Stative and Stativizing Constructions in Arabic News Reports:

A Corpus-Based Study

by

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This dissertation uses a corpus of tokens retrieved from broadcast news stories and print news articles to examine the array of constructions used to encode stative predications in Modern Standard Arabic. A state is defined as a situation that includes its reference time, whether that time is encoding time or another time of orientation. A range of stativity diagnostics are implemented. The constructions analyzed include both those that select for the class of states and those that yield various stative construals of otherwise dynamic predications. The constructions examined range from inflectional constructions to verb-headed phrasal patterns to verbless predicates; a lexicalist implementation of Construction Grammar, Sign Based Construction Grammar, provides a uniform format for representing the constructions as feature-structure descriptions. The constructions include: the $p$ (refix)-stem verb, an inflectional construction exhibiting considerable semantic and syntactic flexibility; participles, including both the Active Participle, which typically yields a progressive reading and sometimes a perfect reading, and the Passive Participle, which yields a perfect reading; non-verbal predicates, which denote various stative relations, including existence, property attribution, possession and deontic modality; and phrasal constructions headed by the auxiliary kāna, which are used to convey past states, irrealis states and resultant states, while serving as a copula in syntactic contexts requiring a copula. A final case study underlines the formal and semantic heterogeneity of the class of Arabic stativizers by examining an emergent idiomatic pattern, the yatimmu construction, which has
either a progressive function or a perfect function, depending primarily on subordination. The dissertation shows that in Arabic news narratives, users deploy distinct stative constructions in distinct contexts to convey whatever state is relevant in the context. It demonstrates that constructions convey both tense-based notions (like state ongoing at encoding time) and aspectual notions (state ongoing at the time of another event invoked by the text). In addition, it demonstrates that aspectual constructions are not 'merely' aspectual, but instead have constraints relating to argument structure, valency and subordination.

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$$
\text { \}فَلَلَّهِ الْحَمْدُ رَبِّ السَّمَاوَاتِ وَرَبِّ الْأَرْضِ رَبِّ الْعَلَمِينَ }
$$

Then praise to God the heaven's Lord and the earth's Lord: Lord of the worlds - Sūrat al-Jā $\theta$ iya , verse 36 .

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## Chapter 1: Introduction and Theoretical Prerequisites

## 1. Introduction

As the determinant of semantic roles within the clause it projects, the verb has traditionally been considered the locus of predication, especially in the widely analyzed Romance and Germanic languages. For this reason, inquiries into predicational elements like tense and aspect have largely been restricted to the domain of the verb or verb phrase. So much so, that theorists, formally and informally, refer to languages as primarily being either tense-based or aspect-based, with the exclusive reference to the language's verbal system. Consider, for example, that Slavic languages, based on regularities of verb morphology, are seen as conveying an aspectual opposition, while English is viewed as a tense-based language because aspectual distinctions are conveyed by periphrastic constructions rather than verb morphology. Arabic has been analyzed by various grammarians as either primarily expressing tense, aspect, or a combination of both, based solely on its verbal system (Mansouri, 2011). Nearly all of these investigations focus on analyzing the semantics of two morphological verbal inflections in Arabic': الفعل الماضي al-fi 'lu l$m a \bar{d} \bar{l}$ 'the past verb' (referred to in this dissertation as the s(uffix)-stem), and الفعل المضار al-fi 'lu l-muḍāri 'u 'the analogous/similar verb'(referred to in this dissertation as the p (refix)-stem) exemplified by the following examples:
1.
انتظرثُ المدير ساعة

[^0]intazartu $\quad$ l-mudīra $\quad$ sā'atan
wait.s-stem $\quad$ the-boss.ACC
hour.ACC
'I waited an hour for the boss.'
2.

إننّي أنتظر المدير

| 'inna-n̄̄ | 'antaziru | l-mudīra |
| :---: | :---: | :--- |
| evid.-me | wait.p-stem | the-boss.ACC |

'I am waiting for the boss.'
The question frequently revolves around the type of temporality each form conveys.
While examining the above is necessary, the semantic focus on verb forms omits phrasal patterns like these:
3.

| 'inda-m $\bar{a}$ <br> when |  |  | عندما اتّصلت بالأمس، كنت قد انتهيت من العشاء |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ttaṣalta call.s-stem | bi-l- 'amsi, yesterday.GEN | kuntu be.s-stem | qad | intahaytu |
| min al- 'ašá ${ }^{\text {c }}$ |  |  |  |  |  |
|  | from the-dinner.GEN |  |  |  |  |
| 'When yo | ed, yesterd | had finished |  |  |  |

4. 


intahayta min al-'amali
finish.s-stem from the-work.GEN
'The plane arrives tomorrow after you will have finished work.'

In addition to periphrastic constructions, Arabic features predications that contain no verb at all:
5.
naḅnu fì l-bayti
we in the-house
'We are home (lit.: in the house).'
6.

|  |  |  |
| :--- | :--- | :--- |
| šīrā | bintu | lawrā |
| S. | daughter | L. |

## 'Shira is Laura's daughter.'

Sentences (5-6) are complete sentences in Arabic, but a look at the gloss reveals a lack of verbs. The PP in (5) is a complete predicate, and the NP in (6) is one as well. When looking at the English translations, one could argue that these types of clauses are limited to copular clauses with prepositional and nominal predicates depicting purely static situations. This is a fair assessment of those examples, but what about the following examples?
7.
علينا النوم مبكّر ا الليلة

| 'alay-n̄ | n-nawmu |
| :--- | :--- | :--- | :--- |
| on-us | the-sleep.NOM |
| 'We need to sleep early tonight.' |  |

8. 

|  |  |  | رزان ذاهبة للعمل (الآن / بعد دقائق) |  |
| :---: | :---: | :---: | :---: | :---: |
| $r a z a ̄ n$ | дāhibatun | li-l- 'amali | (l-'āna ) | ba'da daqā'iqin) |
| R. | go.AP.NOM | to-the-work.GEN | (now / | after minutes) | 'Razan is going to work (now / in a few minutes).'

These verbless clauses, despite requiring verbs in their English translations, convey more than locative statements/property attribution. The exclusive focus on verb morphology means that sentences like (3-8), are never included in larger predicational analyses. When we include these types of predicates, do we enhance the grammatical description of Arabic? How are these predicates similar, and how do they differ from the simple verbal predicates? What are the restrictions on these types of clauses? Can we predictively extract the predicational information from all of these types of clauses? What temporal information, if any, do they contribute to the grammatical system? What are we missing by overlooking these types of predicates?

The goal of this dissertation is to explore a particular class of predication types in Arabic -those used in narratives to convey stative situations. By applying a Construction Grammar
framework, we can focus on the variety of expressions of this stativity function without biases regarding the forms used to convey that function. Construction Grammar allows for an exploration of stative predications because, as we shall see further in the introduction, its grammatical units are constructions, which include any type of meaningful linguistic structure. Stative constructions considered in this dissertation range from morphological patterns to auxiliary-headed periphrases to clausal patterns containing no verb at all.

The remainder of the introduction handles the following issues. Section 2 discusses the corpora analyzed in this dissertation. Section 3 discusses the concept of stativity as used in this dissertation and includes a brief introduction to grammatical aspect (section 3.1), lexical aspect (3.2), and the theory used in this dissertation that unifies both (3.3). Section 4 clarifies the usage of the terms perfect and progressive, specifically when applied to Arabic. Section 5 considers the function of stativity in narrative. Section 6 presents the stativity tests used throughout the different case-study chapters. Section 7 introduces Construction Grammar. Section 8 discusses the major findings and theoretical conclusions. Section 9 describes the structure of the dissertation.

## 2. Data

News genre was chosen because news reports are typically filled with narratives.
Narratives tend to include relations between clauses, including sequencing and overlap, the latter of which is a function of stative clauses (Michaelis, 2011, p. 1362). The data I analyze in this dissertation was retrieved primarily from LDC's Ontonotes 5.0 released data (Weischedel et al., 2013). The Arabic data extracted for this study form two corpora. The print-based corpus is from an Arabic-language Lebanese newspaper, and contains $\sim 400 \mathrm{~K}$ words. The broadcast data set is
smaller, at $\sim 80 \mathrm{k}$ words, and is taken from various Arabic-language news channels. The data have already been analyzed morphologically, analyzed as trees, and tagged for predicate-argument relations. To extract the appropriate structures, I use the Arabic Treebank corpus, henceforth referred to as ATB, (Maamouri \& Bies, 2004; Maamouri et al., 2008), specifically ATB 3 (Maamouri et al., 2005) and the Arabic PropBank, A.K.A. APB, (Palmer et al., 2008; Zaghouani et al., 2010). The data are represented as phrase-structure trees of written or transcribed text in Modern Standard Arabic, henceforth Arabic, unless otherwise specified. APB adds a semantic layer of predicate-argument analysis on top of the syntactic trees given by ATB. Thus, for the purposes of extraction, I indicated whatever syntactic parse (provided by ATB) and relevant semantic labels (provided by APB) were needed for the identification of the correct constructions. Including the aforementioned syntactic and semantic information, the extracted data comprised full sentences-as designated by the data and ATB. Thus, I had access to the immediate context around the phenomena I was investigating, but nothing past the extracted sentence. Once the sentences were extracted, I systematically annotated and tagged that data based on the construction's own particular properties. Finally, when an example of a relevant function was needed, but not found in the data, I turned to Google search, under their 'news' tag in an attempt to maintain genre congruity, to search for and extract examples of that behavior. If that failed to yield results, I used my own examples to illustrate the situation. Since each construction has its own forms and restrictions, I delve into more details regarding the data extraction in their appropriate chapters.

## 3. Stativity

As this dissertation focuses on stativizing constructions, it assumes that predicate meaning and construction meaning interact in such a way that an inherently dynamic predicate can be construed as a stative one. As background, I briefly introduce grammatical and lexical aspect, after which I focus on a theory that combines the two, and provides the basis for this dissertation's conception of stativity.

### 3.1 Grammatical aspect

Grammatical aspect (or viewpoint aspect) concerns the internal temporal organization of situations, and is commonly expressed morphosyntactically (e.g., inflectionally, periphrastically, etc.) in languages of the world. As Smith explains, "viewpoint is generally indicated morphologically, with affixes or special forms" (1991, p. xvi). Declerck et al. add, " $[\mathrm{g}]$ rammatical aspect has been defined as the use of aspectual verb forms or auxiliaries to express aspectual meanings" (Declerck et al., 2006, p. 37). The categories of viewpoint aspect are perfective and imperfective. The imperfective form is traditionally understood as a grammatical tool that a language can utilize to represent the medial portion of a situation without access to its transition points, i.e., a post-initial, pre-terminal portion of the situation. Comrie further explains, "the imperfective looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation, since it can both look backwards towards the start of the situation, and look forwards to the end of the situation, and indeed is equally appropriate if the situation is one that lasts through all time, without any beginning and without any end" (1976, p. 4). By contrast, the perfective is the linguistic representation of the entirety of
a situation: "perfectivity involves lack of explicit reference to the internal temporal constituency of a situation" (ibid., p. 21). In English, this distinction is illustrated in the following examples:
9. When the phone rang, she brushed her teeth.
10. When the phone rang, she was brushing her teeth.

The perfective clause in (9) represents the entire event of tooth-brushing, including its onset, middle, and end points. In construal-based terms, we are not within, nor do we have inside access to, the brushing event. This claim is based on the consecutive reading found in (9), which is available only because of our external/whole viewpoint on the tooth-brushing situation; we know that its inception follows the event mentioned in the when clause. The consecutive reading is not available in (10): because we are situated within the tooth-brushing event, we construe it as ongoing at the time that the phone rang. These examples utilize English's Past construction and its Progressive construction, respectively, to help illustrate some of the ways the language can express the perfective/imperfective opposition representative of grammatical aspect.

### 3.2 Lexical Aspect

Lexical aspect, or Aktionsart, is a philosophically based taxonomy of situation types that may be expressed by a verb alone or a verb plus its complements (arguments and adjuncts). Vendler introduces the concept in his discussion on the interaction between verbs and time, by stating that "the use of a verb may also suggest the particular way in which that verb presupposes and involves the notion of time" (1957, p. 143). Vendler uses a number of English linguistic tests to conclude that there are four temporal schemas that a verb may invoke: activities, like (11-12), which "go in time in a homogeneous way; any part of the process is of the same nature as the whole" (ibid., p. 146) and can take the progressive:
11. She's out on the track running now
12. I run every weekday

If someone went running for an hour, then uttering (11) for any sub-portion of that hour would also be true. The simple present of activity verbs lends a habitual reading, as in (12).

Accomplishments, like (13-14), also take the progressive. These "also go on in time, but they proceed toward a terminus which is logically necessary to their being what they are" (ibid., p. 146). Accomplishments fail the subinterval property test, whereby, if a situation is true over a period of time, then it is also true for a portion of that time:
13. I am building this table
14. I built this table in thirty minutes

As (13) shows, accomplishments are compatible with the English progressive; however, (13) does not entail that the table has been built. The change of state to having been built is the moment from which that accomplishment is true. That transition is also highlighted by the adverbial in (14).

The other two Aktionsart categories do not take the progressive and "do not indicate processes going on in time, yet they may be predicated of a subject for a given time with truth or falsity" (ibid., p. 146). Achievements, like (15), are linguistically instantaneous.
15. The cup shattered (*in five minutes)
16. *The cup is shattering

The progressive does not combine with achievements, prototypically, because they are construed as fleeting. This is also why certain adverbials do not combine with achievements, like for $X$ time or in $X$ time (the latter only works if the interval is construed as a time within rather
than a duration of the event). Crucially, an achievement, like an accomplishment, includes a final transition: from whole to shattered in (15), for example.

States, which also share the subinterval property with activities, are not instantaneous and are seen as homogenous in their make-up. In English, states prototypically do not combine with the progressive in contexts of present tense reporting, as (18) illustrates:
17. I understand the issue
18. *I am understanding the issue

However, sentences like (18) are possible if the speaker is highlighting temporal boundaries, which dynamizes an otherwise static situation. Such interpretive phenomena are collectively known as coercion (Jackendoff, 1997; Michaelis, 2003, 2004, 2005). This particular type of aspectual coercion "is triggered if there is a conflict between the aspectual character of the eventuality description and the aspectual constraints of some other elements in the context" (De Swart, 1998, p. 360).

In addition, a big distinction between states and their eventive counterparts is their relationship with an interval that is neither the speech time $(\mathrm{S})$ nor the event time (E), but is still salient linguistically. Reichenbach (1947) refers to this interval as reference time ( R ), and it is an interval "that is jointly relevant to the interlocutors" (Michaelis, 2011, p. 1361). States are said to include their reference time, i.e., they are not bound by it. Events, on the other hand, are included within their reference time, i.e., "reference time includes or "exhausts" the situation described" (ibid., p. 1361). Let us look at examples:
19. I knew the answer in class.
20. I figured out the answer in class.

Sentence (19) contains a stative verb, and (20) contains a dynamic one. Both sentences have the same reference time, indexed by the PP 'in class'. The knowing-situation in (19) is not bound by 'in class' because it is a state, i.e., the entire knowing-state may have very well began before class, and is likely to have extended after it. Thus, (19) is true even if it only expresses part of the entire knowing-situation. This is why we say that E (in this case, the interval of knowing) includes its R. However, the same is not true for the figure out-event in (20). Because it is a dynamic situation, the interval 'in class' encompasses that event, i.e., it was within this interval that the event was realized and the answer was worked out. Consequently, (20), as a dynamic event, is bound within its reference time: E (the interval of figuring out) is included within $R$.

We have grammatical aspect that is mostly marked morphosyntactically and that gives us either a partial/internal window or a complete/whole view of a situation, and we have lexical aspect, a set of idealized situation types to which verbs and predicates correspond. The examples above illustrate that the two can interact, because of the potential for conflict between the Aktionsart class of the verb and the aspectual class selected by the construction.

### 3.3 Unifying grammatical and lexical aspect

Departing from the traditional way of separating grammatical from lexical aspect, some scholars have suggested that lexical and grammatical aspect are based on the same meaning components, thus unifying the two concepts. The idea is that stativity is either inherent to the predicational element's representation, or acquired by predicates via morphosyntactic means, or that "there are simply lexical states and grammatically derived states" (Michaelis, 2011, p. 1360). However, this does not negate the concepts of grammatical aspect and Aktionsart; instead
"[g]rammatical aspect "markers" are simply re-envisioned as constructions that select components of the semantic representations of verbs" (ibid., p. 1395). In other words, the two types of aspect interact in such a way that aspectual constructions denote portions of a predicate's lexical temporal representation: "stativizing constructions not only denote states but also select states in the Aktionsart representation of verbs with which they combine" (ibid., pp. 1364-1365).

The form of temporal representation that I will use in this dissertation is based on Michaelis' $(2004,2011)$ framework, which is a modification of Bickel's (1997) model. According to Michaelis, "[t]emporal representation captures the patterns of stasis and change which characterize each situation type" (2004, p. 14). Thus, the basic building blocks for this representation are states $(\phi)$, transitions $(\tau)$, and event chains $([\tau \phi])$, or "state-transition combinations" (Michaelis, 2011, p. 1365). States are able to stand alone and are "internally homogenous situations which include no transitions (i.e., temporal boundaries)" (Michaelis, 2005, p. 15); while transitions are those temporal boundaries that cannot stand alone and must be preceded or followed by a state. There also cannot be two consecutive transitions within this model. The temporal representations for the lexical classes discussed earlier are found in Table (1.1), which is reprinted from Michaelis (2011, p. 1372):

Table 1.1 Aktionsart classes in temporal representation

| Aktionsart Class | Temporal Representation | Example Predication |
| :---: | :---: | :---: |
| State | $\phi$ | prefer-white wine |
| Homogenous activity | $\tau \phi \tau$ | stand-on one foot |
| Heterogenous activity | $\tau \phi[\tau \phi]^{+} \tau$ | pace-back and forth |
| Achievement | $\tau \phi$ | stand-up |


| Aktionsart Class | Temporal Representation | Example Predication |
| :---: | :---: | :---: |
| Accomplishment | $\tau \phi[\tau \phi]^{+} \tau \phi$ | drive-home |

The idea, then, is that imperfective markers, for example, select for those states already present in the predicate's own representation, (e.g., when English's progressive construction is combined with a homogenous activity, it selects that medial state; while the progressive's combination with an accomplishment, selects the medial state plus the event chain-if the predicate contains the latter). Otherwise, if there is a conflict between the lexical representation and the grammatical construction with which the verb combines, the representation is modified so that a resolution is found. An example is found in the coercion case of (18) above, in which a stative predicate is re-constructed as a heterogenous activity so that there is an appropriate medial state to be selected by the progressive marker. As Michaelis states, "[s]tativizing constructions do not create states out of thin air. Rather, as I will claim, stativizing constructions evoke states that are contained in the event representations of verbs" (2011, p. 1364).

## 4. Terminology

In this section, I clarify two of the terms I frequently use in this dissertation: progressive and perfect. In English grammars, each label refers to a particular periphrastic construction-one that contains a participle and is headed by an auxiliary verb. Each construction denotes a phase of an event (expressed by the participle), with the progressive construction conveying a state that holds during the course of a dynamic event, and the perfect construction conveying a state that comes to be after the conclusion of the event denoted by the participle. When I apply these terms to Arabic, I am invoking only the semiotic function associated with these constructions in English. Thus, when I discuss a progressive
function of a particular Arabic form, I mean to convey that said form selects for a post-initial, pre-concluding phase of an event, i.e., the $\phi$ portion in any sequence of the type $\tau \phi \tau$. And when I claim that a given Arabic construction has a perfect function, I am claiming that said construction selects a $\phi$ that holds after the event's final transition: $\tau \phi$. In other words, I do not claim that Arabic and English have identical progressive and perfect constructions. On the contrary, I assume that the two languages perform the relevant type-shifting functions in distinct ways. While English has dedicated progressive and perfect construction, Arabic, as we will see, has multiple forms that can convey progressive and perfect states.

## 5. Stativity and narratives

If, as Michaelis says, stativity is a grammatical and pragmatic concept based on the concepts of unboundedness and constancy (2011, p. 1360), then, as per the above discussion, one can deduce the functions of stativizing constructions from these features. With regard to discourse and aspect, the majority of the research notes that states are used for setting up background information in a narrative (Bybee et al., 1994, p. 126; Forsyth, 1970, p. 10; Hopper, 1982). In fact, looking at Old English, French, Malay, and Russian, Hopper found a number of functions for imperfectives. These include setting up the background information for another event or situation, focusing on a medial portion of a situation without access to its temporal transitions, displaying overlap or simultaneity with other situations, describing habituals and generics, stativizing dynamic events, expressing purely static situations, and even focus and subject shifts (1979, p. 61). The majority of these functions can be seen as extensions of states' constant and unbounded features; as Michaelis states:
[S]peakers create states to meet the demands of narrative. Telling a story requires us to indicate what situations overlapped, preceded or followed other situations. Stativization is the means by which we convey overlap: as described above, only stative situations can include (rather than being included within) an interval. Thus, if we wish to convey that one event was ongoing at the time of another, we must stativize the first. (2011, p. 1362)

## 6. Stativity tests

Each of the case studies to be presented in the forthcoming chapters includes a number of linguistic tests that have been used to verify the state of affairs expressed by the predicate, its arguments, and any aspectual marking's stativity. The majority of these tests are taken from Michaelis (2011, pp. 1366-1370)—with modifications applied when necessary, due to languagespecific constraints. As will become evident, the tests invoke distinct characteristics of states. A. The when test

This test utilizes a subordinate when-clause to test whether the main clause overlaps it or not. If the main clause does overlap the subordinate clause, then it is stative, as the examples below illustrate, in English:
21. I was at the beach when the sun set
22. I walked home when the sun set

The main clause in (21) denotes a state of being at the beach, and this state is understood to be ongoing at the time that the sun sets. Sentence (22) is a dynamic predication because the main clause's event of walking home is understood to occur after, not during, the sun's setting.

## B. The indirect-discourse test

This test uses reports to see whether or not the reported situation overlaps the reference time indexed by the main clause (i.e., if the reported situation overlaps the time indexed by the reporting predicate, then it is stative), as (23) and (24) illustrate:
23. The barista said that the coffee was burning
24. The barista said that the coffee burned

In (23), the event of the coffee burning is understood as occurring while the Barista reported it. While in (24) we get a reading that the coffee burned anterior to that of her reporting it.

## C. The expansion test

This test investigates states' unboundedness by seeing whether past states are extendable to the present time, as (25) and (26) illustrate:
25. She was sick with a cold on Thursday. In fact, she's still fighting off that cold!
26. She built that chair on Thursday. *In fact, she's still building it.

This works because "a stative situation, unlike a dynamic one, may hold at a larger interval than that for which it is asserted. This is a consequence of the fact that a state includes its reference time: reference time does not exhaust the duration of the state" (Michaelis, 2011, p. 1368). Hence, in (25), the state of her having a cold is extendable past the initially indexed reference time; while the dynamic event in (26) is not extended similarly.

