvement of everyone to get things better in their town; the second, in São Vicente, is explaining how she deals with discipline in class.

[^28]```
(106) a. Enton tenta fazi bo bu parti (Wosvaldo, Santiago)
    so try do 2SG PPOSS.2SG part
    pa kuzas midjora.
    for things get.better
    Intended: 'So, try to do your part yourself so that things get better.'
b. Bo tentá inpo-l un regra. (Liziane, São Vicente)
2SG try impose-3SG one rule
'You try to impose a rule on them [the student].'
```

As a side note, in the first sentence 'try' is in the imperative mood, which requires subject-verb inversion if the subject is overt (often it is not). ${ }^{64}$ What is interesting about this overt subject here is that it must: (i) be a free pronoun, not a clitic (Santiago bo is the free form for second person singular; see 2.1.1), probably because it carries focus; and (ii) be to the right of the lower verb, not between the two (although here negation and/or ta or sata/tita may occur). ${ }^{65}$

Many other verbs have a true double life, being commonly available both as the only verbal item in simple sentences, and as one of the various verbal items in complex ones where however no specific connective appears at an intermediate position-as opposed to what we observed in the previous sections.

All these complex sentences, here labelled multi-verb constructions, are composed in Caboverdean by two or more verbs occurring either as adjacent words, or separated by a few other elements, such as temporal morphemes, negation (of the lower clause), or the pronominal complement of the higher verb (an independent subject for the lower one is here, to my knowledge, never allowed, which demonstrates a tighter dependency of the verbs in these constructions, in contrast with the subordinate clauses headed by a connective; note that those complement clauses from São Vicente that may omit the complementizer show an overt subject for the complement clause, which itself demonstrates that the function of the dropped complementizer is intact). ${ }^{66}$

[^29] 'allow' and 'order'), the object of the higher verb is coreferent with the subject of the lower one,

Among the several kinds of multi-verb structures available in the language, sometimes each of the verbs more clearly seems to convey its own meaning, as the one in (107), and other times they seem closer to a pair of the type auxiliary + main verb, as in (108). In the first, the young speaker tells about his intentions regarding his future professional life: he has interrupted his studies and is now a computer technician, but plans to go back to school to follow his passion.
(107) N ta krê ser un pisikólogu.
(Wosvaldo, Santiago)
1SG TA want be one psychologist
Literal: 'I want to become a psychologist.'

The second verb in (107) is one of those suppletive forms already mentioned: in Portuguese, ser is the infinitive of 'be' (individual-level). This suggests that, despite whichever properties this combination might reveal, we have here a case for nonfiniteness. Let us bear this idea in mind and recover it for the full discussion of finiteness, in chapters 4 and 5.

In the next sentence the elderly female speaker talks about how life was in the old days, and how it contrasts in several respects with what we have now.
(108) Ultimament é k jent ben uzá sapot. (Inês, São Vicente)
lately be that people come wear shoe
'It is [only] lately that people came to wear shoes.'

These sentence types and verb combinations need dedicated studies to establish their internal syntactic dependencies. As was already noted, the goal here is rather to provide an overview of what may and may not appear between the different verbal units subsumed in this heterogenous group, where the main point in common is that no overt connective bridges their meanings. ${ }^{67}$

[^30]The next subsections briefly present the main facts of interest here and a few illustrative examples. Other verbs must be included in future detailed discussions on these constructions, but for now they are: podi/podê 'can'/'may' and debi/dvê 'must' (3.4.2), krê 'want' and prumeti/prumetê 'promise' (3.4.3), dexa/dxá 'let'/ 'allow' and manda/mandá 'order' (3.4.4), odja/oiá 'see' and obi/uví ‘listen’ (3.4.5), komesa/komesá ‘start’, bira/vrá ‘turn.to’ (become) and sai/saí 'go.out' (3.4.6), and finally ben 'come', and bai 'go' (3.4.7). Before engaging in these short descriptions, a line of reasoning must be mentioned which often comes up when multi-verb sentences in a West-African language are discussed: whether these are, or not, instances of serial verbs (3.4.1).

### 3.4.1 A note on serial verbs

A tentative comparison was done in Pratas (2007) with Santome, a Portugueserelated language spoken in São Tomé and Príncipe, also on the West African coast, whose multi-verb constructions were submitted to diagnostics for serial verbs in Hagemeijer (2000). The conclusion I reached at that time-that no such configurations were available in Caboverdean-was supported by the nonexistence of one single event or one single aspect shared by both verbs.

The recent typological survey in Haspelmath (2016), on the other hand, defines ten other criteria for serial verbs and underlines the flaws of specifically the ones I used then. The author says that the single event criterion is impractical: "there is no objective way of identifying a single event and distinguishing it from a set of several events" (Haspelmath 2016: 306), and that the shared tense/aspect/mood/arguments is unnecessary, "as there are no constructions that would be excluded from [this class] only because they lack [this property]" (ibid.). Although the following observations still lead to no clear conclusion, we may nevertheless take a quick look at the data under the criteria considered relevant by the author. The example in (109a) displays two adjacent verbs, none of which is a clear auxiliary, and only one subject and one negation (by some accounts this could thus be a monoclausal construction). The speaker, originally from Santiago, is saying that she now wants to go on living in Sal.
(109) a. Gó N ka krê sai di li. (Miranda, Santiago)
now 1sG NEG want leave of here
'Now I don't want to leave here/this place.'
b. N ka krê kel kamiza lá.

1SG NEG want the shirt there
'I don't want that shirt.'

If we apply the criterion defined in Haspelmath (2016: 305) (against Aikhenvald 2006) that in serial verb constructions no verb is part of the complement of the other, the sentence in (109a) raises at least this remark: $k r e ̂$ 'want' is a transitive verb, which can also take nominal internal arguments (109b). Its complement in (109a) is thus the clause headed by sai 'leave', and thus the second verb is in a lower structural position than the first. This seems indeed, amidst the conditions defined as useful in Haspelmath (2016), the only reason to exclude this construction from this category.

On top of this, we may go back to another claim about the monoclausal/biclausal distinction. Consider the next example, in which the speaker is saying he wants to study more this year, but he knows this will be hard because of everything he must do as a primary school teacher.

| (110) N | krê studaba es anu | (Edson, Santiago) |
| :--- | :--- | :--- |
| 1SG want study:PAST this year |  |  |
| mas djá tenpu stá un bokadinhu pertadu. |  |  |
| but just time be one little tight |  |  |
| Intended: 'I wish I had studied this year, but there is no time for that.' |  |  |

This sentence illustrates a quite specific property which holds for many other multi-verb constructions. The temporal morpheme -ba can appear on the second verb without appearing on the first-note that in other cases it is affixed on both verbs, and these distributional properties relate to different temporal meanings. The relevance of this regarding serial verbs may however be summarised as follows. If a monoclausal structure is part of their definition, then Caboverdean presents negative results here as well: one temporal morpheme can mark the lower verb while being absent from the higher one. This discussion nonetheless needs to be extended to the analysis of multi-verb constructions in São Vicente for more conclusive results, and this will surely be pursued elsewhere. Any study on this topic must certainly give a special attention to some verbs briefly described in the next subsections.

### 3.4.2 Can and must

The verbs podi/podê 'can'/'may' and debi/dvê 'must' are involved in epistemic or nonepistemic modal meanings (nonepistemic stands here for circumstantial, deontic, or root, etc.). Examples (111) and (112) may regard epistemic meanings, and (113) and (114) regard nonepistemic meanings of 'can'/'may' and 'must', respectively. Both (111) and (113b), with 'can'/'may', were uttered by one female speaker from Santiago; in the first she is telling how she now loves to live in Sal, even if she may have left the island at some point for vacation; and in the other she is defending her point of view regarding the economic situation in the country; the sentence in (113a) belongs to that same sequence from before where a young female teacher is telling about discipline inside the classroom-here she directly repeats the limits she imposes on her students regarding their behaviour. The epistemic example with 'must' in (112) has been elicited from one consultant in Santiago. The nonepistemic in (114) is from Brüser et al. (2002).
(111) N podi bai féria, N ben, (Miranda, Santiago) 1SG can go vacation 1SG come más... N krê fika na Sal. but... 1SG want stay in Sal
'I may have gone on vacation and back, but... I want to continue in Sal.'
(112) Ana debi durmi si kaza. (Ricardo, Santiago)

Ana must sleep Pposs.3sG house 'Ana must have slept at home.'
(113) a. "Bo ka podê ergí d bo lugar." (Liziane, São Vicente) 2SG NEG can get.up of PPOSS.2SG place "'You cannot get up from your place.'"
b. Governu ka ta podi dá tudu algen trabadju. (Miranda, Santiago) government NEG TA can give everybody work 'The government cannot provide a job for everyone.'
(114) Ten kuza ki algen debi konbersa en partikular. (Brüser et al. have thing ReL someone must talk in private 2002: 565) 'There are things that must be talked in private.'

Note that all the examples above have bare dynamic predicates in the lower position, which is relevant to show their distinct interpretation regarding the modal time reference: under the epistemic meaning in (111) and (112), the lower bare predicate has a perfect interpretation; under the nonepistemic meaning in (113) and (114), the lower bare predicate has a subsequent interpretation.

Furthermore, in their epistemic meanings both these modals allow for preverbal morphemes on the lower verb. This is illustrated for podi in (115), an example adapted from Pratas \& van de Vate (2012: 426), elicited from one consultant in Santiago; a similar combination of epistemic podi + progressive + dynamic verb appears in Brüser et al. (2002: 601) classified as a supposition. And in (116) we have an example for this with debi.
(115) Ka bu fazi rabolisu pamodi Maria podi sata durmi.

NEG 2SG make noise because Maria may PROG sleep
'Don't you make (any) noise because Maria may be sleeping.'
(116) Oxi bu pai txiga di trabadju inlionadu, (Brüser et al. today pposs.2SG father arrive of work upset 2002:509) algun kuza debi sata korre-l mal. some thing must PROG run-3sG bad
Intended: 'Today your father has arrived upset from work, something must be going bad for him [there].'

As is certainly expected by now, the temporal interpretation of these lower dynamic verbs marked with the progressive is like the one available for bare lower statives: inclusion of the modal time reference. Check this with podi 'can'/'may'.
(117) Bu ka odja ma mi N podi ser bu pai? (Brüser et al.

2SG NEG see that 1SG 1SG can be Pposs.2SG father 2002: 841)
'Don't you see that I can be your father?'

Lower bare statives are not laid out in table 6 (by the end of this subsection), for it regards dynamic verbs only. But it is worth to briefly point out that, also under nonepistemic modals, and if no other reference time is given that rather makes them be interpreted as subsequent, they have an inclusion meaning as well. We see this in (118), which belongs to a sequence where the young speaker declares he lives with his parents because they are old, and he must be there to take care of them.
(118) Dja N ten ki stá lá.
(Edson, Santiago)
ADV 1SG have CON be there
Intended: ‘I just have to be there.'

So the important point here is that lower bare statives differ from bare dynamic verbs in this respect too, since no inclusion is available for the latter, which can only be interpreted as perfect (under epistemic modals) or subsequent (under nonepistemic modals).

One more interesting fact about these multi-verb constructions in this subsection is that negation may show up to mark the lower verb, in both epistemic, which is perhaps the less unexpected, and nonepistemic meanings. For the latter, which might be the more surprising, observe the example below.

```
(119) E ta da-u senpri bon diskulpa
(Brüser et al. 2002: 71)
    3SG TA give-2SG always good excuse
    pa e podi ka djuda-u paga renda.
    for 3SG can NEG help-2SG pay rent
    Intended: 'He always gives you good excuses to avoid helping you pay
    the rent.'
```

A final note for a potential complete description of modals in the language concerns ten ki (in Santiago) / ten $k$ (in São Vicente)-literally 'have that' but meaning 'have to', as in (118), above. The difference between this and the other modals portrayed so far is that only here do we have this ki/k besides the verb itself. In the next example, with a nonepistemic ten ki, the lower dynamic verb is marked with $t a$, here associated with habitual-the time of this habitual situation may include the time of evaluation defined by the modal (this overlap is coherent with the stative-like properties of habituals) or be subsequent to it (but still as a habitual-note that this is different than having ta to mark subsequent episodic situations). The young speaker is telling what funerals still consist of in some inland villages of Santiago: besides the food at lunch and dinner, the family of the deceased must regularly offer coffee to all visitors for several days.
(120) Bu ten ki ta da-l kafé tanben, (Edson, Santiago)

2SG have that TA give-3SG coffee too
pa e ka durmi, pa djuda-l ku sonu.
for 3SG NEG sleep for help-3SG with sleepiness
Intended: ‘You also have to give him/her coffee, so that he/she doesn’t get sleepy, to help him/her fight (their) sleepiness.'

Again, a similar temporal relation between the nonepistemic modal and the embedded situation obtains when the latter is in the progressive (here the progressive is in a periphrastic form because of the insertion of senpri 'always').
(121) Nu ten ki stá senpri ta prendi nobus kuza. (Brüser et al. 2002: 6)

1PL have that be always ta learn new:pl thing
'We have to always be learning new things.'

Importantly, in all cases pointed out above-both with the verbs podi/pode 'can'/'may' or debi/dvê 'must' and with the expression ten $k i / k$ 'have to'-no subject can appear between the two verbs in the sentence.

In sum, the most relevant observations about these modals are as follows.
A. The temporal morphemes available for the modals themselves are (this was not explicitly discussed above):
(i) epistemic modals do not get preverbal $t a$ for a present interpretation (they behave as statives, such as some instances of sabi/sabê 'know')
(ii) nonepistemic debi/dvê also behaves so: bare forms convey present ${ }^{68}$
(iii) there is however an interesting distinction regarding two nonepistemic interpretations for podi/podê: the allowance/permission interpretation also behaves as the above modals, with present conveyed by the bare form, as in (113a), whereas in the 'be able' interpretation it needs preverbal ta for present, as is visible in (113b). ${ }^{69}$ This distinction in meaning may be not as evident in other languages' morphology (see more details in fn. 88, chapter 4).
B. Now regarding the temporal morphemes available for the predicate under the modal and their respective temporal meanings:
(i) under epistemic modals:
(a) all temporal markers may occur, depending on the meaning of the embedded situation as related to the reference time defined by the modal (the examples above do not include any temporal morphemes associat-

68 Another nonepistemic modal available in the language is mesti/mestê 'need', which behaves like nonepistemic debi/dvê 'must' but has no epistemic counterpart.
69 See also this other example from Santiago, presented in chapter 2 as (47), with a 'be able' interpretation, where the higher verb may be marked for progressive-the speaker is telling how she is not being able to make some cookies that she is now making and selling for a living.
(i) Na prinsipiu N ka sata konsigiba. (Sandra, Santiago)
at beginning 1SG NEG PROG succeed:PAST
'In the beginning I wasn't succeeding.'
I am thankful to Dominika Swolkien (p.c.) for our talk about this also for São Vicente.
ed with past meanings: -ba for Santiago and tava for São Vicente; more on these morphemes as they occur with lower verbs in multi-verb constructions is left for the next chapters, as the inclusion of more examples here might add confusion rather than refine their description)
(b) the temporal meanings for the lower bare predicates depend on its stative vs. dynamic status: if no other reference time is given, the time of an embedded stative situation includes/coincides with the reference time defined by the modal (117); the time of embedded dynamic situations precedes the reference time defined by the modal, as in (111), (112)
(ii) under nonepistemic modals, bare dynamic predicates have a subsequent interpretation regarding the time of evaluation defined by the modal (as we see in (113) and (114)), and bare statives, if no other reference time is given, have an inclusion interpretation (118).

Table 6 organises the important information about dynamic predicates under modals, although not all details have for now been here shown in examples.

Table 6: Functional morphemes and temporal interpretations available for dynamic predicates (situations) under some modal verbs. These predicates are never preceded by a connective (ten ki/k is the modal expression itself). Among all higher verbs included in this section, epistemic modals are the only ones allowing for a perfect interpretation of the bare dynamic lower predicates. Note, too, that the habitual and the progressive in the subsequent interpretations, as defined regarding the modal base, will naturally have a relation of inclusion regarding any other reference time given in the discourse context.

|  |  | subject | ka | bare | $t a$ | sata / tita | tava / -ba <br> (for some meanings) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'can'/'may' epistemic | podi/podê | no | yes | perfect | subsequent/ inclusion | inclusion/ subsequent | yes |
| 'must' epistemic | debi/dvê <br> ten ki/k | no | yes | perfect | subsequent/ inclusion | inclusion/ subsequent | yes |
| 'can'/'may' <br> non- <br> epistemic | podi/podê | no | yes | subsequent | subsequent/ inclusion | inclusion/ subsequent | yes |
| 'must' <br> nonepistemic | debi/dvê ten ki/k | no | yes | subsequent | subsequent/ inclusion | inclusion/ subsequent | yes |

The morphemes allowed under the modals certainly have effects at the syntactic level, regarding the biclausal vs. monoclausal discussion. This is again left for future studies, for the focus of this monograph is rather on their contribution to the expression of temporal meaning.

Next subsection is about two verbs also linked to modality: krê 'want' was already mentioned in the brief introductory note on potential serial verbs, in the beginning of this section; the other one is prumeti/prumetê 'promise'.

### 3.4.3 Want and promise

The group of verbs that denote some type of attitude from the subject regarding the situation depicted in the lower predicate is vast and also quite heterogeneous (on this hot topic within semantic studies, see for instance White et al. 2014 and Giannakidou \& Mari 2018).

Here two of them are briefly described (examples with them are also part of chapter 5) since they are among the few that may participate in multi-verb constructions in Caboverdean-many other attitude verbs, such as the equivalents to 'think' or 'believe’ (pensa/pensá and kridita/kriditá, respectively), for instance, have complement clauses headed by a connective (they would fit section 3.1 instead). Furthermore, these two included here have another property in common, which is: "Like WANT, the PROMISE attitude is clearly future oriented. This is so because promise is known to be performative, i.e., it is said to involve commitment of $i$ to perform an action to bring about p." (Giannakidou \& Mari 2018: 182). Note that krê 'want' and prumeti/prumetê 'promise' may also select for complement clauses headed by some connective ( $p a$ 'for' in the first casewhich hints at a purpose meaning similar to the adverbial clauses in 3.3.4-and $m a / k$ 'that' in the second), but they are of greater interest here for their versions with no connective feed the nonfiniteness discussion crosslinguistically. ${ }^{70}$

[^31](i) E ka ta krê pa algen inkomoda-l. (Brüser et al 2002: 120)

3SG NEG TA want for someone distubr-3SG
She doesn't want that anyone disturbs her.'
(ii) N prumeteba nha mai ma N ta studaba pa testi. (elicited) 1SG promise:PAST my mother that 1SG TA study:PAST for exam 'I had promised my mother that I would study for the exam.'

The next example is from Santiago-which at the outset shows the possible double occurrence of -ba in these multi-verb structures in this variety.

## (122) E kreba serba nha mos. (elicited, Santiago; adapted

 3SG want:PAST be:PAST PPOSS.1SG boy from Pratas 2007) 'He wanted to be my boyfriend.'Note, again, that ser 'be’ (individual-level) is one of those previously mentioned suppletive forms from Portuguese which might raise questions about any possible nonfiniteness morphology; here the suffix -ba is applied to it.

In this next example from São Vicente ((63) had a part of it), the speaker is describing how on weekends people naturally want to rest comfortably at home.
(123) Bzot krê deskansá, bzot krê stod a vontad. (Firmino, São Vicente)

2PL want rest 2PL want be comfortable
'You want to rest, you want to be comfortable.'

In this sentence above also a suppletive form, this turn for 'be' (stage-level), is chosen, which again may raise doubts about the finite status of this lower verb.

The higher verb in the next example is prumeti/prumetê 'promise', and the lower one is marked by clausal negation: someone is promising not to do something. This sentence was produced during a task of elicited translations and grammaticality judgments.
(124) N prumeti (*N) ka studa pa izami.

1SG promise (*1SG) NEG study for exam
'I promised not to study for the exams.'

The lower clause in the example above cannot have an overt subject (any doubts that a sequence like this might appear with a lower subject in a case of complementizer dropping are rejected on the grounds of its temporal meaningsee next page), and its bare verb form is interpreted as subsequent. This is due to the meaning of 'promise', which is future-oriented, as we saw above and as is also captured in this observation by Comrie: "although the time reference of the infinitive after promise is relative future, this is redundant, since this is the only possible time reference for an infinitive after promise; no information is thus lost by having a tenseless construction after promise" (Comrie (1985: 53).

In the next example (elicited in Santiago; from Pratas 2007) we have both verbs marked by the affix -ba.
(125) N prumeteba ka fazeba batota.

1SG promise:PAST NEG make:PAST cheating 'I had promised not to cheat.'

As was said earlier, in the case we want to express an embedded subject-either coreferent with the main subject or not-we must have a full complement clause, headed by the adequate connective. Note that for that full clause the subsequent interpretation is also mandatory, the difference being that the lower verb must be marked by ta (see (ii) in fn. 70). A bare dynamic predicate would there have its regular perfect interpretation, as the one obtained in root clauses, which would produce a result where prumeti/prumetê 'promise' would have a different meaning, closer to 'guarantee' (such as in English 'promise' used with simple past or present finite complements)-this is not the one under analysis here.

This fundamental role played by the selectional properties of the higher verb is highlighted when we compare the restrictions imposed by prumeti/ prumetê 'promise' with the ones imposed by flá (in Santiago) or $d z e ̂$ (in São Vicente). As was pointed out in section 3.1, superficially equal verb forms may carry different meanings, depending on the other elements in the sentence. In that section we saw the contrast between the meanings of flá/ $d z \hat{e}$ when its complement is headed by $p a$ (in which case its meaning is more equivalent to 'tell' and the embedded clause denotes an instruction or an order) and by $m a / k$ (in which case its meaning is more equivalent to 'say' and the embedded clause just denotes a common direct object-what is said, in this case). Here we have a specific interpretation available for the latter whenever it contains a verb marked with $t a$ and the subsequent interpretation is ensured: it may (among other things) be equivalent to 'promise'. ${ }^{71}$ Unlike prumeti/prumetê, naturally, flá with this 'promise' meaning does not allow for any version with no preverbal ta, even when there is no overt pronoun between both verbs:
(126) a. N prumeti studa pa izami.

1SG promise study for exam
'I promised to study for the exams.'

71 Take for instance the elicited sentence in (i), which shows this meaning of 'say' (although it carries a lower degree of commitment):
(i) N flá nha mai ma N ta studa pa izami. 1SG say my mother that 1SG TA study for exam 'I have told my mother that I will study for the exam(s).'
b. N prumeteba studa(ba) pa izami.

1SG promise:PAST study(:PAST) for exam
'I had promised to study for the exams.'
c. * N flá studa pa izami.

1SG tell study for exam

* 'I said to study for the exams.'
d. * N flaba studa(ba) pa izami.

1SG tell:PAST study(:PAST) for exam
*'I had said to study for the exams.'

As was said above for (124), the absence of the connective in the complement of 'promise' itself relates to some prohibitions: no indirect object in the main clause is overtly expressed, and no embedded subject, ta or sata/tita are allowed. This does not apply to tenta/tentá 'try' or krê 'want'-see examples of the latter embedding progressive dynamic predicates in (165) and (166), subsection 5.1.1. For all of them, and in certain conditions that will hopefully be clear later, an embedded -ba may appear in Santiago.

Table 7 organises the details for these two verbs, and it also includes tenta/tentá 'try', which was mentioned in the introduction to this whole sectionand is the only one from this heterogeneous group which never (to my knowledge) appears in simple clauses, only in multi-verb constructions.

Table 7: Functional morphemes and temporal interpretations available for predicates under some attitude verbs when these predicates denote dynamic situations and are not preceded by a connective. Note that the habitual and the progressive in the subsequent meanings for 'try' or 'want' will naturally have a relation of inclusion regarding another given reference time.

|  |  | subject | ka | bare | $t a$ | sata / tita | tava / -ba <br> (for some meanings) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'try' | tenta/ tentá | no | yes | subsequent | subsequent/ inclusion | Inclusion/ subsequent | yes |
| 'want' | krê | no | yes | subsequent | subsequent/ inclusion | Inclusion/ subsequent | yes |
| 'promise' | prumeti/ <br> prumetê | no | yes | subsequent | - | - | yes (for -ba) |

### 3.4.4 Allow and order

Among the verbs that may appear next to other verbs belonging to their complements, these two may, like 'promise' (and any other with a 'promise' meaning), have an overt indirect object: manda/mandá 'order' and dexa/dxá 'allow'/'let’. In (127) the speaker is telling a longer story-about a maid she used to have in the house who was from another island, and their difficulty in understanding each other's variety-of which the relevant excerpt here is this.
(127) N manda-l kuzinhá un koza [...].
(Flávia, São Vicente)
1SG order-3SG cook a thing
'I ordered her to cook something [...].'

In this other (request) sentence, the speaker uses a polite way (he is kind of asking for permission) to add his next claim about the topic he is discussing.
(128) OK, dxa-m po b un izenpl [...].
(Firmino, São Vicente)
1SG let-1SG put 2SG a example 'Ok, let me give you an example [...].'

There is a worth-noting distinction between these two verbs regarding what is allowed to accompany their verbal complements: with manda/mandá 'order', when the negation of the embedded situation is intended, the version with the connective $p a$ is preferred (130), whereas with dexa/dxá 'allow'/‘let' negation and temporal morphemes can freely join the lower predicate even in the absence of the connective-see this in two elicited examples from Santiago (129).
(129) a. Oxi sata txobi txeu, N dexa-s ka bai skola. today PROG rain a.lot 1SG let-3PL NEG go school 'Today it is raining a lot, I let them not go to school.'
b. Oxi sata txobi txeu, N dexa-s sata durmi. today PROG rain a.lot 1SG let-3PL PROG sleep 'Today it is raining a lot, I let them be sleeping [until late].'
(130) a. ? N manda-s ka bai skola.

1SG order-3PL NEG go school
b. N manda-s pa es ka bai skola. 1SG order-3pl for/to 3PL NEG go school 'I ordered/told them to not go to school.'

The translations into English also show an interesting distinction: 'let' embeds a complement with no 'to' in the embedded predicate, and 'tell'/‘order' requires 'to'. Since they are in this language both considered nonfinite, the need for 'to' in only one of them must have some connection with any distinguishing property. This might be a syntactic restriction related to different degrees of defectiveness in the lower predicate (which would require some explanation itself). But they are not indeed equivalent, for meaning differences exist that also involve temporal location: dexa/dxá 'let'/‘allow' is compatible with a lower predicate denoting a situation which is ongoing or habitual (with the corresponding morphology), with the time of this situation possibly including the reference time for the higher one. With manda/mandá 'order', if anything beyond a bare verb is needed-i.e. in the case that a progressive or habitual is intended-then the time of the lower situation includes another given reference time, not the one connected to the higher situation (as with 'promise', the interpretation of the lower situation must be subsequent to the higher one). Observe a set of elicited sentences with manda 'order' from Santiago. Besides the possible negation only when the lower clause is headed by pa, as in (131c), an important note regards the two examples with no pa, (131a) and (131b): the temporal clause defines different reference times for the main complex sentence, as associated with each of the two situations expressed there-kantu combined with the bare txiga 'arrive' defines a time prior to the time of speech, and thus this is more naturally subsequent to the time of the order situation, which is also clearly prior to the time of speech; oki combined with the bare txiga 'arrive' defines a time after the time of speech, and thus it can only relate with the sitting situation, since this is the only one for which a location subsequent to the time of speech is available.