## D. The still and no longer tests

These test the expandability of states, which are unbounded. Katz (2000) classifies still and no longer as "temporal modifiers that select for temporal properties of state verbs to the exclusion of event verbs" (p. 146). He goes on to say that these tests test for the subinterval
property of a state and explains that still means "still P means that P is true at some time t , that it was true at some time t ' previous to that, and that it has been true at all the time in between t and t'" (p. 145). Still and no longer share a presupposition, that the state holds at t'; they differ with regard to whether it continues to hold at t . Thus, a situation that can felicitously be expanded up to the present time using still is considered stative, as (25) and (26) above have shown.
E. The complement of كان kāna test

As an auxiliary, kāna selects stative complements, whether verbal or otherwise, like these examples:
27.
كانت هوازن في المنزل

| kānat | hāwzin | $f \bar{\imath}$ | l-manzili |
| :--- | :--- | :--- | :--- |
| be.s-stem | H. | in | the-house |

'Hawazin was home.'
28.

| kānat | hanādī | ta'kulu | $f i$ | l-matbaxi |
| :---: | :---: | :---: | :---: | :---: |
| be.s-stem | H. | eat.p-stem | in | the-kitchen.gen |

كانت هنادي تأكل في المطبخ
be.s-stem $H$. eat.p-stem in
'Hanadi was eating/used to eat in the kitchen,'

That $k \bar{a} n a$ selects for a stative reading is confirmed by those contexts in which $k \bar{a} n a$
heads an s-stem complement. Instead of an eventive reading of the s-stem complement, a perfect interpretation, and thus a stative one, is the only available reading in this context:
29.

|  |  |  |  | كانت أماني أغلقت الباب |
| :---: | :---: | :---: | :---: | :---: |
| kānat | 'amānı̄ | 'ağlaqat | $i l-b a ̄ b a$ |  |
| be.s-stem | A. | close.s-stem | the-door.acc |  |
| 'Amani had closed the door.' |  |  |  |  |

The above example of an auxiliary combined with an s-stem complement denotes a state following the door's closure, as opposed to a closing event. This periphrastic construction creates
an anterior reading (in which the door's closure precedes the event of the phone ringing), This reading is present because the state of the door's having closed contains the event of the phone's ringing. This reading is opposed to the consecutive reading that we would get were the s-stem to stand alone, as the examples below illustrate:
30.
kānat 'amān̄̄ 'ağlaqat il-bāba $\quad$ كانت أماني أغلقت الباب عندما رنّ الهاتف ranna

'Amani closed the door when the phone rang.'
In (30), the phone-ringing event is understood to occur during the state that comes into being after she closes the door. However, in (31) we have a consecutive reading whereby the phone ringing precedes the closing of the door. I use the ability of a predication to appear as a complement of $k \bar{a} n a$ as a language-specific test for stativity. It is important to note that examples like (31), in which $k \bar{a} n a$ appears with an s-stem complement, do not undermine the contention that $k \bar{a} n a$ is a state selector. The reverse is true: the fact that $k \bar{a} n a$ imposes a stative reading on an otherwise eventive (s-stem) complement confirms that it is a state selector. Chapter (5) is dedicated to a discussion of the various stative readings that the $k \bar{a} n a$-construction imposes. The construction is considered an exponent of periphrastic stativity in Arabic: it both selects for a stative complement and imposes a stative reading of an otherwise eventive
complement (via the resultant-state construal of the relevant event). The $k \bar{a} n a$-construction is therefore treated as both a diagnostic of stativity and a state-selecting construction.
F. The حال hāal circumstantial clause test

Arabic has a construction known as الحالal-hāl 'the circumstance, the state'; it is usually referred to in grammars as the circumstantial clause because it describes the state of a clause's argument at the time the clause is said to have occurred ( $\mathrm{Ni}^{\top}$ mah, 1973, p. 75), i.e., it conveys the state of a participant during the performance of an action. Abu-Chacra says that "[i]n English it corresponds mostly to a (co)predicative or adverbial participle (referring to the subject or object)" (2007, p. 303). Sentence (32) provides a simple example:
32.
جاءت شمسيّة مسرعة
jā'at šamsiyya musri'atan
come.s-stem S. fast.AP.ace
'Shamsiyya came hurriedly.'

In the example above, hurriedly describes the state of shamsiyya's coming. It overlaps the reference time of the matrix clause, i.e., hurriedly describes her state that overlaps her comingevent. This construction is restricted to adjectives, as the example above, and clauses:
33.
قام الطفل يبكي qāma t-tiflu yabkī
get up.s-stem the-child.NOM cry.p-stem
'The child got up crying'
34.

|  |  |  |  |
| :--- | :--- | :---: | :--- |
| $j \bar{l}$ 'at | šamsiyya $\quad$ wa-hiya | farihatun |  |
| come.s-stem | S. | and-she | happy.nom |
| 'Shamsiyya came while she was happy.' |  |  |  |

In (33) the crying-event either overlaps or is simultaneous with the getting up-event. And in (34) the being happy-state overlaps her coming-event. Sentence (34) also shows an optional feature of the circumstantial clause, circumstantial wāw; "[t]his introductory wāw indicates the simultaneousness of the main clause and the circumstantial clause" (Bernards, 2011, para. 1). Because the construction is one that must convey overlap, it is restricted to constructions that allow for overlap. Generally, this construction is restricted to adjectives, including participles, and clauses. However, these clauses can only be stative ones: p-stem clauses (33), NVPs (34), or even perfect clauses for it to overlap a post-transition state (35):
35.

| đahabtu | li-ziyārati-hi | wa-qad | säfara |
| :--- | :--- | :--- | :--- |
| go.s-stem | to-visit.GEN-him | while-QAD | travel.s-stem |

'I went to visit him and he had travelled.'

Sentence (35) conveys a going to visit-event that overlaps with a had left-state, i.e., the visitor did not see the visited because the latter had left already. A circumstantial clause can be a VP with an s-stemmed verb. A qad particle is added to the VP in order to express a posttransitional state that overlaps with the main clause. Ryding states as much by saying: "[i]f the circumstances referred to by the Haal structure precede the action noted by the main verb, and especially if they form a background for the main verb, the waaw al-Haal is used with qad and a past tense verb" (Ryding, 2005, p. 285). The circumstantial clause-status of s-stemmed asyndetic clauses without a qad particle is questionable, because of the consensus that without a qad particle preceding the s-stem, a sequential reading is understood (Isaksson, 2009, p. 65), see example:
36.

| ðahabtu | li-ziyārati-hi | wa-säfara |
| :--- | :--- | :--- |
| go.s-stem | to-visit.GEN-him | and-travel.s-stem |
| 'I went to visit him, and (then) he travelled.' |  |  |

Sentence (36) conveys a visit that happened, as opposed to (35). The semantic restriction on the clause reflects the restriction on the type that can be used to convey it: it must have predicative qualities, and it must be stative. Thus, I utilize it as a language-specific stativity test in this dissertation.

## 7. Construction Grammar

Construction Grammar (Fillmore et al., 1988; A. E. Goldberg, 1995, 2006; Kay \& Fillmore, 1999; Michaelis, 2004, 2012; Michaelis \& Lambrecht, 1996) is an attempt at a holistic approach towards meaning creation and construal. Whereas traditional semantic approaches presume that the word is the locus of meaning, Construction Grammar recognizes that grammatical structures, constructions, also contribute to sentence meaning. Whatever meanings attach to a particular construction are considered conventional-not predictable based on the construction's parts. The conception of constructions is purposefully broad to include patterns ranging from phonological templates to morphosyntactic structures to sentence types. As long as it is a conventional, unpredictable matching of some linguistic form to meaning, it is a construction. This also means that constructions contain within them sequences licensed by other constructions. Constructions are not procedures; that is, they are descriptions of classes of linguistic objects. Constructions can also be polysemous, in that a single construction might have multiple, simultaneous functions. The language's grammatical rules dictate what is and what is not felicitous in these situations. The notion of grammar as a network of interrelated
constructions is common to Cognitive Grammar (Langacker, 2003, 2009), and functionally oriented accounts of language acquisition (A. E. Goldberg et al., 2007; Tomasello, 2005; Tomasello \& Brooks, 1999). Construction Grammar has variants including Fluid Construction Grammar (Steels, 2011; Steels \& de Beule, 2006; Wellens et al., 2013) and Embodied Construction Grammar (Bergen \& Chang, 2009), among many others.

This dissertation utilizes Sign-Based Construction Grammar (SBCG) (Boas \& Sag, 2012; Michaelis, 2009, 2013). SBCG expands Saussure's (de Saussure et al., 1983) concept of sign to include words, lexemes and, crucially, phrases. Constructions describe either feature structures or constructs: complexes of feature structures modeled as local trees (tree structures with signs at the nodes):
[A]n SBCG grammar describes the sign configurations that the grammar permitsconstructions that build words from one or more lexemes and constructions that build phrases (phrasal signs) from one or more expressions. (Michaelis, 2013, p. 134)

The repertoire of constructions includes combinatoric constructions (phrase building constructions), derivational and inflectional constructions, (word- and lexeme-building constructions), and-class constructions, which "describe classes of feature structures that correspond to words or lexemes" (Michaelis, 2013, p. 136). Combinatoric constructions can contain a mother (MTR) feature and daughter (DTR) feature; the semantics of the mother can, and frequently does, contain meaning components not contributed by a daughter; this accounts for aspects of non-compositional meaning. Features are a key part of this grammatical description. Features can be atomic, like the nominative feature for nouns or the auxiliary feature
for verbs; features can include features within features. The features used in this dissertation to describe the different signs in SBCG are:

- PHON
- FORM
- ARG-ST
- SYN
- CAT
- VAL
- SEM
- FRAME
- INDEX

PHON \& FORM: These two features deal with the phonological and morphosyntactic descriptions of a sign. PHONOLOGY is usually represented in phonological segments and conveys the phonological composition of the sign. While FORM is the feature concerned with morphological and phrasal processes. It is typically written out in the language's traditional orthography, as opposed to phonetic symbols. It conveys "a list of the formatives (words or morphemes) that comprise the expression" (Michaelis, 2013, p. 139).

ARG-ST: the ARGUMENT-STRUCTURE feature lists the syntactic and/or semantic arguments of a lexical sign hierarchically, e.g., for Arabic, the number of NPs in this feature structure could indicate whether the predicate is intransitive (with a single NP: the subject), transitive (two NPs: the first representing the subject, the second the object), or ditransitive (three NPs: the subject, direct object, and indirect object, in that order).

SYN: This describes the sign's syntactic qualities. The syntax feature includes three main features: CAT, VAL, and SEM. CAT: indicates the sign's grammatical CATEGORY and includes information like part of speech, case markings, inflections, etc. Thus, SYN can be elaborated on depending what type the sign is, e.g., for Arabic, nominals have three inflections:

مرفوع marfū' 'nominative', منصوب manṣūb 'accusative', and مجرور majrūr 'genitive'. The p-stem inflection verb also has three moods: مرفوع mafū' 'indicative', منصوب mansụub 'subjunctive', and مجزوم majzūm 'jussive'2. It is this feature, CAT, which would include this information. VAL: VALENCE is used "to specify which of an expression's syntactic-semantic arguments it has yet to combine with syntactically" (Sag, 2012, p. 85). This feature can be used for lexical items or phrases, and differs from ARG-ST based on what has already been satisfied locally for the sign. For example, the sign eat would require two NPs, called valents, for the eater and the thing consumed, but the sign eat a meal would have a single valent missing, the eater. SEM: contains the SEMANTIC information of the sign, which is primarily represented via the FRAMES feature. This feature is based on Frame Semantics (Fillmore, 1977, 1982). The idea is that meaning is "anchored in human experiences and human institutions" (Fillmore, 1982, p. 135), whereas accessing the meaning of something invokes the meaning of "the whole structure in which it fits" (ibid., p. 111). This means that the FRAME feature includes semantically salient features related to the sign, including its core meaning, arguments, etc. Thus, the frame for writing covers the semantics associated with writing, and includes participants like the writer, the topic or product written, etc. In this dissertation, the stative qualities discussed earlier are expressed by the FRAME feature. The feature SEM has the INDEX feature whose value is the referential index of an expression, represented as a variable. The index "is assigned to an individual when the

[^1]expression bearing the index is a NP or to a situation when the expression bearing the index is a clause, verb or VP" (Michaelis, 2013, p. 140).

## 8. Findings and Theoretical Conclusions

Reference time. This exploration will show that focus on a predication's reference time is crucial to explaining the various functions of these constructions-especially when we include their functions in subordinate clauses. For many of these constructions, a "default" reference time, one without explicit adverbials or subordinators indicating otherwise, is one that coincides with the moment of utterance. One could extrapolate a tense-function for these constructions based on this coincidental simultaneity between S and R ; however, subordination-whether it is characterized syntactically (e.g., by the presence of subordinating conjunctions, clausal complementation, circumstantial clauses, etc.) or semantically, (e.g., by the presence of modal particles, conditional particles, etc.)—forces an uncoupling of R and S . We see that in these cases, the states of affairs conveyed by these constructions actually overlap R, not S. This finding is significant for an understanding of time reference in Arabic: aspectual meaning includes the semantic territory occupied by exponents of (deictic) tense relations, like the English present tense.

A semantic division of labor. Many constructions function to convey states in Arabic, and these constructions have subtly distinct functions. These constructions range from inflectional constructions to phrasal constructions headed by verbs (auxiliary or otherwise) to non-verbal predicative constructions. The non-verbal stative constructions are divided into stativizing participles and stative non-verbal predicates. The former convey either an event in progress or a resultant state of an event; while the latter convey static situations that do not include a dynamic
component. The verbal constructions license both lexical verbs and verb complexes headed by function verbs. The lexical verbs are represented by an inflectional construction, the p -stem-a state selector that can convey any type of stative predication (continuative, progressive, habitual, resultative, etc.). Context is the only distinguisher. Compound verbal predicates, by contrast, restrict the types of states conveyed: perfect-states, states overlapping a reference time that is not speech time, past states, and irrealis states. The yatimmu construction, which is headed by a verb inflected in the p-stem, is a type-shifter based on the types of maṣdar-a verbal noun-it prefers as a complement. By contrast, the periphrastic construction containing $k \bar{a} n a$ as its head appears to be ambiguously either a type shifter or type selector, depending on whether the complement has a dynamic component or not. With a dynamic complement (a participle or s-stem), $k \bar{a} n a$ is a type-shifter; with a stative complement (a p-stem inflection or NVP), it is a stative type-selector. The participles, for their part, are type-shifters, while the NVPs are type selectors. Such insights are supported by a framework in which stative constructions are seen as denoting or selecting states, and triggering coercion in case of conflict between the type selected and the type provided

What a corpus reveals. A corpus-based analysis of these constructions aids in uncovering the distinct types of states that each construction conveys. If we look only at the stativity tests utilized in this thesis, we see that the p-stem construction is the only pattern to which all stativity tests apply, but the corpus study reveals as well that the p-stem is also unspecified with respect to the types of state conveyed, e.g., it can convey a progressive state in a manner similar to the yatimmu construction and the AP. In other words, the p-stem displays the fewest use conditions of any of the constructions described. However, the corpus study shows as well that the p-stem cannot convey all states in Arabic. Stative predications of property attribution, possession,
existence and certain types of obligations are primarily conveyed by non-verbal predicates (NVPs). Temporal verbs, specifically, the class of verbs including $k a \bar{a} a$, can combine with NVPs to express past time, irrealis states, negation, etc., but generally, and this is especially true in the case of property predication and possession, the states conveyed by NVPs are not conveyed by verbs. Thus, even if there is some overlap in the function of these constructions, each construction serves its particular stative niche. In addition, the corpus study upholds or undermines certain characterizations of these constructions offered by traditional grammars. For example, numerous grammars state that participles, when syntactically verbal, combine only with present or future adverbials, with past adverbials restricted to the syntactically nominal usage. The corpus study supports this distinction. The corpus study also shows that semantic subordination has the effect of decoupling R and S , as well as syntactic subordination. The corpus study also reveals genre effects.

Atemporal aspects of aspectual constructions. Many of the constructions included in this thesis have multiple functions. Two of these constructions have valence-reducing properties: the passive participle shares its argument structure with passive verbs, while the yatimmu construction, a verbally headed construction, reduces the valence of its verbal noun, or maṣdar. Because they remove the most agentive argument from the verb's repertoire of arguments, these constructions convey non-volitional states. The p-stem-inflected $k \bar{a} n a$ construction provides an additional example of a non-aspectual function. While this construction is used for perfect and progressive states that overlap R, it also has a purely syntactic function-that of verbal copula for NVPs embedded within constructions that require a verb. These examples show that each construction not only conveys a particular type of state, but also performs other functions. A
construction-based analysis captures both aspectual and non-aspectual functions of constructions because it acknowledge that these constructions are not merely temporal markers or inflectional patterns, but complexes of constraints, some of which are idiosyncratic.

Revisiting the aspectual nature of the Arabic system. This thesis suggests that Arabic is neither exclusively aspect-based nor exclusively tense-based. The majority of the constructions considered here-the p-stem, the participles, the NVPs, and the yatimmu construction-are aspectual, in the sense that they do not necessarily relate the situation conveyed to speech time. However, the $k \bar{a} n a$ construction, when its head receives an s-stem-inflection, conveys an unbounded state that includes a past reference time, a function of tense. Thus, the Arabic system of time reference has both tense-based and aspect-based characteristics. This is expected if the organization of grammar is construction-based.

## 9. Outline of the Study

The first case study in this thesis (Chapter 2, the p-stem) focuses on the p(refix)-stem form of the verb. This is a finite verbal form with many functions; according to Goldenberg it denotes: "present-future 'acts, is acting, will act, will be acting'; imperfect-progressive-dynamic situated at any time" (2013, p. 207). The p-stem is a concord construction, a state-selector. The state that the construction selects includes R; the construction is not intrinsically a tense-marker ( R need not be equated with speech time), but has tense functions. This stative analysis accounts for the multiple functions displayed by the p-stem, some of which are encoded by nonfinite forms in other languages.

Chapter 3 discusses the participles, active and passive. These participles can function as nouns, nominal modifiers, and even verbs. Participles partake of verbal properties in that they
assign nominative and accusative cases to their subjects and objects, respectively. This chapter focuses specifically on the verbal functions of these participles, while I include their adjectivalpredicational properties in the following chapter. Both participles are type-shifters that select for a medial phase of an event's representation, or a final rest phase of an event's representation. However, they are more restricted in that it conveys a single event, as opposed to an event series, as in habitual or generic predications. The participles share the p-stems's relative reference time: the situation they convey is one that overlaps $R-n o t S$.

In Chapter 4, Non-verbal Predications, I discuss the states expressed by non-verbal predicates (NVPs). As we have seen from Chapter 3, verbs are not required in Arabic predications. Nonverbal predicates include NPs, PPs, ADVPs, and even clauses (independent or dependent). Again, the reference time is equated by default with speech time, but subordination can change that identity, with caveats. Because the predicate is not a verb, NVPs are far more restricted-as the stativity tests indicate-in their syntactic and semantic functions than their pstem construction counterparts. These restrictions become apparent under certain grammatical conditions that require a verbal complement, as I explore in the subsequent chapter. NVPs placed in such situations must be modified to fit the grammar and, as a result, acquire a verb/syntactic copula. Unlike the previous constructions, the NVP is not a type-shifter; it is a concord stative construction. The states conveyed by NVPs are divided into four subtypes: existence, obligation, possession, and the attribution of a property to a subject.

Chapter 5, the Auxiliary Käna Construction, presents the first of two periphrastic constructions considered in this thesis, the latter of which will be described in Chapter 6. The $k \bar{a} n a$ construction inherits its stative character from its head verb, $k \bar{a} n a$, while the verbal
complements represent dynamic predications. In this respect, $k \bar{a} n a$ construction is similar to the English perfect and progressive constructions; it performs analogous stative shifts. However, the non-verbal predications represent stative predications. Thus it is akin to an inflectional construction when it combines with NVPs: it type-shifts with verbal predicates, and type-selects with non-verbal predicates.

The auxiliary kāna construction has subtypes defined by the auxiliary head's inflection and on its predicate complement. With NVP complements, $k \bar{a} n a$ functions like an inflectional construction. However, $k \bar{a} n a$ also has a copular function when certain syntactic conditions demand a verb and a bare NVP is not grammatical. With verbal complements, a s(uffix)stemmed kāna generally has an anteriorizing effect. Aspectual coercion occurs with eventive complements like the s-stem where the construction conveys a perfect reading. A p-stemmed $k \bar{a} n a$ construction, however, mimics the p -stem construction: it has a non-past reading, if in a main clause. A verbal s-stem complement generally expresses perfect situations, where R and E are uncoupled, while a p-stem complement expresses general imperfectivity. Tokens with an sstem $k \bar{a} n a$ are more frequent in both corpora than tokens in which the auxiliary is p-stem inflected. S-stem kana is also used to convey certain irrealis states, but its verbal complement is somewhat restricted, either morphologically or semantically. Basically, this construction seems to convey temporally or modally overtly marked states, or syntactically marked NVPs.

Chapter 6 is the final case-study chapter. It concerns another periphrastic, idiomatic, polysemous construction. The head is a p-stem-inflected form of the verb $\underset{\sim}{*}$ tamma, which is usually glossed as 'to complete, perfect, finish'. However, when it heads a مصدر maṣdar 'verbal noun', it conveys either a progressive state or a perfect state with valence decreasing properties.

It is usually considered a periphrastic passive in the literature, which puts certain semantic restrictions on the type of maṣdar it can head, i.e., the maṣdar should be transitive syntactically, but it can also be transitive semantically, with its argument being the object of a preposition.

Finally, Chapter 7 concludes this dissertation by looking at the relative frequencies of each construction in the corpora and considering directions for further research.

## Chapter 2: The p-stem verb

## 1. Introduction

This chapter is the first of the case-study chapters in this dissertation that demonstrates the different types of stative constructions in Arabic; its focus is the p-stem form of the Arabic verb, which, as we shall see, is a concordance stative construction. The p-stem is one of three verbal inflections: (1)الأمرal-'amr 'the command', the imperative; (2) الماضي al-mād̄̄ ‘the past', a form of the verb whose person and number information is suffixed at the stem; and (3) almud̄āri' 'analogous/similar', named because it takes some mood markings that are phonetically identical to case markings on singular nouns (Ibn Manzūrr, 1999, p.1290). The 'past' form has many labels in linguistic literature, including Past, Perfect, and Perfective; I will use a morphological descriptor and refer to it as the s(uffix)-stem. The mudāric is variously referred to as Present, Imperfect, and Imperfective; I refer to it as the p (refix)-stem, and it is this verbal form that is the topic of this chapter. In the course of this chapter, it will become evident that this construction's function is a stative one, i.e., it depicts an unbounded, constant situation that includes its reference time. Where that reference time is located, however, is context dependent, as I will show. The p-stem is a concord construction, which, per Michaelis, is a "[a] construction which denotes the same kind of entity or event as the lexical expression with which it is combined" (2005, p. 55). In other words, the p-stem construction is a stative construction that selects state-phases from a predicate's temporal representation. When dynamic predicates combine with this construction, aspectual coercion augments the representation and a produced state is selected by the construction. The p-stem's main function is to include its reference time
$(\mathrm{R})$. This R is a relevant time interval that is neither speech time (S) nor event time (E). Without an explicit marker to that R in the clause, R and S are assumed to be simultaneous, i.e., that relevant interval matches up to speech time. However, if an overt R is established in the clause, that R is the one around which the p -stem orients itself.

The remainder of the chapter will be organized as follows: Section 2 analyzes the pstem's function. Using examples, I start by illustrating cases in which $R$ and $S$ are simultaneous. I move towards examples where these intervals split to illustrate the p -stem's orientation is one around R and not S . Section 3 discusses the construction's distribution in the data by comparing the two corpora. Section 4 illustrates the different range of usages of the construction and investigates the effect of subordination. Section 5 demonstrates the construction's stativity by applying the stativity diagnostic tests to the p-stem predicates. Section 6 provides a formal representation of the construction. Section 7 concludes the chapter.