(131) a. Prufesora manda mininus xinta kantu N txiga. teacher order children sit when 1SGarrive 'When I arrived the teacher ordered the children to sit.'
b. Prufesora mandamininus xinta oki N txiga. teacher order children sit when 1SG arrive 'The teacher has ordered the children to sit when I arrive.'
c. Prufesora manda mininus pa es (ka) xinta oki N txiga. teacher order children for/to 3pl (NEG) sit when 1SG arrive 'The teacher has ordered the children to (not) sit when I arrive.'

A lateral note that may be relevant for future studies on these (and other) ditransitive verbs is that, also in Santiago, the indirect object may appear in the subject position of passives, with the verb being marked with -du (where the
temporal meaning is perfect) or $-d a$ (where the situation is temporally located before another given past time). Two examples with $-d u$ are provided below. ${ }^{72}$
(132) Bu ten ki fazi sima bu mandadu.
(Brüser et al. 2002: 148)
2SG have that do as 2SG order:PART
'You have to do as you're told.'
(133) N ka dexadu bai badju mi só.
(Brüser et al. 2002: 445)
1SG NEG let:PART go ball 1SG only
'I was not allowed to go alone to the ball.'

The properties pointed out for the above predicates in actives clauses are briefly organised in table 8. Note that temporal morphemes and a subject (either as a pronominal or a noun phrase) are allowed for the lower verb-as well as negation, at least for one of them. These have been over the years the lexical items studied in great detail crosslinguistically to determine whether these structures were more or less defective-which then would lead to conclusions about their finiteness (see chapter 4 for the various proposals on this relation between morphology/syntax and the nonfinite label). In Caboverdean, however, if they serve as a diagnostic for anything, it rather functions as challenging this category altogether, or at least any simplistic answer to that sort of question.

Table 8: Functional morphemes and temporal interpretations available for predicates under some attitude verbs when these predicates denote dynamic situations and are not preceded by a connective. Note that the habitual and the progressive in the subsequent interpretations will naturally have a relation of inclusion regarding another given reference time.

|  |  | subject | ka | bare | $t a$ | sata / tita | tava / -ba <br> (for some meanings) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'allow' | dexa/dexá | yes | yes | subsequent | subsequent/ inclusion | Inclusion/ subsequent | yes |
| 'order' | manda/ mandá | yes | ? | subsequent | ?? | ?? | yes for -ba <br> ?? for tava |

72 This is impossible in Portuguese with any indirect object (Portuguese, by the way, also does not display double object constructions of the type in example (30), in chapter 2).

### 3.4.5 See and hear

This short subsection is about two perceptive verbs, odja/oiá 'see' and obi/uví 'hear'/'listen', already mentioned in subsection 2.3.2, where the progressive cycle was presented-there, they were important to show that, under them, $t a$ indeed marks an unfolding situation (a progressive), not a habitual or prospective. And they are included here because, as selectors of clauses not headed by a connective (although an overt subject typically appears in these), they participate in multi-verb constructions. ${ }^{73}$ The next two examples have 'see', and the following two have 'hear'/'listen', in Santiago and São Vicente.
(134) N odja-u ta pasia ku el na bu karru. (Brüser et al. 2002: 231, 1SG see-2SG TA ride with 3 SG in your car Santiago) Intended: 'I've seen you riding your car with him.'
(135) N tá ta oiá Benfica ta festjá. (Firmino, São Vicente) 1SG tava ta see Benfica ta celebrate 'I was watching Benfica celebrating.’
(136) Só meia noti ki $N$ ta obi-u ta toka? (Brüser et al 2002: 527, only midnight that 1 SG TA hear-2SG TA play Santiago) 'Is it only at midnight that I will listen to you playing?'
(137) Astantas, li volta di un des ora, (Inês, São Vicente) then here around of one ten hour $N$ uví un senhora ta falá purtugês. 1SG hear one lady TA speak Portuguese 'Then, somewhat around 10h, I’ve heard a lady speaking Portuguese.'

Remarkably, not all predicate types are preceded by ta when they occur under perceptive verbs. Note that this ta marks progressive in the cases above (translated to -ing forms in English), and so for it to appear in this combination the lower predicate needs to be compatible with a progressive interpretation. And

73 As was also seen in 2.3.2, this also happens with stá/stod 'be', but these are not included here because in these constructions they are themselves part of a periphrastic progressive.
although achievements like txiga 'arrive' may be marked by progressive morphology typical of root clauses-which is in line with our intuition that a precursory stage somehow leads to this culmination (see Pratas 2018a and, in this monograph, a brief note on this in section 4.3)-it is quite interesting for the study of these much-debated predicates that they appear unmarked by (the progressive) ta under a perceptive verb, as in (138). This reinforces something unsurprising: that precursory stage does not belong to the situation itself.
(138) E obi nha tia Ganga txiga na porta. (Brüser et al. 2002:

3SG hear PPOSS.1SG aunt Ganga arrive at door 527, Santiago)
'He heard my aunt Ganga arrive at the door.'

Table 9 summarises the details for these two verbs.

Table 9: Functional morphemes and temporal interpretations available for predicates under perceptive verbs, where these predicates denote dynamic situations and are not preceded by a connective. Note that here the embedded ta marks an unfolding situation/the progressive, which may be why it does not occur with achievements (but see 4.3 on root clauses). Concerning negation, it is possible to include it, but it gives less natural results.

|  | subject | ka | bare <br> achievements | ta | sata / tita | tava/-ba <br> (for some <br> meanings) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 'see' $\quad$ odja/oiá yes | ?? | coincidence | inclusion | no | yes |  |
| 'hear' obi/uví | yes | ?? | coincidence | inclusion | no | yes |

### 3.4.6 Ways of starting

This section describes some verbs that, when involved in multi-verb constructions, provide a 'begin' meaning to the situation denoted by the lower predicate. This is the case, for instance, with bira/vrá, which on its own means 'become', and this is also the case of sai/saí, which on its own means 'leave'/'get.out'. A similar contribution is however more often expressed by kumesa/kumesá 'start'. All these verbs have other types of complements in some cases, but in others they are indeed followed by another verb, marked by $t a$ or not.

The two sets of examples in the next page illustrate those two first verbs which can mean 'begin'/‘start'. The sentence in (139a), uttered within a narra-
tive about the difficulties concerning agriculture and the weather in Santiago, shows the meaning of bira as a stand-alone verb, and the one in (139b)-the segment after the second comma-is a multi-verb construction with two elements between the two verbs: negation and a temporal morpheme.

```
(139) a. Txuba djá bira-nu mas korrenti. (Aldina, Santiago)
    rain already become-1pL more frequent
    'Rain has become more frequent for us.'
    b. E ta trabadjaba txeu,
    3SG TA work:PAST a.lot
    bira si, e bira ka ta fazi nada.
    become like.this 3sG turn NEG TA do nothing
    'He used to work a lot, [he] has become like this, started doing nothing.'
```

In (140) we have a pair for sai/saí: (140a) in the common meaning 'go.out'/ 'leave', as the only verb in the sentence, and (140b) in this sense of suddenly doing something. Here the consultant is telling how students, in order to have time for their school homework, sometimes challenge their parents' orders to work in the agriculture instead [but then the parents oblige them anyway].
(140) a. No saí d kaza volta d 5 ora. (Firmino, São Vicente)

1PL leave of house around of 5 hour
'We left the house around 5 o'clock.'
b. Si alunus sai ta flá asin
(Daiana, Santiago)
if pupils go.out ta say this.way
"gosi N ka sata bá fazi kel trabadju li", [...]
now 1sG neg Prog go do the work here", [...]
'If the students start saying "now I'm not going to do this work" [their parents say: "Yes you are! School work is at school, not at home"]."

As for komesa/kumesá 'start', it may also select an embedded verb marked by $t a$, with the corresponding temporal meanings. The following intuitions arise regarding these two combinations: when the lower verb is bare, the situation that the sentence is about is referred at its starting point; when the lower verb is marked by $t a$, the situation that the sentence is about is already unfolding at the reference time. We observe this in the next two examples. In the first, the speaker is telling that after his scholarly instruction he started an internship. In the second, another speaker is telling how, when he entered high school, he started feeling confused-what he is reporting is thus this initial state of confusion.
(141) N komesa fazi stájiu...
(Wosvaldo, Santiago)
1SG start do internship
Intended: 'I started (doing) an internship...'
(142) N kumesá log ta sentí konfuz. (Firmino, São Vicente)

1SG start right.away TA feel confused
Intended: 'I immediately started feeling confused.'
These verbs may show an additional peculiarity that must be tackled in future surveys: a preverbal morpheme for the lower dynamic predicate may also be na, a preposition which typically corresponds to 'at' or 'in' in English. An example of this with kumesa 'start' is displayed in (143). ${ }^{74}$
(143) E kumesa na fazi kaboku.
(Brüser et al. 2002: 351)
3SG start in make hole
'He started digging a hole [at a construction site].'

To my knowledge, what cannot appear with the lower predicates is the progressive as it appears in root clauses, at least in the sense that is in order here-note that a different relation between these two predicates may occur, more in line with a translation involving 'by', like in 'I started [to address this problem] by taking notes'. These are not the cases of interest to this short subsection. Table 10 summarises all these combinations.

Table 10: Functional morphemes and temporal interpretations available for predicates under three aspectual verbs. These predicates denote dynamic situations and are never preceded by a connective. Note that in the subsequent interpretations they are 'immediately subsequent'.

|  | subject | ka | bare | ta (na) | sata / tita | tava/-ba <br> (for some <br> meanings) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 'start' | komesa/ no <br> komesá | yes subsequent | coincident/ <br> (subsequent) | no | yes |  |
| 'turn.to' bira/vrá no | yes subsequent | subsequent | no | yes |  |  |
| 'go.out' sai/saí | no | yes subsequent | subsequent | no | yes |  |

74 The related language Ginensi shows a much more productive (and indeed quite interesting) $n a$ 'in' in progressive constructions (Kihm 1994: 86, and Truppi 2019: 90, among others).

### 3.4.7 Come and go

The double life of these verbs consists in sometimes applying their spatial motion meaning to an exclusively temporal representation. In fact, even when the former is the focus the latter is also involved, for any spatial dislocation takes time. This is visible for ben 'come' in the second relative clause in (144), from Santiago, as well as in (145), from São Vicente; both mainly relate to a spatial motion, although they include a temporal import. In the first, a female teacher is speaking about the bigger number of students at her school now. In the second, another female speaker is telling about a male friend who her daughter has raised as her own son, and how they now have a room for him to stay at night.
(144) Ten kel ki ka studaba ki sata ben aula. (Daiana, Santiago) 3SG DET that NEG study:PAST that PROG come class Intended: 'There are those who didn’t study who are coming to school.'
(145) El ta ben durmí má nos. (Inês, São Vicente)

3SG TA come sleep with 1PL
'He comes [here] to sleep with us.' [in the house, to make them company]

This subsection is however about their more exclusive temporal interpretation, and a general remark at this point is about how, as temporal verbs, both ben 'come' and bá (bai) 'go' apply their typical spatial direction to temporal notions: the former means motion from a prior time towards the main reference time, often the time of speech (the main situation occurred between both), and the latter means motion from the main reference time up to the situation time. ${ }^{75}$ We may observe this temporal content in the next sentences: in (146)-(149) for ben 'come', and in (149)-(154) for bá 'go' (with (149) having one instance of each). ${ }^{76}$

In (146) the speaker is telling how she ended up having all those children (at another point she tells they are nine). ${ }^{77}$ In (147) the speaker is telling about the whereabouts of a man she knows.

75 For an approach to these verbs as temporal auxiliaries in Portuguese, see for instance Móia (2018). In future studies on this, crosslinguistic analyses are indeed needed, and not only with Portuguese-since we are dealing with time notions, not mere lexical properties of verbs.
76 We must note further that these verbs are also here dynamic verbs-therefore, any future studies willing to check their auxiliary status must confront them with cases like stá 'be', which reads as present in its bare form (see 4.1.3 for details).
77 Two different female speakers in this corpus report having had nine children, this one from Santiago (Aldina), and one from São Vicente (Inês).
(146) N ben ten tudu kes mininus.
(Aldina, Santiago)
1SG come have all these child:PL Intended: 'I ended up having all these children.'
(147) El ben konxê un brazilera [...] (Inês, São Vicente)

3SG come know one Brazilian:F
Intended: 'He ended up meeting a Brazilian [...].'

Also worth noting is that both these verbs may be used in different temporal combinations, depending on the point taken as a reference-and note that, as always, this reference time may be overtly specified or not. The sentence in (148) is an example of this for ben 'come'.

Asin dura, más kantu ben ta txobi, (Wosvaldo, Santiago)
so take.long but when come TA rain
txobi au menus fixi.
rain at least well
Intended: 'So it has taken a while, but when it came to raining, at least it has rained well.'

With the verb corresponding to 'go', two different forms are available: bai seems to me more frequent in spatial motion meanings, while bá may often appear in both spatial and temporal motion meanings. ${ }^{78}$ In (149) we have an example of both ben and bá.
(149) Si N ben fika xintadu, na un kabu más (Miguel, Santiago)
if 1 SG come stay seated at one point more
N ta paxona, N ta bá mori.
1SG TA depress 1SG TA go die
Intended: 'If I end up sitting all the time, at some point I will get depressed, I will die.'

Note that ben is not exclusive of past meanings and bá is not exclusive of subsequent meanings regarding the time of speech: this interpretation indeed happens, but the main reference time can be another point as well. In (149), above,

[^32]ben 'come' takes as its reference time this hypothetical time in the future (conveyed by the si-clause), with the time denoted by ta bá being subsequent to this.

In the next complex sentence, the speaker describes what happens to many young people on the island as a result of the lack of jobs.
(150) Ten kel ki ta viaja, [...]
(Daiana, Santiago)
have that who TA emigrate
ta bá fika un emigranti.
TA go become a emigrant
Literal: 'There is the one who goes abroad, [...] [and] becomes an emigrant.' Intended: 'There are those who go abroad, [...] who become emigrants.'

While the temporal meaning of the above sentence indeed involves a present generalisation about a subsequent condition of many people, the next shows a past environment for the same verb, uttered within (again) the narration of the speaker's adaptation process when he started high school.
(151) Foi un kozinha dur na inísie, (Firmino, São Vicente)

| was one bit |  | hard at | beginning |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| mas depos | N | bá ta | kustmá. |  |
| but afterwards | 1SG | go | TA | get.used |

Intended: 'It was a bit difficult in the beginning, but I later became used [to it].'

Another notion of interest here is that these predicates under ben 'come' or bá 'go' marked by ta may themselves convey either some development or some repetition. These embedded situations correspond to some common uses of the Portuguese gerund (with temporal idiosyncrasies of their own) which may be translated into English as 'go on doing something'. ${ }^{79}$ In (152) the speaker is telling how at a certain point, when he was living in Lisbon, many Cabo Verdeans used to go on Sundays to a certain city garden to meet family and friends, but then started avoiding it.

79 This correspondence of a verb marked with preverbal ta to the Portuguese gerund under a verb of motion may be illustrated in examples as (i) (for the last part of (151)), and (ii) (for (152)).
(i) Mas depois fui(-me) acostumando. (without the clitic in Brazil, with the clitic in Portugal)
(ii) Cada um (de nós) foi deixando de ir lá. (in both Brazilian and European Portuguese)
(152) Kada un bá ta fuji di bai lá. (José, Santiago) each one go TA run.away of go there Intended: 'Each [of us] went on avoiding going there.'

Both sentences below were uttered by the same speaker and illustrate again two temporal meanings for bá 'go'. The first is produced after she tells about some health issues and how, despite them, she feels not so bad.

```
(153) N ta bá ta vivê. (Inês, São Vicente)
    1SG TA go TA live
    'I go on living.'
```

The second follows the statement that she was 17 when she had her first child. ${ }^{80}$


Finally, the next set of sentences (two for ben 'come' and one for bá 'go') further confirm this relation between the meanings of these verbs when they are on their own-spatial motion-and when they are rather in the higher position in multi-verb constructions, where they involve a motion in time. In (155), the elderly lady is telling how at a certain point she needed to obtain the documents showing she had been a public servant (155a), which then granted her a pension (155b). Both have the lower verb in its participial form-they are (impersonal) passives, with the indirect object now moved to the subject position (as we saw in (132) and (133))-and the meaning of these lower situations is perfect regarding the main reference time, which is defined by the time of speech. But ben 'come' hints at another unspecified time in the past (note that this is unspecified when we take these sentences isolated, but these other reference times are generally clear in the discourse context-and this is in fact the case in this lady's interview), with the denoted situation occurring between both temporal points.

[^33](155) a. N ben fladu pa N trá tudu dokumentu. (Lurdes, Santiago) 1SG come tell:PART for 1SG take all document

Literal: 'I came to be told to arrange all the documents.'
b. N ben dadu un penson.
(Lurdes, Santiago)
1SGcome give:PART on pension
Literal: 'I came to be given a pension.'

The next sentence also has the participial form for the predicate embedded by the motion verb. But here this verb is bá 'go', which naturally reverses the motion regarding the main reference time as compared with ben 'come'-the reference time here is established by the situation in the temporal clause, and this is in the past. This sentence was uttered in a sequence where the speaker tells how in the old days young couples dated outside the house-na kaminhu 'on street'and then, how her boyfriend finally entered her family home to propose to her before her parents.
(156) Mas kantu dá kazu, N bá pididu (Aldina, Santiago) but when give case 1SG go ask:PART nha mai ku nha pai na kaza. PPOSS.1SG mother with PPOSS.1SG father at house
'But when it got serious, I went to be proposed [before] my mother and my father at the house.'

So here the reference time is defined by the 'get serious' situation, and the 'ask' situation occurs after that, hence the motion 'go' from the former to the latter. The general description of the temporal uses of the verbs above also applies to other uses where they may as well:
(i) occur sometimes as temporal verbs and other times as independent verbs;
(ii) be marked by various temporal morphemes in both cases;
(iii) select for a lower predicate whose verb is bare or rather marked by its own temporal morphemes, according to the meanings available for their combination (for the lower $t a$, both a subsequent meaning, as in (148), and a type of developing meaning, as in several other examples, are available);
(iv) the elements which, to my knowledge, never occur in the lower clause are an overt subject and the progressive morpheme as the one which appears in root clauses.

Table 11 summarises all the combinations of these verbs embedding a dynamic predicate.

Table 11: Functional morphemes and temporal interpretations available for predicates under two temporal verbs. These predicates denote dynamic situations and are never preceded by a connective. Neither the negation nor tava / -ba were illustrated here, but they are indeed allowed.

|  |  | subject | ka | bare | ta | sata / tita | tava /-ba <br> (for some meanings) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'come' | ben | no | yes | subsequent | developing/ | no | yes |
| 'go' | bá (bai) | no | yes | subsequent | subsequent developing/ subsequent | no | yes |

### 3.5 Concluding summary

This chapter has laid out, sometimes with more detail, sometimes more briefly, the embedded morphemes and temporal interpretations allowed under diverse subordinating predicates, some of them in combination with a connective, such as in complement clauses, relative clauses, and adverbial clauses, and others with no connective separating them from the lower verbs. The latter combinations were examined under the general label multi-verb constructions.

Besides these more descriptive goals, some sections in this chapter include further interesting details, which will be recaptured for the main discussions in the next two chapters: on the limits of finiteness, which is one of the topics in the next; and on the complexity of temporal relations in natural language, which is the topic of the fifth.

## 4 Tense

> This week will be like the week your mother disappeared, and your now dead uncle taught you multiplayer solitaire. Bet the money you saved in high school that you will hear the chains falling.
> Shauna Barbosa, in Strology Gemini, from her collection Cape Verdean Blues (2018)

Essential theoretical tools related to our temporal depictions of situations are examined in this chapter. This discussion starts with those tools that have been most useful for my main findings on Caboverdean so far (4.1), and the challenges encountered by finiteness as a core linguistic concept (4.2). The points regarding those language properties that still call for more satisfying answers will also be exposed (4.3), thus motivating the contents of the next chapter, just before a few concluding remarks are put together (4.4).

### 4.1 Meaning and morphology

This first section focuses on the expression of tense-the past, present, and future location of situations as they are voiced in natural language-without dedicated overt morphology. In 4.1.2 a summary of several approaches to tenseless languages is provided, and 4.1.3 registers my recent reasoning to claim that Caboverdean is one such language. Before these segments on tenselessness, though, another point from the literature is needed at this stage, for it lays some notions which are essential to what follows: a synopsis of Klein's system (4.1.1).

### 4.1.1 Times that matter

Klein (1994: 24) tells how Reichenbach (1947) elaborated on an older idea to establish those three times he considered relevant to the construction of temporal reference: (i) Speech Time (S); (ii) Event Time (E); (iii) Reference Time (R). Reichenbach never defined what his reference time is exactly, rather hinting that it means the time of another event in relation to which the (main) Event Time is defined. The proposal in Klein's works then clarifies this. He names this third time Topic Time and describes it as the "time for which the speaker wants to make an assertion" and which "can be given in different ways" (Klein 1994: 24). In this anew adapted model, the relevant three times are (in the same order as before): (i) Time of Utterance (TU), (ii) Situation Time (TSit), and (iii) Topic

Time (TT). In very simple terms, tense defines the location of TT in relation to TU, and the different orderings obtained correspond to (a) past, (b) present, or (c) future. Aspect defines the relation between TSit and TT, which can be of (a) precedence, (b) inclusion/coincidence, or (c) subsequence (the two words in this latter (b) express the aspectual distinction between imperfective and perfective, respectively). ${ }^{81}$ So, quite notably, "[what] TSit in a given utterance is, is only indirectly derivable to a lesser or greater degree of certainty-from the topic time, the nature of the lexical content, from the way in which lexical content and topic time are brought together, and finally from adverbials which can be used to enrich the lexical content" (Klein 1994: 37).

Klein also raises important questions about the notion Time of Utterance (e.g. given that the speech event itself takes time, what slice of it are we considering here?). If we take this TU as roughly corresponding to the (speaker's) present, its precise nature relates, as was said in chapter 1, to complex ideas in both the philosophical and psychological sense (as conception and perception are sometimes difficult to tell apart). Klein later suggests that it "should be replaced by the more general notion of clause-external temporal structure, to which situations described by a sentence can be linked" (Klein 2009: 48).

There is a multitude of ways to express the linkage between the lexical content and TT, and then between TT and TU, and Klein (1994) presents various examples of this complexity, for which some languages have morphological distinctions (these are typically from the Indo-European family) and others do not. And so, given that he is talking about language universals, when he defines tense in the terms pointed out above, he refers to the relation itself (tenses are "abstract temporal relations"; Klein 1994: 123), not to morphological verb markings. In another work he even states that tense, in the sense of verbal inflection, "is not only to be separated from time-it is not even a [sic] particularly important for the expression of time. Many languages do not have it at all, and in those languages that do have it, it is largely redundant" (Klein 2009: 43). ${ }^{82}$

[^34]
### 4.1.2 Tenseless languages

Tenselessness is here taken as the lack in a given language (or clause) of dedicated grammatical markings for that relation between TT (topic time) and TU (time of utterance). This is in line with most studies on this issue, which thus defend the absence of tense morphemes without defending that a tense meaning, in the above sense, is also absent from those languages (there is at least on exception, though). ${ }^{83}$ In the same manner, tenseless languages (at least) are able to express aspect, the relation between TSit (situation time) and TT (topic time), through an array of lexical items.

In fact, besides the acknowledgement in Comrie (1976: 82-84; 1985: 50-52) that some languages lack grammatical markings for tense, which he illustrates with Igbo and Yoruba (Comrie 1976), and then with Burmese and Dyirbal (Comrie 1985), several more detailed analyses for other tenseless languages have emerged in the past decades. Among others, this is the case of: Li \& Thompson (1981: 213-215) and Lin (2003, 2011) on Mandarin (Chinese, China); Bohnemeyer (2002, 2009) on Yucatec (Mayan, Mexico); Bittner (2005) and Shaer (2003) on Kalaallisut/West Greenlandic; Ritter \& Wiltschko $(2005,2009,2014)$ on Blackfoot (Algonquian) and Halkomelem (Salish); Matthewson (2006) on St'át'imcets (Lillooet Salish); Tonhauser (2011) and Pancheva \& Zubizarreta (2019a, 2019b) on Paraguayan Guaraní (Tupí-Guaraní); Mucha (2013) on Hausa (Chadic, AfroAsiatic).

Nevertheless, the exact notion of tenselessness differs among these works, and what is relevant to briefly summarise here is how each of them accounts for this absence of overt morphemes dedicated to express tense in the languages they focus on. The rest of this subsection does just this.

Li \& Thompson (1981: 213-215) note that although some events marked with -le have a past interpretation in Mandarin, -le is not a past tense marker.

[^35]Lin (2003, 2011) defends also for Mandarin that it "essentially uses aspectual information, temporal adverbials, discourse anaphora, individual lexical items and pragmatic reasoning to determine the temporal reference of a sentence" (Lin 2011: 681). According to him, some Mandarin sentences with a future interpretation are like English futurates (in the sense of Copley 2009), which is "about the present rather than the future" (Lin 2011: 689). The modal hui 'will', on the other hand, is used when a future sentence is not about a planned or scheduled event. The author also clearly observes that there is no finite/nonfinite distinction in Mandarin, which "can be attributed to the lack of a syntactic T node" (Lin 2011: 679).

Bohnemeyer (2009) confirms his conclusion from prior works that Yucatec is a tenseless language and uses no tense morphemes but rather five sources of overtly expressed temporal information: lexical items, status and aspect markings, adverbials, connectives, and nominal suffixes. He defends that the language has nevertheless temporal anaphora-which thus do not depend on tense morphemes (cf. Partee 1973). As for the distinctions between past, present, and future interpretations, he proposes a realis/irrealis mood contrast, "where realis mood includes reference to individual present or past events, the irrealis future time reference, and habitual and generic reference may be subsumed under either category depending on the construction" (Bohnemeyer 2009: 93).

Shaer (2003) proposes that Kalaallisut sentences with no temporal morphemes receive either a past or a present interpretation. Bittner (2005) agrees with him that the language is indeed grammatically tenseless, and that it has an "alternative system" to convey temporal information, "even about the future, as precisely as the English tenses" (Bittner 2005: 359), despite the wide diversity of morphemes which may be used in the expression of future interpretations.