## 2. The p-stem and its reference time

In this section, I demonstrate that the p-stem's function is primarily an aspectual one, i.e., it is a stative construction and not a tense. Any tensed expressions conveyed by the p-stem are artifacts of how it selects its states from the temporal representation. Let us start by looking at some examples below:
1.

'Thérèse is (now) playing with the play at the playground.'
The p-stem is a concord construction: it is a stative construction-it expresses a stateand it selects a state in the predicate's representation. The bolded p-stem in example (1) conveys a living-in-Riyadh-state that holds at S . The temporal representation for this is a state-phase without transition points, i.e., no linguistic information is provided regarding when the living-in-Riyadh-state began or ended. In (2), we have a singular playing-with-the-ball-event that holds at S. The temporal representation for this heterogeneous activity is an event chain within the initial and final points. The p-stem is a state selector, however. To resolve this aspectual conflict, the activity's representation is augmented to include a medial state, and it is that state for which the p-stem selects. Consequently, it is translated with a present progressive construction in English. This is because English's Progressive construction is aspectually sensitive and requires eventive inputs (Michaelis, 2011), while English's Simple Present construction is used in (1). In addition to present-time reports, the p-stem can also be used to convey habituals, as (3):
3.


Comrie describes habituals as "a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period" (1976, p. 28). In other words, habituals convey an event that occurs (semi-)regularly and spans a longer timeline. Example (3) conveys a habit the speaker has, in which multiple, regular sleeping-events are being discussed over a period of time that extends from an undisclosed past, to the present, and
into the foreseeable future. Instead of selecting a state from a single event's representation, for habituals like (3), a state of regularly iterated events is selected by the p-stem via coercionagain, no transition points are linguistically salient. Moreover, the p-stem can also be used to describe necessary truths: law-like phenomena or those that characterize the world (Bertinetto \& Lenci, 2012), as (4) illustrates:
4.

| yab'udu | l-qamaru |
| :---: | :---: |
| be distanced from.p-stem | the-moon.NOM |
| bi-miqdāri | 240,000 mīlan |
| with-amount.gen | M. |

$$
\begin{aligned}
& \text { يبعد القمر عن الأرض بمقدار ....... } \\
& \text { ‘an il-'ardi } \\
& \text { from the-earth.GEN }
\end{aligned}
$$

'The moon is (distanced) about 240,000 miles from the Earth.'

Example (4) conveys a gnomic state about the world: the (average) distance between the Earth and its moon. Gnomic states differ from the previous states in the relevant time span generally associated with them. It is much larger than any of the previous states' time span and can be understood as timeless in how long it is perceived to hold. As a state-selector, the p-stem has no problems with gnomic clauses. Based on the above select examples, it would seem as though the p-stem shares a number of functions with English's Present Tense construction. Indeed, some have referred to Arabic's p-stem as a present tense form, e.g., Mace (2007, p. 119), Ryding, who defines the p-stem as " [t]he present tense, or imperfect, refers in a general way to incomplete, ongoing actions or ongoing states. It corresponds to both the English present and present continuous tenses. There is no distinction between these in Arabic" (2004, p. 442), or even Google, as Image (2.1) illustrates:


Image 2.1 A snapshot of Google Translate for the p-stem's name
However, simply because the p -stem, as a verbal inflection, is a stative construction that can convey a situation that holds at S , it does not mean that it is a present tense construction or that its primary function is that of tense. The p-stem does more than convey present-time states and events, as the example illustrates:
5.

'Fatima returns tomorrow at 6 in the evening.'
Sentence (5) conveys a scheduled future event of Fatima's returning, yet still utilizes the p-stem. How do we account for that? We can account for this if we consider that the reference time for the return-event in (5) starts at $S$ and extends up until Fatima's return. This R-based analysis for future readings is similar to Michaelis' analysis of English's Simple Present construction's future usage, which states:

Since [return] has an extended temporal profile that cannot fit inside the present moment, that event must be 'flipped' onto either one side or the other of the present partition in order for the semantic conflict between the tense inflection
and the verb to be resolved. Thus [(5)] denotes the state that lasted until the event of [return]. (2006, p. 234)

Thus, coercion augments the temporal representation and provides a state for the p-stem to select. This state is one that is prior to E. Based on examples (1-5), some scholars have analyzed the p-stem, not as a present-tense, but as a non-past tense, e.g., Upson \& Wilcox (1921, p. 66) and by Mazraani (2013, pp. 65-67). Limiting the p-stem to a non-past tense function does not account for usages such as the following:
6.

'In those days, I used to sleep at eleven.'
7.

| tiflat- $\bar{l}$ | bada'at | tatahaddä $\boldsymbol{u}$ | $f \bar{\imath}$ | sinnin | mubakkirin |
| :--- | :--- | :--- | :--- | :--- | :--- |
| child-my | start.s-stem | speak.p-stem | in | age.GEN | early.GEN |

'My child started speaking/to speak at an early age.'
8.

'Yesterday I was with Zayn while she was teaching at school when you had called me.'
None of the sentences in (6-8) can be classified as expressing a non past-time situation.

Sentence (6) is also a habitual, but the habitual situation held at sometime prior to S. The English translation no longer uses the Simple Present construction, and I gloss the sentence using English's used-to construction to convey a previous habit. Arabic utilizes a double verb combination, which is the focus of Chapter (5), the second of which is the same p-stem found in (3)-albeit with a different person inflection. Thus, the p-stem can be used to convey habituals,
either alone or combined with other constructions. It does this because it is a state-selector and only requires a state-phase in the predicate's representation-regardless of the clause's timereference. Sentence (7) expresses a child's speaking that began at an early age sometime in the past. The teaching-event in (8) was a day previous to $S$, as indexed by the matrix clause. What then, if anything, does the p-stem convey? How does one account for these seemingly different usages and functions that the p-stem conveys?

The answer lies with R . The premise of this chapter is that the p -stem is a stative construction, and that the state it conveys includes its respective reference time. Sentences' (1-4) reference times just happen to be simultaneous with S , and since the p -stem includes its R , the p stem conveys a state that also includes $S$. The p-stems' $R$, and subsequently its $S$ in these earlier examples, is either overtly indexed via adverbials (1-2), or it is implied (3-4). A seemingly speech-oriented reading lends a present-time reading. This is where we get a reading in which the moment of utterance is a moment in which the situation conveyed by the p-stem holds, i.e., the states extend beyond $S$ from a linguistically inaccessible inception time to an inaccessible terminal moment. However, the present-time reference in (1-4) is only an artifact of R's simultaneity with S , as the subsequent set of examples illustrate.

For sentences (5-8), R does not coincide with S. Per the analysis above, the p-stem in (5) selects for the phase until the final transition of the accomplishment's representation, by which the return is true. Sentence (6) conveys a habit that held at an $R$ that is prior to $S$, as indexed by 'in those days'. In example (7), the predicate speak's R is established as sometime anterior to S by the matrix clause headed by the s-stem for the verb start; its R's moment of inception is coindexed by the verb start and the adverbial at an early age. This does not make the p-stem less stative, for access to one of the transition points is still considered a stative usage, as Fleischman
explains: " $[0] f$ the two endpoints of a situation, initial and terminal, it is the latter than tends to be of greater linguistic consequence in discourse. Accordingly, imperfective aspect is also commonly said to present the situation as non-completed" (1995, p. 521). In (8), the teachingevent's R is the calling-event that happened the day prior to S , as indexed by the when-clause. Zayn's teaching-event is understood to have overlapped that calling-event. Based on these analyses, I claim the p-stem is an R-oriented stative construction-regardless of where that R is.

An R-based analysis is even used for other usages such as (9):
9.

| talabtu | min-ka | 'an | tantazira-n $\bar{l}$ |
| :--- | :--- | :--- | :--- |
| request.s-stem | from-you | SUB. | wait.p-stem-SBJ.-me |

'I asked you to wait for me.'
In (9), the p-stem is syntactically subordinated by a subordinating conjunction. The matrix clause establishes a request-event that is anterior to S , but what about the p -stem? What function does a finite verbal complement do in such cases? In his investigation on the function of aspect in narrative, Dowty looks at the temporal relationships inferred between successive clauses in English. He says that, generally, ensuing stative clauses (which include states and progressive activities in his analysis) do not move narrative time forward (1986). Let us look at his example (3), which I reprint from (p.37) in (10) below, and compare with his example (6), reprinted as (11) from (p. 38):
10. John entered the president's office. The president woke up.
11. John entered the president's office. The president was looking out the window.

The second clause in (10) moves the narrative forward, i.e., the two clauses happened in succession, the first then the second. This happens with achievement and accomplishment clauses. States and activities, on the other hand, lend an overlap reading, as in (11), partially due
to pragmatic understandings of the world, and partially due to the fact that states and activities have the subinterval property. Recall from the introduction that the subinterval property states that if it is true that a clause is a state or activity at a particular interval, then it also is true that the clause is a state or an activity at any subinterval of that time frame, e.g., if it were true that you were sleeping from 11-6a, then it is also true that you were sleeping from 2-3a. The subinterval property does not hold for achievements and accomplishments, e.g., if it is true that you built a particular chair in an hour; it is not true that you built that chair in thirty minutes. This property facilitates an overlap reading in clauses like (11) in which the stative clause has a backgrounding effect, and the narrative is not moved forward.

Let us return to example (9). In sentence (9) the p -stem wait does not move the narrative forward, as it is the finite complement of verb request. In fact (9) can be rephrased with a maṣdar 'verbal noun/infinitival' complement and retain its meaning:
12.

|  |  |  | طلبت منك انتظاري |
| :---: | :---: | :---: | :---: |
| talabtu | min-ka | intizār $\overline{-} \bar{\iota}$ |  |
| request.s-stem | from-you | wait-me |  |
| 'I asked you to | me.' |  |  |

Using Dowty's terminology, neither the p-stem in (9), nor the masdar in (13) move the narrative forward. The waiting-event is expected to occur sometime after the request was made, regardless of whether or not it actually happened.

Accordingly, this chapter's focus is the p-stem verbal inflection in Arabic. It is a stative concord construction that selects for states in the temporal representation of the predicate. Aspectual coercion resolves any conflict that occurs if the predicate is not a state. The p-stem's state includes its reference time. By default, and without any overt adverbials, the reference time is understood as simultaneous with the moment of utterance. However, if the clause contains an
overt R that does not coincide with S , that R becomes the pivot around which the p -stem orients. That the p-stem conveys a state that overlaps its R , means that the p -stem does not move the narrative forward. This facilitates its usage to background information in the narrative. This type of analysis goes against some other analyses of this construction. For example, Aoun et al. (2010) list various syntactic and semantic functions of the p-stem in both Standard Arabic and several dialects. However, they conclude that the p-stem form "does not morphologically carry any temporal or aspectual information" and argue, "[t]he most plausible characterization of the [p-stem form] is that it is the default form of the verb (the nonfinite form)" (p.30). I am unclear as to how they categorize the p -stem as non-finite while ascribing present and future tense to it (ibid., p. 25). They also do not account for its narrative function of backgrounding/overlap with their analysis.

In another analysis, Bahloul (2008) divides the p-stem's functions three ways into primary and secondary functions: an inherent function, in which "the [p-stem] typically refers to present time events, that is, processes which are simultaneous with the moment of enunciation" (p. 105), a gnomic function (p. 132), and context-dependent usages, which are limited to its future and past readings. These are secondary functions because the p-stem does not seem to function temporally in these settings. Instead, it is the recipient of the clause's temporality. He states that the p-stem's future reading is "highly contextualized, and is, therefore, an inherent property of the linguistic context, that is, the utterance, rather than a feature of the $[\mathrm{p}-$ stem], it is not given invariantly by the tense itself" (p.132). And, in a similar manner to the future usage, he states the following about the past usage: "[t]emporality remains a property of the context, and, at times, inherent to the type of enunciation" (p.132). Why this form would assign its own temporality in one function, then surrender to the context in the other, is not quite
clear. Utilizing this analysis, I hope to have shown that all these functions are not distinct, i.e., there is not a "core vs. secondary" division in function-instead they are all directly a result of its stative function and its orientation around R .

An alternate analysis to the reference time-based one discussed above would be Declerck's (2006) discussion on relative tense, which he defines in opposition to absolute tense as "[t]enses that express a single temporal relation between the time of the situation referred to and an ORIENTATION TIME other than zero-time" (p. 25). He continues to state that relative tenses express these temporal relations: anteriority places the time of the event prior to the orientation time, posteriority places the event time after said orientation time, and simultaneity is when "the time of the situation is represented as coinciding with the orientation time" (p.25). Accordingly, the p-stem can be said to convey temporal simultaneity with the orientation time. That orientation time happens to coincide with speech time in the absence of any overt adverbials. However, if an orientation time other than speech time is made explicit, then the situation conveyed by the p-stem is simultaneous with that explicitly marked orientation time. In this dissertation's analysis, however, the overlap/simultaneity is a product of the construction's stativity. The p-stem has no primary tense functions in this analysis. Whatever tense function it conveys is secondary to its stativity. Now let us to turn to the construction's form and distribution in the data.

## 3. The Data

Let us examine the distribution and frequency of this construction in the two corpora. This is the only simple verbal construction we are looking at, so it will be revealing to compare and contrast each form's usages to the other. As stated earlier, there are three inflectional-based verbal forms in Arabic: the imperative, s-stem, and p-stem. The instantiation of these
inflectional-based forms depends on which وَزْن wazn 'measure, pattern, form, template' (pl. أوزان 'awzān) the verb falls into. These 'awzān are a combination of particular vowels and consonants interspersed around a (usually) trilateral consonantal root. It follows that, for each wazn, there is a fixed vowel/consonant skeleton with slots in specific places that allow for the consonants of the root. For example, all of the following verbs, e.g., للّس labbasa 'to dress', أكّل 'akkala 'to feed',

لبّى $l a b b \bar{a}$ 'to respond', and جوّد jawwada 'to make better' fall into the $\mathrm{C}_{1} \mathrm{aC}_{2} \mathrm{C}_{2} \mathrm{aC}_{3} \mathrm{a}$ wazn (where C stands for the consonants in the root). This particular verbal pattern has short/a/ vowels interspersed between the consonantal root and geminates the second consonant. Generally, each wazn supplies information on valency or intensity/iteration, etc. (Clive Holes, 2004, pp. 100-106).

While each wazn expresses its p-stem form differently, all p-stems share some characteristics. The form of the verb begins with one of the following consonants: ', $\mathrm{n}, \mathrm{t}, \mathrm{y}$. Additional information such as dual and plural markers (except for first person), and feminine gender (except for second person dual and third person singular) may appear near the end of the verb. This results in 11 inflected forms per wazn (although some of the verbal forms do not vary according to the person/number/gender of subjects, and transitive 'awzān have passive counterparts). As previously stated, the Arabic name for the p-stem is مضارع mudārí', which is an active participle of the verb ضفارع dāra'a and means 'like, or to be similar'. The mud̄āri' combines with three mood markers (indicative: $-u$, subjunctive: $-a$, and jussive: $-\phi)^{3}$, which is

[^2]phonetically similar to (mostly singular) nominals that have three case markings (nominative: $-u$, accusative: $-a$, but not genitive: $-i$ ).

All the morphological information is provided in the trees at the Part Of Speech (POS) level under the label of 'imperfective', so everything that ATB delineated as sentences containing an instance of this verbal inflection was retrieved. This means that a longer sentence with multiple p-stem instances was retrieved multiple times. The broadcast data has 3,822 instances of p-stem verbs ( $\sim 4.78 \%$ of the 80 k -word corpus), while the print data has 14,989 instances ( $\sim$ $3.75 \%$ of the 400 k -word corpus). By far, this was the most widely attested stative construction in the data. And, as the upcoming chapters reveal, it is the least restricted stative construction in the data, and by that I mean all the stativity tests applied without issue to this construction.

Table (2.1), below, shows the morphosyntactic phenomena that are relevant to the analysis in this section. Note that the patterns in question frequently overlap (i.e., a single verb can be marked simultaneously for mood and negation); if I were to add them up, the numbers would far exceed the actual tokens I have. Instead, next to each token count, I show a percentage that indicates how frequent that marking is with regard to the total number of tokens of p -stems within each corpus. In the following sections, the contents of the table will be further divided to reflect some of the intricacies within the data. However, it is interesting that more than half of the instances of this verbal type are subordinated in one way or another, and almost one quarter are negated, whereas, fewer than a fifth are marked for future, and finally, less than five percent have mood markers.

Table 2.1 Syntactic distribution of $p$-stem verbs in the data

| Syntactic Phenomena | Print | Broadcast | total |
| :---: | :---: | :---: | :---: |
| subordination | $8721(58.2 \%)$ | $1591(41.6 \%)$ | $10,312(54.8 \%)$ |
| negation | $4141(27.6 \%)$ | $500(13.1 \%)$ | $4641(24.7 \%)$ |


| Syntactic Phenomena | Print | Broadcast | total |
| :---: | :---: | :---: | :---: |
| future | $2764(18.4 \%)$ | $609(15.9 \%)$ | $3373(17.9 \%)$ |
| mood | $588(4 \%)$ | $142(3.7 \%)$ | $730(3.9 \%)$ |

This distribution tells us that the p-stem construction combines a variety of constructions that form different, but not necessarily exclusive, functions. It does more than simply convey situations that hold at present time, as Google Translate claims in Image (1). It is used in tensed verbal negation, it combines with the future particles up to two-fifths of the time (excluding those futurate readings without an overt marker), and it carries mood markings that, as will become evident in the following sections, reflect various irrealis usages, as well. Also, the construction favors subordination-especially in the print data. Over half of the newsprint's usages are subordinate. Frequent subordination could reflect the p-stem's tendency to encode a situation whose reference time is identified with a reference time previously introduced by a matrix clause/particle. Now that we have looked at the syntactic distribution of the p-stem, let us look at its functions and the types of situations it conveys within the corpora.

## 4. Functions of the p-stem in the corpora

This section will illustrate some of the many uses the p-stem performs in the data. I start with the more familiar usages, based on the earlier examples I have explained, and then move towards other usages. Throughout the section, however, I maintain that these usages are all a result of the p-stem's stative function that orients itself around an R. If the usages listed in this section are different, then they are different because those reference times oriented towards are different.

### 4.1 Present-time reporting

This should not be surprising, but when $R$ and $S$ coincide, the $p$-stem conveys a state that includes R and S . A result of this is that, in this particular situation, the p-stem can be used to convey states that overlap the moment of utterance. Sentences (13) and (14) below are reports of states of affairs that hold at speech time, but this is because R and S coincide in these sentences:
13. b(roadcast example)

l-‘arabiyyi l-'isrā̄iliyyi hiya mihwaru l-liqāāati
the-Arab the-Israeli she pivot the-meetings
wa-l-muhāda $\theta a \bar{a} t i$
and-the-discussions
'It now seems that the issue of settling the Arab-Israeli conflict is central to the meetings and discussions.'
14. b
al-'̄̄na jalālatu-hu yadxulu 'ilā mabnā l-kunǧrisi l-'amrīkiyyi now excellency-his enter.p-stem to building the-congress the-American '(Right) now his excellency is entering the Congress Building.'

In (13) and (14), note that the seeming-state and entering-event overlap their respective reference time, indexed by the adverbial 'now', reflecting that R and S coincide in these clauses.

### 4.2 Habituals

The p-stem is also used to convey habitual predications.
15.
at-tawaffuru: yušhanu çādatan $\quad$ xilala 24 sā́atan the-availability: ship.p-stem.PASS usually within 24 hour 'Availability: (it) is usually shipped within 24 hours.'

The passive sentence (15) informs the hearer/reader when one can expect a product to ship. English's use of the present simple (is shipped as opposed to is being shipped) and the Arabic p-stem both relay the idea that the product has regularly shipped within 24 hours, and that the merchant expects it to ship within that time frame in the foreseeable future. Also, note the
felicitous use of the adverbial 'ādatan 'regularly, usually, habitually, ordinarily...etc.' with the verbal form. The presence of this adverbial anchors a habitual reading in the sentence, as opposed to a possible present-time reading, i.e., the time span is explicitly a habitual one. The adverbial is also present in (16):
16.
 'These battleships are returning/return gradually to the sites at which they are normally stationed during peace time.'

In example (16), there are two p-stem forms of the verb. The returning-event is given two possible glosses due to the ambiguity of this form. If a speaker is discussing a scene they are witnessing or an operation underway, then the English progressive is the correct gloss. However, if they are talking about procedural norms for these battleships in, say, a lecture to an audience, the simple present is the better English translation. The second p-stem form of the verb tatamarkazu 'centralize/localize' conforms to the simple present tense because the stationing event is a regular occurrence and is the result of peacetime.

### 4.3 Future

We know from (5) that the p-stem can be used with future adverbials, and in those cases it selects for a state that precedes the event, as in examples (17-18):
17. b

| 'álana announce.s-stem | mas'ülun representative | filasṭiniyyun 'anna <br> P. that | ra'ı̄sa s-sulṭati head the-authority | l-filasṭīniyyati the-P. |
| :---: | :---: | :---: | :---: | :---: |
| mahmūd | 'abbās | yaqūmu | bi-ziyāratin 'ilā | dimašq |
| M. | A. | perform.p-stem | with-visit to | D. |
| is-sabti | l-muqbili |  |  |  |
| the-Saturday | the-coming |  |  |  |

'A Palestinian official announced that the president of the Palestinian Authority, Mahmoud Abbas, performs a visit to Damascus next Saturday.'
18. p(rint example)
يعاد العرض الراقص الذي قدمته فرقة مدرسة التزحلق على الجليد في مجمّع ايس سكينغ أرينا غدا السبت الساعة
 'arīna ğgadan as-sabta s-sāata $\quad \underline{l-x \bar{a} m i s a t a}$ A. tomorrow Saturday the-hour the-fifth
'A dance show presented by the Ice Skating Troupe School is being repeated in the Ice Skating Complex tomorrow, Saturday, at five.'

Also, the p-stem combines with the future particle سَوف sawfa or, as some researchers have postulated, e.g., H.assān (1994, p. 241)Wright et al. (2005, p. 19), Ryding (2005, p. 442), its truncated form سَ $s a$-. When it combines with this future particle, the established R coincides with a posterior E , and this R would be indexed by adverbials if they are present, as examples (19) and (20) illustrate:
19.

'And the committee will return to the meeting after the institutions send to them all the notes.' 20. b

'And Putin will perform an official visit on the twelfth of the next month.'
In (19) the adverbial 'after the intuitions send them all the notes' indexes the bolded pstem's R, and in (20) the date is established R. The corpora seem to parallel each other regarding
their preference for this construction. The print data had 2764 instances of these overtly future marked p-stems, and the broadcast data had 589 instances.

### 4.4 Gnomic Predications

The p-stem can be used to convey observable states about our world. The time span is larger than that of the habitual's, and information regarding the inception and termination of this event (or event series) is unavailable to us. Arabic does not have a dedicated form that distinguishes the length of the phase in question; thus, we can have cases of ambiguity like (21).
21.

'The harvesting of genetically modified tomato crops is being completed in California (or Genetically modified tomato crops are harvested in California.')

Sentence (21) has an ambiguous time span without any overt adverbials. On the one hand, it could describe a situation that is ongoing at the time of utterance (i.e., present time reporting). However, it could also be making a general statement about the world: genetically modified tomatoes are harvested in California. Without additional context or a time adverbial anchoring the time span discussed, there is no way to choose the intended reading. This exemplifies the ambiguities association with the p-stem's usage. Context determines the type of state it conveys, whether habitual, gnomic, or a singular event.