Ritter \& Wiltschko (2005) are concerned with the universal principle that all "events must be anchored to the utterance or some other salient reference point" (Ritter \& Wiltschko 2005: 343) and investigate how two tenseless languages do that anchoring without the syntactic category tense. They propose that in Halkomelem anchoring proceeds spatially via a dedicated syntactic category and its spatial arguments, and that in "Blackfoot event anchoring proceeds via participants of the utterance (or discourse) and event (i.e., via nominal arguments)" (Ritter \& Wiltschko 2005: 344). The authors associate the future with irrealis, and further specify that the future "introduces a modal component (Enç 1996), which can be interpreted as assertion of non-coincidence between
event world and utterance world" (Ritter \& Wiltschko 2005: 343, fn. 2). ${ }^{84}$ In Ritter \& Wiltschko (2009, 2014), they explore the properties of the universal category INFL in clauses and languages where it has no variable substantive content (it is then "associated with temporal, spatial, or participant marking"; Ritter \& Wiltschko 2014: 1331).

Matthewson (2006) rather defends that St'át'imcets is only superficially tenseless, since every finite clause takes a phonologically covert tense morpheme which restricts the reference time to the past or the present (so it behaves as a non-future marker). Future and conditional interpretations are obtained by the combination of that covert tense with a modal operator analogous to Abusch's (1985) 'woll', instantiated in this language by the overt morpheme kelh-since this operator needs to be anchored to some given tense, it is also presented as a proof that tense exists in the language.

Tonhauser (2011) demonstrates the advantages of a tenseless analysis of Guaraní, whose temporal reference is "anaphoric to a contextually given antecedent reference time, just as in tensed languages like English" (Tonhauser 2011: 300). In "matrix clauses, only context and (optional) temporal adverbials constrain temporal reference", and they "are interpreted at past and present reference times, except" in two constructions where "absolute future antecedent reference times are made available" (Tonhauser 2011: 297). As for the temporal reference of subordinate clauses, it "is affected by the subordinating constructions" (ibid.). The future "is realized almost exclusively by the eventuality time option, i.e. with expressions that temporally locate the eventuality time in the future of the present reference time" (Tonhauser 2011: 288).

Mucha (2013) claims that in Hausa temporal reference is pragmatically inferred from aspectual, modal, and contextual information. Special attention is also given to the future time reference, which the author proposes is "realized as a combination of a modal operator and a prospective aspect marker, involving the modal meaning components of intention and prediction as well as event time shifting" (Mucha 2013: 371).

Finally, Pancheva \& Zubizarreta (2019b) advance the more distinct view of tenselessness among these, which goes beyond the inexistence of overt or cov-

84 I am unsure whether the authors use 'assertion' in the same sense as it appears in Klein's works, where 'assertion' is related to main declarative clauses, finiteness (FIN-time), and the Topic Time (TT); main non-declarative clauses, such as imperatives, and all types of subordinate clauses are excluded from this notion of assertion (infinitives then have INF-time, as corresponding to TSit, and in finite subordinate clauses FIN-time is unspecified, meaning that it "is not the time for which an assertion is made" Klein 1994: 219). (this note here is about the ambiguous use of 'assertion' in the literature, which will be discussed again later).
ert tense markers. They propose that in Guaraní "temporal interpretation is achieved without evoking a reference time" (Pancheva \& Zubizarreta 2019b: 1). Future meanings are resolved through the prospective aspect marked by -ta, which "has no connection to tense" (Pancheva \& Zubizarreta 2019b: 9). They also establish a bridge between deictic notions related to temporal interpretation and a demonstrative morpheme used to refer objects that are close to the speaker-therefore establishing a parallelism between space and time notions which have the speaker at their centre.

Interestingly, most of these studies explicitly take into account the relevance of finite clauses in the languages they work with, the only exception being Lin (2011) for Chinese. As far as I understand, however, when these other works allude to finiteness, they are considering the above-mentioned notion of anchoring. This concept is discussed in the next section, and again in the next chapter. Before that, next subsection recounts the essentials about the prior stages of my current study.

### 4.1.3 Perfect, progressive, habituals and predictions

In the first stages of my studies I was particularly concerned with the past interpretation of the bare forms of dynamic verbs, and a focus on aspect was naturally an area to be explored (4.1.3.1). The following stage has been about whether tense is or not grammatically marked in the language (4.1.3.2), and then the preverbal morpheme $t a$ has also lately been accounted for (4.1.3.3.). Finally, once all these other puzzles were resolved, the core questions about tense (concerning morphology and meanings) returned (4.1.3.4), and they are basically what has paved the way to the wider approach intended for this monograph.

### 4.1.3.1 The perfect and the progressive

My first take on the system of tense, aspect, and mood in the variety of Santiago already pointed up its compositional scheme: "in most Caboverdean phrases, Time and Aspect, as well as [Mood], are not exclusively guaranteed by functional morphemes, but are derived from interaction of different items, such as the verbs [...], adverb expressions, temporal clauses and discursive information, which work together and condition all meaning" (Pratas 2007: 43). ${ }^{85}$ More spe-

[^36]cifically regarding their syntactic status, the proposal was that those functional morphemes were heads, appearing in adjunction under the label T, for 'temporal'. This decision was motivated by how hard it was then to define the values for each morpheme: sata seemed clearly an aspect marker, and ta looked more like a modal element. As for -ba, given that it was often associated with some past clauses, it could be a tense marker (for past); but it participates in temporal meanings that are different from past, it also shows up in what looked like infinitives, and there are some past meanings obtained in its complete absence. And so things got a bit more muddled.

The interpretation of the bare form of all dynamic and all stative verbs was developed in my following works, which at first reinforced the need for a zero (or null) morpheme-in combination with different predicates, it had a perfect interpretation. The bare forms of verbs previously viewed as simple past could then start to be represented as for instance $N ø$ kume pexe, with the English equivalent '[now] I have eaten fish' (Pratas 2010: 229). ${ }^{86}$ Note that the Portuguese translation, Eu comi peixe, is itself traditionally described as 'simple preterit perfect'-it also (along with the Caboverdean version) contains no auxiliary for this perfect interpretation but is (unlike Caboverdean) marked by overt verbal morphology.

It is also important to note that in these proposals following my dissertation I have always assumed that the salient Caboverdean opposition regarding grammatical aspect is, as was said above, the progressive vs. the perfect, rather than the imperfective vs. the perfective (Pratas 2012, and mainly 2014a). The progressive and the perfect are here seen as semantically complex categories involving certain temporal characteristics (see Smith 1997 on this, and also Klein, who says: "But if the perfect is also an aspect, it cannot be on a par with the perfective and the imperfective aspect, because these are found within the perfect"; Klein 2009: 54).

And so the following relations between TSit and TT may be derived:
(a) the bare verb form expresses TSit as preceding TT-a perfect meaning;
(b) with a progressive morpheme, TSit includes TT.
mood (MoodP) and tense (TP). There is however an incoherence between the data descriptions in her chapter 4, showing the various interdependencies of verbs and different functional morphemes, and the diagrams in chapters 6 and 7, which lack empirical support. The author's claim on verb movement in the language was also disputed in Pratas (2004, 2007).
86 As was said earlier, a null perfect analysis has also been advanced in van de Vate (2011) for Saamáka. See Pratas (2012: 79) for a review of the differences between the two accounts. Under my current perspective, however, a null entity to guarantee the perfect meaning is entirely unnecessary, given the constellation of factors which are responsible for this interpretation.

Two different states, which still hold at TT, ensue from the prior situation in (a):
(i) one is a resultant state, "an abstract state of the event's 'having occurred'" (Portner 2011: 1230); more specifically, we have a "post-time of the situation described by the predicate", as in Klein (2014: 962). In Caboverdean this is what we get with all dynamic predicates and with some types of statives (including all instances of kridita 'believe' or gosta 'like')-note that according to the predicate in question this resultant state (post-time) of the situations depicted by the predicates has different implications regarding the current state of affairs, which does not interfere with the temporal interpretation at stake here: the time of the situation, TSit, is prior to the topic time, TT. Moreover, for reasons related to their inherent stativity, predicates like kridita na Dios 'believe in God' are compatible with this perfect meaning-in their bare forms, they denote a situation prior to TT-but incompatible with the progressive, which is in compliance with a crosslinguistic restriction about many statives. As for the morpheme which adds a habitual, generic, or subsequent meaning to dynamic predicates, with these statives it either reinforces their already imperfective value or just adds a subsequent meaning.
(ii) the other state is a result state, which is part of the situation structure (Moens \& Steedman 1988; Smith 1997). This is what we get with some other statives, like stá duenti 'be sick' (stage-level), é altu 'be tall' (individuallevel), some instances of sabi/sabê 'know', ${ }^{87}$ and some instances of the modals debi/dvê 'must' and podi/ podê 'can'. In this case, we have the intuition about a past resultative situation of the type 'get sick', 'get tall', 'get to know', 'get an obligation', 'get permission', the aspectual interpretation being directly anchored to their result state (so their complex TSit has such a stage that includes TT); the impossible combination of these predicates with the progressive follows from this depiction of the situation as a result state. ${ }^{88}$

87 Depending on the context, sabi/sabê may mean 'know' (a state) or 'get to know' (a dynamic situation). In the former meaning we have a complex situation structure which includes a past subevent, 'got to know', plus its result state, to which the temporal interpretation is anchored.
88 Recall from last chapter that the nonepistemic podi/podê shows distinct requirements regarding temporal morphology according to its meaning: in the 'have permission' meaning, its bare form means present; in the 'capacity'/'ability' meaning, the present requires preverbal $t a$. This distinction is also active in the past: in the 'have permission' meaning, in Santiago we have podeba, in São Vicente we have pudia, a suppletive form from the Portuguese past imperfective podia; the 'capacity'/'ability' meaning has morphemes associated with some past habituals in each variety, ta podeba in Santiago and tava podê in São Vicente. This distinction hints at a crosslinguistic analysis of this modal, taking the 'have permission' meaning as more clearly a stative and the 'capacity'/'ability' meaning behaving more as a dynamic predicate.

### 4.1.3.2 When the topic time differs from the time of utterance

The above analysis of the bare forms still included the view of the affix -ba, in Santiago, as a past tense morpheme (so marking a TT prior to TU), but this left unexplained the many clauses where -ba appears which (i) do not have a past meaning, or (ii) correspond to nonfinite verbs in other languages.

In more recent works the notion of tenselessness-in the grammatical sense referred above-has brought about some developments. As we saw in subsection 4.1.2, in natural language past, present, or future meanings of a sentence may be expressed without any dedicated tense morphemes, and this is defended by various authors for numerous members of different language families.

And we saw in chapter 1 that Comrie suggested how we should proceed in order to know whether a language is tenseless: "we would look at a particular form in a language, decide whether it does in fact express location in time and whether it is indeed a grammatical category, and then pronounce it to be tense or not" (Comrie 1985: 9). My latter hypothesis is therefore that -ba in Santiago and tava/tá in São Vicente are indeed grammatical categories, certainly associated with temporal meanings, but fail some diagnostics as tense markers. This was explicated in Pratas (2018a), as follows.

First consider the examples given in chapter 2 to illustrate the most common temporal values in root clauses, here repeated for convenience.
(47) progressive in Santiago
a. Kabu Verdi sata dizenvolvi ben.
(Daiana)
Cabo Verde Prog develop well
'Cabo Verde is developing well.'
b. Na prinsípiu N ka sata konsigiba [...]
(Sandra)
at beginning 1 SG NEG PROG succeed:BA [...]
'At the beginning I wasn't succeeding [in making corn pastries].'
(48) progressive in São Vicente
a. N tita falo-b d nha rialidad. (Firmino)

1SG PROG speak-2SG of PPOSS.1SG reality
'I am telling you about my reality.'

[^37]b. Inda el tava ta trabaiá.
still 3SG TAVA TA work
'She was still working.'
(49) bare form in Santiago

N duensi.
1SG get.sick
Intended: ‘I got sick.’
(50) bare form in São Vicente

N pasá un one sen traboi.
1SG spend one year without work
Intended: 'I spent a year unemployed.'
(51) ta in Santiago

N ta vendi tomati, alfasi ku pepinu.
1SG TA sell tomato lettuce with cucumber
'I sell tomatoes, lettuce and cucumbers.'
(52) ta in São Vicente

Senpr N ta stimulá nhas alune. (Liziane)
always 1SG TA stimulate PPoss.1sG.PL student
'I always encourage my students.'
(53) $t a+-b a$ in Santiago

N ta pasaba difikuldadi. (Sandra)
1SG TA go.through:BA difficulty
'I used to go through hard times.'
(54) tava (or tá) in São Vicente

No tá intxí korr ku kes produt. (Firmino)
1PL tava fill car with those product
'We used to fill the car with those products [to distribute].'
(55) past before past in Santiago: bare form + postverbal -ba

Nu moraba lisin, sin. (Miguel)
1PL live:BA right.here, yes
Intended: 'We had lived right here [in the old days].'
(56) past before past in São Vicente: tinha (suppletive form from the Portuguese 3SG of the past imperfective of ter) + participle

Kel dia papá tinha dod mi sen skud. (Firmino)
that day dad had give:PART 1SG 100 skud
'That day my dad had given me 100 skuds.'

If we take the meaning of past tense, as in Klein's system, to order TU after TT, it could be argued that in many clauses Santiago -ba indeed resembles a tense marker (as was still defended in Pratas 2012, 2014a). The contribution of São Vicente preverbal allomorphs tava/tá seems however less straightforward, given that it marks more than just the order of TU regarding TT. But at least the case of -ba had to be addressed, and so my focus shifted to the reasons against its status as a tense marker.

The first argument is not terribly impressive. It is true that these morphemes are unneeded when a past situation is expressed through the perfect interpretation of bare dynamic predicates, as is the case of (49) and (50) for Santiago and São Vicente, respectively. Nevertheless, although the relevant situation in those sentences indeed occurs in the past (TSit is prior to TU), according to my own proposal the underlying temporal reference is present (TT coincides with TU)this is after all the idea of the 'perfect' label to account for these.

There is nonetheless a much stronger argument, as was already noted above: Santiago -ba occurs in clauses where it conveys no past meaning, namely in many embedded predicates, be it under modals or many other verbs. Observe the examples below, repeated from chapter 3.
(122) E kreba serba nha mos. (elicited, Santiago; adapted 3SG want:BA be:BA PPOSS.1SG boy from Pratas 2007) 'He wanted to be my boyfriend.'
(125) N prumeteba ka fazeba batota. (elicited, Santiago; adapted 1SG promise:BA NEG make:BA cheating from Pratas 2007) 'I had promised to not cheat.'

Given that these embedded predicates with -ba seem to have a modal mean-ing-nothing is said about whether, or when, these lower situations occurred-it could be argued that what we have here is a mood agreement morpheme. But a problem to this hypothesis is the absence of this morpheme from other contexts whose embedded situations are also unproven, like some (future) conditionals. An alternative to this would thus be that $-b a$ is rather some kind of temporal agreement (as superfluous as morphological agreement for person and number seems to be in other languages) associated with some past environments. In fact, some complex sentences-as the ones in (122) and (125), above-have these lower nonpast instances of - $b a$ associated with past main clauses, which by the way typically belong to an adequate linguistic sequence.

Now recall what Klein says about grammatical tense: "[m]any languages do not have it at all, and in those languages that do have it, it is largely redundant" (Klein 2009: 43). And it is within Sigurðsson's (2011, 2016) assumptions, regarding language uniformity and diversity in the light of recent developments of the minimalist program, that "[universal grammar] is maximally minimal" ("language variation is mainly or entirely confined to externalization"), and "morphological processes such as agreement" occur "in the externalization component" (Sigurðsson 2011: 189). And so at some point it reinforced my idea for this morpheme: given that it fails to encode the past meaning itself, it must be a post-syntactic phenomenon, a kind of temporal agreement with past, which was itself supplied by other means. The same reasoning would hold for preverbal tava/tá in São Vicente, considering the specifics of the diachrony of ta (see section 2.3.2 $)^{89}$ and the fact that tava/tá, too, is used in contexts which have no past meaning. We may observe this for each morpheme in examples from chapter 3.
(83) Si N ka staba na Sal, N staba na Praia. (Miranda, Santiago) if 1SG NEG be:BA in Sal 1SG be:BA in Praia 'If I wasn't [now] in Sal, I would be in Praia.'

89 Recall from chapter 2 that the Santiago verbal affix -ba might be lost when the language spread from the southern islands (Swolkien 2015: 233 fn .82 ). As was also pointed out in chapter 2, the northern islands' tava (and then tá) was derived by analogy with the Portuguese first/ third persons singular/past imperfective of estar (estava) and is now multifunctional, associated with distinct past environments: (i) in past habituals (tava/tá +V ), and (ii) as the reinforcement of past progressives (tava/tá $+t a / t e+\mathrm{V}$ ). This is a case of microvariation perfectly aligned with the Borer-Chomsky conjecture (Baker 2008), in that we have distinct morphological forms expressing the abstract properties of equivalent lexical items, although these properties may combine in one of the forms. And, again, this is also in line with the view in Labov (1969 and subsequent works) that language variation involves different ways of saying the same thing.
(84) S tud jent tava vivê sima mi, mund era dret. (Inês, São Vicente) if everybody tava live like 1SG world were right 'If everybody lived like me, the world would be right.'

Next subsection sums up my complete account for the correspondence between different morphemes and temporal interpretations (as in Pratas 2018a, 2019).

### 4.1.3.3 Habituals, generics, and predictions

The proposal presented here includes all these other contexts that are not unambiguously about the past, as well as another crucial level: a realis vs. irrealis distinction, as was defined by Comrie (1985).
[...] 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.

Comrie (1985: 45)

So there is this distinction in Caboverdean between realis and irrealis, and it is within realis that we find that opposition between the perfect and the progressive described above. As for the preverbal morpheme ta, it is associated with irrealis, occurring in subsequent meanings and also in habituals (see Suzuki 1994 for a similar proposal), which can be viewed as "inductive generalizations". ${ }^{90}$ From this point of view, all the meanings of Santiago ta in root clauses are nicely arranged under this value: habituals (past and present), and subsequents (or conditionals, including some counterfactuals), whose interpretation is mainly distinguished from the habitual by the discourse environment, but occasionally also by adverbials pointing to a later situation time (manhã 'tomorrow', simana ki ta ben 'next week', dia siginti 'the following day', and so forth).

[^38]Therefore, $t a$ is not a tense marker (like meaning non-past) as was proposed in Silva (1985), since it also occurs in past constructions. This was well noted in Baptista (2002). But Baptista, on the other hand, proposes that ta also marks realis, and with this she means habituals (Baptista 2002: 79-80); just to make things clear, however, modern $t a$ in root clauses fails to mark realis, in Comrie's sense. For realis in this sense-"situations that have actually taken place or are actually taking place"-there are the perfect and the progressive, as said above.

At this point we may go back to the ordering between TT and TU, which in Klein's model defines tense meanings. So in Caboverdean, when no other information is given, we have the same relation of coincidence for dynamic predicates in root clauses: (i) habitual, as marked by $t a$; and (ii): (a) perfect, with the bare verb, or (b) progressive, as marked by sata/tita. The different temporal interpretations are entirely derived from properties related to aspect: in the perfect, TSit precedes TT, hence the situation has occurred also before the time of utterance (this is why this situation itself is interpreted as past); as for the habitual and the progressive, TSit includes TT, which means that it also includes TU (and thus the situation itself is interpreted as present).

Note that there are more subtle differences among the imperfective mean-ings-the progressive and the habitual or the generic-which lie in the specific nature of the relation between TSit and TT: in the progressive, we have an ongoing dynamic situation at TT; in the habitual or the generic, what is coincident with TT is a (stative-like) situation presented as a kind of property or generalisation, not any instance of the dynamic situation specifically located in time-this is coherent with the irrealis nature of these combinations. ${ }^{91}$ As was said earlier, in certain cases irrealis allows for the situation to be depicted as subsequent (with different commitment degrees from the speaker); in this case TSit is after TT (and so of course after TU), which corresponds to Klein's prospective aspect (a strategy also attested for other languages, as we saw in 4.1.2).

[^39]This distinction is motivated by Comrie's definition, and coherent with other authors' proposals as well. True, these other authors consider a realis/irrealis contrast as belonging to mood, while here it mainly helps organise temporal depictions and make sense of their morphological markings. Anyhow, the concrete combinations that fall on the irrealis side are in line with others (not all, though) assumed in the literature. The habitual, generic, and future in Yucatec Maya has similarly been identified with irrealis (Bohnemeyer 2009: 108). In their paper about Yurakaré, an unclassified language of central Bolivia, van Gijn \& Gipper (2009) also point out that, in some languages, like the one they are studying, the habitual is part of the irrealis category. They mention "Givón's (1994: 270) observation that both habitual and irrealis are temporally nonspecific", which leads them to considering "the habitual to be of hybrid modality, combining realis features (actual occurrence) with irrealis features (nonreferential and temporally unspecific)" (van Gijn \& Gipper 2009: 172-174). And they observe that "other authors have found other correlations, mainly between irrealis and the imperfective aspect, of which the habitual is a subcategory." Chung \& Timberlake (1985: 241) for instance affirm that "languages differ significantly as to which events are evaluated as actual (and expressed morphologically by the realis mood) vs. non-actual (and expressed by the irrealis mood)." For a more recent typological perspective see also Timberlake (2007).

And we can refer Comrie (1985) again, this turn to illustrate this crosslinguistic variation: "[in] Dyirbal, present habitual is expressed using the irrealis, whereas in Burmese it is treated as realis" (Comrie 1985: 51). Finally, also Palmer (2006) briefly points out that the (past) habitual is marked as irrealis in Bargam (Papuan): "It is only simple statements (assertions) about present or past actions that are always realis" (Palmer 2006: 168).

### 4.1.3.4 Back to tense

Resuming the description for Caboverdean, now is the time to point out that all these combinations (including the perfect) can be shifted into a past interpreta-tion-so we are speaking about tense meanings here-for which all sentences need (as was stated above) the adequate linguistic information, since in its absence an interpretation where TU and TT coincide is the logical one.

As was summarised earlier, this is generally in line with some proposals for tenseless languages, and makes sense for tensed ones as well. In Guaraní, temporal reference is "anaphoric to a contextually given antecedent reference time, just as in tensed languages like English" (Tonhauser 2011: 300, from 4.1.2). The author defends that in "matrix clauses, only context and (optional) temporal adverbials constrain temporal reference." As for the temporal reference of sub-
ordinate clauses, it "is affected by the subordinating constructions" (Tonhauser 2011: 297). Also Mandarin "essentially uses aspectual information, temporal adverbials, discourse anaphora, individual lexical items and pragmatic reasoning to determine the temporal reference of a sentence" (Lin 2011: 681, also from 4.1.2). And, to mention just another one, Yucatec uses five sources of overtly expressed temporal information rather than tense morphemes: lexical items, status and aspect markings, adverbs, connectives, and nominal suffixes (Bohnemeyer 2009, as was mentioned in that same subsection).

But besides the distinguishing details in other layers of these analyses, which we can skip for now, in Caboverdean we still need to account for those morphemes that are (only) sometimes inserted in association with this mean-ing-and this is crucial here.

My most recent view on the nature of these lexical items/functional morphemes, inspired by different claims in the literature that are here put together, is much more rewarding than taking them as a type of temporal agreement (see 4.1.3.2). This novel approach indeed accounts for all the observed phenomena, offering an elegant solution to the questions that were left unanswered in my previous attempts. It will be discussed in the next chapter, and for now its grounds are established from this conclusion to my previous works: the morphemes associated with the past versions of the different meanings-so past habituals, past progressives, or past perfects-cannot indeed be tense markers, because of some other environments in which they also appear. In fact:
(i) they may occur in simple or complex sentences which certainly have no past meaning, as we see in the new example of a root clause in (157), but also in the conditional sentence (84), repeated from chapter 3;
(ii) one of them (at least) may be repeated in the same sentence, also marking lower verbs that in other languages correspond to nonfinite forms, as we see in (158); and, moreover,
(iii) this same form may occur in lower clauses whose embedding verb is itself unmarked with -ba, and for this we have again (158)-bá panhaba; podi viveba-and the example (110) repeated from chapter 3-krê studaba.
(157) N kreba tres pedra di jelu na nha uiski. (Brüser et al. 2002: 269) 1SG want:BA three stone of ice in my whiskey 'I wanted three ice cubes in my whiskey.'
(84) S tud jent tava vivê sima mi, mund era dret. (Inês, São Vicente) if everybody tava live like 1SG world were right 'If everybody lived like me, the world would be right.'
(158) É pa nu bá panhaba lenha na txada, (Aldina, Santiago) be for 1PL go catch:BA firewood at woods pa nu vendeba, pa nu podi viveba. for 1PL sell:BA for 1PL can live:BA '[our work was hard in those days] It is for us to go fetch firewood in the woods, for us to sell, so that we could live.'
(110) N krê studaba es anu (Edson, Santiago)

1SG want study:BA this year
mas djá tenpu stá un bokadinhu pertadu.
but just time be one little tight
Intended: 'I wish I had studied this year, but there is no time for that.'

The two latter examples, which illustrate the contexts pointed out above in (ii) and (iii), are from what is still the better documented variety (Santiago), but the corresponding combinations and their effects will soon be examined also for others, keeping in mind that this proposal must include all the allomorphs for the same lexical item-another variant available, although less frequent, is -se, in Santo Antão (a variety not extensively studied here), as mentioned on chapters 2 and 5. Note also that, as was referred before, in São Vicente some suppletive forms from Portuguese verbs, such as tinha 'had' + the verb participle (for past perfect), are used in other combinations where Santiago has -ba.

The following tables (Pratas (2018a: 119; 2018b) illustrate all these relations.

Table 12: The different layers of values, also with the temporal -ba (Santiago)

|  | realis |  | irrealis |
| :---: | :---: | :---: | :---: |
|  | perfect | progressive | habitual, generic, or subsequent |
| TU coincides with TT | ```V (present perfect) (49)``` | sata V <br> (present progressive) $(47 a)$ | $t a \vee$ <br> (present habitual or subsequent) (51) |
| TU is after TT (provided by the discourse context) | V-ba <br> (past perfect) (55) | sata V-ba <br> (past progressive) (47b) | ta V-ba <br> (past habitual or condi- <br> tional) (53) |

Table 13: The different layers of values, also with the temporal tava/tá (São Vicente)

|  | realis |  | irrealis |
| :---: | :---: | :---: | :---: |
|  | perfect | progressive | habitual, generic, or subsequent |
| TU coincides with TT | v <br> (present perfect) (50) | tita/tite V <br> (present progressive) <br> (48a) | $t a \vee$ <br> (present habitual or subsequent) (52) |
| TU is after TT (provided by the discourse context) | tinha + participle (past perfect) (56) | tava or tá + <br> ta or te V <br> (past progressive) <br> (48b) | tava or tá V <br> (past habitual or condi- <br> tional) <br> (54) |

So this is the language-internal account that underlies the wider proposal in this monograph. ${ }^{92}$ And it is indeed this account that raises some interesting questions to which the current more extended, more integrated analysis tries to provide a satisfactory answer. As a side note, the morpheme ta is from now on glossed as IRR, for irrealis. As for - $b a$, as well as the more complex tava, they still stay as BA and tava in the glosses until 5.3.2, after their meaning is entirely captured under my current account.