### 4.5 Negation

Most verbal negation is done with the p-stem, as in (24 a-d).
22.
(a
lam 'a'tabir hāððihi qadiyyatan 'ābiratan

NEG. consider.p-stem.JUSS this
case passing
'I did not consider/have not considered this a passing issue.'


| lan |  |  |  | (c |
| :---: | :---: | :---: | :---: | :---: |
|  | naqbala | l-fašala | 'alā l-'itllāqi |  |
| NEG | accept.p-stem.SUBJ | the-defeat | at all |  |
| 'We | not accept defeat |  |  |  |

(d أريد أن أوجّه هـاته الرّسـالة: أوّلا لا تتنـازلوا
'urīdu 'an 'uwajjiha hātihi r-risālati 'awwalan
want.p-stem SUB. direct.p-stem this the-message first
lā tatanāzal̄̄
NEG. concede.p-stem.JUSS
'I want to direct the following message: first, do not concede!'
At first glance the distinctions between the above sentences are mostly tense, while (20d) conveys a negative imperative. However, the verbal inflections in all of these sentences is the pstem, which is further proof that it does not inherently carry any tense information. What does change, however, is the negation particle and the mood marker on the p-stem: lam+ jussive pstem is used for past and present perfect negations ${ }^{4}$ (20a). La $n$-n $\bar{a} f i y a$ 'negation $l \vec{a}$ ' + indicative p-stem is used to negations of states that hold at $S(20 b)$. Lan + subjunctive p-stem is used for future negations (20c). Lān-nāhiya 'prohibiting $l \bar{a} ’+$ jussive p -stem conveys a negative imperative (20d). It is these larger negation constructions that establish the p-stem's R. Lam is ambiguous between a previous state that no longer holds at S and one that does. $L \bar{a}$ makes R and

[^3]S simultaneous. Lan is ambiguous between a state that extends to the event or one that is not attached to S . And prohibitive $l \bar{a}$ is one that establishes the negative state from S onwards. When it comes to verbal negation, the p-stem seems to reign. In fact, the language only has one other form of verbal negation, which is a past-tense negation that utilizes the s-stem form of the verb preceded by the negation particle $m \bar{a}$ (far more frequent in dialects as a negation marker).

Table (2.2) shows the breakdown of these negated p-stems in the data.
Table 2.2 P-stem negation distribution in the data

| Negation | Print | Broadcast | total |
| :---: | :---: | :---: | :---: |
| negating lāa لا النافيـة | 2358 (57\%) | 253 (50.6\%) | 2611 (56.3\%) |
| لم lam | 1126 (27.2\%) | 154 (30.8 \%) | 1280 (27.6\%) |
| ل Jan | 422 (10.2\%) | 45 (9\%) | 467 (10\%) |
| prohibiting la $\bar{a}$ لا الناهية | 229 (5.5\%) | 34 (6.8\%) | 263 (5.7\%) |
| ما | 6 (0.1\%) | 14 (2.8\%) | 20 (0.4\%) |
| totals | 4141 | 500 | 4641 |

Note how the corpora parallel each other with the frequency of the type of p-stem negation. The fifth row is all dialect negation and is not considered in the analysis. However, it is interesting to note that the numbers are higher in the broadcast data for $m \bar{a}$ as people slip into dialect while interviewing/being interviewed. Also interesting is that despite the fact that the numbers are vastly different, the distribution along the various corpora is similar. About $55 \%$ of the negated p-stems are simple negations by $l \bar{a}$. Less than $30 \%$ are negated in the past by $l a m$. Ten percent are future negated by lan, and $6 \%$ are a command not to do something, which is higher in the broadcast data.

### 4.5 Syntactic subordination

There are two subordinating conjunctions أن ' إن 'in an and These are verbal particles that
only head the p-stem, and they assign their verb subjunctive mood. They are used for multiple types of subordination, verbal, nominal, modal.

### 4.5.1 Verbal subordination:

Most verbs utilize the p-stem form as their verbal complements. Depending on the verb, the English translations of these verbal forms will invariably be in the infinitive. From the examples below, we see that this phenomenon happens with any verb that takes a verbal complement:
23. p
'aradn $\bar{a}$

want.s-stem $\quad$ 'an $\quad$| nasma'a |
| :--- |
| subar.p-stem.SBJ |

'We wanted to hear President Hariri personally.'

| l-harīrı̄ the-H. | šaxsiyyan personally |
| :---: | :---: |

24. b

| wa-wa'ada | $\underline{b i-}{ }^{\prime}{ }^{\text {an }}$ | yazalla | mutanabbihan | $l i-{ }^{\prime}$ ay |
| :---: | :---: | :---: | :---: | :---: |
| and-promise.s-stem | with-sub. | continue.p-stem.SBJ |  | to-any |
| tağyı̄rin change | $\begin{array}{ll} f \bar{\imath} & \text { sulūki } \\ \text { in } & \text { behavio } \end{array}$ | l-filasṭīniyyīna the-P. |  |  |

'And he promised to continue being alert to any changes in Palestinian behavior.'
25. b

| wa-yajibu | ${ }^{3}$ an | $y u j \bar{i} b \bar{u}$ | ${ }^{\text {'alay-hā }}$ | bi-şarāhatin |
| :---: | :---: | :---: | :---: | :---: |
| and-necessitate.p-stem | sub | answer.p-stem.sBJ | on-her | with-honesty |
| 'And that they answer | hon | is necessary (or: they | must an | it with honesty |

26. b


'The Public Prosecutor, Adnan Addum, requested in a memo to the judges that all the assignments and warrants they put out include the requested records.'
27. p

'But some information sources expect that the American strike to/would/will be quick.'
The various matrix verbs in (25-30) illustrate that, if a head verb requires a verbal
predicate, 'an + subjunctive p -stem is a viable option. The different verbs supply different Rs for the p-stem. If the matrix verb is an accomplishment or an achievement, the state for which the pstem selects holds sometime after the situation conveyed in the matrix clause, e.g., in (29), including the requested records is made explicit once the request was explicit in the memo.

However, if the matrix verb is a state, like $(25,27,28)$, then the reference time of the subordinate p-stem overlaps that of the matrix verb. But at no time does the p -stem move the narrative forward in any of these examples. Its state either overlaps or starts at S .

There is a class of verbs that does not require a conjunction at all, exemplified by the verb بدأ bada'a 'to begin', as in the examples below.
29. b

| wa-qad | $\underline{\text { bada'at }}$ | $i l-{ }^{\text {'asma }}{ }^{\text {a }}$ u | tatasāqatu |
| :---: | :---: | :---: | :---: |
| and-PRF. | start.s-stem | the-names | drop.p-stem | 'And the names have begun to drop.'

30. p
بدأ أمس حكّام الأقاليم الأففانية الجنويية يصلون إلى مدينة قندهـار

$$
\underline{\text { bada'a } \quad \text { 'amsi } \quad \text { ḥkkāmu } \quad l \text {-'aqālimi } \quad \text { l-'afğāniyyati l-janūbiyyati }}
$$

start.s-stem yesterday rulers the-regions the-A. the-southern
yaṣilūna 'ilā madīnati qandahār

$$
\text { arrive.p-stem to city } \mathrm{K} \text {. }
$$

'The rulers of the southern regions of Afghanistan started, yesterday, to arrive in Kandahar.'
Despite the fact that there is no overt syntactic marker of subordination in these
sentences, the subordinated verbs are subordinated to the matrix verb. In these cases, the state is bound by one end, its inception, see analysis for (7) above. Again, it is possible to rephrase these sentences using the subordinate verbs' corresponding maṣdars, compare (31) to (33):
31.

وقد بدأت الأسماء بـالتسـاقط

| wa-qad |
| :--- |
| and-PRF. |$\underline{\underline{\text { bada'at }}}$| il-'asmart.s-stem |
| :--- |
| the-names |

'And the dropping of the names has begun.'

### 4.5.2 Nominal complements:

Generally, nominal predicates will establish an R that coincides with S more readily than verbs will. The following sentences demonstrate this:
32. b

'George Bush is expected to give a speech this evening.'
33. p
${ }^{\prime} a w d \bar{a}{ }^{\text {c }} u n$
conditions shake.s-stem

bi-l-'ajhizati llatū min al-mafrūdi 'an tahmī-hi
with-the-devices that from the-required sub. protect.p-stem-him 'Condition that shook with it the confidence of the Palestinian citizen in the (security) services that are required/supposed to protect him.'

The above clauses have an $R$ that coincides with $S$. As such, the state-phase in (32) is that up to the moment the speech is given, similar to the futurate usage. While in (33), the protectingevent overlaps the modal PP.

Another type of nominal subordination occurs with a closed group of nouns that can refer to spatial or temporal spaces. However, a temporal meaning results when these nouns are combined with the subordinating conjunction and p-stem. Let us look at a few examples of these adverbial constructions.
34. p

لقد بدأ العتب العراقيّ قبل أن تقع الواقعة.

| laqad | bada'a $\quad$ l-'atbu | l-'irāqiyyu | qabla |
| :--- | :--- | :--- | :--- |
| perf. | start.s-stem the-blame | the-I. | before |
|  | 'an taqa'a | l-wāqi'atu |  |
|  | sub. happen.p-stem | the-incident |  |

'The Iraqi blame has started before anything happening.'
35. b

sa-nutābi'u bānūrāmā wa-'iyyākum bacda 'an nantaqilu mubāšaratan fut-follow.p-stem P. and-you after to move.p-stem live
 to P. to-transfer speech for-the-head the-French J. C.
'We will return/be returning to Panorama with you after moving/going, live, to Paris to cover The French President's, Jaques Chirac, speech.'

Sentence (34) conveys a state of occurrence that is then placed within a temporal sequential order based on its head noun, which in this case happens to be posterior to the matrix clause's event. Sentence (35) is similar, but instead of placing the subordinate state posterior to the matrix's situation, the noun 'after' places it before. In such cases, the adverbial construction
inherits the event referent from the p-stem, but the p-stem takes on the reference time of the adverbial.

### 4.6 Modal subordination

Modal subordination tends to favor an $R$ that is simultaneous to $S$, but it can also convey a state that starts at $S$, as the examples illustrate:
36. p

| $\begin{aligned} & f a-\stackrel{〔}{ }{ }^{\text {alā}} \\ & \text { then-on } \end{aligned}$ | قعلى لبنان أن يعمل بكلّ ما أوتي من قوّة من أجل المحافظة على هذه القوّة الكامنة المتمثّة في المقاومة. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | lubr |  | $\frac{\mathrm{s} a n}{\text { sub }}$ | ya'mala work.p-stem | bi-kulli with-all | $\begin{aligned} & m \bar{a} \\ & \text { rel. } \end{aligned}$ | 'ūtiya <br> give.s-stem | min <br> from |
|  | quwwatin | min | ${ }^{2}$ ajli | l-mu | azati | 'alā | hāDihi |  |
|  | power | from | purpose | the-m | ntaining | on | this |  |
|  | l-quwwati | l-kām |  | l-mut | aTTilati | $f i$ | muqāwam |  |
|  | the-power | the-un | rlying | the-r | esented | in | the-resistan |  |

'So Lebanon must work with all its given strength with the purpose of maintaining this latent power represented in the resistance.'
37. b

| Calay-him | 'an | $y u j \bar{i} b \bar{u}$ | ${ }^{\prime} a l \bar{a}$ | $h a ̄ ð i h i$ |
| :---: | :---: | :---: | :---: | :---: |
| on-them | sub. | answer.p-stem | on | this |
| 'They have to answer these questions.' |  |  |  |  |

عليهم أن يجيبوا على هذه الأسئلة
l-'as'ilati the-questions
'They have to answer these questions.'
The states being subordinated in the above examples hold from S onwards.
Another modal use is with the particle قَدْ qad, which when combined with the p-stem conveys potentiality, as in the following example sets:
38. b

| $h \bar{a} D \bar{a}$ <br> this | $l-m a w d \bar{u}^{c} u$ the-issue | țuriḥa | هذا الموضوع طُرح باعتباره أنّه قـد يكون حلاّ وسطا لكا لا لطرفين |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | āri-hi | 'anna-hu | qad |
|  |  | present.s | pass wi | onsideri | that-he | MOD. |
|  | yakūnu | hallan | wasatan | li-kilā | t-ţarafay |  |
|  | be.p-stem | solution | medium | for-two | the-side |  |

'This issue was presented with the consideration that it may/might/can/could/has a potential to be a middle ground solution for both sides.'
39. p


| qad | takūnu sah̄̄hatan | wa-qad | takūnu | bālūnan |
| :--- | :--- | :--- | :--- | :--- |
| MOD. | be.p-stem | true | and-MOD. | be.p-stem | balloon

'It may/might/can/could/has a potential to be true and it may/might/can/could/has a potential to be hot air.'

In these examples, the reference time is simultaneous with speech time -the "default", so to speak - hence we get a present-time modal reading that does not move the narrative forward.

### 4.6 Purpose clauses

The p-stem is also used to convey a purpose of some event, and all the purpose particles give the verb subjunctive case:
40. p

'We demand the return of our lands in order for the people to return to its cultivation.'
41. b

|  |  | لنجـحِ في القضـاء على كلّ مجموعة إرهابية |  |  |
| :---: | :---: | :---: | :---: | :---: |
| lan | nantahiya | $\underline{h a t t \bar{a}}$ | nanjaha fì | $l-q a a d \vec{a} i$ |
| neg. | be finished.p-stem | $\underline{\text { until }}$ | succeed.p-stem.SUBJ in | the-eradication |
|  | 'alā kulli | majm $\bar{u}^{\text {catin }}$ | 'irhābiyyatin |  |
|  | on all | group | terrorist |  |

'We will not be finished until we succeed in eliminating all terrorist groups.'
42. p

| nahnu | hun $\bar{a}$ | $f \bar{\imath}$ | muhāwalatin |
| :--- | :--- | :--- | :--- |
| we | here | in | attempt |

$\begin{array}{ll}\underline{k a y} & \text { nataqaddama.SUBJ } \\ \text { in order to } & \text { move forward.p-stem }\end{array}$

| نحن هنا في محاولة لتسوية المشاكل كي نتقدّم معا |  |
| :--- | :--- |
| li-taswiyati | l-maSākili |
| for-settle | the-problems |
| ma'an |  |
| together |  |

'We are here in an attempt to settle disputes so that we move forward together.'
43. b

wa-li-kay naSkura-hu
and-for-so thank.p-stem.SUBJ-him
'And in order for us to thank him.'
44. p
دعتهم إلى أن يكونوا سفراء لبنان في هذه المرحلة لـيخبروا عن وطنهم بكلّ فخر واعتزاز
dacat-hum
invite.p-stem-them
hāDihi
this
bi-kulli
with-all
invite.p-stem-them
hāDihi this
with-all
'ilā 'an yakūn̄̄ sufarā'a lubnān fī to sub. be.p-stem ambassadors L . in l-marhalati li-yuxbirū.SUBJ 'an waṭani-him the-stage to-inform.p-stem about nation-theirs wa- ${ }^{\text {tizaza }}$ zin and-glory
'She invited them to be ambassadors for Lebanon at this time in order for them to talk about their nation with pride and glory.'
45. b
'anā hunā li-'u'u'ida
I here for-repeat.p-stem.SUBJ
l-muttahidati tijāha
the-united toward

'I am here in order to reiterate the commitment the UN has made to the Iraqi people.' 46. p
min 'ajli $\quad$ 'an nafqida $\theta$-өiqata bi-'anfusi-nā
from purpose sub. lose.p-stem the-confidence with-soul-our
'In order to lose /with the purpose of losing our trust in ourselves.'
The states conveyed by the p-stem in these purpose clauses is one that precedes the culmination of the event because we are within a state of working towards that goal.
4.9 Jussive lām

Suggestions and requests headed by the particle $\underset{\substack{~}}{l i-}$ also require the p -stem. This particle gives the verb jussive case.
47. p

لـنغيّر أسلوينا مـ أمريكا
li-nuğayyir 'uslūba-nā ma'a 'amrīkā
for-change.p-stem.JUSS method-our with A.
'Let us change our ways with America.'
48. b
لـنتابع هذا اللقاء الخاص بالعربية مـع العاهل الأردنـيّ الملك عبد الله الثاني

| $\underline{\text { li-nutābi }}{ }^{\text {c }}$ for-continue.p-stem. | USS | $h \bar{a} D \bar{a}$ <br> this | $l-l i q \vec{a} a$ the-meeting | $l$ - $x a \bar{s} s s i$ the-special | bi-l-‘arabiyya maca with-the-A. with |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $l-{ }^{\text {ca }}$ hili | $l$-'urd | iyyi | l-maliki | ${ }^{\text {'abd allāh }}$ | $a T$-Tān̄̄ |
| the-monarch | the-J. |  | the-king | A. | the-second |

'Let us continue this special meeting that al-Arabiyya (TV station) has with the Jordanian monarch, King Abdullah the second.'

Examples (47) and (48) can be categorized as requests, suggestions, or even softened imperatives. The state defined by the p-stems in these instances starts to hold at S , which is the moment of its inception in these types of clauses.

## 5. Stativity Tests

The premise of this chapter is that the p-stem is a particular morphological construction that conveys stativity, as defined by Michealis (2011). In order for this construction to work, certain conditions need to be met. Here are the tests that will be used throughout the case study chapters that diagnose the stativity of a construction.

### 5.1 The when test

Michaelis (2011) states that should the main clause's event overlap with a stative subordinate when-clause, the test reveals that the subordinate clause is a state (p. 1366). Let us look at an example from the data:
49. p


تجارية على مساحة . 77 ألف متر مريع.

and-spread.p-stem
180 'alf
l-ªswāqu fī l-waqti the-stores.NOM in the-time.GEN murabba in
l-xitṭatu 'alā 'iqāmati
the-plan.NOM on establishing.GEN
on
square.GEN around.ACC the-mosque.GEN 'alā masāhati
space.GEN
l-hādiri
'alā
the-current.GEN on
hawla l-masjidi
bayna-mā tanusşu
while stipulate.p-stem tijāriyyatin shopping.GEN
'alfa mitrin murabb'in
thousand.ACC meter.GEN square.GEN
'Currently, the stores spread 180 square meters around the mosque, while the plan stipulates for the establishment of shopping centers over a space of 660 thousand square meters.'
50. b

'And president Nejad holds onto his forward movement towards nuclear energy while Muhammad el-Baradei, the director of the International Nuclear Agency, prepares to present his report to the Security Council.'

In (49), the current spread of stores overlaps the plan's stipulation. And in (50), Nejad's continuing forward with obtaining nuclear energy overlaps el-Baradei's preparation for the UN.

### 5.2 The indirect-discourse test

If the situation being reported can be understood as "overlapping the time of the speechact event in the matrix clause (i.e., reference time), we view the reported statement as a stative predication" (Michaelis, 2011, p. 1367); it is stative if the event holds at the time of speech (p. 1368). Both (51) and (52) below, show that the situations conveyed by the p-stem construction can be read as overlapping $S$ :
51. p

maṣdarun fì wizārati s-siyāhati qāla 'anna l-mudīrata source.NOM in ministry.GEN the-toursim say.p-stem sub. the-director.ACC

| $l$-‘ $\bar{a} m m a t a$ | nadā $s-s u r d \bar{u} k$ | tujrī | tahqqīqan | $f \bar{\imath}$ |
| :--- | :--- | :--- | :--- | :--- |
| the-general.ACC | N.S. | run.p-stem | investigation.ACC | in |

ša’ni $\check{s}$-šakwā
interest.GEN the-complaint.GEN
'A source at the Ministry of Tourism said that the Director-General, Nada Surduk, is running an investigation regarding the complaint.'
52. b
wa-qāla 'anna l-'amrīkiyyīna yuḥāwilūna min waräi
and-say.s-stem sub. the-A. try.p-stem from behind
Dālika
that muwāṣalati duğūṭi-him 'alā ' $\bar{\imath} r a ̄ n . .$. continuation pressure-them on I.
'And he said that, with that, the Americans are trying to continue putting pressure on Iran...'
In (51), the running of the investigation-event is understood to have already started prior to the source saying it and is continuing past it, i.e., the running of the investigation overlaps $S$. Similarly, sentence (52) conveys an internal perspective to a state-phase of an attempting-event by the Americans with the saying-event occurring somewhere within that phase.

### 5.3 The expansion test

According to the expansion test, a prediction denotes a state if it can felicitously be extended by a clause that extends it to the moment of speech (Michaelis, 2011, p. 1367). We see that this test is applicable to the p-stem and a previous situation can be extended to the present:
53. p

| $\begin{aligned} & \text { 'ajal, } \\ & \text { yes, } \end{aligned}$ | bakaytu wa-'an |  | اليائر ولا | نـن الأزهار على |  | تِ وأنا أري |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 'arā <br> see.p-stem | $n$-nis $\vec{a} a$ the-women | l-muhajjba the-covere |  |
|  | yanTurna throw.p-stem | l-'azhāra the-flowers | $\begin{aligned} & \text { ‘al } \bar{a} \\ & \text { on } \end{aligned}$ | D-Daxäiri the-munition | $\begin{aligned} & \frac{\text { wa-l } \bar{a} \text { ziltu }}{\text { and-still }} \\ & \underline{\text { and }} \end{aligned}$ | $\begin{aligned} & { }^{\mathrm{J} a b k \bar{l}} \\ & \text { cry.p-stem } \end{aligned}$ |

'Yes, I cried when/while/as I saw women in hijab throw flowers on the munition, and I am still crying.'

Michaelis (2011) mentions, "[s]uch a clause may contain the temporal adverbial still" (p. 1367), hence the usage of the phrasal verb مـا زال mā zāla 'X continues to speech time', which is used to convey the continuity/extendedness of an event and can be translated into English as 'still'.

### 5.4 The still and no longer tests

Recall that this tests for the expandability of states through the subinterval property
(Katz, 2000). They presuppose that a state held at some point. Still affirms that it continue to hold up to the interval being reference; while no longer negates that it holds at that interval.
54. b

'And he clearly stated that his government still lacks some maturity.'
55. p

'And he pointed out that the refugees and the displaced continue/are still returning in huge number to their homes.'

In sentences (54) the lack of government maturity, as established by the speaker, is assumed to not only have been the case prior to their stating it, but continues to the moment of their speech. Similarly, the return of the displaced in (55) is established prior to, and up until, the speaker's statement.
56. b

'In the alleys of the town, one no longer heard (anything) except bullets...'
57. p

| $h \bar{a} \partial \bar{a}$ | $t$-t $\bar{r} r \bar{\imath} x u$ | $\underline{l a m}$ | $y a^{c} u d$ |
| :--- | :--- | :--- | :--- |
| this | the-date.NOM | $\underline{\text { NEG. }}$ | $\underline{c o n t i n u e . p-s t e m ~}$ |

hāð̄̄a t-tārīxu lam yacud yušakkilu muhlatan nihảiyyatan
this the-date.NOM NEG. continue.p-stem

$$
\begin{aligned}
& \text { هذا التاريخ لم يعد يشكّل مهلة نهائية...... } \\
& \text {.... هذا التاريخ لم يعد يشكِل مهلة نهائية.... } \\
& \text { form.p-stem deadline.ACC final.ACC }
\end{aligned}
$$

'This date no longer constitutes a final deadline.'
In (56), the presupposition is that other noises were heard, presumably not those of violence, in the alleys of the town. However, that no longer is the case as S. All that is heard now is the sound of bullets. Sentence (57) presupposes that particular date was a final deadline once, prior to $S$, but it is no longer the case at $S$.