### 4.2 The limits of finiteness

This section is devoted to discussing the role of finiteness in the expression of temporal meaning, with an emphasis on the disappointing results when we try to entirely grasp this obscure entity. To this end, 4.2.1 comprises some generalisations about finiteness in recent literature, and 4.2.2 organises specific empirical challenges that Caboverdean also poses to this linguistic concept.

[^40]
### 4.2.1 Tentative definitions

A consensus regarding what finiteness is exactly is still far from materialising, with most explanations so far being insufficient or contradictory. ${ }^{93}$

The list of criteria to talk about finiteness in Klein (2006) starts with how, at the very beginning, there were Latin verb inflections. This advent of the notion of finiteness as motivated by the study of Latin is reviewed in Nikolaeva's (2007) introduction, and McFadden \& Sundaresan (2014: 2) also discuss it. We can then safely conclude that this powerful old language was at the inception of the concept, but the fact that we know where it comes from is no guarantee that we know what it is. Klein indeed points out right at the opening of his paper that "[as] so many other concepts from our grammatical tradition, the notion of finiteness is used by everybody and understood by nobody", and the introductory chapter in Eide (2016) also mentions how several other contemporary authors speak of finiteness as a poorly understood category.

Most attempts to grasp what finiteness is today often resort to describing how it shows up, and two of its popular potential carriers are tense and agreement morphological markings. Eide (2016: 2) states that "[tense] typically pairs up with agreement in many well-studied languages, and to date the most widespread diagnostic for finiteness (especially within formal approaches) is the presence of morphologically expressed tense and agreement features on the verb." But, as she also observes, problems ensue regarding even languages for which this has been proposed: some non-tensed verbs have tensed interpretations (e.g. Wurmbrand 2014), some tensed verbs have tenseless interpretations, like imperatives (e.g. Holmberg \& Platzack 1995: 23), and for instance Portuguese displays agreement on infinitives (which have been analysed by several authors over the past decades, e.g. Gonçalves et al. 2014, Ambar \& JiménezFernández 2017, and Martins 2018, amongst the most recent works).

Moreover, those morphological markings for finiteness relate to a common consideration that nonfinite verbs look less verbal, rather being more nominallike or adjectival-like. And here we get to another bit of confusing information: modern works on nominals show they may have a kind of tense, expressing this overtly in some languages much in the way that some verbs do. In fact, according to studies such as Lecarme (1996 and following works), Nordlinger \& Saddler (2004), and Tonhauser $(2006,2020)$, the notion of tense goes way beyond

[^41]the verb, which challenges even more those traditional connections between tenses, agreement, and finite verbs.

Nevertheless, since in the languages that were studied first (which, for this mere arbitrary reason, were elevated to the status of determining what is canonical and what is not) there are morphological markings associated with finiteness, all languages nonconforming to those descriptions must endure the extraburden of explaining why they are special, exotic, and so forth. More recent studies have been proving that some of these languages indeed enjoy a happy life without most of those verbal properties, rather displaying other strategies for anchoring the situations denoted in their clauses. We will soon be back to the notion of anchoring, which is of greatest importance here when taken at the level of meaning, not finiteness. But first we need to list other overt indicators that have been recently proposed for some non-European languages.

In Eide (2016: 3) some of these forms are mentioned: "a range of languages clearly depend on other overt grammatical features for expressing finiteness, e.g. mood (Holmberg et al. 1993), but also mood and negation markers (Amritavalli 2014) or even spatial markers or participant markers (Ritter \& Wiltschko 2005, 2009, 2014)." And Tonhauser (2011) claims that "a finite clause is one that contains a fully inflected verb. Since Guaraní verb stems are obligatorily inflected only for person/number information, finite clauses in Guaraní are those that can be headed by such verbs" (Tonhauser 2011: 270 fn . 9). And so we still face a matter of morphological markings, although they have meanings different from tenses (it must be so, for the latter works deal with tenseless languages)-which at least finds room for a broader crosslinguistic variation.

In a parallel with morphological markings and the arguably related syntactic restrictions, other diagnostics for finiteness have been used. One of them is that only finite clauses may be independent. But this rule only operates in this direction, thus overlooking the fact that, in those languages which show clear finiteness markers, a good deal of dependent clauses are finite as well: this is the case with a great deal of complement, relative, and adverbial clauses. So the descriptive potential of this relation brings no solution whatsoever for the main question of what finiteness is, the only interesting part of it being that "the focus shifted from analysing finiteness as an inflectional feature of the verb to viewing it as a more abstract category belonging to the clause as a whole" (Eide 2016: 3).

Other studies have skipped a binary nature of the properties for finiteness, proposing a scalar approach instead. Under this view, different languages-or some sentences within one language-may display various degrees of finiteness, for instance by exhibiting a smaller number of its typical markings. And
here we get other notions such as more or less defective clauses, as opposed to full, finite clauses. But again, we may easily get trapped in a long list of small properties whose precise relevance takes us to circular reasonings rather than leading us to any adequate explanation. This is so because the scalar approach not only still uses a view of finiteness as morphological signs, it also seems to get lost within the search for an underlying property that motivates these overt manifestations. In other words, what does it mean for a clause to be partially finite? What underlying property does it only partially possess?

Summing up, after struggling for many years to understand which adjustments had Caboverdean undergone so that most of its sentences were difficult to classify as finite or nonfinite (few overt signs were detectable for one or the other even after close inspection), the studies which led to this monograph have provided another path. The rationale can be put this way: since the concept itself seems at odds with a well-sustained definition, the reasons for the restrictions associated with finiteness in those languages should perhaps be explored under a different perspective. And, as was suggested above, there is certainly an underlying reason for those morphological manifestations in other languages which also operates in Caboverdean. If this is proven to be right, those overt signs may be redundant in the languages which have them, as is also the case with the multiple number or gender morphemes, among others.

And so here we are brought back to the notion of anchoring. Part of this account in Amritavalli (2014) is also found in Eide (2016: 6):
> [...] the Anchoring Condition of Enç (1987: 642), requires that in all languages, "in main declarative clauses... events must be anchored to the utterance or some other salient reference point." Event anchoring is what is identified as "finiteness," or the ability of a clause to "stand alone." It is usual to assume that the anchoring in question is temporal anchoring (of the event time to speech time, via a reference time); and that its syntactic reflex is tense. In the generative tradition, this assumption is attributed to Stowell (1995), but it is in fact a traditional assumption, as the discussion in Comrie (1976: 1-2) shows. Finite clauses are described as carrying "independent tense" or "absolute tense," which is "deictic," because it locates "the time of a situation relative to the situation of the utterance" [...]

> Amritavalli (2014: 284)

And this is still from Eide's introduction: "it seems clear from what is observed thus far that cross-linguistically, finiteness serves as an anchoring category for the clause, via creating a 'logophoric center' serving to anchor the predication event." Moreover, "this anchoring must also be allowed to exist and [be] encoded without any such explicit morphological markers, since in Creole languages and many other languages like e.g. Chinese there are no obligatory morphologi-
cal exponents of finiteness whatsoever" (Eide 2016: 17-18). This will be explored in chapter 5, in connection with an alternative view on what finiteness is about.

In the next subsection a set of Caboverdean data will be (re)described that demonstrates how this language indeed challenges most morphological characterisations of finiteness-this has already been briefly pointed out in the last chapter, but here some examples from those various sections are organised to more specifically illustrate this. Therefore, if finiteness is to be taken as a way of naming an underlying linguistic universal, then it is of course also active in Caboverdean, with its distinction from at least European languages being that this abstract notion is here expressed in other ways.

### 4.2.2 Empirical challenges

This subsection returns to passives in Santiago (4.2.2.1), with an example from chapter 2 and a new one added here, and to complex sentences in both varieties, as presented in chapter 3 (4.2.2.2). When we observe them, it stands to reason that typical morphological properties ascribed to finiteness are missing.

### 4.2.2.1 Passives in Santiago

Passives in Santiago can naturally be combined with markers for progressive or habitual. See an example of the latter from chapter 2 , there as (19).
(19) Kel bes ta flada resebedoria. (Lurdes, Santiago) that timeta say:PART.PAST receiving.office 'At that time it was said receiving office.'

But Santiago passives may also have a perfect interpretation, and for this they only have what is supposedly a nonfinite verb form: a participle. ${ }^{44}$ This is the case in (159); the speaker, a young teacher, expresses some apprehension that the (linguistic) 'things' they 'modify' since childhood in the inland town where

94 In São Vicente they are obtained through a local version of the participle preceded by a suppletive form of the Portuguese auxiliary 'be' (foi: Portuguese 'simple preterit perfect', 3sG).
(i) Asin k no foi kriod, nãu é? (Firmino) like.this that 1PL was raise:PART no be.PRES
'It was this way that we were raised, right?'
Note that this participle, kriod, shows the contextual vowel change pointed out in chapter 2there, fn. 38 provides another sentence by the same speaker, but in an active past perfect construction, with tinha dod 'had given'.
she is from (and where she lives and teaches) may now disturb her discourse in Caboverdean (in her interview). So here this passive is a subordinate clause (the relative clause in the first line, which restricts the reference of the pronominal subject of the main clause). But we find this in stand-alone clauses as well: in any context, perfect passive clauses contain no other verb than the participle itself. And so this is one of the challenges regarding finiteness and verbal morphology, at least in this variety of the language.
(159) Nos ki kriadu bera Somada asin, 1PL that raise:PART near Somada as.such asves nu ta modifika txeu kuza desdi mininu. sometimes 1PL TA modify a.lot thing since child Literal: 'We who have been raised in Somada, sometimes we modify a lot of things from an early age.'

### 4.2.2.2 Subordinate clauses

The next linguistic examples, repeated from chapter 3, show various temporal meanings for the bare form of dynamic verbs in subordinate clauses. It will be locally emphasized that some of these correspond to cases where nonfinite and/or subjunctive forms are typically used in languages that have them. ${ }^{95}$ This list here is certainly incomplete (as are the descriptive lines about each case), but under the current organisation it will hopefully evince the key role of the higher verbs and/or the connectives. The two smaller subsections thus contain sentences where the bare dynamic situation is interpreted as subsequent (4.2.2.2.1) and as perfect (4.2.2.2.2), as related to a given topic time. Before I begin this presentation, it must be highlighted that also these different mean-

95 Just to also discard raising, a typical context for an embedded infinitive in English, it must be said that it is unattested in Caboverdean. In this set of sentences from Santiago (elicited), we see that: the subject cannot raise to the main clause (ib); an alternative version is a main parse 'seem' clause with no subject, embedding a clause headed by a complementizer (connective) (ia). The version in (ic) is also possible if the discourse context demands topicalization.
(i) a. Ta parse-m ma Maria stá kontenti ku si trabadju. TA seem-1SG CON Maria be happy with her work 'It seems to me that Maria is happy with her work.'
b. ${ }^{\star}$ Maria ta parse-m stá kontenti ku si trabadju. Maria IRR seem-1sG be happy with her work
c. Maria, ta parse-m, e stá kontenti ku si trabadju. Maria IRR seem-1SG 3SG be happy with her work 'Maria, it seems, she is happy with her work.'
ings according to the context do not depend on any type of 'optional tense'nothing is optional about tense here.

### 4.2.2.2.1 Subordinate bare forms with a subsequent meaning

These sentences, repeated from chapter 3, are now ordered by the type of lexical item that contributes to the temporal meaning of the bare verb in question:
A. connective (oki (or some cases of kond; see 3.3.3); conditional si/s; pa)
B. embedding verb (attitude verbs manda/mandá 'order' and prumeti/prumetê 'promise'; aspectual verb bai/bá 'go')

## A. by connective

A.1. Corresponding to subjunctive forms in some languages, e.g. Portuguese. ${ }^{96}$
oki-clauses (temporal)
(86) Oki djá bu ká pila farinha, (Sandra, Santiago)

CON already 2sG finish grind flour,
bu ta ferbi batata ku sal.
2SG IRR boil potato with salt
'When you finish grinding the flour, you boil the potatoes with salt.'
si/s-clauses (in conditionals)
(149) Si N ben fika xintadu, na un kabu más (Miguel, Santiago) if 1SG come stay seated at one point more N ta paxona, N ta bá mori. 1SG IRR depress 1SG IRR go die 'If I come to sit [all the time], at some point I will get depressed, I will die.'
A.2. Corresponding to nonfinite verbs in some languages, including Portuguese, where we sometimes get a special case for inflected infinitives.

[^42]$p a$-clauses (purpose; both complement and adverbial) ${ }^{97}$
(72) N ta fla-s pa es deta(,) pa diskansa. (Lurdes, Santiago)

1SG IRR tell-3PL CON 3PL lie-down CON/PREP rest
Intended: 'I tell them to lie down(,) to get some rest.'

## B. by embedding verb

Attitude verbs and an aspectual verb: the verbs embedded by these correspond to infinitives in languages which have them, like Portuguese.

## krê 'wish'/‘want'

(123) Bzot krê deskansá, bzot krê stod a vontad. (Firmino, São Vicente) 2PL want rest 2pl want be comfortable 'You want to rest, you want to be comfortable.'

## manda/mandá ‘order’

(127) $N$ manda-1 kuzinhá un koza [...].
1SG order-3SG cook a thing
'I ordered her to cook something [...].'

## prumeti/prumetê 'promise'

(124) N prumeti studa pa izami. (elicited, Santiago)

1SG promise study for exam
'I promised to study for the exams.'
bai/bá 'go'
(150) Ten kel ki ta viaja, [...]
(Daiana, Santiago)
have that who IRR emigrate
ta bá fika un emigranti.
IRR go stay a emigrant
Intended: ‘There are those who go abroad, [...] will become emigrants.’

[^43]
### 4.2.2.2.2 Subordinate bare forms with a perfect meaning

In this case, the list is of bare dynamic verbs denoting past situations with no past marker-this past interpretation relates to a given reference time. Again, they appear here by type of lexical item determining their temporal meaning:
C. connective (kantu (also cases of kond; see 3.3.3); pamodi/pamó; ma/k; ki/k) ${ }^{98}$
D. embedding verb (modals such as epistemic debi ‘must’).

## C. by connective

C.1. Corresponding to finite forms with past meanings in other languages.
kantu-clauses (temporal)
(88) Kantu e ben regresa (Wosvaldo, Santiago) when 3sG come be.back
e ben konstrui si família.
3SG come build his family
'When he [his father] came back [from abroad], he built his family.'
pamodi/purkê-clauses (causal/explanatory)
(78) N txorá purkê foi un grand supreza pa mi. (Inês, São Vicente) 1SG cry because was one big surprise for me 'I cried because it was a big surprise for me.'
$m a / k$-clauses (complement)
(68) N ta lenbrá k prufesora da-m kel livr. (Liziane, São Vicente) 1SG IRR remember that teacher give-1SG DET book 'I remember that the teacher gave me the book.'
ki/k-clauses (relative)
(65) Enton é un stória k feka-m markod txeu. (Firmino, São Vicente) so bea story that get-1sG marked a lot 'So it's a story which got strongly marked on me.'

[^44]C.2. These correspond to infinitival verbs in some languages, including Portuguese, where we sometimes also get a special case for inflected infinitives. ${ }^{99}$
sen 'without'-clauses (negative-circumstance)
(105) Es ta deixa mininuta ba skola sen (es) toma kafé. 3PL IRR allow child IRR go school without (3PL) take coffee 'They let children go to school without having taken breakfast.' (adapted from Brüser et al. 2002: 138)

## D. by embedding verb

Epistemic modals: the predicates under these items, as the one illustrated here, correspond to infinitival verbs in languages which have them, like Portuguese.
epistemic modals, such as debi 'must'
(85) Si e sata raprende-l,
(Brüser et al. 2002: 486)
if 3SG PROG scold-3GS
é pamó algun kuza mariadu e debe fazi.
is because some thing bad 3SG must do
'If she is scolding him, it's because something wrong he must have done.'

So the list of examples above calls for (at least) three major observations. The first is that the verbs embedded by other verbs with no connective linking them correspond to infinitives in some other languages. In Caboverdean, it is also true that most of them has no overt subject-if we consider that the clitic appearing after manda/mandá 'order' is its complement, not the subject of the lower verb, only predicates under sen 'without' may be preceded by that element. And this makes the next detail even more interesting: despite this nonfiniteness apparent to all of them (in (123) we indeed get that suppletive form from a Portuguese participle, stod), not every one of these lower verbs has the same temporal orientation: a subsequent interpretation for some, as the ones in B, and a perfect interpretation for a few, as the ones in D. So any finiteness/nonfiniteness distinction seems here much less relevant than the differences between the verbs that embed them.

[^45]In support of something already known, the second observation is that in C.1-subordinate clauses whose equivalents are defined as finite in languages displaying morphological signs for this-we have subordinate clauses from the three main types: adverbial, complement, and relative clauses, so there is nothing in this general division by syntactic function that especially explains the temporal interpretation of their bare dynamic verbs. A distinction in this respect is rather found within some types, which is shown when we attempt a more fine-grained description-seen here by their distribution between A and C .

The third observation here is about the clauses headed by $p a$, which, be they complement or adverbial, show the same temporal restrictions for the bare form of their relevant verb. Again, this supports the above idea that the type of clause according to its function in the complex sentence plays a limited role as for the restrictions on their temporal meanings, the main burden being rather on the side of lexical items, such as the higher verb and the connective itself.

Finally, this is a brief note which involves the pa-clauses as well, but also the ones headed by sen 'without': their equivalents in other languages are labelled nonfinite (in Portuguese they are a case for inflected infinitives, obligatory or optional), but many may show an overt subject-the presence of an overt subject therefore fails to be a diagnostic for (non)finiteness.

### 4.3 Further concerns

Two imperative issues were left unsolved by my latter proposal, as was sketched in 4.1.3, which led the search for a wider explanation and, above all, for a cohesive view about tenses and temporal interpretation in natural language.

One of these issues is related to one of the premises in my reasoning about the Caboverdean variety of Santiago. My argumentation to defend that approach was, up to a certain point, still grounded on the notion of finiteness: the fact that - $b a$ can be affixed to embedded verbs which in other languages, such as Portuguese and English, are nonfinite was used to defend that this morpheme is no past marker (infinitival forms cannot be marked for past), but rather a temporal agreement morpheme. This reasoning no longer makes sense.

The other issue is more like an open question, which can be converted into multiple sub-questions. It is also more wide-reaching, as it relates to a crosslinguistic phenomenon approached in the literature but never truly responded in the explanatory way I was looking for. What do speakers have in mind that makes them use temporal markings apparently associated with a certain tense to express another tense? More specifically, why do Caboverdean speakers use
the morphemes -ba or tava/tá in clauses that denote themselves nonpast situations? Also importantly, why does this 'mismatch' occur only in some cases?

In the next chapter a proposal is defended that treats these uses as no mismatches, but rather as the consistent expression of some other value. And at this point another clarification is needed, about a phenomenon independently observed for which my previous explanation may be revised under the main proposal in this monograph: some also apparent mismatches between forms and meanings of the progressive. The remainder of this section comprises the summary of my previous reasoning.

Take the subsequent interpretation for the verb bá 'go' marked for progressive in the examples below. It looks natural, since bá 'go' is a verb of motion included in future-oriented constructions, as we have seen previously. It is here illustrated for Santiago in (160) and São Vicente in (161).
(160) Nhu padri sata bá komesa selebra misa. (Brüser et al. 2002: 713, mister priest PROG go start celebrate mass Santiago) 'The priest is going to start celebrate the mass.'
(161) No tinha pok konhesiment d ukék (Firmino, São Vicente)

1pl had little knowledge of what is that
no táta bá otxá na liseu.
1PL TÁTA go find in high school
'We had little knowledge of what we were going to find in high school.'

Despite appearing as intuitive, this combination needed to be accounted for, and the point in Pratas (2018a) was to show that this frequent use of the progressive + bá 'go', as above, demonstrates the need to consider a complex view also for other progressives with a subsequent interpretation, even when no bá is used. This may be naturally applied to languages like English, where we also have an option between 'I'm going to leave' and 'I'm leaving'. ${ }^{100}$

The notion of the progressive as depicting a situation which is ongoing at a topic time (TT) relates to what 'ongoing' really means. We can easily have different intuitions about this temporal value by looking at the next examples, repeated from chapter 2 . In the first, the ongoing situation is almost like a ha-

[^46]bitual, to which an incremental meaning (beyond the contents of 'raising' itself) is added by the progressive. The second contains a progressive in the sense mostly approached here, of an instance of a situation unfolding at TT.
(15) Es sata subi inpostu tudu dia.
(Brüser et al. 2002: 259)
3PL PROG raise tax everyday
'They are raising taxes everyday.'
(48) N tita falo-b d nha rialidad.
(Firmino)
1SG PROG speak-2SG of PPOSS.1SG reality
'I'm telling you about my reality.'

About this latter meaning, a much-discussed intuition at a different level concerns the so-called 'imperfective paradox' (Dowty 1977), which involves the (in)completion of telic situations in past progressives-that is, when the relevant topic time (TT) is prior to the utterance time (TU). Observe the sentence below, repeated from chapter 2, with a progressive in the past: the legitimate question arises about the telicity of this situation if we cannot tell whether she indeed ended up being able to do what she was trying (after TT).
(47) Na prinsipiu N ka sata konsigiba
(Sandra)
at beginning 1SGNEG PROG succeed:PAST
[fazi pastel di midju].
[make pastry of corn]
'At the beginning I wasn't succeeding [in making corn pastries].'

Many analyses of such puzzle have resorted to modal semantics and the notion of possible worlds-e.g. Portner (2011) presents a nice overview of these. But then take also Smith (1997) who, among others, sees nothing paradoxical in this type of combination between a progressive and a telic situation (whose final stage is in principle associated with a culmination, a change of state), since "[one] does not have to know the outcome of a particular event to know" that it is telic (or atelic) (Smith 1997: 96).

Therefore, for one type of telic and one type of atelic situations (accomplishments and activities, respectively, in Vendler's 1957 terminology), my analysis consisted in taking the Caboverdean progressive as referring to their stage at TT; in the case of accomplishments, there is thus no need to postulate anything special. As Arche (2014) puts it, "[with] heterogeneous predicates in
the progressive, a part of the event is understood as instantiated. It is not that the predicate becomes homogeneous; a part of it is understood as having occurred, as other authors have also pointed out" (Arche 2014: 799-800). And others continue to point this out in more recent studies (see for instance Martin \& Demirdache 2020, and the papers in that same special issue).

As for achievements, like 'arrive', as in (162), the use of the progressive cannot be justified by a stage within their structure, given that they are defined as having no activity part-they only involve time instants (Vendler 1957: 149).
(162) N obi algen ki sata txigaba pertu dimi. (Brüser et al. 2002: 1SG hear someone that PROG arrive:BA close of 1SG 158, Santiago) 'I heard someone that was arriving near me.'

And so my claim was that there is also no conversion into accomplishments as an effect of the progressive, which can rather be taken as depicting a precursory stage off the achievement itself (in line with the "preliminary" stage for progressives combined with achievements in Smith 1997: 46). In this case, the subsequent culminating situation is understood as belonging to the natural continuance of this stage (Pratas 2018a)-TSit is underlyingly after TT. Notably, we saw in subsection 3.4.5 that achievements are not marked by (progressive-see 2.3.2) ta under perceptive verbs (and example (138), showing this, is repeated here), which demonstrates that this precursory stage indeed is not part of the denoted situation: in (138), in the absence of any progressive morphology, the simultaneous interpretation is directly available for the culmination itself.
(138) E obi nha tia Ganga txiga na porta. (Brüser et al. 2002:

3SG hear PPoss.1sG aunt Ganga arrive at door 527, Santiago)
'He heard my aunt Ganga arrive at the door.'

The idea was that we may therefore account for the subsequent interpretations that resort to bá 'go' marked by the progressive if we assume that, at the relevant TT, there is some precursory stage of the type just proposed for achievements, the difference here being that it is expressed by this verb of motion + the progressive-and TSit again includes TT. In other words, in sentences like the one in (160), from Santiago, there is an overt sign of something already happening that will result in the situation denoted by the embedded predicate, selebra misa 'celebrate the mass'. For the sentence in (161), from São Vicente, the reasoning is the same: a course of events leads to the situation denoted, with the
only difference being that TT precedes TU-we have bá 'go' marked for past progressive, consistent with the tense of the higher clause.

As a side note, a subsequent interpretation of a situation marked for progressive (with or without bá 'go') may have no subject. Observe the sentence in (163), for which a present and a subsequent interpretation are available as well (when one looks at the sky and sees dark clouds coming-listening to the forecast news is an equally good scenario). It is here to show that the precursory stage implies no agent, or even no subject with any other role.
(163) Sata txobi oxi.

SATA rain today
'It's raining today.' but also 'It is going to rain today.'

In each of the cases above there is the sense that, at TT, something is happening that will, with a great level of confidence, lead to a subsequent situation. Therefore, this use of the progressive to express subsequent situations never created any mismatch either. This prior proposal is anyhow important here to strengthen the view that various temporal meanings may themselves-that is, with no need for extra morphology nor any other label-be used in ways that reflect a certain attitude from the speaker, as well as specific inferences from all involved in the speech act. Nevertheless, the more concerted hypothesis in the next chapter may be, in a near future, adapted to some progressives as well.

### 4.4 Concluding summary

Each of the main issues reported in this chapter has contributed in its own way to the integrated analysis explored in this monograph regarding the expression of temporal meaning. Summing up, in the various sections above it has been shown that the notion of finiteness still needs to be better-motivated and clarified crosslinguistically. The environments which show different morphological markings in certain languages depend instead on the meaning restrictions imposed by some embedding lexical items: some verbs, some connectives, or a combination of both. Under this view, those specific morphological markings on (and around) embedded verbs seem like a superficial indicator of some underlying value. In this sense, therefore, these overt signs may be viewed as redundant, which thus needs to be explained for each of these languages, rather than impose itself on the study of others.

Next chapter presents some responses to the questions raised so far.

## 5 The most of times

> Tenpu ki bai / Dexa-m ali sakedu ta djobi ora / Ku gana volta tenpu di minineza / Sodadi na jardin di nha memória. ${ }^{101}$
> Mayra Andrade, Tenpu ki bai, in Lovely difficult (2013)

One novel suggestion in this monograph is that the time notions we express in our everyday discourse are closer to this complex design of strata that may stretch, push, and pull one another, currently pictured for the universe by physicists and philosophers, than to the straight timeline we know from textbooks. This is so when we are telling about all types of subjects-it may be time itself, for this is one topic that grabs our attention (we often complain that it flies, and proclaim how it heals or kills), but also a myriad of other things. This hypothesis is validated when we apply certain theoretical tools available in the literature to the description of linguistic productions in what is still an understudied language. So after those descriptions, as well as the questions left unanswered by previous accounts, this chapter contains an overall discussion on the expression of temporal meaning in natural language.

In Caboverdean, this expression encompasses distinct layers, each of which dealing with a pair of values.