### 5.5 Complement of kāna test

The auxiliary kāna auxiliary construction is a stative one as it inherits the stative property of its head, the auxiliary function of the verb kāna 'be', as we shall see in Chapter (5). This auxiliary $k \bar{a} n a+$ verb $_{p-s t e m}$ construction selects for states that are medial to an event, but anterior to S: either a past progressive or a past habitual reading, as (58) and (59) attest. The distinction is one that is made clear by context.
58. p

fī-mā kuntu 'utālíu kitāba "rīmūn'iddah jumhūtiyyatu
while be.s-stem read.p-stem book.ACC R. E. republic.NOM
d-damīri" li-l-'ustāDi niqūlā nāsīf, tawaqqaftu 'inda
the-conscience.GEN for-the-prof.GEN N. N. stop.s-stem at
faṣli "buyūtu $\theta$ - $\theta$ 'r'ri" 'anqulu-hu
chapter.GEN houses.NOM the-revenge.GEN transfer.p-stem-him
ka-m $\bar{a}$ warada bi-tajarrudin
as-SUB. state.s-stem with-impartiality.GEN
'While I was reading Prof. Nicola Nassif's book "Raymond Eddé: Republic of Conscience", I stopped at the chapter "Houses of Revenge", page 55, taking it down as it is written with impartiality...'
59. b

| $k \bar{a} n \bar{u}$ | yasīhuna <br> yeil.p-stem | caliciyan <br> loud | wa-yusaffiqūna <br> and-clap.p-stem | li-saddām <br> for-S. | husayn |
| :--- | :--- | :--- | :--- | :--- | :--- |
| be.s-stem | H. |  |  |  |  |

'They used to yell/were yelling loudly and clapping for Saddam Hussein.'

Sentence (58) lends an internal state phase of a single reading-event (a more likely reading than a habitual reading in this particular case) of this book. Sentence (59) is ambiguous
as to if it is a single cheering and clapping-event or if this is an accumulation of a number of events that lends a habitual reading. Either way, the test applies to the p-stem construction.

### 5.5 Circumstantial clause test

The circumstantial clause expresses the state or circumstance of a clause's argument, i.e., the argument's state holds at that particular interval. We see that the p-stem is one of the constructions used to convey this:

'The Lebanese (channel), last evening, shook the image of Bishop Gregoire Haddad as he was exposed to blows and attacks by an extremist in front of Tele Lumiere' 61. b

'And they have kidnapped the photographer, who is around 50 years of age, while he intended to enter the agency's office in Gaza.'

In the above sentences, the circumstantial clauses are read as simultaneous or overlapping the main clause, because they describe one of the participants at that specific reference time, i.e., the circumstantial clauses above overlap their main counterparts. Thus this test is applicable to
the construction. This, and every other stativity test used in the dissertation, is applicable to the p-stem construction, making the p-stem the least restricted construction and the one with which all these tests are directly applicable without any caveats or modifications.

## 6. Formal Representation

The representation of the مضارع mudārici / p-stem form of the verb is a construction, as opposed to a lexeme, because it is an inflectional verbal form, figure (2.1) below. Inflectional constructions are language dependent and are used to form words out of lexemes, and are constrained by the following rule: "[t]he mother of an inflectional construct is of type word; the daughters must be lexemes" (Sag 2012, p. 115). Lexical constructs, on the other hand, are not restrained in this manner and only require " $[t]$ he daughters of a lexical construct are all of type lex-sign, i.e. they are words or lexemes" (ibid., p. 115).


Figure 2.1 The p-stem construction
The mother node's form is passed from the information in the daughter node's form (which, for Arabic, I judge to include the root and particular wazn the word falls into). The form is unspecified in both nodes because each wazn has its own form of the p -stem, and then inflections for person, number, and gender, as well as active or passive forms, are added to that. The argument structure of the verb is empty in order to show that it is unspecified. The semantic information of the root combined with the argument structure of the wazn and the verb's active or passive skeletal templates indicate how many arguments a particular verb takes and their syntactic categories. The syntax node carries information from the daughter and outputs a final
form of the word, which happens to be a finite verb. That same node is unspecified in the daughter node because we have yet to form an actual word at that level. The semantics of the daughter node include the different frames required for temporal representation of any event: the offset of an event, its medial phase, and the final resting frame. While the semantics of the mother node include the state frame (co-referenced to the medial phase frame of the daughter node), the reference time frame and the include frame tell us that the medial phase includes its reference time. This is used to illustrate the fact that this construction conveys the medial portion of an event's representation, without any knowledge about transitions or previous and post phases. This temporal portion of the event structure facilitates the different stative behaviors observed in the previous section.

## 7. Conclusion

This chapter is the first of the case-study chapters that displays the different types of stative constructions Arabic uses, by looking at two news corpora. The focus of this chapter was the p-stem verbal inflection. The p-stem is a concord state-selector construction. In other words, it is a state-selector, and it expresses a stative expression. This chapter analyzes the p-stem aspectually. It demonstrates that Reichenbach's (1947) reference time $(\mathrm{R})$ is key to understanding the different functions of the p -stem. R is the interval around which the p -stem orients its state. The default reading for $R$ is simultaneous with $S$. This results in a situation that overlaps $S$, and in these particular cases, the p-stem can convey present-time situations. However, R need not coincide with S , and it frequently does not. In such cases, the p -stem overlaps that R interval. It is this basic function that explains the various usages of the p-stem. In the next chapter, I look at a type of predicate that straddles the predication spectrum between verbal, on one end, and
nominal, on the other. Unlike the stative p-stem construction, the participles are basically a stativizing construction.

# Chapter 3: Verbally functioning Participles 

## 1. Introduction

This chapter explores the first stativizing construction among the case study chapters: the socalled "verbal" function of the two participles in Arabic: اسم الفاعِل ismu l-fā il 'the active participle ${ }^{5}$, and اسم الدَفعول ismu l-maf'ūl 'the passive participle'6. Whereas the p-stem is an inflectional concord stative construction, we will see that the participles are inflectional stativizing constructions: they take dynamic inputs and produce states. However, where the active participle (AP) generally conveys a progressive/continuous reading of a single event, the passive participle ( PaP ) expresses a state that has come into existence after the end of an event. The PaP's selection frequently lends itself to a resultative reading. However, the AP can have a resultative reading if the temporal representation of its event contains a phase after the final transition for it to select. Additionally, the PaP is a valence reducing construction (the first of two constructions that do so in this dissertation) and demotes the subject of its active verbal counterpart, illustrating how these stative constructions can be multifunctional.

[^4]Syntactically, however, these participles' functions are varied across the language ${ }^{7}$ : many proper nouns are participles, e.g., خالدxālid is an AP derived from خلا xalada 'to last forever/be immortal' and محمَّد muhammad is the PaP of the verb hamamada 'to praise'. Participles are also used as substantives, e.g., هاتف hātif'telephone' is an AP derived from the verb هتف hatafa 'to cry out/call', and مشرو mašrū' 'project' is a PaP derived from شر ش Participles can modify nouns, in which case they follow the noun in case marking and definiteness and have to meet certain gender agreement rules (1). Participles can function as predicate adjectives, in which case they refer to a property that is ascribed to the subject (2). Participles can also function as verbs (3).
1.

| 'abīr | fannānatun | mašhūratun | / | عبير فـانة مشهورة / ماهرة māhiratun |
| :---: | :---: | :---: | :---: | :---: |
| A. | artist.NOM | make popular.PaP.NOM | / | excel.AP.NOM |

'Abeer is a famous / skilled artist.'
2.

|  |  |  |
| :--- | :--- | :--- | :--- |
| ǧāda | sālimatun | / mahbūbatun |
| G. | healthy.AP.NOM | / love.PaP.NOM |

'Ghadah is healthy / beloved.'
3.

|  | 'ākilatun | / | mut'amatun | tuffāhata-hā |
| :---: | :---: | :---: | :---: | :---: |
| A. | eat.AP.NOM | / | feed.PaP.NOM | apple.ACC-her |

'Aïsha is eating / has been fed her apple.'

If things were this clear cut, we might be able to move on. However, usages exemplified by (2) are actually ambiguous between a predicate adjectival reading, and a progressive/ resultative reading. In other words, the clauses in (2) can also be translated as 'Ghadah is being healthy' and 'Ghadah has been loved'. One of the distinguishing features of the predicate

[^5]adjectival usage versus a progressive/resultative usage is the presence of a second argument for the participle. The syntactic relationship between the participle and its object clarify the intended meaning of the predicate. If the relationship between the participle and its object is marked genitivally, as in (4), the resultant reading is that of property predication and the participle is read more as an adjective:
4.


| ${ }^{\prime} a^{\prime}$ issa | 'ākilatu | / | mut'amatu | tuffāhati-hā |
| :---: | :---: | :---: | :---: | :---: |
| A. | eat.AP.NOM | / | feed.PaP.nom | apple.GEN-her |

'Aïsha is the eater of / is fed her apple.'

However, if the participle and its object are in a verbal relationship, as (3) above, then the predicate is understood as stativizing a dynamic event, and we get a progressive or resultative reading. The data has already distinguished between the two usages syntactically, as we will see. Thus, it becomes apparent that participles span the predicational spectrum from nominal to verbal functions. Because this dissertation is examining stative predications in Arabic, the current chapter is restricted to participles with functions exemplified by (3), reserving usages like (2) and (4) for the next chapter that includes property predications in its analysis. I refer to functions such as (3) as their "verbal function" for syntactic and semantic reasons. Syntactically, the participle assigns its argument case markings identical to those assigned by verbs in Arabic: nominative for subjects and accusative for objects, as (3) demonstrates. Semantically, the AP in (3) has a progressive reading (i.e., we are moving within a single apple-eating event), and the PaP in (3) has a perfect reading (i.e., we are in a state post an apple-feeding event). When these participles function verbally, they are stativizing constructions: they shift the aspectual representation of the input from eventive to stative, as example (3) demonstrates. The
accomplishments of apple eating / apple feeding are shifted. We are now within an unbounded, with no information on transitions, phase of apple-eating, similar to what the English progressive does (Michaelis, 2011), or we are conveying a state that has come into being after the applefeeding has been completed, similar to the resultative usage of the English perfect (Michaelis, 1994). In sentence (2), however, the participles function as predicate adjectives and convey the state of a subject at $R$.

When it comes to their verbal functions, in which they assign case to their argument and stativize an event, the participles are usually seen as comparable in their function to their corresponding p -stem verbs, i.e., substituting the participle with a corresponding p -stem lends a synonymous reading (Sībawayh, 1999, p. 218; Ṣaydāwī, 1999, pp. 96-97; Schulz, 2004, pp. 70-71; Mace, 2007, p. 36). However, some scholars have acknowledged a difference in usage: the participles' inability to convey habituality (Fehri, 1993, p. 181-184; Hassān, 1994, p. 99; Abu-Chacra, 2007, p. 161), as exemplified by the following examples:
5.

| al-hujjāju | mutawajjihūna |
| :--- | :--- |
| the-pilgrims.NOM | head towards.AP.NOM |

الحجّاج متوجّهون إلى مكّة (الآن / غدا / *عادة / *بالأمس) ilā makka (l-'āna / to M. (now.ACC / ğadan / *'ādatan / *bi-l-'amsi) tomorrow.ACC / *usually.ACC / *yesterday.GEN)
'The pilgrims are heading towards Makkah (now / tomorrow / *usually/ *yesterday) 6.

'The pilgrims are heading towards/head towards Makkah (now / tomorrow / usually/ *yesterday)

As example (5) above illustrates, when the AP is functioning verbally, it lends a progressive reading, an ongoing look at a single moving-event. This is supported by the adverbial collocation: present-time adverbials are felicitous, but habituals are not. Compare this with (6), in which the predicate is the p -stem. We know that the p -stem is not specific for the type of imperfectivity it conveys. Thus, it is felicitous to use habituals in addition to the present-time adverbials with it. And with both examples, you have a felicitous future adverbial, which, as I explained in the previous chapter, can be analyzed as the predicate selecting for the state that precedes the event. In the verbal function of both the p -stem and the AP, the past adverbial is infelicitous when they are matrix clauses. However, uncoupling R from S occurs with subordination, and the participles orient the event they convey around that uncoupled R , as with the p -stem.

PaPs also cannot convey a habitual usage, as we can see:
7.

| al-fà $\hat{i}$ u | mamnūhun | الفائز ممنوح الجائزة (الآن / غدا / *عادة / *-الأمس) |  |
| :---: | :---: | :---: | :---: |
| the-winner.NOM | grant.PeP.NOM | the-prize.ACC | (now.ACC/ tomorrow.ACC/ |
| *'ādatan.ACC | / *bi-1-'amsi) |  |  |
| usually | /*yesterday) |  |  |

'The winner has been granted the prize (now / tomorrow / *usually/ *yesterday).' 8.

'The winner is (being) granted/has been granted the prize (now / tomorrow / usually/ *yesterday).'

Adverbially, the PaP patterns similarly to the AP , in that it allows present-time and futuretime adverbials, but not past-time or habitual adverbials. The activity verb manaha 'grant' is
ditransitive in Arabic. As you see in (7), the indirect object of the active verb, the entity granted the prize, is now the subject marked with nominative case of this simple, indicative clause, while the direct object, the prize, is in accusative case. This is identical to its passive verbal counterpart in (8). The future adverbial reflects the upper end limit of the state selected in futurate readings. Again, when not subordinate, neither is applicable with a past adverbial, but subordination will show that the PaP is oriented around R and not E . As far as Aktionsart representation goes, the state that the PaP selects for is a post-event state (i.e., that state that comes into being after the terminal transition of the event). In other words, if we assumed that the reference time and speech time coincide, (7) could be phrased into English thusly: we are in a state posterior to granting the winner the prize. Because of this post-event state selection, the PaP is frequently used to convey resultative states.

Aktionsart plays a part in the meaning conveyed by the AP and PaP. The data will show that the constructions largely prefer dynamic events, reinforcing the idea that the participles are stativizing constructions rather than stative constructions. However, a progressive reading of a single event does not apply to all APs. For example, achievements and accomplishments, as discussed earlier (section 3.2-3.3 of chapter 1), have a temporal representation of a post-event state following an eventive final transition period. Thus, APs depicting achievements and accomplishments can lend a resultative reading, as the example illustrates:
9.

| 'anā | fă $\boldsymbol{i z u}$ | $f i$ | l-musābaqati |
| :---: | :---: | :---: | :---: |
| I | wear.AP.NOM | in | the-race.GEN |

'I have won the race.'

This aspectual coercion occurs because the achievements have no state prior to their transition. The AP chooses the state from the representation it is presented with. This selectional ability of the AP means that (3) can have an alternate reading: Aïsha has eaten her apple.

As far as stative representations go, the data has stative roots that I analyze as aspectually coerced and made dynamic in order to produce the construction:
10. b

'We will promise God then our nation and you all that we will return to our country being committed/bounded by this agreement.'
11. p

| 'ataynā-hu | أنيناه وهو محاطّ بأركان الحرب مع بعض النّوّاب |  |  |
| :---: | :---: | :---: | :---: |
|  | wa-huwa | muhātun | bi-'arkāni l-ḥarbi |
| approach.s-stem-him | while-he | surround.PaP.NOM | with-officers.GEN |
| ma'a ba ${ }^{\text {d }}$ di | n-nuwwābi |  |  |
| with some.GEN | the-represe | tives.GEN |  |

'We approached him while/as he had been surrounded by officers and representatives.'

Both examples are examples of circumstantial usages. The AP in (10) describes the
promising individuals as 'being committed to the agreement' as they return to their country. The commitment is augmented to an activity in this example because of the AP. It is something that is being continuously worked on, with explicit boundaries, as opposed to an effortless, unbounded state. Also, sentences (10) and (11) reflect the participle's orientation around the matrix predicate's reference time when it is subordinated. The orientation around R , and not E , is why some scholars have analyzed the participles as conveying any tense (Qwaqzeh, 2015), despite the fact that their function is not one of tense. Wright et al. acknowledge this matrix reference time
orientation for the participles and for the maṣdar, which are collectively referred to as verbal nouns, when they state "the concrete verbal noun refers to the same period of time as the verb in which it is connected, when it is annexed to the verb as an adverbial accusative" (2005, p. 196, italics in original). In (10) the being committed to the agreement will overlap the matrix clause's return home, which is in the future-as indexed by the future particle on the verb 'return'. While in (11) the being surrounded by officers is in the past and overlaps with the reference time of the matrix clause's coming-event.

To summarize, the verbal function of the participles are stativizing constructions. The AP conveys either single events in progress or perfect states, and the PaP expresses a post-event state. This is in contrast with the p -stem: a concord stative construction that can convey habituals and progressives. The participles and the p-stem form of the verb both have a default reference time that coincides with S . However, we have seen that when subordinated, R uncouples from S , and that R is what these constructions are oriented around. The predicate adjectival usage of the participles, exemplified in (2) and (4), is also a subtype of stative constructions and will be covered in Chapter (4) with the rest of the NVPs.

Accordingly, the remainder of this chapter is arranged as follows: Section $\mathbf{2}$ briefly introduces the difficulties scholars have had in pinpointing these participles' categories based on their multiple functions. Section 3 introduces the reader to the forms and derivation processes of the AP and the PaP. Section 4 further explores the ambiguous usages that are frequently associated with the participles and explains it based on the types of states available for the construction to select. Section 5 discusses the data by focusing on how the correct participial functions were extracted, their frequency, and their syntactic distribution in the data. It also
provides an Aktionsart analysis on a portion of the data. Section 6 applies the stativity tests to the construction, while Section 7 gives a formal representation of the constructions. We then conclude the chapter with Section 8.

## 2. Classification of participles

I would like to start the remainder of the chapter with an anecdote that illustrates the ambiguity and multi-functionality of the participles. This story is said to have happened during the reign of the Abbasid Caliph, Hārūn ar-Rašīd (d. 809 A.D.). The grand judge Ya $q u \bar{b}$ al'Anṣārī, known as 'Abū Yūsuf, held Islamic Jurisprudence in higher regard than the study of grammar, the latter of which he saw as a futile and worthless undertaking. One day, 'Abū Yūsuf and the grammarian, al-Kīsā $\overline{1}$, met with the Caliph, and the judge started to openly mock and insult grammar and its study. In response to that attack, al-Kīsā̄̄̄, wanting to teach him a lesson, asked him which men in the following two hypothetical scenarios would he, as a judge, take into custody. In the first, one man says to another:
12.

|  |  |  | أنا قاتلٌ غلامِك |
| :---: | :---: | :---: | :---: |
| 'anā | $q \bar{a}$ tilu | ğulāmí-ka |  |
| I | kill.AP.NOM | lad. GEN.your |  |
| 'I killed your lad.' |  |  |  |

And in the second scenario, a man says this to another:
13.

| 'anā | $q \overline{a r t i l u n ~}$ | ğulāma-ka |
| :---: | :---: | :---: |
| I | kill.AP.NOM | lad. ACC.your |
| 'I will | r lad.' |  |

'I will kill your lad.'

The judge responded by saying that he would take the speakers from both scenarios into custody. At that point, Caliph Hārūn interjected and informed the judge that his choice was
incorrect; the judge must take the first man in, as he is a killer. The other man had yet to kill. AlKīs $\bar{a} \overline{1}$ i further explained to the judge that the structure of the clause indicates whether the killingevent happened, or was yet to happen. In (12), the AP does not carry the /-n/ sound in its case marking, known as tanwīn (lit. 'adding /n/ sound'), and the complement of the AP is marked in the genitive case, as is underlined in the gloss. This structure is nominal in Arabic: the AP 'killer' assigns its complement 'lad' genitive case, a syntactic property restricted to nouns. This predicational construction, as we shall see in more detail in Chapter (4), predicates a property to its subject, i.e., the literal translation of (12) is 'I am the lad's killer'; it is a confession! This is not the whole picture for this "nominal" usage, however. This usage with nominal syntax is the only one in which you can felicitously include a past-time adverbial, e.g., last year. The presence of this adverbial shifts the temporal representation from an unbounded state, to a state bounded by its initial transition point. Thus, nominal syntax can be ambiguous between an unbounded stative reading or a perfect-type state. The structure in (13) is different. Syntactically, the AP carries the $/-\mathrm{n} /$ phoneme in its own case marking, and it assigns its complement accusative case, as highlighted in the gloss. This structure is verbal: the complement of the AP is assigned accusative case, a property of verbs in Arabic. By default, this verbal function either conveys an event that is simultaneous with S , or one that is posterior to it, as example (1) has shown. (I assume, for pragmatic reasons since the two men are in the judge's court and without a weapon, the only reading available was a futurate one.) As such, no crime had been committed, yet. The judge is said to have praised the pursuit of grammar after this encounter ${ }^{8}$ (al-Hamw $\overline{1}, 1993$, pp. 1741-1742).

[^6]It is clear, then, that the participles have caused confusion based on their variable functions, and scholars have grappled with their Part Of Speech (POS) classification. Traditional grammarians of Arabic, exemplified by Sībawayh ${ }^{9}$ (1999, p. 40), who belonged to the Baṣrah school of grammar, have claimed three types of words based on specific criteria such as inflection, morphology, case/mood markings, open or closed classes, etc. These include verbs (inflected for person, number, gender, mood markings, temporality), nouns/nominals (inflected for number and gender, and take case-markings); and a closed class of particles. For this group, the participles are considered nominal mainly based on morphology. However, the Kūfan school classified the participles based on their verbal function and meaning. Since the participles have a verbal function, "the Kufan grammarians regarded the participle as the present tense, called $f i$ ' $l$ d $\bar{a}$ 'im 'permanent verb', along with the past and the future" (Owens, 2011, Para. 11).

Other scholars felt the traditional system was too restrictive and did not account for functional nuances of different word classes. Hִassān (1994), for example, has developed the part of speech tags for Arabic into seven groups based on their function-including predication potential. Among these seven, he includes the category for ṣifah 'adjective' (lit. descriptor, attribute, characteristic) in which he includes the participles. This particular class of word is morphologically nominal but can also function grammatically as a verb. Thus, he refers to the AP as صفة الفاعل sifat al-fā 'il 'the doer's / subject's descriptor' and the PaP as صفة المفعول sifat almaf'ull 'The passive / object's descriptor' (p.99).

On the other hand, Wright et al. (2005) argue that both the AP and PaP are "verbal adjectives, i.e. adjectives derived from verbs, and nearly correspond in nature and signification to

[^7]what we call participles" (p. 131). They later add "[t]hese verbal adjectives often become in Arabic, as in other languages, substantives" (p.131). Thus, scholars have struggled with how to classify these participles: they are morphologically nominal, yet they have multiple functions and can not only predicate, but they can assign case to their arguments as well ${ }^{10}$. In the next section, we look at the morphological forms of the participles before we move onto their representation in the data.

## 3. Form and derivation

This section briefly covers the morphological features of the participles. This will show that not only do the participles share an eventive function with the p-stem, but the majority of them are similar in form to the p-stem, as well. Also, this section demonstrates the criteria for the data to delimit participles from other POS at a morphological level, which needs to be done before the participles can be classified syntactically in the data.