As was defended in chapter 4, the first of these layers concerns realis vs. irrealis meanings, where the following temporal depictions are obtained: (i) some past dynamic situations through a present perfect interpretation of bare verbs; (ii) present progressives, marked with preverbal morphology with several local variants; and (iii) present habituals, generics, and prospective situations, marked by preverbal $t a$. Those in (i) and (ii) are realis, those in (iii) are irrealis.

Now two other layers will be added that account for the whole picture.
The second layer concerns veridicality, which is assumed here as a universal property of natural language, and as the underlying value that finiteness mostly is about. The notion of veridicality as defined in Giannakidou \& Mari (2018) is here employed with one minor adaptation (5.1).

The third layer involves a notion of (full or low) accessibility as applied to temporal locations (5.2), which is more adequate than previous accounts for some uses of temporal morphology, for both descriptive and explanatory rea-

[^47]sons. And then a section brings all this together into a comprehensive picture (5.3), just before a concluding summary ends the chapter (5.4).

### 5.1 Veridicality

As was also argued in chapter 4, no consistent morphological signs are observed in Caboverdean sentences whose counterparts in other languages are assumed to contain infinitival predicates or clauses. Here we shall perceive that even the few stative verbs that sound like Portuguese nonfinite forms, such as those equivalent to 'have' or 'be' (both stage-level and individual-level), behave as invariant items in their own way: although they are used in temporal expressions with certain properties, they are unrelated to any language-internal morphology; true, they show language-internal phonological effects of diachrony, but also in this they behave like other morphologically invariant words.

In both multi-verb constructions and subordinate clauses headed by a connective, a lot of embedded verbs are bare, but many others are marked by preverbal morphemes in the same manner as in main clauses, depending on the temporal depiction of the situations they denote. They may also get a postverbal morpheme-and this is the case also with ser 'be', one of the referred suppletive forms from a Portuguese infinitive, which in Santiago may appear as serba. ${ }^{102}$ Although some restrictions bear upon some of these predicates, only some of them are typical of nonfinite clauses-e.g. the prohibition of subject clitics and clausal negation. Other constraints, such as their temporal idiosyncrasies/dependencies regarding the situation denoted by the main predi-cate/clause-namely an anterior or a prospective orientation-work similarly for clauses considered finite, and even for independent clauses in the same discourse sequence. This is observed in other languages as well. ${ }^{103}$

My doubts about Caboverdean nonfiniteness may therefore be converted into a clearer hypothesis:

102 The historically related Ginensi also has, besides other suppletive copula forms, sedu, which has been analysed as resulting from Portuguese ser as well, with an affix similar to the participle marker in Santiago-as it appears in (19b), chapter 2, and (159), chapter 4 (but see Truppi 2019 for details on this copula, and the references therein).
103 For instance finite clauses that are complements of some verbs are typically futureoriented. And even with stand-alone clauses we find temporal dependencies, like the temporal interpretations invited for some consecutive finite clauses in narratives (again, see Altshuler 2016 for a detailed account for these in English, under a formal semantics perspective).
(i) if finiteness is defined as a set of morphosyntactic properties, and
(ii) some languages dispense with most of these overt manifestations, then
(iii) what would be quite interesting to find out is the associated crosslinguistic value-in other words, what finiteness is about (in most cases, at least).

One relevant note here is that, in this collective pursuit, the languages that show no obvious signs for this value should of course have no extra burden of explaining themselves.

This section discusses what seems a less fallible way to capture this underlying value (5.1.1) - note that the notion of anchoring, associated with finiteness in diverse works in the literature, is also fundamental in this monograph, albeit taken from another angle. This section also accounts for the few cases of suppletive verb forms that display nonfinite morphology in Portuguese and are used in Caboverdean in certain contexts (5.1.2); as may be expected by now, these rare and superficial signs of finiteness only underpin my drive to seek the meaning(s) underneath these constellations.

### 5.1.1 A special kind of attitude

So the anchoring of a situation is often invoked in the literature when finiteness is discussed. It has mostly been unclearly defined, but one consistent point in most references to it hints at a relationship of that situation with a deictic centre, which is by default established by the utterance. To put it another way, when a speaker tells something (e.g. in a narrative sequence), the situation(s) thus denoted is/are temporally linked to that moment in the speaker's life. This idea is of course very intuitive, and, as such, a key working notion here as well.

Problems arise, however, when these works in the literature defend that only some of the situations denoted by the speaker are anchored in this sense: i.e. the ones conveyed by finite clauses-recall the valuable summary of this in Amritavalli (2014), used in 4.2.1. ${ }^{104}$ This might actually be the case if there were

104 "[...] the Anchoring Condition of Enç (1987: 642), requires that in all languages, 'in main declarative clauses... events must be anchored to the utterance or some other salient reference point.' Event anchoring is what is identified as 'finiteness,' or the ability of a clause to 'stand alone.' It is usual to assume that the anchoring in question is temporal anchoring (of the event time to speech time, via a reference time); and that its syntactic reflex is tense. In the generative tradition, this assumption is attributed to Stowell (1995), but it is in fact a traditional assumption, as the discussion in Comrie (1976: 1-2) shows. Finite clauses are described as carry-
obvious differences in temporal meaning separating ones from the others. But given that there is no way of consistently telling them apart under this criterion, as we have seen in the last chapter, this notion then gets all muddled in various ways. ${ }^{105}$ A tentative solution to this must therefore be grounded on something else, leaving anchoring itself connected to-as it so naturally is-our 'blurred' vision of the world (as put by Rovelli), that same viewpoint which allows us to interpret and express time as we do (this is further clarified in the next sec-tions)-and note that this takes the world to be just one and only, which is itself complex enough to offer ever-moving layers of temporal meaning.

For now, we still must account for what finiteness may be about.
At this point we need to go back a little. Klein (1994: 215-224) defends that the temporality of subordinate clauses obeys the same rules of the main declarative clauses, but they differ in that only the latter contain an assertion; the former are under the effect of a subordinator, which modifies this relation. He also states that "some subordinate clauses presuppose the truth of the situation described, and others do not" (Klein 1994: 220). As was said earlier, my view on finiteness diverges from Klein's. ${ }^{106}$ But this specific consideration about a presupposed truth creates a nice bridge with the alternative picture below.

The central concept to be discussed in this respect is veridicality, as defined in Giannakidou \& Mari (2018) in the citation below: what distinguishes some predicates from others is a certain attitude assumed by the attitude holder, who may be the speaker themselves but also the subject of attitude verbs. ${ }^{107}$

Language [...] mostly encodes subjective representations of truth and reality, subjective because they are construed by linguistic agents, i.e., the speaker or the individuals that bear propositional attitudes. In building these representations, linguistic agents able [sic] to reason not only about truth but, and indeed mostly, about the veridicality of sentences. Giannakidou \& Mari (2018: 2)

[^48]This means that predicates and clauses obey their subjective judgement (in the sense of their "commitment to the truth of [a proposition]"; Giannakidou \& Mari 2018: 6; and here I deliberately skip the following segment "irrespective of what actually holds in the world"). The authors focus on the choice-both in Standard Modern Greek and Romance languages, in particular Italian and French-of different moods according to different attitudes, and defend an association of this choice of mood (indicative or subjunctive) with subjective veridicality, rather than with any relation to the truth/reality in the philosophical sense. ${ }^{108}$ Moreover, as Modern Greek lacks nonfinite complementation, unlike Romance languages, the alternation it shows in complements is between the indicative and the subjunctive, not between finite and nonfinite verbs-they thus point out that "the emphasis on English" has attracted research to the "that or to contrast", and that "simply studying this contrast prevents us from understanding that the actual culprit of many apparent meaning shifts is the tense of the complement" (Giannakidou \& Mari 2018: 2). Still on the same introductory page, they say:

> We will distinguish between veridical tense (which is the past and present), and nonveridical tense which is what we will call nonpast. We will show that this simple dichotomy helps substantially in uncovering dimensions in the meaning of the embedding atti-tudes-and it determines fully the kinds of readings speakers extract with modal verbs. Giannakidou \& Mari (2018: 2)

In the present work the notion of veridicality is fundamental as well, albeit used with one small modification regarding the distribution of temporal meanings between the two camps. I argue that in Caboverdean (which lacks an indicative/subjunctive distinction, unlike Modern Greek, Italian and French-and, by the way, Portuguese) this notion regards attested, assumed, or foreseen situations (depicted as veridical) vs. the ones that are depicted indirectly (which thus are nonveridical). Note that this is slightly different than what Giannakidou \& Mari (2018) are proposing, as in Caboverdean the veridical value includes some foreseen situations (thus clearly "nonpast"). ${ }^{109}$ This adapted description here

[^49]has the further advantage of correctly sorting out past and veridicality, since some situations may indeed be located in the past and yet be expressed as nonveridical. This is why nonveridical is here defined in these terms-as restricted to situations not attested, assumed, or predicted by the attitude holder. ${ }^{110}$

Moreover, I claim that this notion is compatible with a realis/irrealis distinction, here maintaining what was defended in my previous works based on Comrie's (1985) portrayal mentioned in the last chapter (4.1.3). This distinction was first applied to the temporal interpretation of main clauses, and in the current study is extended to most predicates. It concerns temporal depictions, as combinations of tense and aspect values, in the following terms. In Caboverdean:
(i) both bare verbs with a perfect meaning and verbs marked for progressive have a realis interpretation-speakers use them to denote situations as located before or at a given topic time (TT)-which by default includes the time of utterance (TU), but may be, within a discourse context, shifted into other positions, for instance the past (before TU) or the future (after TU) (see fn. 112 about this future);
(ii) most verbs marked with preverbal $t a$ have an irrealis interpretation: this includes habituals and generics, or otherwise prospective/subsequent episodic situations-they correspond to the inductive generalisations and predictions as defined by Comrie, and they remain so even when their TT is distinct from TU (in other words, they remain so in diverse tense meanings), for there is still no concrete mention to any instance of these situations as located before or at a given topic time (the predicate is not about particular instances, but about habits and qualities or rather subsequent episodes).

Thus, with this realis/irrealis distinction being differentiated from attitudes, any of these temporal meanings can then be depicted either as veridical or nonveridical.

As for veridicality, it is indeed modal in nature, and is responsible for the next level of temporal meaning mentioned in the introducing paragraphs to this chapter. ${ }^{111}$ To put it more schematically, in Caboverdean this works this way:

[^50](a) all types of situations (including generalisations) presented as depicted directly by the relevant attitude holder-as attested, assumed, or predicted by them-are veridical;
(b) situations presented as depicted indirectly are nonveridical.

And this nicely translates into a very clear distinction:
A. root and main clauses (except imperatives) depict situations as veridical;
B. subordinate predicates/clauses may depict situations as veridical or not.

To clarify this once again, the veridical value proposed here also includes some prospective situations. The reason for this is as follows: if we are talking about attitudes/subjectivity, and not the truth in the philosophical sense, predictions/foreseen situations may well belong to veridicality, depending on how they are felt by the attitude holder (plus: if they also have a TT at TU, in a sense they are indeed in line with the veridical tenses in Giannakidou \& Mari 2018). ${ }^{112}$ Therefore, we have in principle these combinations:
(i) progressive and perfect predicates in root and main clauses are both realis (for the type of temporal relationship they have with a given TT) and veridical (the lack of evidence pointing otherwise depicts them as such); in subordinate predicates, however, they are still realis but may be nonveridical (in this case a combination of lexical items shows that they are depicted indirectly; and this includes the progressive marked by ta under some verbs);
(ii) predicates marked with ta in root and main clauses are both irrealis (for the type of temporal relationship they have with a given TT) and veridical (the lack of evidence pointing otherwise depicts them as such, even as qualities and generalisations, or foreseen situations); in subordinate predicates, we still get irrealis, and it may be veridical as well (marked with $t a$ as in main clauses) or rather nonveridical (in this latter case a combination of lexical items shows that the situations are depicted indirectly; nonveridical irrealis may be expressed in various ways: with $t a$, for habituals/generics, or for instance with bare verbs with a subsequent meaning regarding a given TT).

[^51]This is organised in table 14, below. And note that, regarding morphology, irrealis and realis have distinguishing temporal markings, but the burden of the veridical/nonveridical distinction mainly falls on other lexical items possibly combined, as is explained below.

Table 14: Crossing realis/irrealis temporal meanings (which may exhibit morphological distinctions) with veridical/nonveridical attitudes in Caboverdean.

| all main and many sub | RIDICAL <br> bordinate claus | NONVERIDICAL <br> the other subordinate clauses/verbs |  |
| :---: | :---: | :---: | :---: |
| realis | irrealis | realis | irrealis |
| bare verbs; verbs marked with the progressive | verbs marked with $t a$ | some bare verbs; verbs marked (with ta or sata) for progressive | some other bare verbs; all others marked with $t a$ |

Therefore, regardless of the veridicality of the situation they denote, all these clauses/predicates relate (in their own way) to a topic time (TT). In some languages, some nonveridical situations are marked by an infinitive, or by the subjunctive mood. ${ }^{113}$ Other languages show no such morphosyntactic distinctions. This confirms that these divides are mostly superficial, for this value is rather dependent on attitudes and expressed by a choice of lexical item(s): in Caboverdean this is mostly achieved by the embedding verb on its own or in combination with some connective, or rather by the connective itself.

We observe an instance of the latter case in the effects from different connectives heading otherwise identical complements of the verb flá/dzê 'say': the conjunction $m a / k$ 'that' always heads veridical complement clauses (note that Portuguese que 'that' may head nonveridical clauses as long as their verbs are in the subjunctive), and the preposition $p a$ 'for'/‘to' always heads nonveridical complement clauses (interestingly, in São Vicente only $m a / k$ can be omitted,

113 Also in Portuguese the temporal meanings obtained in subjunctive clauses may often be obtained as well by infinitival counterparts; see Marques 2018 for a recent discussion of these, and the necessary syntactic adaptations to each of the verb forms. The author further examines the phenomenon of obviation: in subjunctive clauses, a null subject cannot be coreferent with the subject of the main clause. In Caboverdean, as was shown in chapter 2, no null referential subjects exist, and so this diagnostic is not available to check whether, despite the lack of subjunctive morphology (but see next subsection on suppletive forms), there are other singularities in these constructions.
not $p a$, which is another sign that the former ones have the same value as standalone clauses). Check the sentence in (164a), uttered within a narrative about some attempts to find a job; when the speaker tried a given firm for that, they told her to wait for an answer. This segment of her narrative is contrasted with the elicited sentence in (164b).
(164) a. Es dze-m pa $N$ sperá un bokod.

3PL say-1SG for 1SG wait a while 'They told me to wait a while.'
b. Es dze-m k el sperá un bokod.

3PL say-1SG that 3SG wait a while 'They told me that she/he has waited a while.'

In (164a) the speaker is the only attitude holder; she reports about the attested telling situation, but the waiting situation is depicted indirectly-not as attested or assumed, nor even as predicted (we know nothing about what she did next). If however the connective heading the complement clause is 'that' (here $k$ for we are dealing with São Vicente; in Santiago it would probably be ma), the sentence has a rather different meaning, as in (164b) (elicited with a different speaker from the same variety). ${ }^{144}$ And in this latter case we have two veridical clauses (both situations are depicted as attested), one main and one complement: for the telling situation the attitude holder is the speaker, for the waiting situation the attitude holder is the (plural) subject of the main clause. ${ }^{115}$

Like pa 'to'/'for' (heading both complement clauses, just as is shown above, and purpose adverbial clauses), the connectives si 'if' (in what Haegeman 2003 calls event-conditionals), oki 'when’ (also kond in future-oriented temporal clauses), and the verbs krê 'want', tenta/tentá 'try' or podi/podê 'can'/'may', and debi/dvê 'must', among others, embed nonveridical situations: these subordinate situations are depicted indirectly by the attitude holder, not as attested, assumed, or foreseen-even with krê 'want' or tenta/tentá 'try', the attitude holder attests these main situations only, not the ones embedded under these verbs (which are thus also depicted indirectly, through the meanings of the

[^52]main verbs themselves). In Portuguese, to name just one language with finiteness distinctions, all the predicates embedded under these items are indeed either infinitives or in the subjunctive, which might motivate the conclusion that nonveridicality is just another term for these cases.

And in most cases this conclusion is borne out, but a few others show items which in Portuguese also select for infinitival or subjunctive predicates and have equivalents at least in Caboverdean that seem to depict situations as veridical. One such case is the connective sen 'without' (negative-circumstance clauses), and another is the verb ben 'come' in multi-verb constructions. With any of them, the attitude holder presents the subordinate situations as attested or assumed. This can be observed in the following examples, repeated from previous chapters. In (104) it is stated that the subject was not eating, and in (146) it is stated that the subject has had all these children.
(104) N xinta na mesa di restoranti sen (N) sata kumi. 1SG sit at table of restaurant without (1SG) PROG eat 'I've sat at the restaurant table without being eating.'
(146) N ben ten tudu kes mininus.

1SG come have all these child:PL
Literal: 'I came to have all these children.'

One key connection in this respect is that, whenever the subordinate bare forms of dynamic verbs have a perfect interpretation, these situations are certainly presented as veridical. Observe below the difference between (66), where the bare verb under kantu 'when', kumesa, has a perfect interpretation, and (79), where the bare verb under si 'if', mistura, has a subsequent interpretation. In the former the situation is presented as veridical (the attitude holder/speaker directly claims that she started working at some point), and in the latter as nonveridical (the attitude holder/speaker is neutral as to whether the right-away mixing will happen).
(66) temporal clause
(Daiana, Santiago)
Kantu ki N kumesa trabadja
CON that 1SG start work
N odja ma rialmenti nha vokason é ser prufesor.
1SG see that really PPOSS.1SG vocation be be teacher
'When I started working, I saw that my vocation really is to be a teacher.'

```
(79) Si bu ka mistura-l logu e ta kria karosu. (Edson, Santiago)
    if 2SG NEG mix-3SG right.away 3SG TA create lump
    'If you don't mix it right away it creates lumps.'
```

All these possible combinations-which demonstrate, again, the dependence of these temporal meanings on specific constellations of items-need to be carefully examined in future dedicated studies. And maybe this is the time for those languages with finiteness distinctions to explain themselves, like 'why is it that they have nonfinite verbs in sentences as (104) and (146) while their meaning is clearly of veridical situations?'

Then, the predicates selected by all these lexical items may show either sata/tita (progressive) or ta marking the relationship between the time of the situation and the relevant topic time (with of course the progressive being realis and the habitual or prospective being irrealis). We have seen this for sata in an embedded veridical situation in (104), and below we have examples of embedded nonveridical situations.

Compare the following elicited examples from Santiago. The instruction to the consultant was accompanied by a context which defined an embedded time roughly coincident-and maybe a little subsequent-with the 'want' time for (165), and an overtly subsequent time regarding the 'want' time for (166).

```
(165) Ka bu xatia-m kabesa,
    NEG 2SG bother-1sG head
    N krê sata odja telivizon en pas.
    1SG want PROG see television in peace
    'Don't you bother me, I want to be watching tv quietly.'
```

(166) N krê sata odja telivizon oki bu txiga kaza.
1SG want PROG see television at.the.time.when 2SG arrive house
'I want to be watching tv when you come home.'

Note that the verb forms under krê 'want' are the same, with the progressive morpheme expressing, in both cases, an ongoing situation regarding TT. And this also applies to the English translations: in both languages there may be different topic times for the progressive situations embedded by 'want'-in the first example, the embedded topic time includes the utterance time, in the second it is defined instead by the time of the situation in the temporal clause. The most relevant note for the current purposes is however that in English (as would
also be the case for Portuguese) this common embedded form is morphologically marked as nonfinite-on the auxiliary (in both languages the progressive is expressed by a periphrastic construction)-whereas in Caboverdean its morphological shape is equal to the one assumed for progressive predicates in standalone clauses.

The natural conclusion for this contrast is, again, twofold: (i) the overt signs associated with finiteness may be redundant in some languages, rather than their absence being a problem for the ones lacking them; (ii) what is called finiteness in those languages where this morphology is visible is mostly about (even if not always, which naturally calls for further and more detailed studies on this topic) a crosslinguistic value: veridicality, as defined in Giannakidou \& Mari (2018). In languages with no such morphology, this modal meaning remains of course intact-it depends on a variety of lexical items which are there anyway, such as, at least in Caboverdean, verbs and connectives.

All these considerations are of great relevance for the current work also because they allow us to happily avoid associations between three pairs of concepts that have, to my knowledge, been established in the literature in quite puzzling terms: the parallels between finiteness/nonfiniteness and assertion/nonassertion, as in Klein's works; and between assertion/nonassertion and realis/irrealis, as in Palmer (2006: 3), with the presupposed (unasserted) information falling into the irrealis domain. From the angle defended here, for a situation to be depicted as veridical more is needed than to be asserted-it needs to be asserted as directly attested, assumed, or predicted. Also, for a situation to belong in the realis domain more is needed than to be presupposed or even asserted-it needs to have a specific temporal relation with TT.

I believe there is now a clearer sense to these pairs, regarding my own purposes for the study of Caboverdean. And after these clarifications have been made, the distinction asserted/nonasserted (as related to some other details about speech-acts) is rendered somewhat irrelevant here-in the context of narratives and declarations, even if they contain promises, commands, doubts, or desires, I assume we are talking about assertions in every single case.

### 5.1.2 Suppletive forms

The few suppletive verbs available in all varieties of Caboverdean, thus inherited from Portuguese as invariant forms, occur as bare verbs in some cases, and marked by regular morphemes in others. Predictably, these markings depend on the temporal depictions of the situations.

Consider the next two examples from São Vicente. In (167), the speaker is telling about when he did some exams along with a lot of candidates, and how he was anxious that he would not make it to the final selection. The sentence in (168) is a variation of another one included in chapter 3; this speaker said that one first and this one next, to reinforce the idea that if everybody led a life as friendly to all around them as she does, the world would be a better place.
(167) N dzê k tava ser inpusível.
(Firmino)
1SG say that tava be impossible
'I said it would be impossible.'
(168) S tud jent tava ser asin, mund era dret. if everybody tava be like.this world were right 'If everybody were like this, the world would be right.'

These examples present the same suppletive form from the Portuguese infinitival 'be' (individual-level), preceded by the temporal morpheme tava. In the first, the predicate is within a complement clause, which has a subsequent interpretation regarding the telling situation. In the second, the predicate is within an adverbial clause and establishes the base for the conditional meaning of the main clause. Recall from 2.3.2 that tava in this adjacent position to a verb is itself no verb (albeit being such when on its own).

As was observed before (and illustrated in table 2-section 2.2), there are no other verbs in the language with forms equivalent to ser 'be' (individual-level) or ter 'have'. Despite this, under a specific view they could be taken as weakening my view that Caboverdean has no morphological markings for finiteness. It could indeed be claimed that, if these forms only occur in these contexts, they (the forms and the contexts) must somehow be related to nonfiniteness, since there must be a reason why only there do the speakers resort to these forms.

This also holds for all forms inherited from Portuguese subjunctives described before: future or past for first and third persons singular (for/fose 'be', individual-level; tiver/tivese, which come from either 'have', or from 'be' stagelevel in its Portuguese reduced form. ${ }^{116}$ This next sentence contains a relative

[^53]clause with tiver 'be' (stage-level); the speaker is talking about her grandchildren, who she says care a lot for her.
(169) Es ta faze-m kel $k$ tiver na ses altura. (Inês, São Vicente) 3PL TA do-1SG what that be at their height Literal: 'They do for me what be in their reach.' Intended: 'They do for me everything they can.'

Therefore, rather than being an argument in favour of finiteness as a universal morphosyntactic category (of the kind 'it is so comprehensive that even a language with so scarce verbal inflections as Caboverdean shows some nonfinite or subjunctive verbs in the right contexts'), they indeed constitute one more reason against it: they count as a case of redundancy as well, which in this case is manifested by analogy. To put it another way, if Caboverdean does so well without any finiteness morphological markings on most of its verbs (including instances of verbs with meanings related to these), there is no reason to accept that the occasional suppletive forms of these particular statives proves the existence of such category. On the contrary, that these few idiosyncratic forms occur in a minimal subset of constructions only emphasizes the redundancy hypothesis. Moreover, and as was referred earlier, these two stative verbs display a couple of other suppletive forms: from the Portuguese past imperfect tinha 'had', or from the Portuguese simple preterit perfect tive 'had'; and from era 'used to be' or foi 'was'. ${ }^{117}$

Resuming the forms from Portuguese nonfinite verbs, the next examples illustrate other scenarios where they may appear. They sometimes differ across varieties, which also calls for a thorough diachronic analysis-this variation may be due to distinct periods of contact with Portuguese. The sentence in (170) illustrates ter 'have' in a context where the speaker is saying that, as there are people from different islands where he now lives, one has to be careful when they think of making generalisations about the local population-note the two forms of 'have' in the same sentence, the Caboverdean form in the modal expression 'have to', and the suppletive form as the subordinate verb (depicting a nonveridical situation).

117 In Portuguese there is another foi, also irregular (in both cases it is available only for third person singular), meaning 'went' (simple preterit perfect of 'go'), and it is curious that, to my knowledge, it never appears as a suppletive form in Caboverdean-only foi 'was' is available. Also podi/podê 'can' have some suppletive forms (pudia, puder) but only in some of its meanings, not in others. So the stative nature of those verbs must be important in this phenomenon.

```
(170) N ten k ter kuidod.
    1SG have con have care
```

(Firmino, São Vicente)

Literal: 'I have to have care.'
Intended: 'I have to be careful.'

Next we have an even more idiosyncratic form, the aforementioned stod, available in the variety of São Vicente, a phonological adaptation of the past participle for the Portuguese verb estar 'be' (stage-level), estado. ${ }^{118}$ In (171) the speaker is describing how she habitually likes to cook, using for this the expression 'being at the cooker'.

$$
\begin{aligned}
& \text { (171) } \mathrm{N} \text { ta gostá d stod na fagon. } \\
& \text { 1SG TA like of be at cooker } \\
& \text { 'I like being at the cooker.' }
\end{aligned}
$$

(Inês, São Vicente)

In (172), an ongoing situation is embedded under an epistemic modal. The speaker was asked to utter a sentence where he guesses a possible explanation for the fact that a friend is taking so long to get ready for them to go out.
(172) N ta otxá k el dev stod ta bestí. (Franscisco, São Vicente)

1SG TA find that 3SG must be TA dress
'I think that he must be getting dressed.'

The main points defended in this section so far are that the few suppletive forms from Portuguese nonfinite or subjunctive verbs showing up in Caboverdean occur under quite specific circumstances. One of these consists in the denotation of nonveridical situations, and so they appear embedded, as in these examples above. Since I am proposing that nonveridicality is the meaning beneath most morphosyntactic nonfinite markings (in languages which have them, of course), those cases could constitute an argument in favour of the old view.

The problem for this possible claim is however that a few of these suppletive forms also show up in veridical situations when the verb needs to be marked by any genuine language-internal temporal markings. This happens if for instance a progressive must be applied to them (e.g. in English 'you are be-

118 The phonological adaptation consists in the earlier referred process of contextual vowel change; see fn. 38 of chapter 2, and also Swolkien \& Cobbinah (2019).
ing stubborn'), but also in habituals or conditionals. This was shown for ser 'be' in (167), with a conditional, and is exhibited in the next examples as well. The one in (173), from Santiago, brings an already mentioned layer of evidence against the relevance of their merely nonfinite status: ser 'be' (individual-level) is marked by the affix - $b a$.