[^8]
### 3.1 The Active Participle

The derivation of the participles depends on the particular wazn from which it is derived.
The Arabic name for the AP $f \bar{a}$ 'il tells us its form in the simplest/first (i.e., $\mathrm{C}_{1} \mathrm{aC}_{2}\{\mathrm{a} / \mathrm{u} / \mathrm{i}\} \mathrm{C}_{3} \mathrm{a}$ )
wazn: $\mathrm{C}_{1} \overline{\mathrm{a}}_{2} \mathrm{iC}_{3}$. However, not all verbs from this wazn actually allow for an AP -instead they have other derivational nominals used in their place. Wright et al. begin their exploration of the AP with its derivation. They state, " $[\mathrm{w}]$ hen formed from $\left[f a^{\prime} a l a\right]$ and the transitive $[f a$ ila] [...], these nomina agentis are not only real participles, indicating a temporary, transitory or accidental action or state of being, but also serve as adjectives or substantives, expressing a continuous action, a habitual state of being, or a permanent quality" (2005, p. 132). Accordingly, this means that fa 'ula, and the intransitive fa'ila, generally, do not form APs. For all other 'awzān, the AP's form is similar to the p -stem, and is easily derived from it: switch the first syllable of the p -stem to a $m u$ - and change the last vowel in the stem to /i/, e.g., يُّ x يُ yutawwir 'he develops/is developing' $\Rightarrow$ مُطوِّر muṭawwir 'developer/developing', y y y 'tabir 'he considers/is considering' $\Rightarrow$ معتبر mu 'tabir 'considerer/considering', يتظاهَر yatazāhar 'he demonstrates/is demonstrating' $\Rightarrow$ متظاهِر mutazāahir 'demonstrator/demonstrating'.

Generally, APs maintain the valency structure of their associated verb, unlike the PaPs.
Thus, if a verb is transitive, its associated AP is as well. For example, the verb balğa 'to reach/ attain/achieve' is transitive and requires an object. Its corresponding active participle بالغ bāliǧ, will also require an object and accordingly assign that object accusative case, as in the example below:
14. p

$$
\text { ... للمشروع البـلغة تكلفته نحو } 90 \text { مليون دو لار ... }
$$ li-l-mašrū $i$

## l-bāliğati

for-the-project the-reach.AP.GEN cost.NOM-his around. \begin{tabular}{l}
ACC <br>

| dūlărin |
| :--- |
| d.GEN | <br>

'...for a project (with) a cost reaching around 90 million dollars...'
\end{tabular} m.ACC

Both arguments of the AP are realized in this sentence, with the AP assigning its object accusative case. Maintenance of the verb's argument structure is extended if the associated verb is syntactically intransitive but semantically transitive. For example, the verb رغِب rağiba 'desire/ want' can require a preposition for its object, as its AP does below:
15. p


70 in the-hundred.GEN
'Statistics show that the percentage of youth wanting to migrate to the west approaches $70 \%$.'

### 3.2 The Passive Participle

Similarly to the AP, the PaP's name in Arabic displays its form in the first wazn. Thus, for all forms of the verb of the simplest wazn that are semantically or syntactically transitive, the PaP's form is $m a C_{1} C_{2} \bar{u} C_{3}$. PaPs of all other 'awzān are similar to the p-stem form of the verb. The first syllable is switched to a /mu-/, identical to the AP. However, the last vowel in the stem is a /a/—as opposed to the AP's /i/. Hence, we have يُ يُطوّ yutawwir 'he develops/is developing' $\Rightarrow$

معتبَر
$\boldsymbol{m u}$ 'tabar '(being) considered', يستسلِ yastaslim 'he surrenders/is surrendering' $\Rightarrow$ مستسلَم
mustaslam '(being) surrendered'. Sentences (7) and (8) above show that the valence of the PaP is that of the passive verb, not the active verb's valence. The PaP's derivation process is applicable
for the majority of verbs. However, there are exceptions for irregular verbs. In fact, for some verbs the AP and the PaP are identical, e.g., , محتّل muhtall 'occupier/occupied'. Only context clears up those ambiguities. The next section is an attempt to clarify some of the ambiguities associated with the participles and explain them by looking at the selection options for the participle.

## 4. Ambiguous usages:

### 4.1 Resultatives

A feature of the participles is that they can function as resultatives, which Nedjalkov \& Jaxontov (1988) define as "those verb forms that express a state implying a previous event" (p. 6). Hence, the participles' resultative function selects those states that occur in the temporal representation of a predicate after the final transition of an event. As previously explained, the AP has a resultative function, as Xrakovskij's (1988) states: "the active participles of [certain] terminative and neutral verbs have resultative meaning" (p.333). He gives the following comparative examples taken from (p.333):
16.

ista 'addū̄ li-l-imtihāāi
prepare.s-stem for-the-exam.GEN
'They got ready for the exam.'
17.

hum musta iddd̄na li-l-imtiḥāni
they prepare.AP.NOM for-the-exam.GEN
'They are ready for the exam.'
It seems that the types of APs that allow for this resultative reading are not completely specified, as he admits, "[t]he scope of this category of verbs is not specified; the problem needs further study" (p.333). I diverge slightly with Xrakovskij's analysis: a final transition in the
predicate's temporal representation is necessary for this resultative reading. The predication as a whole must be "terminative", not just the AP. In (16), we may not consider prepare to be terminative, as it is an activity. However, the entire predication of prepare for the exam is an accomplishment, with a post-transition state in its representation. In such cases, the AP is ambiguous between a progressive reading (selecting for an intermediate state) and a resultative reading (selecting for the phase post-final transition). Thus, I add another translation to (16): 'they are (currently) preparing for the exam.'

The PaP has often been referred to as a resultative (Ryding, 2005, p.113; Holes, 2004, p. 150) because of its state selection; the PaP always selects for a state that comes into existence after an event's final transition. Xrakovskij (ibid.) introduces the PaP's resultative function when discussing what he calls "objective resultatives": a resultative with a situation's object "is expressed by the nominative of the passive participle, accompanied by the indefinite article. It denotes a state which exists at the moment of utterance and which has resulted from a preceding terminative action" (p.333). I assume by indefinite article he means tanwin (the addition of a $\mathrm{n} /$ sound to the end of the case marking in declinable nominals). I reprint one of his examples below (p.333):
18.

| 'inna-hā <br> EVID.-her |  | إنّها مخطوبة وتستعدّ للحياة الزّوجيّة |  |
| :---: | :---: | :---: | :---: |
|  | maxtūbatun | wa-tasta 'iddu | li-l-ḩayāti |
|  | affiance.PP.NOM | and-prepare.p-stem | for-the-life.GEN |
|  | iyyati <br> rried.GEN |  |  |

'She has (become) engaged and is preparing/prepares herself for married life.'

### 4.2 Ambiguities with intransitive participles acting as predicates

As (3) and (4), and (12) and (13) have shown, transitive participial syntax disambiguates a "verbal" from a predicate adjectival usage. However, (2), reproduced in (19) below, has shown that there are usages in which a syntactic clarification is not available:
19.

غادة سـالمـة / محبوبـة
$\check{g} a \bar{a} d a$ sālimatun / mahbūbatun G. healthy.AP.NOM / love.PaP.NOM 'Ghadah is (being) healthy / (has been) (be)loved.'

This commonly occurs with intransitive usages of the participles. The participle's own case marking (whether or not it has an $/ \mathrm{n} /$ ) and its object marking indicate whether the relationship between them is nominal (via genitive markers) or verbal (via accusative markers). However, without the object available, the participle is ambiguous as to which reading it lends. With these intransitive cases, context is the best distinguisher between a "syntactically-nominal" reading vs. a "verbal" reading. The syntactically nominal reading, as previously stated, can have a past-time adverbial associated with the predicate. This adverbial marks the initial phase of the state, and can lend a perfect reading in English.

## 5. Data

This section deals with issues pertaining to the participles in the data. First, I discuss the process behind the selection and extraction of the relevant participial function. Second, I explore the frequency of the construction, and look at its syntactic distribution in the data. Finally, I look at the Aktionsart classification of a portion of the data to show that it indeed is a stativizing construction.

### 5.1 Extraction of the verbally functioning participles

As I have argued, syntactically both of these participles have a number of functions spanning from non-predicative uses (nouns or adjectives) to predicative (as predicative adjectives, or even as fully predicative verbs that assign case to their arguments). However, because I am concerned with the so-called verbal functions of the participles in this chapter, I only wanted to extract those examples with that particular function. Hawwari et al. (2011) have explored ways of automatically tagging the arguments of predicate nominals (nouns and adjectives) for APB. As part of that undertaking, they looked at the predicational properties of the different syntactic categories in the data. I reprint Table (3.1), below, taken from that study (ibid., p. 45):

Table 3.1 Syntactic behavior of different POS tags as categorized by ATB compared with traditional grammarians' categorization

|  | N | Participles |  |  | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Syntactic Behavior |  | $\begin{aligned} & \text { verb-like }> \\ & <\text { noun-like } \end{aligned}$ |  |  |  |
| Traditional <br> Analysis | Nouns |  |  |  | Verbs |
| ATB3 |  | ADJ | ADJP- <br> PRD | $\begin{aligned} & \text { ADJ. } \\ & \text { VN } \end{aligned}$ |  |

Table (3.1) shows the categories of $\mathrm{N}(\mathrm{oun})$, Participles, and V(erb) across the top row. The second row illustrates that the syntactic behavior of the participles spans the spectrum from noun to verb. The third row reveals that, traditionally, grammarians lumped participles with nouns. And the final row reveals the different tags the Arabic Treebank gives these participles based on their functions in the clause: ADJ, ADJP-PRD, and ADJ.VN.

The tag ADJ is assigned to simple adjectives that modify their head nouns and have no predicational function in their clauses, like:
20. p

> ...في ... عبار ات مذهّبة أو نـافرة

| $f i$ | 'ibārātin | muðahhabatin | 'aw | nāfiratin |
| :--- | :--- | :--- | :--- | :--- |
| in | phrases.GEN | gild.PaP.GEN | or | protrude.AP.GEN |

'.. in . . . gilded or protruding (embossed) phrases.'
The tag ADJP-PRD is assigned to predicate adjectives, and thus falls in the middle of the spectrum since it is predicative, as opposed to simple adjectives, but not quite verbal in its case assignment, etc. This usage is exemplified in sentence (21), where the participle is the predicate of one of $k \bar{a} n a$ 's sisters, ماز $m \bar{a} z a \bar{a} l a$, a complex verb comprising a negation particle + verb, meaning 'past state that extends to speech time' or 'still', and (22) where it is the sole predicate of the subordinate clause:
21. p

| wa-'anna darajata | $l$ l-'inðāri | $f i \quad l$-wilāyāti | l-muttahidati |
| :---: | :--- | :--- | :--- |
| and-SUB. degree.ACC | the-alarm.GEN | in the-states.GEN | the-united.GEN |
| li-muwājahati | l-'a'māli | l-'irhābiyyati |  |
| to-face.GEN | the-works.GEN | the-terrorist.GEN |  |
| lātazālu | muratfi'atan |  |  |
| still.p-stem | high.AP.ACC |  |  |

'And that the level of alert in the face of terrorism in the U.S. is still "high".' 22. b

|  |  |  | كما هو مقرّر | برنامج التخيب سيتو اصل |
| :---: | :---: | :---: | :---: | :---: |
| mu'akkidan | 'anna | barnāmija | $t$-taxş̦ı̄bi | sa-yatawāṣalu |
| ascertain.AP.ACC | SUB. | program.ACC | the-enrichment.GEN | FUT.-continue.p-stem |
| $k a-m \bar{a}$ | huwa | muqarrarun |  |  |
| as-SUB. | he | decide.PaP.N |  |  |

'...Ensuring that the enrichment program will continue as it is decided (i.e., as is planned).'
The ADJ.VN tag is used to show that a participle is not only predicative, but also functions syntactically as a verb. Let us look at sentence (23) and sentence (24). Both have their arguments realized: (23) has a subordinate sentence for 'thing allowed' (which, we have learned from the previous chapter (see examples $(9,12)$ in section 2 , and examples $(29,31)$ in 4.5.1), can
be reworded with an accusatively marked maṣdar), while (24) includes the prepositional phrase (PP) that is the 'abled action':
23. p

l-'amri
the-issue.GEN
'I have not been authorized at this stage to give comments of substance about the issue.' 24. b


Only those predicates tagged with an ADJ.VN tag by the Treebank were included in this analysis, i.e., words that are morphologically considered participles but syntactically tagged as NOUN, PROPER_NOUN, ADJ, ADJP_PRD were not included in this chapter. Once extracted, I looked at the first 100 instances of these ADJ.VNs in each corpus. I coded each of these hundred instances for participle type, Aktionsart classification, and syntactic subordination (which will be further explored in the next subsection: 5.2).

The ADJ.VN count is as follows: the print corpus has 2,215 instances, and the broadcast data contains 397. These verbal participles were tagged at a later stage by the Arabic Treebank. As Bies states in a personal communication, " $[t]$ he VN (verbal noun, or verbal nominal, or nominal verb...) tags are different from other POS [Parts of Speech] tags in that they are derived from the syntactic tree following the treebank annotation. So, anything that is originally POS tagged ADJ but that heads a VP in the tree will have its POS tag changed to ADJ.VN in the
released data [...] ADJ.VN should be participles that are functioning verbally (i.e., that have verbal arguments)" (2014).

### 5.2 Syntactic representation and frequency of the participles in the data

Syntactically, the Treebank considers this usage of these participles as verbs that head a

VP. They frequently head manner and adverbial clauses, as they are frequently حال hāl 'circumstantials' or circumstantial clauses that refer to a state of one of the arguments, simultaneous with the main event (refer back to section 6.F in the first chapter). When tagged as such, the Treebank considers the participles a subordinated clause without a subordinator, as in the following trees:
25. p
(TOP (S (S (CONJ فَ then)
(NP_TPC_1 (NP (NOUN_PROP بُوش Bush)) (SBAR (WHNP_3 (_NONE_0))
(S (VP (DET_ADJ.VN_CASE_DEF_NOM الطامِحُ aspire.AP)
(NP_SBJ (_NONE_*T*3-))
(PP_MNR (PREP $ب$ with)
(NP (NOUN_NSUFF_FEM_SG_CASE_INDEF_GEN
strongly)))
(PP_CLR (PREP إلَى to)
(NP (NOUN_NSUFF_FEM_SG_CASE_INDEF_GEN وِلايَةٍ
term)
(ADJ_NUM_NSUFF_FEM_SG_CASE_INDEF_GEN ثانَيَةٍ
second)))))) ()
'So Bush, (who is) strongly aspiring for a second term...'
26. b
(TOP (S (NP_SBJ (DET_NOUN_NSUFF_FEM_SG_CASE_DEF_NOM الدورة the session))
(S_EQUAT (PP_PRD (PREP في in)
(NP (PRON_3FS L ه her/it)))
(NP_SBJ (NP (NP (NOUN_NSUFF_FEM_SG_CASE_INDEF_NOM فائدة use))
(ADJP (ADJ_NSUFF_FEM_SG_CASE_INDEF_NOM كبيرة large)
(NOUN_CASE_INDEF_ACC جدا very)))
(PP (PREP ل for)
(NP (NP (DET_NOUN_NSUFF_FEM_SG_CASE_DEF_GEN السادة
gentlemen))
(SBAR (WHNP (_NONE_*0*))
(S (VP (DET_ADJ.VN_NSUFF_MASC_PL_GEN المسؤولين
answer.PaP)

$$
\begin{aligned}
& \text { (NP_SBJ (_NONE_*T*)) } \\
& \text { (NP_OBJ (_NONE_*)) } \\
& \text { (PP_CLR (PREP في in) } \\
& \text { (NP (NP (NOUN_CASE_DEF_GEN آتخاذ taking)) } \\
& \text { (CONJ g and) } \\
& \text { (NP (NOUN_CASE_DEF_GEN صنع making) } \\
& \text { (NP (DET_NOUN_CASE_DEF_GEN القرار the }
\end{aligned}
$$


'The session is very beneficial for those (who) have been responsible for taking and making decisions’

In (25) we have an AP from the broadcast data that modifies Bush and heads its own clause, which is subordinated without an overt subordinator (although, some analyses indicate that the al- is in place of a subordinator and is not a definite article ( $\mathrm{Ni}^{\text {' mah, 1973) }}$ ). Sentence (26) is similar, but is taken from the broadcast data and uses a PaP derived from the verb 'to question'. All in all, only ten instances in the print data and two in the broadcast data are tagged as predicate nominals and are not considered circumstantials. This distribution that favors subordination reflects that the participles are primarily used to convey states that overlap situations in their matrix clause, i.e., they provide a background to the main narrative.

### 5.3 Aktionsart analysis of a portion of the data

To investigate whether this construction is a type-shifter, one that selects for events to produce states, or a concord construction, a stative construction that produces a state, I wanted to look at the participles' Aktionsart representation. However, due to the size of the data set, I restricted myself to a portion of the data's Aktionsart classification. I examined the first 100 sentences with participles in both corpora and the breakdowns across the corpora are similar for this data set. The sentences in the print data have 79 APs: 44 are activities, 19 are states, 9 are
accomplishments, and 7 are achievements; so 60 of the 79 (a little over three-quarters, or 76\%) APs are dynamic; the rest are states. The PaPs make up 21 instances: 7 states (one-third of the total PaPs are dynamic), 6 activities, 5 achievements, and 3 accomplishments (two-thirds of the total PaPs). Per the Table (3.2), almost eight in ten participles marked as ADJ.VN were AP. Two thirds of the PaPs and three-quarters of the APs are eventives.

Table 3.2 Stative vs. eventive participles in the print data

|  | Events (\%) | States (\%) | Totals |
| :---: | :---: | :---: | :---: |
| AP | $60(76 \%)$ | $19(24 \%)$ | 79 |
| PaP | $14(67 \%)$ | $7(33 \%)$ | 21 |
| Totals | $74(74 \%)$ | $26(26 \%)$ | 100 |

As far as distribution between the two participles goes, the broadcast data reflected a similar breakdown to the print data: 80 APs to 20 PaPs. The AP breakdown is: 38 activities, 30 states, 11 achievements, and 1 accomplishment. $63 \%$ of the APs are dynamic. The PaP breakdown is: 10 states, 7 activities, and 3 achievements. The PaPs are split evenly between eventives and statives, as Table (3.3) shows:

Table 3.3 Stative vs. eventive participles in the broadcast data

|  | Events (\%) | States (\%) | Totals |
| :---: | :---: | :---: | :---: |
| AP | $50(63 \%)$ | $30(37 \%)$ | 80 |
| PaP | $10(50 \%)$ | $10(50 \%)$ | 20 |
| Totals | $60(60 \%)$ | $40(40 \%)$ | $100(100 \%)$ |

The numbers reflect a number of generalizations, keeping in mind that this is an analysis of the first 100 ADJ.VNs in each corpus. First, The distribution of APs to PaPs is almost identical across the corpora, with about $80 \%$ of the data represented being APs. Second, there is a higher representation of statives in the broadcast data, than in the print data. Despite that, the data,
especially the APs, show a preference for eventive predicates. Thus, an emergent pattern is one that reflects a preference for dynamic events. This dynamic preference suggests that the participial construction is a type-shifting one: it requires a dynamic input to produce a stative predicate. Stative inputs are augmented, through aspectual coercion, in order to produce a dynamic event to input into this construction (see sentences (7-8) above).

## 6. Stativity Tests

This section applies our stativity tests to the construction under examination in this chapter.

## A. The when test

The when test tests for stative matrix clauses by seeing if they overlap the when clause or not. Stative matrix clauses are seen as overlapping. This test is not applicable to the construction, as it requires the construction to place E anterior to, or posterior to, S . In order to do so, as a matrix predicate, the construction needs to be placed within a verbal construction, as this example illustrates:
27. m

|  |  |  |  | رنّ الهاتف |
| :---: | :---: | :---: | :---: | :---: |
| kuntu | muntagira-ka | 'inda-m $\bar{a}$ | ranna | l-hātifu |
| be.s-stem | wait.AP.acc-you | when | ring.s-stem | the-phone.nom |
| 'I was wai | for you when the | ne rang.' |  |  |

It is not surprising that I could not find examples in the data.

## B. The indirect-discourse test

This test states that if a construction is embedded in a matrix clause with a past tense reference, it is stative if an interpretation of overlap is an option. This test is applicable to this construction, as the following examples illustrate:
28. b

'Bush admitted to a lack of a magical solution for the situation in Iraq, (and he was) considering that a failure means that it turns into a hotbed of terrorism.'
29. p

$$
\begin{aligned}
& \text { وجاء في بيان وقّعه الأمين العام للحزب الاتحاديّ سيّّ أحمد الحسين أنّ سياسات النظام والحزب معروفة بفقدانها الصدقية... . } \\
& w a-j \bar{a}{ }^{\prime} a \quad f i \quad \text { bayānin waqqa}{ }^{\prime} a-h u \quad l \text {-'amīnu l-'àmmu } \\
& \text { and-come.s-stem in statement sign.s-stem-him the-secretary the-general } \\
& \text { li-l-hizbi l-ittiḥādiyyi Sayyid 'aḥmad al-ḥusayn 'anna siyāsāti } \\
& \text { for-the-party the-federal S. A. H. SUB. policies } \\
& \text { n-nizāmi wa-l-ḩizbi ma rūfatun bi-fuqdāni-hā ṣ-ṣidqiyyati } \\
& \text { the-regime and-the-party know.PP with-lack-her the-credibility }
\end{aligned}
$$

'And it declared in a statement signed by the Secretary General for the Federal Party Sayyid Ahamd al-Husayn that the regime and the party's policies had been known for their lack of credibility.'

In both sentences, the subordinate clause is understood as simultaneous with the matrix event. Sentence (28) says that Bush considered a failed mission to mean a hotbed for terrorism at the same time as he admitted to the lack of a magical solution to the state of Iraq. The passive participle in (29) tells us that the situation of the regime and party's policies to be known for their lack of credibility overlaps that of the declaration that has already happened.

## C. The expansion test

The subinterval properties of states allow for their expansion. As these modified sentences show, this test applies to this construction:
30. b


| for-holding.GEN | elections.GEN | presidential.GEN | and-legislative.GEN |
| :---: | :---: | :---: | :---: |
| mubakkiratin | wa-lā zāla | yad'ū | $\underline{\text { li-১ālika }}$ |
| early.GEN | and-still.p-stem | request.p-stem | for-that |

'He said that he is continuing his call to hold early presidential and legislative elections ... and is still calling for them.'
31. p

'And it said that the two armed men have been equipped with good weapons, and they still are.'
The fact that these states of 'continuing in his call for elections' and 'being equipped with new weapons' can be extended to the present conveys their subinterval properties.

## D. The circumstantial clause test

This test is applicable to the construction. Wright et al. mention the participles' place in circumstantial clauses when they state "if the concrete verbal noun stands in a circumstantial clause (حَالُ), the state which it describes belongs to the same period of time as the verb leading the clause" (2005, p. 196). Most of the examples taken from the data are circumstantial clauses, such as (25) and (26) above.

## E. The still and no longer tests

These tests are not applicable because it requires a verb in Arabic. Here are some examples from Google with the verbs glossed as 'still' and 'no longer'.
32. (Al-Sūsī, 2014)
 'Then it occurred to them to look into the hole in the door and they saw him still sleeping in his bed.'
33. (Al-Ṭayyub, 2011)

'a 'lanat
announce.s-stem
fulla
F. the-Alg.NOM
'anna-hā
SUB.-her no longer.p-stem
$\boldsymbol{m a m n u ̄}$ 'atan min ad-duxūli 'ilā miṣr
forbid.PaP.ACC from the-entrance.GEN to E.
'Fulla, the Algerian, announced that she is no longer forbidden from entering Egypt.'

## F. Complement of kāna test

Any complement of defective kāna and its sisters are stative constructions, as the
examples illustrate below:
34. p
... وكان الأب سامي مهنّا ... منتظرا وصول سيادته أمام مدخل المبنى ، حضر ثلاثة شبّان
wa-kāna l-'abu sāmīmuhannā muntaẓiran wuṣūla
while-be.s-stem the-father.NOMS. M. wait.AP.ACC arrival.ACC
siyādati-hi 'amāma madxali 1-mabnā lordship.GEN-his in front.ACC entrance.GEN the-building.GEN ḥaḍara $\quad$ alāӨatu šubbānin attend.s-stem three.NOM youths.GEN
'While Father Sami Muhanna was waiting for his lordship's arrival. three young men showed up.'

Again, we have a parasitic reference time in this sentence. Additionally, when combined with an s-stemmed $k \bar{a} n a$, a past progressive reading is the sole reading possible. This is in contrast to the p -stem form of the verb that, when it combines with an s-stemmed $k \bar{a} n a$, can have a more general imperfective reading that can be ambiguous for past habitual or past progressive (see (4) and (5) above).
35. b

| wa-lākin <br> and-but | lam | yata 'akkad | ..... |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $m \bar{a}$ | 'id̄ | kāna | nājiman |
|  | neg. | ascertain.p-stem.JUSS | SUB. | if | be.s-stem | result.AP. |
|  |  | 'am qunbulatin |  |  |  |  |
|  | GEN | or bomb.GEN |  |  |  |  |

'But he did not ascertain/has not ascertained if it was resulting from a rocket or a bomb.'

And in sentence (35) we have an example from the broadcast data showing, again, that the participial clause can function as a complement of $k \bar{a} n a$. A parasitic reference time is also apparent in this example, as we are faced with a past reading due to a s-stemmed copula head.

Thus it appears that this construction has certain tests not apply to it, especially when compared to the p-stem because the tests that are not applicable here are tests that require verbs. This is not surprising since this construction is more restricted semantically, so it cannot convey habituals, and syntactically, it requires a verb to overtly place E outside of $S$ if unsubordinated.

## 7. Formal representation

This chapter is concerned with the verbal function of the participles, i.e., those functions in which the participle is a predicate with an eventive input and assigns its arguments case markings. The AP typically selects internal states from an event's temporal representation, postinception and pre-terminus. However, it can also select for post-terminus states, as well. The PaP, however, only selects for those states that come into being after the event is over, and is a valence reducing construction. Because of these divisions, I will provide SBCG representations for each participle's main function.

### 7.1 The Active Participle

The AP gets two representations depending on whether it conveys a progressive or a perfect state.

### 7.1.1 The progressive AP

Figure (3.1) below represents the AP as an inflectional construction-because it forms a word. The mother's PHON feature is the product of the morphological function $\mathbf{F}_{A P}$ that includes information on the wazn and then combines with the root from the daughter feature to produce
the participle. The syntactic feature of the mother is a verbal form (VF), because that is the focus of this chapter, and its feature is participle. The external-argument feature of the mother is equal in number to that of the daughter $(\mathrm{n})$, as there is no valency change in this construction. The semantic feature indicates that the index feature of the mother is stative. The (typical) daughter has an index value of eventive. The daughter's semantic frames include the temporal representation of events that plug into the semantic frames of the mother. The mother's semantic frames include the state-frame, the include-frame that is co indexed with the medial-frame of the daughter and with the topic-time-frame.


Figure 3.1 The progressive AP construction

### 7.1.2 The perfect AP

Figure (3.2) represents the perfect AP. The main difference between that and the prior representation lies in the type of state the MTR node indexes. Instead of a medial frame, the perfect function of the AP chooses the final-rest frame as its state.


Figure 3.1 The perfect AP construction

### 7.2 The Passive Participle

Figure (3.3) below represents the PaP as an inflectional construction, also. The mother's PHON feature is the product of the morphological function $\mathbf{F}_{\text {PaP }}$ that includes information on the wazn and combines with the root from the daughter feature to produce the participle. The
syntactic feature of the mother is a verbal form (VF), because that is the focus of this chapter, and its feature is participle. The external-argument feature of the mother is one less than that to that of the daughter ( $\mathrm{n}-1$ ), as it is a valence reducing construction. The semantic feature indicates that the index feature of the mother is stative. The (typical) daughter has an index value of eventive. The daughter's semantic frames include the temporal representation of events that plug into the semantic frames of the mother. The mother's semantic frames include the state-frame, the include-frame that is co-indexed with the final rest-frame of the daughter and with the topic-time-frame.


Figure 3.3 The Passive Participle Construction

## 8. Conclusion

This chapter has focused on the states conveyed by the two participles in Arabic: the active participle and the passive participle. These participles have numerous syntactic functions, but the one that is pertinent to this chapter is the function in which the participle functions semantically and syntactically as a verb, i.e., it is a predicate that assigns case to its arguments. Many scholars have acknowledged the participles’ stativity (Fehri, 1991, p. 184; Holes, 2004, p. 149; Kinberg, 1991, p. 301). However, we see a distinction upon comparing the states conveyed by the p-stem and those conveyed by the participles. The p-stem is a stative construction, and the participles are stativizing constructions. The participles convey a single event, and the p-stem can convey gnomic and generic situations. I have shown how a selection-based model accounted for the fact that the AP is typically a progressive, but can be ambiguous and selects post-terminal states if the temporal representation has one. The PaP is seen as a resultative because it selects for the post-terminal state. In the data, the participles were most frequently found within circumstantial clauses-perhaps as way to frame the state of an argument during the time of the matrix clause. In the next chapter, I will examine non-verbal predicates. The other predicational usage of the participles, the predicate adjectival function, will also be discussed there.

## Chapter 4: Nonverbal Predications

## 1. Introduction

It was shown in Chapter 3 that the presence of a verb is unnecessary for finite Arabic clauses. I restricted the focus of that chapter to a specific, verbal, function of the participles that not only predicates but also assigns accusative case to its arguments. This chapter discusses another stative construction that does not require a verb, yet this construction is distinct from that in Chapter 3. That participial verbal function is a stativizing one. The AP can function in a similar manner to the English progressive-by selecting for an internal state of a dynamic, on-going event. Or the AP can, along with the PaP, select for a post-terminal state of an event-similar to the English perfect. This construction only conveys static, unchanging situations, i.e., it selects for static, unbounded, constant phases in the temporal representation of the predicate and does not take eventive inputs. Nonverbal predications are constructions that license independent clauses, as well, but their predicative element is either nominal, adjectival, adverbial, a prepositional phrase, or even clausal. We distinguish four types of nonverbal predications: property predications, existential predications, deontic modality predications, and possession predications. This division into four types is not only based on meaning; as will become clear, there are syntactic distinctions in addition to (slight) differences in the applicability of the stativity tests among these types. These two chapters (the Participial Construction and the Nonverbal Predication Construction), are further evidence that a larger discussion on aspect, and temporality, in general, requires an exploration of the entire predicative spectrum within a
language, which, at least for this dissertation, has resulted in the inclusion of non-verbal elements as tools with which speakers of Arabic are able to express different states.

Unlike the previous constructions discussed in this dissertation, which are largely defined by their predicative element, this construction is unique in that it is not defined by what it contains, but by what it must lack: the predicative element cannot be a verb. Syntactically, the predication type for this construction can be a noun phrase (1), an adjective phrase (2), a prepositional phrase (3), or even another clause (4), which is usually described by traditional grammarians as a subject with a clause as its predicate, and that clause's subject includes a pronoun referring back to the matrix clause's subject, also known as a left dislocation construction (a misnomer in this situation since in the Arabic script the element is actually forwarded to the right):
1.

|  |  |  |
| :--- | :--- | :--- |
| hā-ðihi | $\boldsymbol{t}$-tabibatu | han $\overline{\boldsymbol{a}}$ |
| this | the-doctor. NOM | H. |

'This is doctor Hana.'
2.
آناء نشيطة جدّا (الآن)
'āna $\bar{a}^{\prime}$ našīṭatun jiddan (al-' $\bar{a} n a$ )
A. energetic.NOM very (now)
'Aanaa is very energetic (now).'
3.
rub $\bar{a}$ fì l-maktabi (l-'āna)
R. in the-office.gen(now)
'Ruba is in the office (now).'
4.
الجامعة مدرّسو ها جيّدون

What the above examples have in common is that they all lack a verbal predicate. Let us compare the first four examples above to sentences (5-8) below, paying special attention to the copula in the translation of the above sentences compared to the translations in those below:
5.

7.

| *(kānat ) | ${ }^{\prime} \bar{n} \bar{a} \overline{ }$ | $j \bar{a}^{\prime}{ }^{\prime}$ atan | bi-l-'amsi |
| :---: | :---: | :---: | :---: |
| *(be.s-stem) | A. | hunger.AP.ACC | yesterday |
| 'Aanaa was hungry yesterday.' |  |  |  |

8. 

| $*(\underline{\text { sa-takū} n u)}$ | rub $\bar{a}$ | $\boldsymbol{f i}$ | l-maktabi | ǧadan |
| :--- | :--- | :--- | :--- | :--- |
| ${ }^{*}(\underline{\text { FUT.-be.p-stem })}$ | R. | in | the-office | tomorrow |

*(ستكون) ربى في المكتب غدا 'Ruba will be in the office tomorrow.'

Sentence (6) is juxtaposed with (5) to show that a verb is required to negate the types of states expressed by NVPs. The parentheses in (7-8) demonstrate that most bare NVPs are not compatible with non-present temporal adverbials. An s-stemmed verb is needed with past adverbials, and a p-stemmed verb is used with future adverbials. Thus, a copula that either affirms the relationship-though with temporal constraints $(7,8)$-or negates it (5), is required in these latter clauses but not in (1-4), so one might deduce that nonverbal predications have a grammatical restriction in MSA: nonverbal predications can convey only indicative states actually holding at speech time; a bare nonverbal predicate is not compatible with negation, past,
or future states. The English translations of nonverbal predications require a present-inflected verb (usually a copula) that describes a relationship between the two arguments in the predication (e.g., an entity and its property in all the above examples). Sentences (1-4) are all present time-reference sentences in that they refer to a state that holds at speech time, i.e., their states include their reference times, which is also speech time in these examples. This is supported by the fact that a present adverbial can be added, as in examples (2) and (3).

However, nonverbal predications express present-time, indicative relations only in matrix clauses. For example, embedding NVPs can decouple the reference time from speech time, as (9) below illustrates. In this example, an alternate reference time is established by the s-steminflected matrix verb 'play'. That established reference time becomes the reference time of the embedded verbless sentence-all the while maintaining stativity of the construction:
9.

| bi-l-'amsi | بالأمس لعبت في الحديقة ومعي أحمد |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | la 'ibtu | $f i$ | l-ḥadīqati | wa-ma ${ }^{\text {cilya }}$ | ahmad |
| in-the-yesterday | play.s-stem | in | the-garden | while-with-me | A |
| 'Yesterday I played in the Garden, Ahmad with me (or as Ahmad [is] with me).' |  |  |  |  |  |

In (9), we have a past reference time as established by the matrix verb's inflection, and as indexed by the overt adverbial 'yesterday'. Stativity is maintained since there is temporal overlap between the two situations: the time of 'Ahmad's being present with me' and that of 'my playing in the garden'. Thus, an embedded nonverbal clause can communicate a state with a past-time reference.

A similar, but not identical, analysis has been mentioned with regard to Biblical Hebrew's (BH) cognate construction, of which Seow states: "In such a clause, tense can only be inferred from context. Without context, the student should simply translate with the English present
tense" (1995, p. 59). This dependent anchoring to speech time leads Van Wolde to claim that, for BH , these types of predications "are a-temporal; their temporal aspects depend on context" (1999, p. 333). Van Wolde also comments on the aspectual status and narrative function of this construction in BH by stating that what she refers to as verbless clauses, "always present background or simultaneous information" (1999, p. 333). A tenseless analysis has also been postulated for Arabic; Fehri's rule for what he refers to as the "visibility" of the copula is: "[s]pell out the copula as kwn when Mood, Aspect, and/or Tense are specified, otherwise spell it out as zero" (Fehri, 1993, p. 156). While specifically discussing existential constructions in Arabic, Aziz states: "Arabic existential sentences are usually verbless. In isolation, such sentences are timeless; in speech, they acquire their time from context." (1995, p. 52).

In addition to the semantic restrictions, certain syntactic constraints also forbid the use of a bare NVP:
10.

| 'ajtahidu | $\underline{l i-*(' a k u ̄ n a) ~ m i n ~}$ |  | al-' ${ }^{\text {a }}$ a ${ }^{\text {a }}$ ili |  |
| :---: | :---: | :---: | :---: | :---: |
| work hard.p-stem | purpose-*(be.p-stem) of |  | the-top |  |
| 'I work hard in order to be among the top.' |  |  |  |  |
| 11. |  |  |  |  |
|  |  |  |  | كادت زينة *(تكون) غنّة |
| kādat | zayna | *(takūna) | ğaniyyan |  |
| almost be.s-stem |  | *(be.p-stem.SBJ) | rich.ACC |  |
| 'Zaynah is almost rich.' |  |  |  |  |

Examples (10) and (11) demonstrate the ill-formedness of bare NVPs in certain syntactic conditions. (10) is an example of a purpose particle that requires a verbal complement, and (11) shows that a bare NVP cannot syntactically stand as a complement of the verb 'almost be'; and a
copula is introduced to fulfill these requirements. As a matter of fact, negation particles (as opposed to negation verbs like (5) demonstrates) must also head a VP:
12.

|  |  |  |  | لن تكون آناء نشيطة |
| :---: | :---: | :---: | :---: | :---: |
| lan | takūna | ' $\bar{n} \bar{a}{ }^{\prime}$ | našītatan |  |
| NEG. | be.p-stem.SBJ | A. | active.ACC |  |

'Aanaa will not be active.'
13.

'Aanaa was not/ has not been active.'

Furthermore, embedding NVPs within modal constructions overwrites its default indicative reading:
14.

| rubba-mā | ruba | $f \bar{\imath}$ | l-'amali | $l$-'āna |
| :--- | :--- | :--- | :--- | :--- |
| mod. | R. | in | the-work.GEN | now |

'Ruba might be at work, now.'
Sentences (12-13) are temporally delimited negated NVPs, and (14) is an example of an NVP construction embedded within a construction headed by a modal particle to convey doubt. Subsequently, a revised restriction on this type of construction would be: as matrix clauses, nonverbal predications convey indicative states overlapping speech time, but embedding this construction can lead to non-present time, non-indicative readings.

Scholars have argued over the classification of nonverbal predications: are they a unique type of clause or are they a sub-type of clauses with verbal predicates? The Arabic grammatical tradition has split the types of independent clauses into two: زملة فعليّة jumla fi liyya 'verbal sentence/clause' and جملة إسميّة jumla ismiyya 'nominal sentence/clause' (Agameya, 2011).

However, these sentence-type labels only refer to what the sentence begins with and not the type of predication. Hence, a jumla ismiyya, or nominal sentence, refers to, 1) the type of clauses currently under discussion in this chapter, and 2) verbal predications where the subject of the verb is fronted to pre-verbal position (Jābir, 2001; Ni'mah, 1973; Wright et al., 2005, p. 251) ${ }^{11}$. The latter category is not part of the discussion in this chapter. Nevertheless, scholars have used the label 'nominal clause' to refer to this type of construction. In their analysis of a cognate Biblical Hebrew construction, Arnold and Choi state, "BH has the ability to form a clause without the use of a finite verb. The subject of such nominal clauses will be a noun or a pronoun. Its predicate will be another noun, pronoun, prepositional phrase, adverb, or infinitive construct." They classify these clauses based on function and mention two types: "Identification clauses signify the nature or identity of the subject, while description clauses speak of the quality or attributes of the subject" (2003, p. 165). These functions are subsumed under one type of clause in my own analysis.

In other analyses, the nonverbal predication construction has been closely associated with a copular analysis. Miller (1999) alludes to this association in her discussion on nonverbal predicated clauses in Biblical Hebrew, by stating, "[i]n a verbless clause, predication is achieved without an inflected verb; identification of the constituent that functions as predicate is thus crucial to a correct reading of the sentence. But because verbless predications (apart from participles) are copular constructions, the semantic content of the predication mirrors that of the English verb to be; that is, the semantics of the predication relative to stative notions of existence or equation, rather than to actions or events" (p.11). Focusing on the type of phrase that cannot

[^9]be a syntactic predicate, others have also referred to this construction as a verbless clause. The verb assumed is almost always a copula. For example, under the heading of The Verbless Clause, Seow asserts that "[n]o verb 'to be' is required in such sentences" (1995, p. 59).

Based on this assumption, some have referred to this construction as a copular sentence type (Bahloul, 2008, 2011c; "Nominal Clauses," 2011; Sinclair, 1999). However, in addition to copular usage, which I refer to as property type because it ascribes a property to the entity in question, the data reveal other types of nonverbal predications that are not copular attributive predications. These include: a possession-type (15), an existential-type (16), and an obligationtype (17). These examples show that property predication is not the sole function of nonverbal predications.
15.
laday-nā $\quad$ mālun
near-our $\quad$ money.NOM
'We have money (lit. At/by/near of us is money).'
16.

|  |  |  |  |
| :--- | :---: | :---: | :--- |
| hunāka | haflatun | $f i$ | $l$-xāriji |
| there | party.NOM | in | the-external.GEN |
| 'There is a party outside.' |  |  |  |

17. 

|  |  |  | عليك قراءة هذا الكتاب |
| :---: | :---: | :---: | :---: |
| 'alay-ki | qirā'atu hāda | l-kitaba |  |
| on-you | reading.NOM this | the-book.ACC |  |
| 'Reading this book is (incumbent) upon you (or, you should/must read this book).' |  |  |  |

These clauses could only awkwardly be translated into English via attributive copular predications, (e.g., Money is near me, This setting is one containing a party, Reading this book is on you). Even if we reject the copular analysis, however, there is a question as to whether these types of clauses (or the types of clauses included in the previous chapter) are analyzed as
sentences with underlying, elided verbs (whether كان kāna ${ }^{12}$ or some other existential verb, or their derivatives, like وُجِد wujida 'to be found/exist' or حصل hasala 'to happen'), or as clauses in their own right. I choose not to regard nonverbal predications as containing unpronounced or abstract verbs. Instead, I adhere to Construction Grammar's premise that there are no underlying forms, including elided verbs; as Goldberg states, "Construction Grammar is not transformational. No underlying syntactic or semantic forms are posited" (1995, p. 7). Hence, surface structure is the only structure; there are no missing, 'true' predicates. Thus, I view nonverbal predications as independent clauses solely by virtue of the fact that they can be used to assert what clauses otherwise do-relations that hold at reference time.

Would including the word verb, as in referring to theses clauses as verbless or nonverbal clauses, in naming these types of sentences assume the primacy of the verb ${ }^{13}$ ? There have been analyses that posit an underlying verb to these types of clauses. For example, in Sinclair's work with Biblical Hebrew where he compares the complements of these verbless clauses to the complements of the copula היה hāyāh 'to be, exist', he concludes that "is it highly unlikely that one could find another Hebrew verb exhibiting the full range of complements that occur with היה.

Yet it is exactly that set of complements that can co-occur with the $\varnothing$ verb" (1999, p. 75). He

[^10]continues to posit that verbless clauses and copular clauses are one clause-type, with the copula appearing only when tense/aspect, mood, or agreement needs to be marked.

Hence, in her analysis of Biblical Hebrew's usages of these types of clauses, Miller raises the issue in the following way: " $[t]$ he term verbless clause (or nonverbal clause) designates the category on the basis of a syntactic feature this is not present; that is, predication is achieved without a verb." (1999, pp. 8-9). Having chosen to adhere to the term verbless clause in her chapter, she continues:

Although the term implicitly assumes the primacy of clauses predicated by means of a verbal form, not all writers make that assumption. Rather, they use the term to describe the surface structure of the construction. Posting a category of verbless clauses does not, however, simplify the syntactic analysis (ibid., p. 9).

Niccacci takes issue with the utilization of the term verb in the label and says, " $[i] t$ is my intention to show that the common designation verbless clause is inadequate for two reasons. First, it may let people think that a verb is missing when it is simply not needed. Second, it does not account for the fact that a finite verb may be used with the function of a noun" (1999, p. 215). In his analysis, he chooses the label nominal sentence. However, as I stated earlier, in the Arabic tradition, this term has its own meaning, which is in conflict with this chapter. In addition to this assumed meaning, would this label not give prominence to nominal predications? As we have seen in sentences (1-4), other types of phrases are potential predicators: PPs, AJPs, ADVPs, clauses.

Still, other scholars have used the term equational sentences to refer to the attributive predication function like sentences (1-4). As an example, Holes defines "‘[e]quational’
sentences" as those which "do not have a verb (' $\mathrm{X}=\mathrm{Y}$ ')" (2004, p. 249). An Arabic language teaching book introduces this category by stating, "[t]he equational sentence consists of two parts, a subject and a predicate. As in English, the subject may be any kind of noun or pronoun, while the predicate may be either of these, as well as adjectives, adverbs, or prepositional phrase ... Arabic equational sentences generally correspond to English sentences in which the verb is "am", "is", or "are"-that is, a present tense form of "to be". As in English, the predicate may identify the subject... or describe it" (Abboud \& McCarus, 1983, p. 103). Similarly, Ryding states, "[t]hese sentences are "equational" because the subject and predicate "equate" with each other and balance each other out in a complete proposition, or equation." (2005, p. 59). However, the term equational in modern linguistic theory refers to an assertion of identity between two independently referential expressions (Birner et al., 2007). Thus, this label is insufficiently general: while (1) might qualify as an equational predication in strict terms, (9-11) certainly do not. Therefore, owing to the variety of relations a clause like (1-4) can express, I choose the label Nonverbal Predication, while reminding the reader that the Construction Grammar model assumed here does not presume deletion or presence of a verb in an underlying structure. Nonverbal predicates simply do the work of verbal predicates (asserting relations of various kinds), without a verb. Thus, I propose that NVPs are full predicates in Arabic with predicative properties, including temporal properties. In particular, I intend to show that NVPs express completely static situations and do not select for states from eventive temporal representations (i.e., they are not stativizing constructions like the participles).

The remainder of this chapter is structured as follows: Section 2 discusses the construction's syntactic distribution and makeup, as prescribed by the Treebank, in the data.

Section 2.1 focuses on its distribution and frequency within the two corpora. Section 2.2 discusses the features of what the Treebank has tagged as the syntactic subject, Section 2.3 describes the Treebank's predicate, and Section 2.4 looks at the distribution of an optional pleonastic pronoun the Treebank places within the subject phrase. Section 3 further analyzes the four subtypes of this construction and examines adverbial support for this type-division. Section 4 applies the stative tests to this construction. Section 5 gives a formal representation of the construction; and Section 6 concludes the chapter.

## 2. The data

Let us now investigate this construction's distribution and its functions in the data.
Syntactically, the ATB represents all of these nonverbal predications with the same structure: a subject and a predicate. Additionally, the ATB has non-verbal predicates tagged with the label PRD (Maamouri et al., 2011, pp. 97-99). Initially, to extract the data, we searched for predicates that are not VPs. However, upon further analysis of the data, it became obvious that this criterion picked up arguments of predicates and constructions such as accusative-infinitive complements. These were manually removed from the data. In addition, verbal-functioning participles were also included in this extraction, and since they are the subject of the previous chapter, they had to be removed as well. Finally, a small group of predicates was mis-tagged, which also had to be manually reclassified. This clean-up resulted in a total of 866 clauses in the print corpus, and 169 clauses in the broadcast data. Once all that clean up was done, I manually tagged each instance primarily for semantic type. However, I also looked to see if other factors played any major roles. These factors included syntactic subordination and the POS tags for both the predicates and the subjects. Let us look at those results first in the next subsection.