(173) Ta serba un tristeza pa bu pais (Brüser et al. 2002: 833)

TA be:PAST one sadness to PPOSs.2SG parents
si bu ka pasaba na izami.
if 2SG NEG pass:PAST in exame
'It would be sad for your parents if you didn't pass the exam.'

Another example shows stod in the past, expressing a situation as ongoing at a topic time preceding the time of utterance. The same speaker as in (167) is recalling how at a certain point he and his colleagues were waiting to be hired as teachers.
(174) No tá stod ta sperá desizãu d ministériu. (Firmino, São Vicente)

1PL tÁ be TA wait decision of ministry
'We were waiting for the decision of the ministry [of education].'

And in (175) we have stod in a habitual progressive.
(175) Asves bo ta stod ta dá kel matéria... (Liziane, São Vicente)
sometimes 2SG TA be TA give DET subject
'Sometimes you are teaching that topic....'

Summing up, these forms occur when these verbs are used for:
(i) nonveridical situations, which is coherent with some scenarios that also get them in Portuguese, and
(ii) some veridical situations, either marked for realis or irrealis.

The fact that they are used in contexts where a certain version of the verb is needed that can receive the adequate temporal markings might lead us to conclude that other forms of these verbs are not capable of getting this temporal morphology. And this is indeed the case for some of them (any temporal morphology requires the use of their suppletive form, like what happens with 'be'
individual-level in both varieties, and with 'be' stage-level in São Vicente), although not for others (the form for 'have' when that temporal morphology is needed is the Caboverdean one, ten, as we saw in example (154), in chapter 3). This must be explained through an analysis that considers both the temporal meanings intrinsic to the various items and crosslinguistic special facts about these verbs, which may also play a role in these Caboverdean idiosyncrasies. For the moment, it is worth noting this curious fact: their frequent status as auxiliaries in Portuguese (as such, they often appear as finite verbs) has not prevented their subjunctive and nonfinite forms (in the latter case, this includes both proper infinitives and at least one participle) from being inherited as such.

### 5.2 The notion of accessibility

When a speaker refers to a past situation using verbal morphology which in their language is often associated with the present tense, in the sense of locating it at the time of utterance, this is usually viewed as a mismatch for which several labels are available in the literature: narrative present, historical present, sports-broadcasts' present, and so forth. An apparently reversed mismatch also exists, with constructions otherwise associated with the past being applied to nonpast situations as well (5.2.1). The quest for an overall satisfactory explanation for the expression of temporal meaning in Caboverdean also implied dealing with these cases, and so this section is devoted to exploring an account for them where (full or low) accessibility plays a fundamental role (5.2.2).

### 5.2.1 'Mismatches': previous accounts and a new one

Some temporal meanings have been handled in the literature as if they are expressed somewhat abnormally. And when an explanation is essayed, it is identified as a modal approach, which emphasizes this flavour of an irregular phenomenon concerning temporal locations in the past, present, or future. The definition of modality as not referring to any property of the situation "but rather to the status of the proposition" (Palmer 2006: 1), which we saw in the last section, could lead to the assumption that modality is always involved in human utterances; and yet, if the use of some temporal location is classified as 'modal', this traditionally means that we are dealing with a special case. In his chapter 8, Palmer also refers the 'modal function' of past tense. He says there is "a considerable body of literature that discusses this use of past tense forms to express 'unreality'", and in section 8.3 he shows this about conditionals.


#### Abstract

'Unreality' in this sense has much in common notionally with irrealis, in that it indicates some degree of lack of confidence by the speaker, but is best treated as a different feature for several reasons. First, it is marked differently-by tense. Secondly, it co-occurs with markers of irrealis, in both mood and modality systems; in fact, 'real' and 'unreal' in this sense mark a further distinction, another parameter within a wider field of modality. Not surprisingly, its functions are often quite different from those of irrealis.


(Palmer 2006: 203)
He also notes that the term 'unreality' is unsatisfactory, and one of the reasons is this closeness to 'irrealis'. The author therefore prefers the terms 'modal-past' and 'modal-present'. But then he never again uses 'modal-present', and regarding the 'modal-past' his further details are about modals and different mood contexts, such as subjunctives and the optative in Greek.

So let us observe the two most relevant points in this citation for my current purposes. The first is composed of two parts: (i) the author takes the irrealis notion as involving "some degree of lack of confidence by the speaker"-this is different from the definition or irrealis used in the current study (see last section); and (ii) '"real' and 'unreal' in this sense mark a further distinction, another parameter within a wider field of modality", which has functions "often quite different from those of irrealis." And this latter part is critical here: the current monograph also defends that we need "a further distinction, another parameter within a wider field of modality" whose function is distinct from, I say, everything else. The crucial split between Palmer's reasoning and mine is that in my current proposal the pair 'real'/'unreal' plays no role at all. We will come to that in the next subsection. The second most relevant point in this citation is that the 'modal' feature in question is marked by 'tense'-and we will see that also this needs an adaptation here.

For other references regarding 'modal' approaches of this sort, take the remark in Binnick (2010), already quoted in chapter 1: given "the dual temporal/modal functions of the past and future tense markers, ${ }^{119}$ 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: 'non-actuality’ (Strang 1968), 'dissociation' (Steele 1975), or, in deictic terms, 'distality' (Langacker 1978) and 'remoteness' (Joos 1964), as opposed to the 'proximality' of the present" (Binnick 2010: 515). One of these studies, Steele (1975), suggests that 'dissociative' is a universal semantic primitive shared by past and irrealis (Steele 1975:

119 As is known by now, the past and the future have company in this "dual function": the present displays it as well, with its "non-canonical usages" (as described in Klein 2010: 48-51).

216-217). Her notion of irrealis, which she defines as the absence or suspension of reality, is also different from the one I am using-here, as said above, no actual opposition between real and unreal is relevant, with irrealis/realis capturing types of temporal descriptions instead. Nevertheless, her intuitions about some uses of the past, supported by data from Uto-Aztecan languages (Mexico and United States) and English, focus on a crosslinguistic relation like the one I am defending here, with the difference that low accessibility (as relating to her 'dissociative’ value) is better motivated from a philosophical point of view.

In a more recent discussion, von Prince (2019) also makes a summary of those and other approaches to some uses for past morphology. She organises them into two groups: the remoteness approach ("[expressions] that encode both past and counterfactuality essentially express remoteness from the actual present"), and the back-shifting approach ("[in] counterfactual contexts, the past marker causes a perspective shift to the past, from which hypotheses about the future can be entertained") (von Prince 2019: 7). She establishes a correspondence between this division and the takes by other authors, which view the "past-as-modal (or past-as-fake)" in some cases and the "past-as-past" in other cases (von Prince 2019: 7, fn. 3). One claim in her study that is of some interest here is that the imperfective is related to counterfactuality when combined with past tense-the morphological pieces I am discussing at this point, -ba and tava, come from Portuguese past imperfective markers as well (and even that -se in Santo Antão that is not detailed here comes from the Portuguese imperfect preterit of the subjunctive); in Caboverdean, $-b a$ and tava are also part of some past imperfectives (past progressives and past habituals), but at least -ba, when not combined with preverbal morphemes, may mark a value with no imperfective involved, the one corresponding to past perfect. Anyway, that alleged association of the past imperfective with counterfactuals is indeed just a description. Then, "inspired heavily" by Dowty (1977) and under a formal semantics perspective, the author points out the intuition that "imperfective aspect can grant access to non-actual worlds" (von Prince 2019: 14).

In my quest for true explanations for these uses, in Klein's claims I found no more than the description for this in (other) theory-internal terms: these "atypical relations between TT and TSit: narrative present and related phenomena" involve a choice made by the speaker, who pretends a different TT in some cases, or imagines a different TSit in others (see details in Klein 1994: 133-140). ${ }^{120}$

[^54]So, as far as I understand, all these approaches certainly provide no answer to this question: what do speakers have in mind when they resort to this apparent mismatch? In other words: why do we choose constructions that we take as corresponding to the past (be it by choosing a different TT or a different TSitimportantly, for reasons to be clarified below I believe that, in Caboverdean, the former case is the one at stake) when we want to express 'non-actuality', 'dissociation', 'distality', 'remoteness', and, conversely, constructions taken as corresponding to the present when we want to express the opposite value(s)?

All these linguistic analyses neglect the main feature about the past that I find of most importance, for it provides a nice explanatory power. This feature is certainly not 'distance', 'distality', 'remoteness', or even 'non-actuality', because we could intuitively attribute all these values to the future as well-and yet future morphology, when used to express detachment, does so in the epistemic sense (we often use it to voice conjectures), not in the temporal one.

The rather complex notion of accessibility, which refers to a quality rather than any quantity of time remoteness, seems to me much more adequate, and therefore I am leading my studies on these grounds: accessibility is here defined as the perception/presentation of a given temporal location as being fully acces-sible-in the sense of us, from this perspective that we are conscious of, being able to put ourselves in there. If we feel we access this location only through our memory, or through any other cognitive process that implies no presence in there, then its accessibility is low-this lack of our 'presence in there' does of course not mean that the temporal location in question is unreal.

This notion is also fortunately not dependent on temporal distance, and this has two welcome effects on what it includes in each camp:
(a) in the low value, it correctly includes some pasts that are not necessarily remote, as well as other temporal locations that may seem close to us but are unspecific (and thus we picture this as low accessibility as well), and
(b) in the full value, it correctly includes some other past situations (expressed by the present perfect), as well as both presents (progressive and habitual), and subsequent situations (in the sense of prospective aspect). ${ }^{121}$
This is encouraged by philosophical considerations about the past, which I then extend to other time locations. And this is explained in the next subsection.

[^55]
### 5.2.2 The past and us

It was unforgettable. I felt that my own pain and sadness had never even come close to hers.

Banana Yoshimoto, Kitchen (1993[1988])

In both tensed and tenseless languages, as was said earlier, the time of utterance is definitely a fundamental concept regarding linguistic productions: it plays a key role in how we define the time about which we are speaking-not only through the overt expressions for anteriority, coincidence or posteriority, but also through constructions that covertly focus on this deictic centre, such as the ones crosslinguistically called perfect. ${ }^{122}$ This has another interesting effect (already briefly mentioned above) on the apparent mismatches under discussion here: although the situations denoted by the perfect interpretations are located at a time previous to the time of utterance, we never use perfect expressions as 'fake pasts'-so what counts as past for the low accessibility marking is certainly not a past situation time (as the ones expressed by the present perfect).

Recall from chapter 1 that, despite the intense debate within physics and philosophy surrounding the formulation of time ontologies, both presentists and eternalists consider that, at the instant of evaluation, we only experience a part of the present and do not have full access to the past, as the past is only available in our memory. ${ }^{123}$ It is this idea about the past that inspired the core theoretical development in this study.

And so the main assumption proposed here is as follows. That lack of full access to the past is also part of the depiction of other temporal locations in human discourse: we either naturally perceive them this way or intend to give this impression to others. In the same manner, we often want (deliberately or not) to annul this lack of full access to the past or to these other time locations, and thus talk about situations there located by expressing a temporal value indeed related to the present and some future-orientations, perceived as fully accessible/available in the sense that we feel we are there or can go there.

Therefore-and this is of extreme significance to distinguish this proposalany notion of 'fake' tenses (or 'metaphoric', or 'noncanonical') is only relevant

122 Pancheva \& Zubizarreta (2019a, 2019b) propose for Guaraní a parallelism between space and time notions having the speaker at their centre.
123 Again, presentism is roughly related to McTaggart's A-series ("that series of positions which runs from the far past through the near past to the present, and then from the present through the near future to the far future, or conversely"), while eternalism is roughly related to the B-series (the "series of positions which runs from earlier to later, or conversely"); citations from the reprint in Le Poidevin \& Macbeath (1993: 24), already used in 1.1.1.
in the scenarios where we perceive these temporal locations in one way and express them in another way. True, this sometimes happens: we express the past as present for narrative purposes, so as to give those situations an accessible flavour, and, conversely, resort to an expression of low accessibility when we want to be polite and intentionally give the hearer the option to materialize it or not (when for instance we ask for a favour as 'Would you...?'). But, remarkably, the explanatory content of this current approach lies in this other part of the equation, the one that interests me the most: we often use these temporal values as we naturally perceive the world (and so those occasional pretended/stylistic uses are themselves motivated by this general perception/meaning).

The details of these connections regarding time perceptions are as follows:
A.
(i) the speaker identifies some past situations (i.e. the ones whose topic time is prior to the time of utterance) with a sense of low accessibility-the past is gone, even if this is an effect of our blurred perspective; so with no time travel there is no full access to it-we can only access it through our memory and other complex cognitive processes (Buonomano 2017; Rovelli 2018);
(ii) in the same manner, the speaker identifies situations located at topic times not necessarily prior to the time of utterance with a sense of low accessibility as well-their temporal location is unspecific and we access them, though also never fully, through those complex cognitive processes (and note that to call them unspecific time locations does not mean they are 'unreal');
B. the same mechanism is in play when the speaker identifies as fully accessible those situations whose topic time coincides with/includes the time of utterance (in the sense of a 'specious present').

And then, whatever resources their language offers to express these values, they use them-mostly reflecting how they really perceive time, but also, sometimes, to obtain stylistic effects. In Caboverdean, a full accessibility value is typically expressed with present progressives, habituals, and generics, and also the perfect; and for a low accessibility value (either for the past or other temporal locations) the speakers add -ba or tava/tá (or -se, in the variety of Santo Antão, not analysed in detail here) to each of those (but see 5.3.2 for other expressions).

In each of these uses, the same dimension is at stake: accessibility. And this is always temporal in nature-it always concerns the temporal location of situations, which may be or not fully accessible from the speaker's perspective, depending on still poorly understood cognitive abilities. Note that here only the speaker's perspective matters-and this is the part that relates to the 'wider field of modality' that I retain from Palmer (2006), as was explained in the 5.2.1.

If, as was argued in chapter 1, we take natural language productions as a wormhole into our deepest and complex notions about time, one idea certainly associated with this hypothesis-that some points other than the past are depicted as lowly accessible as well-is the suggestion already mentioned that we are capable of conceiving different topic times in a way much more coherent with those multiple layers that stretch and push/pull one another, as the world is described in modern physics (and, again, this is the only world at stake here).

The explanatory advancement of this approach thus depends on this linkage between language and our deepest notions about time, and on assuming that we are after all somewhat adapted to the laws of a quantum universe. And so, if these human expressions are indeed signalling this other value, we must consider most of these cases as true temporal depictions (not 'fake'). And it is time to cite Rovelli (2018) again, but now to slightly disagree.

> The grammar of many modern languages conjugates verbs in the "present," "past," and "future" tense. It is not well-adapted for speaking about the real temporal structure of reality, which is more complex. Grammar developed from our limited experience, before we became aware of its imprecision when it came to grasping the rich structure of the world. What confuses us when we seek to make sense of the discovery that no objective universal present exists is only the fact that our grammar is organized around an absolute distinc-tion-"past/present/future"-that is only partially apt, here in our immediate vicinity. The structure of reality is not the one that this grammar presupposes. We say that an event "is," or "has been," or "will be." We do not have a grammar adapted to say that an event "has been" in relation to me but "is" in relation to you.
> We must not allow ourselves to be confused by an inadequate grammar.

Rovelli (2018: 64)

The reason for my minor disagreement consists in the intuition that this reasoning is more grounded on conventional linguistic analyses than on natural language itself. I leave most of this intricate topic for philosophers of language, but here this much must be said: our grammar cannot in principle consistently confuse us in this sense; so what can confuse us is rather how we analyse it.

In chapter 1 this has been asked (as the second of two complementary doubts): since the notion of a straight timeline is classically invoked in linguistic studies, in all their forms and theoretical approaches, could it be the case that this traditional body of knowledge, grounded on old views about our perception of the world around us, is obfuscating/obstructing the research as to how we essentially process time, beyond all the appearances created by our discourse about time? In other words, Rovelli's conviction that our grammar is organised around the absolute distinction of past, present, and future-and therefore inadequate-might perhaps be resolved if the analyses of some temporal meanings were themselves more satisfactory.

The proposal advanced here defends that natural language is much more adequate to depict the temporal structure around us than appears from text-books-even a trivial change of paradigm reveals that, if we consistently use identical terms to denote disparate temporal locations, it should be difficult for a linguist to accept this as just a repetition of improvised adjustments.

More strictly on the linguistic side, here is a final observation to this section: one novel characteristic of this proposal is therefore that it brings together constructions which are easily taken as having a modal meaning (e.g. those that overtly express some doubt/uncertainty or other attitudes from the speaker) and others which do not-so the modal/nonmodal distinction continues to make sense, but it pertains to those areas described in previous sections and chapters, e.g. epistemic vs. nonepistemic, veridical vs. nonveridical, among others. The full consequences of this analysis in relation to those areas of modal meanings will be pursued in upcoming studies. But two notes are worth to, again, underline here: (i) if it makes sense to relate this other layer of temporal meaning to modality-due to the role of the speaker's perception-then it must be done for that vague 'wider field of modality' mentioned in Palmer (2006); and (ii) to say that modality, in this sense, is all that matters would skip the more concrete modal distinctions referred above.

In conclusion, we are able to express temporal locations in the past, present, or future which can be disposed on a timeline, but also others that do not conform to it. There is no mismatch (under a linguistic perspective), let alone any inadequacy of language (under a more general perspective): we are always using the correct expressions to convey the temporal locations we intend to.

Next section lists the main ideas put forward in this chapter.

### 5.3 The big picture

Now this other notion must be added to the two pairs of values considered in the end of 5.1.1, and this is the goal of this section: 5.3.1 is about how accessibility combines with the layers of temporal meanings described this far, and 5.3.2 concretely suggests a label for the morphemes -ba and tava, among others.

### 5.3.1 Anchoring and accessibility

A separation was seen earlier between the realis/irrealis layer, which relates to temporal depictions (as in Comrie 1985), and the veridical/nonveridical layer, which concerns the way the speaker depicts the situation (in the sense of Gian-
nakidou \& Mari 2018) and is assumed here as what finiteness mostly is about. Caboverdean distinguishes the first pair through a few morphemes, but the values regarding the second depend on constellations of lexical items.

And then, when portrayed as accessible, in the sense defined in the last section, all these are computed, directly (in the case of the veridical) or indirectly (in the case of nonveridical), through their relationship with-their anchoring to-the time of utterance. And here is an important clarification: the time of the utterance situation is itself no TSit in this discussion, for the situations we are considering are the ones denoted in the linguistic productions. So this time rather has this crucial role of defining what the present is for the sentence under analysis. And to this we call TU. This means that there is always a relationship between all parts of the linguistic production and TU (with the exception being perhaps pure citations), and this applies to all predicates. Even those that point to a time defined by some other information, thus being given anaphorically rather than deictically, are still (indirectly) connected to TU. This temporal linkage may be either expressed by the utterance itself, e.g. when one predicate/clause imposes restrictions on the temporal meaning of others, or just be part of wider linguistic processes, e.g. in narratives where certain temporal sequences are invited/suggested. Again, these complex processes occur regardless of any finite vs. nonfinite distinction, and this independence also exists in languages which manifest such overt signs.

Now, recall that under this proposal all situations expressed in Caboverdean main clauses and in most subordinate clauses (most complement clauses, most relative clauses, most adverbial clauses) are depicted as veridical, and thus directly anchored to the utterance situation. Among them, the ones marked by the progressive and the ones with most bare predicates-in clauses expressing veridical situations the latter have a perfect interpretation-are realis; the ones marked by ta (habituals and generalisations, as well as prospective situations) are irrealis.

As for nonveridical situations, they, too, must naturally be anchored to the utterance situation (and this is where veridicality, as it is taken here, differs from the notion of finiteness even beyond any morphosyntactic criteria). This is indeed obtained indirectly: mainly through the main predicate in the sentence, the connective between one predicate and the other, or a combination of both. The subordinate clause/predicate that expresses the nonveridical situation is marked by temporal morphemes according to the properties of the situation itself as related to a given topic time (so here we are talking about aspect), and
its temporal location is anyhow related to the time of utterance (so here we are talking about tense meanings). ${ }^{124}$ See an example repeated from chapter 3: the clause which expresses a nonveridical situation in (101) is marked with the habitual $t a$ in the exact manner it would be if this was a root clause (in that case, it would of course have no connective heading it).
(101) Djá N kunpra un sponja
already 1sG buy one sponge
pa $N$ ta laba losa ku el.
CON 1SG TA wash dishes with 3SG
'I've already/just bought a sponge to [regularly] wash the dishes with it.'

As was also said before, regardless of the veridicality of the situation they denote, all these clauses contain an assertion just the same, and so they relate to a topic time (which sometimes may be unspecific). We have also observed that, while many languages have nonveridical situations marked by an infinitival verb or by the subjunctive mood, in Caboverdean there is no such marking (and even the use of a few suppletive forms constitutes no contradiction to this). ${ }^{125}$

All these observations were previously made while assuming as follows the default value for the main topic time:
A. for veridical situations-in all main and many subordinate clauses-a relation between the topic time (TT) and the time of utterance (TU) is expressed by the predicates themselves, with their respective temporal morphemes.
B. for nonveridical situations-in a subset of subordinate clauses/predicatesthe expression of this relation includes other lexical items as well, which are thus external to the relevant predicate itself.

In practice, the (still accessible) TT for nonveridical situations may be related to other TSits expressed through other lexical items.

When the embedded dynamic predicates denoting nonveridical situations are (and indeed some of them can be, as in examples analysed previously) in the habitual or the progressive (or if they are states, for that matter), their TT may coincide/include a later TSit, which may be given by any clause providing

124 Recall from chapter 4 that the anchoring of each situation "must also be allowed to exist and [be] encoded without any such explicit morphological markers" (Eide 2016: 17-18). And this also applies here, with anchoring rather depending on a constellation of items.
125 The relationship that all these reasonings establish with negation-and its inherent logical effects-is to be studied later (but see ahead for at least one case where negation matters).
that temporal reference, but may also be not overtly given in the discourse sequence, rather just imposed by the main verb or a relevant connective.

If the embedded dynamic predicates denoting nonveridical situations are bare, they also have a TT given by a later TSit or rather just imposed by those lexical items as above. This is the case, again, under prumeti/ prumetê 'promise’, but also manda/mandá 'order', and under connectives such as oki 'when’, si/s 'if', or pa 'to'/'for' (listed in 4.2.2.2.1). Only in rare cases do bare forms of dynamic verbs have an obligatory perfect interpretation in clauses denoting nonveridical situations (listed in 4.2.2.2.2 under C. 2 and D). Interestingly, in Portuguese this interpretation corresponds to an infinitival perfect, composed by ter 'have' + participle of the main verb, which is illustrated in the Portuguese translations, below. Two of these occasional Caboverdean cases combining a nonveridical situation with a perfect interpretation of bare dynamic verbs are: sen 'without' clauses (105) and complement predicates to epistemic modals, such as debi 'must' (85). We saw them in previous chapters, and they are here repeated for convenience: the first is adapted from Brüser et al. (2002: 138) and the second (a premise-conditional, as in Haegeman 2003) is from Brüser et al. (2002: 486).
(105) Es ta deixa mininuta ba skola sen (es) toma kafé.

3PL IRR allow child IRR go school without (3PL) take coffee
English: ‘They let children go to school without having taken breakfast.'
Portuguese: 'Deixam as crianças ir à escola sem (elas) terem tomado o pequeno-almoço.'
(85) Si e sata raprende-l,
if 3SG PROG scold-3GS
é pamó algun kuza mariadu e debi fazi.
is because some thing bad 3SG must do
English: 'If she's scolding him, that's because he must have done something wrong.'
Portuguese: 'Se ela está a repreendê-lo, é porque alguma coisa má ele deve ter feito.'

As different as they certainly are in other respects, both these exceptions can be accounted for in the following way: when another specific modal value is imposed upon a subordinate predicate denoting a nonveridical situation-which is the case here with the epistemic meaning imposed by debi 'must', in (85), and with the negative import of sen 'without', in (105)-we have this nonveridical situation combined with a perfect meaning of the bare verb.

Note that, with a nonepistemic meaning, the modal has no such exceptional effect over the nonveridical situation-here the bare lower verb has the much more frequent subsequent interpretation. This is visible in the example (93), also from chapter 3 (Brüser et al. 2002: 508), repeated for convenience as well. ${ }^{126}$
(93) Algen ka debi inkomoda algen di noti
someone NEG must disturb someone at night
oki e sata durmi.
at.the.time.when 3SG SATA sleep
Intended: 'People must not disturb others at night when they are asleep.'

Finally, we obtain a truly integrated analysis of virtually all possible sentences in Caboverdean when we apply:
(i) the low accessibility associated with various other time locations (as is proposed here)
(ii) to the veridical/nonveridical distinction regarding a certain type of attitude from the speaker, as described in Giannakidou \& Mari (2018),
(iii) and to the realis/irrealis distinction connected with temporal depictions at a different level, as established in Comrie (1985)

Now we need to mark all the temporal meanings listed before with morphology that expresses this value. It is often -ba, in Santiago (and other Sotavento varieties), and tava (or tá) in São Vicente (and other Barlavento varieties-plus the mentioned morpheme -se in Santo Antão, to be analysed in future works). But this value can also be expressed by other lexical items traditionally characterised as only meaning past-e.g. some suppletive forms from the Portuguese past imperfective, such as era, for 'be', and tinha, for 'have', and others from the Portuguese past subjunctive (which in fact is literally called 'imperfect preterit of the subjunctive'), such as fose, for 'be', or tivese, for 'have'.

Table 15 adds to table 14, from 5.1, a line about TT as non-coincident with TU, which can be expressed by any of these items/morphemes just mentioned above. In some sentences this latter combination expresses past versions of the diverse meanings (and so TT precedes TU)-past habituals, past progressives, or

126 Also the temporal interpretations in relation to a modal base require a dedicated study that is beyond my current purposes. But I believe that these studies must follow Condoravdi (2002) and Laca (2008) in considering that 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 (the described eventuality) is instantiated" (Laca 2008: 4).
past perfects; in other sentences there is no past involved-the location of TT in this case is unspecific, belonging anyway to an area of temporal locations that the speaker sees/presents as equally characterised by low accessibility.

Table 15: Crossing veridical/nonveridical with realis/irrealis and low accessibility of TT

| VERIDICAL <br> all main and many subordinate clauses/verbs |  | NONVERIDICAL <br> some subordinate clauses/verbs |  |
| :---: | :---: | :---: | :---: |
| realis | irrealis | realis | irrealis |
| bare verbs; verbs marked with the progressive | verbs marked with ta | some bare verbs; verbs marked (with ta or sata) for progressive | some other bare verbs; all others marked with $t a$ |

Now that my analysis has been described, a new label is needed for these morphemes, which is resolved in the next subsection.

### 5.3.2 Low access morphology

The reasoning that leads to my suggestion regarding these Caboverdean morphemes is supported by another line of inquiry among linguists dealing with data from non-European languages, who have met intuitions about tense not conforming to a simple division between past, present, and future. ${ }^{127}$ Their studies thus include sub-types of these tenses as an attempt to account for the diverse morphological markings and their meanings. One such proposal is the formal semantics approach to Temporal Remoteness Morphemes (TRMs) in Kikuyu (Bantu) in Cable (2011). The author argues that these are prefixes that occur in past-tensed verbs and provide further information about the distance between the event described and the time of speech; (like tenses) they "are temporal pronouns, but (unlike tenses) restrict the Event Time rather than the Topic Time" (Cable 2011: 3). This is different than what I am claiming here in at least two ways: (i) as other works on 'graded tense', it concerns different past distances, while I am concerned with uses of Caboverdean morphological mark-

127 For descriptions of languages from different families that require a more fine-grained list of tenses, see for instance Bybee at al (1994) and Plungian \& van der Auwera (2006).
ings that sometimes relate to past and others do not; (ii) and, more particularly, the morphemes under study in that paper do not restrict the topic time, while I defend that the Caboverdean morphemes under study here do just so. ${ }^{128}$

Note that the (quantitative) notion of 'remoteness' in those studies, or their various degrees of pastness (which, as far as I understand, assume a conception of time of the McTaggart's A-series type: "that series of positions which runs from the far past through the near past to the present, and then from the present through the near future to the far future, or conversely"), seems essentially related to the 'remoteness', 'non-actuality', 'dissociation', or 'distality' meanings referred in 5.2.1-albeit those are concerned with the past in its 'modal' uses. But a view of the past as a whole, and the qualities it has for just being past, is closer to the one I am focused on here, which seems at odds with both McTaggart's series. This is so because the B-series, in turn, is about the "series of positions which runs from earlier to later, or conversely"-and so, although in it the degrees of pastness are not crucial (which serves my proposal), as far as understand it the B-series fails to put the speaker at a deictic centre, where they get/create their blurred vision.

Therefore, and regardless of McTaggart's series for now, I propose that:
(i) as was said before, low accessibility captures the value in question much better than 'remoteness' or any other of those distance labels;
(ii) the relevant morphemes are not treated as markers for past which then would extend this value to other contexts, being there a fake past; they are analysed at the outset as marking just this value instead, which sometimes happens to be about the past and others is not.

The final detail that is missing at this point is to assign a label to the Caboverdean morphemes under analysis here: the verbal suffix - $b a$ in the older variety of Santiago, tava (or tá) in the younger variety of São Vicente (and -se in the variety of Santo Antão, which was born between the other two). Recall the procedure that allows us to establish that a given morpheme is a tense morpheme: "we would look at a particular form in a language, decide whether it does in fact express location in time and whether it is indeed a grammatical category, and

128 There are of course ways in Caboverdean of talking about a complexity of pasts, as related to each other (some are more remote than others), as we saw in this example (chapter 3), among others. These relations are typically established anaphorically, rather than deictically.
(71) Depos es ben oiá $k$ es tinha falhod má mi. (Firmino, São Vicente)
after 3PL come see that 3PL had fail:PART with 1SG
Intended: 'Afterwards they ended up seeing that they had failed me.'
then pronounce it to be tense or not" (Comrie 1985: 9). We observed that they are a grammatical category, and they are related to certain tenses-but what they indeed express is not a specific location in time, rather pointing to a different layer of temporal meaning altogether, which comprehends an array of unspecific locations of TT regarding TU.

The proposal here is therefore to call them low access morphemes (LAM).
A few examples follow which have been presented before and are repeated here just to locally illustrate what these morphemes mean in all instances. Another one is added from a young speaker, who is telling about how the floods in the old days got people running for their lives (177).

Recall that tava (tá), from São Vicente, subsumes two meanings, for it contains the irrealis meaning of $t a$ plus a low accessibility meaning (which we cannot attribute exclusively to $v a$, though-see subsection 2.3 .2 for a diachronic analysis of $t a$ and tava): this is why its gloss has these two meanings separated by a dot, not by a colon (a colon separates the meanings for two distinct morphemes, as we see in (176) for the verb forms + -ba). Three examples are included from Santiago to show three different uses for its LAM -ba: in past habituals, as in (64); in conditionals (which point to unspecific points in time), as in (83) and (176); and with verbs that in other languages are nonfinite, as in the last predicate in (64) (the complement of 'like'), and the first clause in (176)-and note how, under this proposal, any prior incongruity between -ba and the suppletive ser just disappears.
(64) Senpri N ta flaba
(Daiana, Santiago)
always 1SG IRR say:LAM
ma N gostaba di trabadjaba asin...
CON 1sG like:LAM of work:LAM like...
'I always used to say that I liked to work like....'
(83) Si N ka staba na Sal, N staba na Praia. (Miranda, Santiago) if 1SG NEG be:LAM in Sal 1SG be:LAM in Praia 'If I weren't [now] in Sal, I would be in Praia.'
(176) Ta serba un tristeza pa bu pais (Brüser et al. 2002: 833, IRR be:LAM one sadness to PPOSS.2SG parents Santiago) si bu ka pasaba na izami.
if 2SG NEG pass:LAM in exame
'It would be sad for your parents if you didn’t pass the exam.'

The next, final example-not repeated from previous sections-shows how -ba may attach to verbs within $p a$-clauses, still keeping the subsequent interpretation (regarding the main situation) that is demanded by this connective.
(177) Otu algen ta fikaba lá na igrexa, pa ka moreba. (Luís, othersomeone IRR stay:LAM there in church for NEG die:LAM Santiago) 'Other people would stay in the church, so that they would not die.'

As for this example from São Vicente, it shows its complex tava in the antecedent of a conditional.
(84) S tud jent tava vivê sima mi, mund era dret. (Inês, if everybody IRR.LAM live like 1SG world be.LAM right São Vicente) 'If everybody lived like me, the world would be right.'

A curious note about this sentence is that it also includes that suppletive form from Portuguese, era 'be', in the consequent leg of the conditional sentence. In previous instances of this and some other suppletive forms, they have been connected to a past meaning. Under the current line of reasoning, as was said in the last subsection, they also convey the low accessibility value, and therefore they are now given a complex gloss as well (in the same manner as the one for tava). This is much interesting at this point, to illustrate how this temporal value may be expressed by a variety of morphemes. In this same vein, other noteworthy combinations involve the past participles that exist in Santiago in certain passives, such as the one in (19c), from chapter 2.
(19) c. Kel bes ta flada resebedoria. (Lurdes, Santiago) that time TA say:PART.LAM receiving.office 'At that time it was said receiving office.'

A final note to all this is as follows. Since (i) these morphemes do not express a unique/specific location in time-so, they are not common tense morphemes, rather expressing a different layer of temporal meaning, that maybe better suits a 'wider field of modality' (although not in the exact sense of Palmer's); and (ii) all other temporal locations are expressed by other means (the bare form vs. the progressive, the irrealis marker, and their combination with lexical items of different categories), we are now led to the conclusion that Caboverdean is a tenseless language after all. This is not the most salient assumption in the current study though, rather appearing as a collateral effect.

### 5.4 Concluding summary

Caboverdean, as many other non-European languages, has no consistent morphological markings for (non)finiteness. The overt signs for such grammatical category therefore appear as a superficial indicator of something related to meaning which seems quite well captured by the notion of veridicality, as connected to how the attitude holder depicts the situations (Giannakidou \& Mari 2018). If this is so, it would be worth exploring how redundant those morphological manifestations are in the languages which have them, as is the case with agreement.

On such grounds, the first section of this final chapter clearly established a separation between, on the one hand, (i) a realis/irrealis distinction, which (in the sense of Comrie's 1985 definition, as well as other more recent analyses of diverse languages) relates to a kind of temporal depictions always regarding a specific TT (which by default includes the time of utterance, TU); and, on the other hand, (ii) a veridical/nonveridical distinction, in the sense pointed out above, which is mostly what finiteness is about.

All these interpretations are conveyed in Caboverdean by different constellations that exhibit specific morphological properties for the realis/irrealis distinction ( $t a$ for irrealis, bare forms or the progressive for realis) but are mostly identical at the level of the veridical/nonveridical distinction-as was said before, no clear finiteness morphology exists, and neither does any subjunctive/indicative contrast (only some suppletive forms, which were accounted for as invariant lexical items). Situations are therefore expressed as veridical or nonveridical through a combination of meanings, typically led by the main predicate (in multi-verb constructions), or the product of an interplay of the main predicate with certain connectives (in some subordinate clauses).

The second section explained in detail a notion that provides a nice answer to this question: why do speakers resort to this apparent 'mismatch' between the expressions they choose and the temporal locations they intend to convey? There are related intuitions by other authors who have approached these same problems in other languages: "some linguists have proposed defining the nonpresent tenses not in terms of temporal precedence or sequence but rather of detachment, understood as either detachment from the present or detachment from reality" (Binnick 2010: 515). And we have a summary of this in subsection 5.2.1. But to my understanding these proposals have never offered an explanation, let alone the limitations of other labels they use, which refer to distance (in the sense of quantity).

That an accessibility notion (which is related to quality instead) applies to different time locations enables us to get rid of the idea that a 'past' morphology
applies to nonpast situations, as an atypical or noncanonical use. So what is indeed typical, in the sense of entirely natural, is the full or low accessibility regarding different times. This results from our anchoring to a given presentnot a universal present (which does not exist), but an individual one, connected to our 'blurred' vision of the world, as put by Rovelli. And note again that this takes the world to be just one and only, complex enough to provide our minds with intricate and turbulent temporal meanings.

This accessibility of other time locations in relation to our anchoring point may be perceived as such, or rather pretended as such for discourse/stylistic purposes. And so, as was noted earlier, if we are natural-born presentists in the philosophical sense (cf. Buonomano 2017), the role of the present is rather functional: through the time of utterance (which can indeed be a 'specious pre-sent'-not exactly an instant but rather a short interval), we are located at a deictic centre, from where we evaluate different accessibility levels regarding times located within layers that stretch and pull each other in complex patterns composed of change.

A low accessibility value does not affect, at least in Caboverdean, the linguistic construction that expresses a present perfect (the topic time coincides with the time of utterance, the situation time being prior to both), but only (i) the past perfect (also a perfect construction but first related to a past topic time), as well as past habituals and past progressives, all of them only accessible through the complex mechanisms of memory, and (ii) conditionals, as well as other meanings that denote temporal locations only accessible through other still poorly understood cognitive processes-note that they may involve memory as well, for we are able to (non-fully) access certain outcomes by recalling similar sequences from the past.

Lastly, one brief note concerning the theoretical approach in this linguistic study and the assumptions mostly developed in these latter chapters. Some notions from older eras were used, only to the point where they still add descriptive adequacy, both to general grammatical devices in Caboverdean and more specifically to language variation. At the same time, a fundamental posture has been adopted that seems to me closer to the descriptions of minimalist approaches (although in practice the results may be different from other works), which concerns the simple and explanatory treatment of the temporal morphemes in question. I believe that the layers of interpretation proposed offer an integrated solution to complicated problems: these levels describe, and justify, all the temporal meanings involved, which comprehend deep notions about time as they are expressed in natural language.

## 6 Final remarks

And when you are young, they assume you know nothing.
Taylor Swift, cardigan, in folklore (2020)
This brief chapter still bears on this quite familiar notion-perspective. This is however approached here from two other angles. One consists in looking back at the main ideas defended in this monograph (6.2.1), and in then listing new doubts related to the current study which may feed some follow-ups (6.2.2). Before that, another angle is added which concerns life in general (6.1).

### 6.1 Change

Indexicality is essential to linguistics for theoretical reasons that have also been explored over the last chapters, about language and time notions. But the concept of perspective in this section has another focus. It concerns this trivial fact: a linguist is a person, who speaks their own language(s) and comes with a private story and a cultural baggage. Their studies on any language are never objective nor entirely 'from without'. And indeed Rovelli says something about this too.

When we do science, we want to describe the world in the most objective way possible. We try to eliminate distortions and optical illusions deriving from our point of view. Science aspires to objectivity, to a shared point of view about which it is possible to be in agreement. This is admirable, but we need to be wary about what we lose by ignoring the point of view from which we do the observing. In its anxious pursuit of objectivity, science must not forget that our experience of the world comes from within. Every glance that we cast toward the world is made from a particular perspective.

I can naturally speak for myself, and this section intends to provide a brief insight into this personal space. As was the case in my previous career as a journalist, my devotion to fieldwork in linguistics is grounded on a fondness for listening to diverse people in their unique places-and then pondering, at home, about the implications of some details they have just told me, looking for a thread that confirms this is a story, another mesmerizing story about being human.

So it comes as no surprise that some among my consultants were met in places where people gather to socialise-Café Sofia, in Praia, Santiago island (the small café that I first encountered evolved into a more stylish restaurant with a lively terrace, where tourists mix with locals-it is still my hot spot in the city, mostly for emotional reasons); Pastelaria Algarve, in Mindelo, São Vicente island; or the iconic restaurant Cesaria, in Dorchester, Boston, Massachusetts.

This is not, however, the most effective strategy to find persons who are good consultants in every possible sense-a good consultant is a person who, of course, corresponds to the ideal sociolinguistic description given our research goals, but is also available, patient, and not willing to embellish data. The most effective method to find such a collaboration is through the help of a local assistant, who in turn can be found through local institutions or even friends of friends. Although it requires more time and homework, there are a lot of advantages over the spontaneous approach: we avoid the inconvenient role of targeting unknown persons in public spaces, and we may record a productive interview or get a quick reply to linguistic tasks as soon as we sit with them at the prearranged meetings.

Still, my earlier practice with spontaneous meetings and conversations has often led me to opt for this first version. It feels increasingly bad whenever people I approach do not respond positively to an invitation to talk in and about their language, but when they accept-and the work session goes well-the emotional and professional reward is such that I keep returning to the discomfort of trying all over again. As frustrating as negative answers may be, my most disappointing moments took place when highly expected pre-arranged sessions got cancelled at the last minute. Anyway, every single episode of fieldwork is now recalled with a touch of relief and a lot of pleasure.

### 6.1.1 Segments

Each of the paragraphs in this subsection has been transcribed from my notebooks, not about language doubts or discoveries, but about personal experiences in the field. How they ended up affecting my approach to the linguistic analysis of Caboverdean could only be known through another type of study. For now, I leave them here because the emotions they involve will possibly resonate among other linguists, especially so if they spend periods away from home listening to people talking, to document their understudied, perhaps endangered languages.

### 6.1.1.1 September 2001

Walking in some streets of Praia under an end-of-Summer sun makes me think of Gabriel García Márquez-his descriptions of a similar 2 o'clock heat on the other side of the Atlantic brutally capture this very moment, which makes them weirdly comforting at the same time. And so it is with a bit of pedantic joy and a lot of sweat that I keep going, past the former customhouse at Chã de Areia, heading to a spot I met the evening before, just after arrival. It will certainly feel nice-just
deeply, honestly nice, with no need for literary solace. At one of the most beautiful squares in the city, a small café indeed offers a rest and a cold drink. After the first moments of recovery, I start listening to the chatters between the people around, in the language that I so dearly want to understand better. Maybe some of them wouldn't mind being my consultants. Maybe. While wondering about this still seated at one corner table, the caramel layer of a homemade banana cake at the counter window catches my attention. Yeah, the world will look much sweeter after a coffee and a slice of cake. Perhaps this will help me conjure the required nerve to approach one of these persons, introduce myself, and kindly ask them to talk to me in and about their kriolu. Sure it will.

### 6.1.1.2 February 2018

The moon cuts a funny face in the bright mid-afternoon sky above the hills. I go back inside my hotel at Madeiralzinho, Mindelo, pick up my camera, photograph our neighbouring planet once again, and then take the camera with me for this last walk around town. It turns out to be quite useful in an unexpected way. True, I have repeatedly captured the turquoise tones at Praia da Laginha, against the impressive silhouette of the island Santo Antão, just across the canal. But as I pass there this time a white sailboat is crossing the bay, so I stop to take another picture. A female voice over my shoulder sounds nice, I turn to talk to them. Two young women are there, smiling at me-the Cabo Verdean morabeza is always welcome, even if I'm almost leaving. One of the women declares that she, too, likes this view a lot. She studied in Portugal for a while but cannot imagine herself living forever away from Mindelo. I know what she means, that sodadi. We listen to it all the time, although they rarely pronounce the word itself-it rather permeates many other words, many sentences, every single story. It is expressed by the tones and rhythm in their music, and in their poetry. And music and poetry are everywhere here. Literally.

### 6.1.1.3 October 2018

The waiter doing the night shift at the fancy hostel where I'm staying in Boston says hello with a sleepy voice, from his hideout behind the counter. It's 5 a.m. and I'm bringing my laptop and a pile of papers to the vast wooden table at the living room, which is decorated with spider webs and skeletons (only a few days to Halloween). My first meeting in this Tuesday morning is only at 10, but I want to check the audio files from yesterday, make backups, register some info on my excel sheet. It has been a great short period, not only for the number of interviews within a few days, but mainly because of the stories I've been told. As other tales
of migration, they contain episodes of hope and heartbreak in different orders, and I feel humble and grateful that each of these persons trusts me enough to tell me about their own in such detail. During the interviews, I focus so much on the linguistic data they are producing, on keeping the conversation going, on checking the battery and the noise levels on my digital recorder, that some content in their discourse only emerges in moments like now, when I'm listening to them in the privacy of my earphones. This delay makes me go back in time, to the old process of photo development that we used to have in newspapers: only in the solitude of the dark room did my colleagues, photojournalists, fully regard the pictures they had been taking.

### 6.1.2 Background

Seventeen years went by between the two first moments above, and yet they share countless details.

In mid-September 2001, I was in Santiago for my very first fieldtrip. I had a cosy room at a small pension in Praia, a few names and telephone numbers, an analog tape recorder, several notebooks. Everything seemed settled and promising. On my first morning I walked a lot, visited the mandatory places at the heart of the city. I had my first katxupa gizadu (a local bean and corn stew, later browned in a pan and often eaten for breakfast, accompanied by a fried egg and a small sausage) at a small restaurant in another city quarter, at that time a growing residential neighbourhood-family houses, some public schools and administrative buildings, and a couple of upscale cafés. So then I was heading back to what is my favourite area from the first moment, luckily the one where I was liv-ing-and where I would stay most times since then (in the same way that, in subsequent years, my visits to the same café would still be memorable, with that same banana cake and a coffee, plus fifteen minutes of pre-paid internet-before my usual pensions offered wifi): Platô, the old and lively district which, as the name shows, stays at an elevated platform, overlooking the harbour on one side and, on another, the colourful Sukupira market, where I soon started to regularly take a iáse to the inland of the island. A iáse is a local transport, named after a popular type of van, which goes around in each place of departure picking up customers one by one, leaving for the road only when it is full of diverse people going about their business. I did it many times since then. I learned how to tell apart a good from a bad driver, and to recognise the different aromas in each area (closer to the sea, or rather through the cultivated fields on some steep slopes, or when passing any of the various local markets, according to the season and the
time of the day). As for the local noises, they were more difficult to capture-in a iáse songs are playing all the time, and I often concentrate on their lyrics.

Then, in February 2018 I was in São Vicente for the first time too, but the former experiences and improved material resources gave it a different flavour. This new scenario in another island was also emotional and extraordinary in many ways, of which the sudden meeting of those two young women was only the last. They were sisters, and their mother became my consultant in a specific sociolinguistic group (she was in her late sixties and has a university education). As for the language, it sounded different indeed. Perhaps this was the reason why everything else looked so easy-going-all my energy and attention were immediately taken by the phonological reality around, so unlike all I knew from Santiago.

And so my enthusiasm was even greater when I landed in the New England area next October, to finally pursue a line of research which had been on my mind since my brief stays there as a visiting student, many years earlier: the study of variation phenomena in this especial context-of close contact among the different varieties of Caboverdean and between them and English. The last of the above notebook segments was written there. At that time, a rough version of the structure and contents of this book were already with me. Now, as their materialisation advances, the pictures of bright and cold Fall mornings in Boston and Providence come to my mind, connected as they are to many ideas here included.

### 6.2 Goals and doubts

A recent series of experiments, as was briefly pointed out in chapter 1, was conducted by a team at Johns Hopkins University to empirically test an old problem: how the brain deals with the perception of three-dimensional objects while our vision receives light in a way that resembles two-dimensional information. The experiment used circular coins slightly tilted (so, viewed as elliptical), as well as truly elliptical coins, to check whether humans could tell them apart. ${ }^{129}$ The subjects were able to rightly choose an elliptical coin when asked for it ("by combining raw visual information with ingrained assumptions and knowledge about the world"), but the analysis of the results allows these scientists to also observe that the presence of the circular coin delayed this process. Then they "conclude that

[^56]objects have a remarkably persistent dual character: their objective shape 'out there', and their perspectival shape 'from here'."

These findings seem to me coherent with the fact that our blurred vision of the world is not equivalent to an illusion or a mental construct, as Carlo Rovelli also argues when discussing our concepts of time: it rather "depends on actual, existing physical interactions" Rovelli (2018: 83), and so it is perfectly compati-ble-also in our minds-with the complex designs in a quantum universe. Even regarding forthright distortions-such as when we wrongly perceive the temporal duration of some situations: when they're happening, stress moments seem to make time slower, while happy moments seem to accelerate it; when we recall them, the temporal distortions are reversed, for we remember happy moments as long and salient, and tend to shorten the stressful periods-they do not necessarily mean that we ignore the true duration of those situations (as was also mentioned in chapter 1).

So the core study here, grounded on the analysis of the expression of temporal meanings in Caboverdean, defends that when we are not speaking about time but rather using time notions to report on other subjects that are important to us, what we express is more similar to the strata of situations that may stretch, push and pull each other, as the ones described for the universe by physicists and philosophers. In other words, and just as the coins' experiments revealed about space, the fact that we have a blurred vision of time (that the identification of the elliptical coin is affected by the presence of the circular one) does not mean that we entirely convert this intricate structure into a well-arranged line of past, present, and future facts (we can still tell apart the elliptical from the circular coins). And this is not opposed either to our strategy of taking repetitive phenomena observed around us as a certain evidence of time passing, therefore using some events to establish other events' location and duration.

This is exactly what we do in all the sentences or verses provided just below the titles of all chapters and some sections of this study. They are all uttered by artists, not linguists, and just perfectly express what they (us) want to say about time, mixing layers of temporal meanings that are impossible to squeeze onto a straight timeline. Two of them, introducing the first and the last chapters, show at least two visible details in common. Despite their quite different ages and genres (they belong to two kinds of folk songs), both verses use situations under 'when' to locate other situations (which is not intriguing at all), and a 'present' verb to talk about other times. The fact that one refers to the future (planned or simply desired) and the other to an atemporal generalisation-or to what oneself experienced in the past (maybe both)-only reinforces the idea that this morphology, in combination with a variety of lexical items, is not exclusive to one time
location. If we therefore seek its true substance, things get clearer under the assumption that we associate diverse time locations with a full or a low accessibility from our own viewpoint in this one and only world, and it is these values that we unequivocally express in natural language. This is different than assuming that a linguistics approach to time must dispense with tense meanings. What I defend here is just the opposite: our deepest notions about time are a crucial ingredient in our dealing with all temporal locations.

Finally, as the time of utterance plays a fundamental role in these expressions, maybe we are natural-born presentists after all (Buonomano 2017: 115)and verbal morphology may indeed show this, albeit not exactly in the way it seems. We are apparently so when we think about time. As in this excerpt from a mid-twentieth century novel:

Here we are-right now. This very minute. Now. But while we're talking right now, this minute is passing. And it will never come again. Never in all the world. When it is gone, it is gone. No power on earth could bring it back again.

Frankie (also known to herself as F. Jasmine), the young protagonist in The Member of the Wedding, by Carson McCullers (1946)

And we are certainly so as well, in a less obvious way, when we think and talk about all other subjects. The cognitive processes involving memorised or predicted events (some of them automatically, as the ones explored by neuroscientists, and others more conscious and sometimes even voluntary, studied by several disciplines-and which indeed feed art with abundant raw materials), plus the still mysterious mechanisms related to imprecise temporal locations that appear to be more around us, all of them allow us to view ourselves at the centre, in this complex web of dynamic meanings and relations.

This is what was proposed here from the analysis of Caboverdean data, while trying to account for old problems which have otherwise remained unsolved. A low accessibility value is expressed mainly though -ba in Santiago, and tava (or tá) in São Vicente (some suppletive verbs may also play this role, and -se in Santo Antão is to be explored also under this view), while full accessibility is signalled by the lack of these morphemes. Each of these cases-presence or absence of this morphology-applies to all temporal depictions available: perfect and progressive, as well as habitual, generics and subsequent situations. Given all the observations about Portuguese and English also met over all chapters in this monograph, I suspect that overt 'present' morphology (associated with their own perfects, progressives, generics and habituals, as well as in subsequent meanings of some of these) signals full accessibility in other languages as well, but this surely requires a thorough examination.

One thing that is therefore evident by now is that while pursuing some old questions this study also skipped a lot of others, which may be easily converted into potential points for additional research.

One such topic concerns the distinctions among dynamic predicate types. These have been mostly approached here as one category alone, which was only possible given the focus on the revelations about the temporal meaning(s) of bare forms under various circumstances. But at some points, examples that illustrate achievements and the progressive meddled in the discussion, raising further doubts about this compatibility that have for now been left unresolved. It will surely be exciting to design a fine-grained study that may also allow us to ascertain whether we are dealing with real problems regarding the progressive combined with telic predicates, or should rather follow what is claimed in recent analyses, that there is here no mismatch either.

Two other topics regard language acquisition. Maybe one could carry out experimental work, or even an extensive survey of experimental works already accomplished in this area, to investigate whether children's uses of different temporal morphology bring any support to the proposals advanced here.

On the one hand, it will be especially significant to analyse under this perspective the numerous data on the acquisition of finiteness, an important subfield in the literature on language acquisition. This refers to the widely studied phenomenon of children optionally using nonfinite verb forms in root clauses in some languages-with languages which allow null subjects being excluded from this lot. The various approaches to this so-called Root Infinitive stage (RI) have not yet fully accounted for it (Grinstead 2016, among others). In their seminal paper about RIs, Hoekstra \& Hyams (1998) make the "empirical generalization in this respect" that they "occur only in languages where the expression of finiteness may be done exclusively through number morphology. Languages where finiteness is always expressed with person agreement, or with tense-morphemes appear not to allow RIs" (Hoekstra \& Hyams (1998: 87). It will be interesting to straighten the focus on these various language-specific morphological properties, under the view that they can be external redundancies in human language.

On the other hand, and more specifically related to temporal meaning, it will also be interesting to study when children start showing any signs of using constructions associated with the past, present, or future to convey any notions of accessibility-and my interest particularly favours this topic. The working hypothesis is that children's usage of temporal constructions in this sense depends on the notions of time they have acquired at a certain stage of their cognitive de-velopment-that is, when they master the intuition that the past is not accessible in the same way as the present or the future.

Our notions of time themselves also need to be further explored. Here is one of the questions raised in the introductory chapter as a driving idea in this book: is this notion of a present time (the one I have while writing this sentence) naturally ingrained in our minds, as a result from some evolutionary change? Research from various fields allows us to admit that this indeed the case. Now it would also be exciting to follow this by asking other questions, such as: how does it relate to the cultural notions that we learn since childhood from the adults around us? Also in the introduction, I mentioned metaphors which play around with secondary meanings, denoting properties about the passage of time (sand sifting, a river flowing, an arrow flying), or about its effects on existing beings (a trap, a healer, a curse, a mighty sculptor). So also these must be studied under a linguistic perspective, as well as overt propositions about time, in tensed and tenseless languages alike.

About tenseless languages as the ones described in 4.1.2, a promising topic of inquiry is this: which analogous uses of the type described here do their speakers resort to for this other layer of temporal meaning, i.e. when they want to mark the low accessibility of some temporal locations?

As for tensed languages, the reasoning developed here applies too, with the main difference residing in their morphological markings for these temporal meanings-and then in using these grammatical constructions to express a low accessibility value in the same way as Caboverdean. As was said above, I have the strong intuition that this is in fact the case at least in Portuguese and English, grammatically tensed languages-in Portuguese, the relevant morphology is of course past imperfective and past subjunctive, in English it is the simple past.

In both tensed and tenseless languages, the modal role of some temporal verbs such as 'come' and 'go' must be explored, to establish what implications they reveal regarding our concepts of time. Since their spatial meanings apply to their temporal uses in the same way-approaching and distancing, respectivelydo the latter imply any type of commitment from the speaker (like certainty for the approaching, because we are located at the goal point; and lack of certainty for the distancing, because we are away from the goal point)? They seem related to the deictic centre that provides the anchoring of our evaluations, but how exactly they help us relate that point in the world with other temporal locations must be meticulously explored.

So various future projects may involve areas as distinct as philosophy of language, neuroscience, cognitive sciences, anthropology, and literary studies, and maybe even multidisciplinary teams bringing together the findings from all these fields. ANDANTE-Human Concepts of Time: a View from Natural Language has an approach of this sort (just like this, with a verb said to be marking the present).

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[^0]:    1 The first version of the song When I'm Gone is by A.P. Carter, of the Carter family (1931). This latter version is Cups (When I'm Gone), by Luisa Gerstein, of Lulu and the Lampshades (2009). It was a theme song in the American movie Pitch Perfect (2012), performed by Anna Kendrick. This version is also the theme song in the British tv series Mum (2016-2019). This is that whole stanza: I've got my ticket for the long way 'round / The one with the prettiest of views / It's got mountains, it's got rivers, it's got sights to give you shivers / But it sure would be prettier with you. / When I'm gone / When I'm gone / You're gonna miss me when I'm gone.

[^1]:    2 Another example is when we-no psychic people or anything related-justify our present behaviour in these terms: 'My late grandmother would love that I'm doing this.'

[^2]:    3 Even if the vision defended by Biolinguistics that "particular languages correspond to specific solutions to the constraints imposed by human biology on language acquisition and historical change" (Fitch 2011: 385) may seem too strong a statement, the position assumed here is much closer to it than to any sort of linguistic relativism. Moreover, only the expression of time notions is under scrutiny-any social, cultural, moral values are entirely out of this discussion.

[^3]:    4 Despite diverse theoretical implementations, one notion is common to the most popular scientific views about the universe: time, if it exists, "is not what it seems" (expression applied to reality by Rovelli, in a title of a previous book). But others oppose to this. See for instance Unger \& Smolin (2015) - a philosopher and a physicist, respectively, who contend that "time is real", which is supported by the fact that "the universe, and everything in it, has a history".

    Note: the page numbers of both Rovelli and Buonomano may be distinct in online editions.

[^4]:    5 Chapter 33 of J.M.E. McTaggart's The Nature Existence (Cambridge University Press, 1927), entitled Time, is a restatement in more clear terms of the reasonings he had presented in the paper The Unreality of Time (Mind, 17, 1908: 457-74). This article in Le Poidevin \& Macbeath (1993: 23-59) is a reprint of that 1927 edition but has the title of the first version.
    6 For a detailed overview on these approaches, and the advocates on each side, see the chapter about Time at the Internet Encyclopedia of Philosophy (https://iep.utm.edu/time/).

[^5]:    7 Also Klein (1994) argues that "[languages] may differ considerably in the way in which they select and encode tenses, and, in practice, it is not easy to determine the exact nature of a particular system of tense marking." (Klein 1994: 140-141)

[^6]:    8 The situation types referred in this monograph roughly follow the terminology in Vendler (1957): states, activities, accomplishments, and achievements.

    9 There is an ongoing debate about what can count as irrealis; see chapter 4 for a brief discussion. Also, Bybee et al. (1994) dispute that this is realised in a language as a binary morphological distinction, contra for instance Foley (1986) for Papuan languages.
    10 This is processed through an intermediate time, let us call it for now the reference time.

[^7]:    11 For two distinct reviews on Jaszczolt's book, see Capone (2009) and Binnick (2010).

[^8]:    14 Among the many popular quotations about time from Augustine, this one is also famous: "When I measure time, I am measuring something in the present of my mind. Either this is time, or I have no idea what time is." Augustine, Confessions, book XI.
    15 For a debate on the persistent misconceptions about language and creoles, see Mufwene (2010) and Aboh \& DeGraff (2017), as well as the update in Veenstra et al. (2020).

[^9]:    16 For a recent state of the art regarding generative grammar, see also Chomsky et al. (2019). For different perspectives on the gains and losses of MP regarding GB, I refer the interested reader to the online dedicated conference within the series Abralin ao Vivo:
    https://www.youtube.com/watch?v=3JZXhTwoSek

[^10]:    17 For a description of the geography and history of Cabo Verde, see Batalha (2004) and references therein. For a recent survey on the few lexical items inherited from African languages, see Quint \& Tavares Moreira (2019).

[^11]:    18 Some interviews in the LUDViC corpus discuss this national topic, showing our consultants' opinions; they may be accessed by using the keyword 'Caboverdean language'.
    19 The independently funded project LUDViC-Language Unity and Diversity: Variation in Capeverdean and beyond (IF/00066/2015; FCT, Fundação para a Ciência e a Tecnologia) has been hosted by Faculdade de Letras da Universidade de Lisboa. This corpus had contributions from Helderyse Rendall and Mireida Miranda, and has had Raïssa Gillier as a team member. I am immensely grateful for their work and dedication, each of them in her own way.

[^12]:    21 The first people to go were from the island of Brava, hired by the American whaling vessels from New Bedford which stopped in these Atlantic islands for provisions and repairs. In fact, New Englanders had at that point already brought with them an uncertain number of Cabo Verdean slaves. But many others were these new workers, who were trying to escape misery in the colony-greatly overlooked by the Portuguese authorities (see Pilgrim 2008 for details and references), it did not offer them the wherewithal even to a modest life. These Cabo Verdean migrants then were among the first free Blacks in the United States.

[^13]:    23 In another logical sense, the six chapters might be paired this way: 3 and 4 at the epicentre (a long ago they were actually planned to be just one, but turned out being too much for one chapter only-this may still be noted in the need to recapture, in 4 , so many data from 3); 2 and 5 (the oldest and the newest); and 1 and 6 , for obvious reasons.
    24 After the reference section, a quite short index is provided which intends to help the readers search for some details that are not immediately available from consulting the table of contents. There, also the page numbers are signaled for the sentences produced by each of the consultants.

[^14]:    25 Source: Frida-A Biography of Frida Kahlo, by Hayden Herrera (Bloomsbury, 2018 [1983]).
    26 All glosses in this book follow the Leipzig Glossing Rules, and I highlight the use of rule 4 (a dot is used when a single object-language element is rendered by several metalanguage elements) and an adaptation of optional rule 4C (a colon is used when an object-language element is formally and semantically segmentable, although this segmentation is not shown in the example itself). The list of glosses (only used when relevant) is: ADV-adverb; cut-clitic pronoun; CON (rather than CONN)-connective (for conjunctions, including complementizers, as well as adverbial expressions, and prepositions heading subordinate clauses); DETdeterminer; EMPH-emphatic personal pronoun; F -feminine; FF - pronominal free form; PARTparticiple; PAST-past; PL-plural; PPOSS-possessive pronoun; PRES-present; PROGprogressive; SG-singular.
    Note that the temporal morphemes ta and tava do not receive any gloss until their full meaning is accounted for-before that it is TA and TAVA, with the descriptive text that accompanies these examples pointing out their contributions. As for -ba, it is sometimes labeled as PAST because: (i) it may help the reader capture a meaning of some sentences, and, at the same time, (ii) it helps highlight the limitations of this label. In 5.3.2 it is assigned an appropriate gloss.

[^15]:    30 On why sequences like (1a) are not emphatic forms instead, see Swolkien (2015: 168-169).
    31 A form homophonous with the 3SG object clitic may occur in some possessive environments. It also leans onto words other than verbs, like a noun (kaza l nha dona 'house of my

[^16]:    grandmother') or adverbs (dentu l kaza 'inside of house'). But this possessive $l$ has no such effect as the stress shift of the phonological sequence obtained. See 2.1.2.2 for the description and analysis of this shift triggered by the affixation of object clitics (this phenomenon is therefore sensitive to the categories of the morphemes involved-it is thus morphophonological).
    32 All the examples belonging the LUDViC corpus-which means they are taken from longer semi-spontaneous interviews, and thus are part of some narrative by the speaker-include the pseudonym of the consultant, plus their variety of origin (most times this is indicated directly in the example, but sometimes comes within the descriptive text above). The other examples fall into two other categories: (i) they are elicited examples from earlier fieldwork periods, and in this case there is no pseudonym indication; (ii) they are taken from the dictionary Brüser et al. (2002), and this is locally referred.

[^17]:    33 This diagnostics about locality is the reason for the classification of these argumental morphemes as anaphoric agreement (as opposed to grammatical agreement). These are the words in Bresnan \& Mchombo (1987: 284): "Our theory tells us that grammatical agreement relations with non-controlled arguments can be distinguished from anaphoric agreement relations by locality: only the anaphoric agreement relations can be nonlocal to the agreeing predicator."
    And for arguments on agreement as a post syntactic phenomenon, see Bobaljik (2006).

[^18]:    35 See also Baptista (2002: 107) and Pratas (2007: 254), for Santiago, and Swolkien (2015: 249) for São Vicente, as to the prohibition of subject clitics with the copula é in both varieties.
    For Ginensi (Guinea-Bissau), the interested reader finds a nice study on copulas in Truppi’s works, for instance Truppi (2019). I am thankful to Chiara Truppi for our nice talks about this language that she investigates, and also for the use of the name Ginensi rather than Kriyol.

[^19]:    36 The ongoing debate on the adjunct vs. argument classification of adverbs is beyond the mostly descriptive goals of this section.

[^20]:    38 São Vicente has no -ba or -da; as for -du, which in Santiago is a suffix marking participles, São Vicente has -id for some verbs and -od for others, depending on the final vowel of the bare form. The latter is one of the previously referred cases of vowel change: it results from the ending -ado in Portuguese. The obligatory use of the free pronoun as the complement of these participial forms applies to both varieties, and we can observe it for São Vicente in (56) (subsection 2.3), here pre-presented as (i). This sentence exhibits a compound past perfect. In the present perfect it would use the subject clitic: $d a-m$ 'give-1sG'.
    (i) Kel dia papá tinha dod mi sen skud. (Firmino) that day dad had give:PART 1SG 100 skud 'That day my dad had given me 100 skuds.'
    The account for this phenomenon has however been developed in more detail for Santiago in a joint work, and that is the version included in this section.

[^21]:    39 I am also thankful to Raïssa Gillier for all our nice discussions on phonology vs. orthography. The phonology of the language is beyond the focus of the current work, but another point worth noting here (for it reflects in the orthography) is that most verbs in São Vicente do not obey this general rule: their primary stress falls on the final vowel (so, the last mora).
    40 It would also be possible to analyse the special behaviour of the plural as following from it belonging to a putative affixal class that would not affect stress. As was noted in Ximenes (2004), and cited in Pratas \& Salanova (2005), in Brazilian Portuguese the plural morpheme lays outside the domain where coda [s] is a trigger for diphthongization:
    (i) paz [pajs] 'peace'
    páts [pas] 'shovels'

[^22]:    41 This is an elicited contrast, which is thus accepted by my consultants, but I am still to find any equivalent to the first clause in a corpus of semi-spontaneous produced utterances. It is only included here because it helps demonstrate how a dependent morpheme cannot be separated from the verb, and for this what counts is the second, ungrammatical option.

[^23]:    45 Tioxi seems derived from the Portuguese até hoje 'until today', which occurs in negative or positive sentences. In Caboverdean, however, it only cooccurs with $k a$, with the value of 'never until [a given reference time]', and therefore is only compatible with a perfect interpretation (present perfect if the reference time is inferred, which thus is now; other perfect meanings when other reference times are provided). This distinguishes this adverb from nunka 'never', which can also combine with perfect interpretations (and here the negator $k a$ is optional) as well as with habitual, such as 'I never eat meet on Holy Fridays' (and here $k a$ is obligatory). These are the examples in Pratas (2018c: 204-205):
    (i) a. Nunka N (ka) kumi karne.
    never 1SG NEG eat meat
    'I have never eaten meat.'
    b. Sesta-fera Santa, nunka $N \quad{ }^{\star}(\mathrm{ka})$ ta kumi karne.

    Friday Holy, never 1SG NEG TA eat meat 'On Holy Fridays, I never eat meat.'
    I am thankful to Ana Maria Martins for all the nice things about negation that we discussed.

[^24]:    46 Other languages have arguably 'tense' morphemes which combine with two tense values, say $X$ and $Y$, and thus are called non-Z markers. Matthewson (2006), for instance, defends the existence of such a morpheme in St'át'imcets: a phonologically empty nonfuture marker.

[^25]:    47 A somewhat lateral note here is that, in Portuguese, both the simple present and the pretérito imperfeito typically denote habituals and generics, and therefore even the latter (unlike the Spanish imperfecto, another Ibero-Romance Language) is rarely used (and only for stylistic effects) with ongoing dynamic situations-the preferred form for this is the past progressive.

    It is therefore possible that in Portuguese, too-as is my take for Caboverdean-the salient opposition in the past regarding grammatical aspect is not between the imperfective and the perfective, but rather between the (simple preterit) perfect and the (periphrastic) progressive (both temporally complex categories-Smith 1997; see 4.1 .3 for this in Caboverdean).

[^26]:    52 Another case of flá complements headed by this same connective, ma/k, will be approached when the equivalent to 'promise' is discussed. We will also see a different connective, $p a$ 'for', heading a purpose complement of flá as the equivalent to 'order'.

[^27]:    53 Complementizer omission-or rather the occurrence of null complementizers-with bridge verbs, as well as extraction from these complement clauses, are common in English (see for instance Erteschik-Shir 1973 and Bošković \& Lasnik 2003 for analyses of these).

[^28]:    right now is that this is not the phenomenon under analysis here, since these morphemes are not semantically vacuous-their omission would change the temporal meaning of the sentence.

[^29]:    64 Crosslinguistically, imperatives do not count for the discussion around null subjects.
    65 The pronominal between the two verbs is good in Portuguese (ia), although the pronoun to the right of the lower verb is also allowed (ib) (with a distinction in emphasis, though):
    (i) a. Tenta tu fazer a tua parte.
    try you do the your part
    b. Tenta fazer tu a tua parte.
    try do you the your part
    'Try to do your part yourself.'
    66 In some multi-verb constructions, in fact (as the ones approached in 3.4.4, on the verbs

[^30]:    in a case crosslinguistically known as exceptional case marking. This label is not relevant here, given that, as was described in subsection 2.1.1, there is no morphological case in Caboverdean, with subject clitics often assuming the same form as object clitics even when there is no other verb to their left, thus leaning onto words such as ma, pa, djá. That phenomenon-of a pronominal occurring between two verbs, apparently performing both functions-still requires an explanation, but this topic is beyond the scope of the current study.
    67 More specifically, they are not linked by any complementizer or conjunction (such as ma/k 'that', $i$ 'and', si 'if', or mas 'but'), any preposition (such as pa 'for', sen 'without', or ti/té 'until'), or any adverb (such as kantu/ kond 'when', or undi/ond 'where'), among others.

[^31]:    70 The version with the connective is obligatory if the subordinate clause has an overt subject, which is certainly expressed when this lower subject is different from the subject in the main clause (i), but, sometimes, when coreference is intended as well (ii). These examples are both from Santiago:

[^32]:    78 As was said above, some sentences may conflate both layers of this motion meaning, but while with ben we can only tell the difference by the general interpretation of the sentence, with bai the spatial meaning seems preferred-this still needs to be confirmed, though.

[^33]:    80 Note that, as was already pointed out, two different female speakers in this corpus report having had nine children, this one from São Vicente (Inês) and one from Santiago (Aldina).

[^34]:    81 The aspect values in Klein (1994: 108) are: TT is included by TSit-imperfective; TT at TSitperfective; TT after TSit-perfect; TT before TSit-prospective. I have proposed, and still defend, that in Caboverdean the relevant distinction is between the perfect and the progressive, which are in complementary distribution at a certain level; as for the imperfective (as habituals and generics), it also exists but belongs to another level (see next subsection for details).
    82 The present study diverges from at least one detail in Klein (1994): the relation of TT, and its associated assertion, with a proposed FIN head, or any other label attributed to finiteness (see also fn. 84). That an assertion connects the utterance situation and the situation referred by the speaker is quite an intuitive idea. But the point here is that the main distinction between

[^35]:    finite and nonfinite clauses is about attitudes, which makes the notion of assertion somewhat inadequate; see this in 4.2 and further discussed in chapter 5.
    83 A brief note on generative syntax: some of these studies, like Lin (2011), and Ritter \& Wiltschko (2005), overtly admit that also the syntactic structure of some languages may lack (a projection for) tense. They are however far from the mainstream. From much literature in the generative tradition we may still get the idea that even when we focus on tense morphology, tenseless languages are rare-but confront this with the observation in DeCaen (1996) that, given the results of his investigation, "'grammatical tenseless' languages make up at least half of the world's tense-aspect systems" (DeCaen 1996: 41; also referred in Tonhauser 2015: 131). Anyway, this monograph includes no discussion about any syntactic projection for tense.

[^36]:    85 In Baptista (2002) we find one of the first analyses for the functional structure in the Sotavento varieties, which includes syntactic nodes for verbal agreement (AgrP), aspect (AspP),

[^37]:    Note, also, that in Santiago the combination V-ba in statives like sabi 'know' is indirectly related to the past perfect, in the same way that the bare form is related to the present perfect; and the imperfective value that we also get is inherent to the result state, independently from -ba.

[^38]:    90 This entirely dispenses with postulating that this morpheme has a double morphosyntactic nature, one as a modal and one as a prospective aspect marker, of the type proposed for morphemes in other languages-albeit with different details-by other authors, such as Mucha (2013) and Pancheva \& Zubizarreta (2019b). This is also a different analysis than to consider, as Lin (2011) does for Mandarin, that some sentences with a future interpretation are like English futurates (in the sense of Copley 2009), and thus are "about the present rather than the future" (Lin 2011: 689). True, in Caboverdean this subsequent interpretation has a topic time (TT) coincident with the time of utterance (TU). But I believe that to take this morphology as irrealis, in the sense of Comrie (1985), much more clearly captures this dual meaning regarding the time of the situation itself (TSit), especially because the present marked with $t a$ in root clauses is not just any present (it excludes, for instance, present progressives).

[^39]:    91 Within the wide domain of the imperfective, more fine-grained distinctions can be made, as in the analysis in Cable (2020) of habituals vs. imperfectives in Tlingit (Na-Dene; Alaska, British Columbia, Yukon), with possible extensions to other languages. The author elaborates on the imperfective as "related to quantification modal semantics", as different from a multiplicity of events, which relates to quantification "strictly over times in the actual world."

    Von Prince (2019), on the other hand, discusses the imperfective as related to counterfactuality when combined with past tense; inspired by Dowty (1977), and also from a formal semantics perspective, she discusses the intuition that "imperfective aspect can grant access to nonactual worlds" (von Prince 2019: 14). This will be briefly referred again in chapter 5 for its approach to counterfactuality; here it is worth noting that the notion (non-)actual worlds is not used in my proposal.

[^40]:    92 To make it clear right away, this whole issue is distinct from the "optional past tense" discussed by other authors for other languages. We find this for instance in Bochnak (2016), about a verbal suffix in Washo (Hokan; California and Nevada), whose meaning "is highly similar to that of English past tense". He argues that Washo morphologically tenseless clauses "lack a tense feature", a notion never explained in the paper that anyhow seems incompatible with any compositional view (the author overtly discards this too), and says that a "finite clause in Washo consists minimally of a verb stem inflected for person (prefixes) and a category that I refer to in this paper as mood (suffixes)". None of this applies to Caboverdean.

[^41]:    93 For an extensive discussion of the successive grammatical properties implicated in the notion of finiteness, see Eide (2016: 1-44).

[^42]:    96 As was said in chapter 2, only very few verbs may appear (mostly in São Vicente) with a form directly inherited from Portuguese subjunctive, such as tiver for future subjunctive and tivese for past subjunctive. These stand for both verbs ter 'have', on its own or in multi-verb constructions, and estar 'be' (stage-level) in its reduced form-these uses are also productive in Portuguese for ter 'have' (tiver and tivesse), although as the reduced forms for estar 'be' they are only allowed in oral speech (the correct forms are estiver and estivesse). As was also said before, these forms in Portuguese are only valid for first and third persons singular, whereas in Caboverdean they are invariable, which is a further sign of their suppletive status.

[^43]:    97 The European Portuguese translation of the sentence in (72) is this:
    (i) Eu digo-lhes para se deitarem, para descansarem.

    Note that the embedded clauses have no overt subject, but both verbs in them show agreement; as a side note, the first has a reflexive clitic, needed in EP for verbs that denote a change in body position.

[^44]:    98 As was pointed out in chapter 3, any instances of a perfect interpretation for bare dynamic predicates under the connective si/s 'if' need to be studied separately, in a more exhaustive examination of all possible conditional sentences. In this section on some empirical challenges to finiteness, that combination is not illustrated, only the one with the common subsequent meaning (in A.1).

[^45]:    99 This is the Portuguese translation for (105) (where the nonfinite verb may show agreement):
    (i) Eles deixam as crianças ir à escola sem tomar(em) o pequeno-almoço.

[^46]:    100 Observe this subsequent meaning of the progressive made famous for other reasons by Culicover \& Jackendoff (1997: 195): ‘you drink one more can of beer and I'm leaving'.

[^47]:    101 Time which has gone / Has left me here standing looking at the hour / Willing to go back to the time of my childhood / Longing in the garden of my memory.

[^48]:    ing 'independent tense' or 'absolute tense,' which is 'deictic,' because it locates 'the time of a situation relative to the situation of the utterance' [...]" Amritavalli (2014: 284).
    105 For one, it barely describes what is going on. For instance, we easily accept that the temporal meaning of nonfinite clauses is dependent on the finite clause; but some complex sentences composed by two finite clauses show the temporal meaning of one of them still being dependent on the other. And second, when the very existence of finiteness is entirely justified with morphology, these same overt signs are then taken as diagnostics, which is only circular.
    106 The author more recently reaffirmed this relation, which is declined here, between finiteness and assertion: "[in] declarative clauses, finiteness marks that (a) an assertion is made, and (b) this assertion is restricted to the 'topic time'" (Klein 2006: 18).
    107 The 'presupposition' referred by Klein, above, seems related to this kind of attitude, but anyway the description in Giannakidou \& Mari (2018) is much more transparent about this.

[^49]:    108 The authors later distinguish between relative (subjective) and objective veridicality-the latter "depends on what is the case or not in the world, and corresponds to actual truth" (Giannakidou \& Mari 2018: 56). But only the former notion is of interest here; the notion of a real, or actual world, much used in works on modality, is still opaque to me.
    109 The difference is milder than it might seem, because the foreseen/predicted Caboverdean situations that I am including in the veridical side are indeed denoted by predicates/clauses where TT still coincides with TU. Anyhow, the situations themselves have not yet occurred, which might make them look as nonveridical under Giannakidou \& Mari's (2018) standards.

[^50]:    110 I figure that the author's idea of commitment is fundamental in this disentanglement, but I believe that the distinction 'direct vs. indirect' may capture this much better, although it still needs to be better refined. And, as is said above, this description also provides the welcome inclusion, in the veridical side, of foreseen situations in Caboverdean.
    111 As was already referred, modality is defined in Palmer (2006: 1) as differing "from tense and aspect in that it does not refer to any property of the situation but rather to the status of the proposition"-and in this sense we are here talking also about modality. And this is of course different than saying that modality is all there is to language.

[^51]:    As a side note, I am generally assuming that these situations are expressed how they are perceived. Of course speakers may pretend these values (people lie), but this is a different sort of question which is to be discussed elsewhere.
    112 Caboverdean has a less frequent morpheme truly marking a TT after TU: al 'will', which must be included in further studies in this area; some tenseless languages, in 4.1.2, such as St'át'imcets-Matthewson 2006-and Mandarin-Lin 2011-display a similar sort of morpheme. Note that it is not associated with a low accessibility as is defined here, in 5.3, since the future tense itself falls on the (fully) accessible camp.

[^52]:    114 The sentence was elicited with a change in the lower subject too so as to render it felicitous in this meaning; to have someone tell me that I myself had waited would be weird, unless perhaps I was unconscious while waiting.
    115 The details of different attitude holders in each complex construction of this type must be thoroughly examined under the perspective of their meaning. One case of interest in this respect must involve prumeti/prumetê 'promise'.

[^53]:    116 The fact that anything like stivesi/stivese, conjectured from the complete Portuguese past subjunctive form of estar in its first and third persons singular (estivesse), never appears (and yet the bare form of the same verb in Caboverdean has both indicative stá and tá variants) is a further reason to consider these items as no proof of any language internal morphology.

[^54]:    120 Klein also refers "the idea of a stable relation between, for example, pastness marking and pastness [as] a bit of an illusion" (Klein 2010: 51). But Rovelli (see chapter 1) denies any idea of illusion, and his idea of our 'blurred' viewpoint applies to time in general, not only the past.

[^55]:    121 Arregui (2005) defines a relation between tense and aspect in English would-conditionals and the nature of the worlds "accessible" to the modal for quantification. Again, the notion of possible worlds is still opaque to me, but my own notions will anyhow be developed in future works and confronted with prior studies of that sort, which naturally must start with Kripke's models (Kripke 1963, and subsequent works), not cited in Arregui (2005).

[^56]:    129 Morales, Axel Bax, and Chaz Firestone are the scientists leading this experiment, available here: https://www.perceptionresearch.org/perspective/ See also here for a brief presentation: https://releases.jhu.edu/2020/06/08/researchers-run-philosophy-experiment-in-a-lab-to-test-objectivity-of-vision/ (accessed on November 13, 2020).