### 2.1 Distribution and frequency in the data

NVPs favor syntactic subordination in the data. The relevant contexts include subordinating conjunctions, conditional particles, auxiliary subordination, or embedding as arguments of indirect speech. 566 instances of the print data (65.4)\% are subordinated. A smaller percentage, 97 instances (57.4\%), are subordinated in the broadcast data. Since most of the instances are subordinated, the understanding that both the syntactic subject and the predicate are always nominative does not stand (Abu-Chacra, 2007, p. 31; Ryding, 2005, p. 59). For example, the subordinating conjunctions أن 'and 'anna, which account for a total of 35 instances in the broadcast data and about 240 instances in the print data, both assign the syntactic subject accusative case when the subject is not a cliticized pronoun. That, and the fact that kāna assigns accusative case to its nominal predicates, means that there are instances where these syntactic nominal constituents of the construction can carry either nominative or accusative case.

Prepositional phrases are not assigned case, although the object of prepositions are assigned the genitive case-marker. My decision to include the clauses with $k \bar{a} n a$ is based on the fact that these clause types are relevant to the study of Arabic stativity, as we shall see in the next chapter, and are peppered throughout the dissertation; the auxiliary kana construction is used as one of the stativity tests in this dissertation. This auxiliary construction, when combined with the NVP construction, functions as a tense marker for past states, as an aspect marker to convey overlap, and for syntactic subordination, as we shall see in the upcoming chapter. In all, 98 clauses of the print data were headed by $k \bar{a} n a(\sim 17.3 \%$ of the embedded clauses in this corpus), whereas, I counted 39 instances in the broadcast data ( $\sim 40.2 \%$ of the embedded clauses).

### 2.2 The Syntactic Subject

With respect to the construction's constituents of Subject and Predicate, I have followed ATB's syntactic designation and classification. In other words, I have assumed their classification of these constituents. Accordingly, the constituent identified as subject by the Treebank is either a noun phrase, as illustrated by some of the previous examples, or a clause, as illustrated in (18) below:
18. p
'innamā
...إنما المؤسف أنّ الصمت العربيّ هو الذي بشجّع العدوّ على استمر اره في هذه المجازر but the-unfortunate.AP sub. the-silence the-Arab he that
 1-majāziri the-massacres
'but that the Arab silence is what encourages the enemy's continuing with these massacres is unfortunate.'

Table (4.1) shows that the vast majority of subjects are in fact NPs, and that the distribution is somewhat similar across the two corpora:

Table 4.1 Types of NVP subjects

|  | Print (\% of SBJ) | Broadcast (\% of SBJ) |
| :--- | :--- | :--- |
| NPs | $794(91.7 \%)$ | $167(98.8 \%)$ |
| S / SBAR | $71(8.2 \%)$ | $2(1.2 \%)$ |

The NPs are further broken down into type: dropped, definite, indefinite, pronoun or demonstrative (table 4.2):

Table 4.2 Types of NVP subject NPs

| Print (\% of NPs) |  | Broadcast (\%of NPs) |
| :--- | :--- | :--- |
| Demonstratives | $55(6.9 \%)$ | $5(3.0 \%)$ |
| Indefinite NPs | $53(6.7 \%)$ | $34(20.4 \%)$ |
| Dropped | $123(15.5 \%)$ | $24(14.4 \%)$ |
| Pronouns | $208(26.2 \%)$ | $31(18.6 \%)$ |
| Definite NPs | $356(44.8 \%)$ | $73(43.7 \%)$ |

In accordance with most grammarians (Agameya, 2011; Beckman, 2013), the majority of the subject NPs are tagged by the Treebank as definite-including proper nouns, with indefinite NPs accounting for only $6.7 \%$ of the print data but a larger $20.4 \%$ of the broadcast data.

### 2.3 The Syntactic Predicate

An analysis of the constituent tagged as Predicate by the Treebank shows a more diverse range of types than that of the Subject, Table (4.3):

Table 4.3 Types of NVP predicates

| Print (\% of total <br> PRD types) |  | Fronted PRD (\% of <br> type fronted) | Broadcast (\% of <br> total PRD types) | Fronted PRD (\% of <br> type fronted) |
| :--- | :--- | :--- | :--- | :--- |
| NP | $374(43.2 \%)$ | $38(10.2 \%)$ | $58(34.3 \%)$ | $5(8.33 \%)$ |
| PP | $251(30 \%)$ | $121(48.2 \%)$ | $53(31.4 \%)$ | $33(62.3 \%)$ |
| ADJP | $156(18 \%)$ | $10(6.4 \%)$ | $27(16 \%)$ | $2(7.4 \%)$ |
| ADVP | $34(3.9 \%)$ | $34(100 \%)$ | $21(12.4 \%)$ | $21(100 \%)$ |
| S / SBAR | $51(5.9 \%)$ | $0(0 \%)$ | $10(5.9 \%)$ | $0(0 \%)$ |

The above table shows us the distribution of the types of phrases that make up the predicates in ATB. In both corpora, NPs make up the largest group (43.2\% for print, $35.5 \%$ for broadcast) — with the majority of them following the syntactic subject (89.8\% and $91.67 \%$ respectively). Prepositional phrases come after noun phrases in frequency ( $30 \%$ for print and
$31.4 \%$ for broadcast) — with roughly half of these PPs fronted ( $48.2 \%$ and $62.3 \%$, respectively). Adjectival phrases make up $18 \%$ of the print predicates and $16 \%$ of the broadcast-the vast majority of which follow the subject ( $6.4 \%$ are fronted in the print data and $7.4 \%$ are fronted in broadcast). Adverbial phrases count for a small proportion of the print data predicates: $3.9 \%$, but they make up about $12.4 \%$ of the broadcast predicates. All of these types of predicates precede their subjects. All but two of the broadcast data are the demonstrative هناك/هنالك hunāka/hunālika 'there', and these make up the existential clauses. The remaining two are tagged with a WHADVP tag and are question/subordinating words, as in (19) below:
19. b
 bayrūt
B.
'And the populace of Abdallah al-Mashnuq street, where the building about to fall is, headed towards the governor of Beirut with a petition...'

The print data has 16 instances of هناك hunāka, 11 instances of $\begin{gathered}\text { ثمّة } \theta a m m a-b o t h ~\end{gathered}$
meaning dietetic 'there', 1 of ه'كذا hākaðāa 'thusly/as such', and 5 question/subordinating words.

Again, all of these dietetic predicates were fronted. The remainder of the predicate types were clauses, and, in both of the corpora, none of these types of predicates were fronted.

### 2.4 Other constituents

As in the case of its sister languages, in Arabic, sometimes a third person pronoun links the syntactic subject to the syntactic predicate ${ }^{14}$. In such cases, the pronoun agrees in number and gender with the subject. If it connects two definite arguments, it is known as damin al-faṣl 'the separation pronoun'; as the guidelines for the ATB state: "The function of the separating pronouns/[ḍamīr al-faṣl] is to separate the subject from the predicate in equational sentences when both of them are definite. These pronouns serve to distinguish the subjectpredicate relationship from the apposition/adjunction relationship where there is also an agreement in definiteness" (Maamouri et al., 2011, p. 199). Example (20) below illustrates: 20. p


This pronoun is supposed to separate two definite arguments in these verbless predicates. Some have analyzed this pleonastic pronoun "as anti-ambiguity devices to force sentential, vs. a phrasal, interpretation of a structure" (Eid, 1991, p. 42) ${ }^{15}$. This ambiguity is a particular issue in Arabic because of how adjectives/noun modifiers pattern syntactically. Adjectives must agree with their nouns in definiteness, as the below examples by the author demonstrate:
21.


[^11]| al-baytu | l-kabīru |
| :--- | :--- |
| the-house.NOM | the-big.NOM |

'the big house.'
22.

|  | entirun |
| :--- | :--- |
| baytun | kabirun |
| house.NOM | big.NOM |

'(a) big house.'
Compare the above examples with the sentence below, paying particular attention to the constituents' definiteness:
23.

| al-baytu | kabīrun |
| :--- | :--- |
| البيت كبير |  |
| the-house.NOM | big.NOM |
| 'The house is big.' |  |

Basically, and this is especially true if both the subject and the predicate are definite, the pronoun disambiguates a reading in which the syntactic predicate can be read as a modifier of the subject —or as its predicate compare (21), (23) above with (24) below.
24.

|  |  |  |
| :--- | :--- | :--- |
| bayt-ī | huwa | l-baytu |
| بيتي هو البيت الكبير |  |  |
| house-my | he | the-house.NOM |$\quad$| l-kabīr |
| :--- |
| 'My house is the large house.' |

However, my data shows a number of examples where a pronoun appears even with an indefinite predicate ${ }^{16}$, which has been observed elsewhere:

Another type of non-anaphoric $d a m \bar{u} r$ dealt with by the grammarians is $d a m \bar{u} r$ al-faṣl.
This pronoun is presented as occurring between two definite predicative constituents,
in sentences introduced by ḍanna, kāna, 'inna and their 'sisters', as well as in 'pure'

[^12]mubtada' + xabar sentences. In particular, it is stipulated that the xabar must be a definite or quasi-definite phrase. In effect, any type of nominal phrase would qualify as a post-damīr-al-faṣl xabar, apart from a single-word indefinite nominal (whether a substantive or an adjective) unaccompanied by any modifying complement ("Damīr," 2011).

The Treebank's guidelines have also noted this expanded usage, stating: "[i]n Modern Standard Arabic, the use of [ḍamīr al-faṣl] has been extended to include also separating heavy NP subjects from their predicates in equational sentences. In this use, the [ḍamīr al-faṣl] can be used even when the predicate is indefinite" (Maamouri et al., 2011, p. 199).

To recap, the syntactic constituents of this construction are the subject (either an NP or a clause), a predicate, and an optional third person pronoun with pragmatic functions. Let us now take a closer look at the different subtypes this construction makes functionally, and their distribution in the data. The different semantic and syntactic functions the subtypes have determine the type of state they are used to express.

## 3. The subtypes of this construction

This section discusses the different types of constructions that verbless predications can instantiate. These differences are motivated semantically, as each category conveys a distinct type of state with its own unique argument structure, and while some may argue that these constructions can be subsumed under a single type, the differences in interpretation, as well as variations in temporal adverbial distribution, should illustrate the distinct types.

### 3.1 Possession

Semantically, the arguments of this type are the possessor and the possession. In total, the broadcast data has four possession clauses, all of which have the possessor fronted. The print data has 28 instances of possession; 11 of those instances are fronted. The possessor (in bold) is always tagged as the predicate, and is either an NP, as in (25), or a PP, like (26). I highlight the other argument - possessed/syntactic subject—by underlying it:
25. b

'Also as he is a member of the American consortium for global development who has a primary role in helping the American government towards achieving its mission in promoting global development.'

As for the distinction between the usages of the preposition $ل$ لـ $l i$ i- and the noun لدى lad $\bar{a}$, it is said that the latter is solely used for abstract things (Badawi et al., 2013, p. 189; Wright et al., 2005, pp. 165-166). However, the data I am working with contradicts that, as there are examples of lad $\bar{a}$ with banks, weapons, and even prisoners of war. Other words also convey possession in a
similar manner (e.g. عند 'inda 'near', ma 'a 'with'), but they have not shown up in the data as possession constructions ${ }^{17}$.

Arabic is not the only language that expresses possession without a verb. In his discussion of subject-properties in Maltese, Comrie (1989) does a comparative study between Maltese locative and possessive constructions, and then contrasts those constructions to their cognates in Classical Arabic ${ }^{18}$. The relevant analyses to this chapter is that Maltese also has nonverbal predications with both possessive and locative constructions, and as Comrie states: "there is no equivalent of 'be' in the present tense" (p. 220). Another point is the word order distinction in Classical Arabic between the locative and possessive constructions, where the former tends to have the located entity in initial position, and the former tends to front the possessor. Comrie says: "In Classical Arabic, the locative and possessive constructions are much closer to one another, the main difference being in preferred word order, and even here, arguably, the difference is determined by topic-comment structure rather than grammatical relations" (p. 223). This might apply as well to MSA in which there is a preferred word order for each construction. My own analysis showed no major patterns to reflect what possession type preferred fronting of the possessor versus the possessed entity in the print data-the only corpus to show variation. If the subject/possessed is definite, a slight preference appears for its fronting: seven instances of a definite possessed entity fronted-as opposed to five instances of a definite possessed entity not fronted. If the possessed entity is indefinite, a slight preference for the possessor-fronting becomes apparent: five to four instances. Four out of five clausal possessed

[^13]entities prefer to be fronted, and all dropped possessed entities are treed as fronted (i.e., as prepredicate).

### 3.1.1 Adverbial collocation

Interestingly, this subtype does not allow for any temporal adverbials other than present tense, as my example in (27) illustrates:
27.

| laday-n̄ | mālun | (al-yawma/*bi-l-'amsi $/ *$ ǧadan) |
| :--- | :---: | :---: |
| at-our | money | (today/*yesterday/*tomorrow) |
| 'We have money (today/*yesterday/*tomorrow).' |  |  |

Simply put, placing this possessive state at a time other than speech time necessitates a finite verb. We will see in Section (4) that this impacts the stativity tests.

### 3.2 Existential

Existential constructions have been studied in a variety of languages (English (Lakoff, 1990, pp. 540-582), Chinese (Chen et al., 1995; Hu \& Pan, 2007), Modern Hebrew (Berman, 2006, p. 329; Zuckerman, 2009, pp. 51-52), Syrian Arabic (Jarad, 2015), Palestinian Arabic (Hoyt, 2000), and general typological surveys (Clark, 1978)). The affirmation of an entity's existence can be expressed in a number of ways in Arabic. The method that is relevant to this chapter, is via nonverbal predication. However, Arabic can also utilize verbs to assert the state of existence of an entity. Classical Arabic utilized كان kāna this way (Wright et al., 2005, p. 99). This usage of kāna was considered a "full/complete" usage in which it sufficed as the predicate. In MSA, however, $k \bar{a} n a$ rarely functions as such. When required, other verbs are usually used in existential clauses, such as وجد wujida 'to exist' (Aziz, 1995, p. 53). Regardless, this section will limit itself to nonverbal existential constructions.

Francez (as cited in McNally, 2011, pp. 1830-1831) lists five common structural characteristics of existential clauses typologically across languages; not all languages share all these features, as we shall see. First, there is typically an expletive subject. Second, verbs conveying 'being' or 'having' are frequently utilized for this construction. Third, there is, what is called, a 'pivot' nominal, whose existence is being discussed or asserted. Fourth, a phrase tagged to the nominal, what she calls a 'coda' phrase, conveying a secondary predicate, can be added to the nominal with language-specific restrictions. Fifth, a locative expression is present, bleached or otherwise. Let us look at an English and Arabic example side by side, to compare how each language fares:
28.

There is a person in the car speaking on the phone.
29.


I highlighted the parts with similar meanings in the English and Arabic sentences above. However, these highlighted parts do not have the same grammatical functions, as I explain below. The deictic demonstrative 'there' and hunāka are not arguments semantically. They function grammatically to fulfill each language's requirements. English follows the first point in that there is grammatical subject, but for Arabic hunāka is treated as a fronted predicate, not the subject. English has a copular verb, Arabic does not require one in present-time, indicative clauses. The pivots are similar in both clauses, although it is the predicate in English and the subject in Arabic. The coda phrase that supplies the secondary predicate in Arabic is a
circumstantial clause headed by a finite verb, as opposed to the English's gerund. Thus, Arabic deviates slightly, as compared to English, from the prototype of how language's express existential clauses: there are restrictions on the presence of a verb, and the expletive is the predicate and not the subject.

Creissels, in a typological survey of existential constructions across a number of different languages, classifies this specific type of Arabic existential construction along with English's there-construction, which are both categorized as a loc-existentials-type. According to him, these are "existential constructions characterized by the presence of an element generally used with a meaning such as 'there' or 'in it', but whose only function in existential predication is to mark the distinction between plain locational and existential predication" (2013, p. 17).

Returning to Arabic, Dat sums up this phenomenon by citing Anghelescu, who states, "[t]he demonstrative localizers hunāka 'there', hunālika 'over there', tamma 'there' and tammata 'over there', which express distancing and are frequently employed in Modern Arabic, become the indicators for localization (Anghelescu 1995:66-67), where space is the most spread out to include existence" (Dat, 2015). Holes suggests that this usage has re-flourished due to language contact, where he states in a note: "[t]his construction certainly existed in [Classical Arabic] but was nowhere near as common a locution as it has now become in MSA, undoubtedly because of the influence of European languages" (2004, p. 338). Other scholars mention historical usages as well as current translational phenomena by stating, "[a] very common method for dealing with indefinite subjects is to introduce the sentence with hunāka هناك or tِammata ثمة 'there' ... It is not necessarily a calque, as this construction occurs also in medieval Arabic, but it is now used to translate 'there is' and 'il y a' regularly" (Badawi et al., 2013, p. 316).

As previously stated, all of these instances in both corpora have syntactically fronted predicates, i.e., ATB tags the thematically empty adverbial, which consistently comes before the existing entity, with the -PRD tag. Syntactically, there are two arguments: the subject (entity existing), and the adverbial predicate. The predicate in this type is mostly a demonstrative for 'there'-as in (30) and (31) below, and a single 'thusly' as seen in (32). Semantically, there is only one argument: the entity existing.
30. p

| wa-' ${ }^{\text {a }}$ dāfa | Oammata | Oağarātun | mu'ayyanatun | $f i$ | $t$-tiknūlūjiyā |
| :---: | :---: | :---: | :---: | :---: | :---: |
| and-add.s-stem | there | gaps.NOM | specific.NOM | in | the-technology |
| l-mutāhati |  | $l a-n \bar{a}$ |  |  |  |
| the-available | PaP.gen | for-us |  |  |  |

'And he added: "There are specific gaps in the technology available to us.""
31. b

|  |  | و هناكّ مسؤولون أمريكيّون كبار متورّطون في سرقة أموال النفـ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| wa-hunāka | mas 'ūlūna | 'amrîkiyyūna | kubārun | mutawarrițūna |
| and-there | representatives.NOM | Americans.NOM | big.NOM | involved.AP.NOM |

fī sariqati 'amwāli n-nifṭi
in theft.GEN funds.GEN the-oil.GEN
'And there are big American representatives involved in stealing the oil money.'
32. p
hā-kaд̄̄ hiya hālu $\quad$ هكذ thus she situation.NOM the-strong.GENthe-withdraw.AP.GEN from the-game.GEN 'This is the case of the strong (one who) withdraws from the game.'

Note that in sentence (32), the syntactic subject is definite, so a pronoun is introduced to link the two syntactic arguments, as discussed in section 2.4 above. If the entity existing is indefinite, as in (30-31), no linking pronoun need be.

### 3.2.1 Adverbial collocations

Adverbially, present-tense adverbials are preferred. However, a planned event in the future encourages a future adverbial. Imagine a group of friends who are excited about their favorite football team playing in a game tonight. Sentence (21) would be felicitous:
33.
ista 'iddd $y \bar{u}$ jamā'atan, fa-hunāka mubārātun prepare.imp VOC. group.ACC for-there game.NOM استعدّو ا يا جماعة، فهنـاك مبار اة الليلة!
al-laylata
tonight.ACC 'Prepare (yourselves), oh group. For there is a game tonight!'

Without a planned event, some speakers I have consulted with on this example judge the future adverbial as borderline acceptable. This is in contrast with the possessive type which only allows present tense adverbials-without a verb.

### 3.3 Deontic Modality

A number of construction types can convey modality in Arabic, but we are focusing on those utilizing NVPs. For example, one can choose whether a verb is required to convey an obligation, or one can simply use the preposition على 'al $\bar{a}$ without a verb. Semantically, there are two arguments to this type of predication: the entity under obligation (the object of the preposition), and the action that is required to be done (which can be an NP, as (34) below, or a clause, as (35) illustrates). Overall, the broadcast data only has two instances of this type of clause; the print data has 17 instances. In all of these instances in the data, the entity under obligation is fronted over the action required:
34. b

وأكدّ الأمين العام أنه على المجموعة الدولية منع الحكومة الإير انبية من الاستمر ار في متابعة تطوبر التنقنيات النووبة wa-'akkada l-'aminnu l-'āmi ’anna-hu 'alā l-majmū̀ati and-stress.s-stem the-secretary the-general sub.-him on the-group
d-dawliyyati $\quad \underline{\text { man'u }}$ l-hukūmati l-'īrāniyyati min the-international prevention the-government the-Iranian from

| al-istimrāri $f i$ mutāba'ati <br> the-continuing in tatwīri | t-tiqaniyyāti <br> n-nawawivang | development | the-technologies |  |
| :--- | :--- | :--- | :--- | :--- |
| ne-nuclear |  |  |  |  |

'And the Secretary General stressed that (incumbent) upon the international group was the prevention of the Iranian government's continuing in pursuing nuclear technologies.'
35. p


Badawi, Carter, and Gully state in their discussion of Arabic verbal deontic modality:
"note also that 'must' can be expressed by 'alā على alone" (2013, p. 396). This non-verbal
construction can occur as complements to such verbs as ينبغي yanbaǧiya or يجب yajibu 'must',
with no change in meaning, as in (36) modified from (34) above:
36.

ينبغي / يجب على المجموعة الاولية منع الحكومة الإبر انية من الاستمر ار في متابعة تطوير التقنيات النووية yanbaǧiya / yajibu 'alā l-majm̄̄'ati d-dawliyyati man'u necessitate.p-stem on the-group the-international prevention
l-hukūmati $\quad$ l-'̄̄rāniyyati min al-istimrāri fì mutāba'ati
the-government the-Iranian from the-continuing in pursuing
tatwīri t-tiqaniyyāti $\quad$ n-nawawiyyati
development the-technologies the-nuclear
the prevention of the Iranian government's continuing in pursuing nuclear technologies is (incumbent) upon the international group.'

### 3.3.1 Adverbial collocation

This pattern allows for present or future time adverbial without a verb. Sentence (37)
below illustrates a present obligation despite the presence of a future adverbial:
37.
عليك أن تنتهي من واجباتّك غدا (قبل سفرك)
'alay-ki 'an tantahiya min wājibāti-ki ğadan (qabla safari-ki)
on-you SUB. finish.p-stem from chores-your tomorrow (beforetravel-your)
'(Incumbent) upon you is that you finish your chores tomorrow (before your travels).'

This adverbial collocation indexes the end-limit for the completion of chores, and not the moment of obligation. The obligation is concurrent with speech time and, presumably, lasts until the indexed terminus. Contrast the moment of obligation between (37) above with (38) below: 38.

| ibtidā ${ }^{\prime}$ an starting | min <br> from | al-'usbū $i$ <br> the-week | l-muqbili the-coming | ابتداء من الأسبوع المقبل، عليك القبام قبل السابعة صباحا |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 'alay-ki | l-qiyāmu |
|  |  |  |  | on-you | the-rising |
| qabla |  | $s$-sābi'ati | sabä |  |  |
| before |  | the-seventh | mor |  |  |

'Starting next week, (incumbent) upon you is the waking up before 7 am .'

In (38) the obligation begins the following week. However, a past obligation requires a finite verb in a manner that does not parallel (37) or (38), as (39) illustrates:
39.


This adverbial behavior is distinct from the previous possessive type, which only allows for present-time adverbials, but similar to the existential construction which allows for future adverbials with planned clauses, further supporting a division between the types.

### 3.4 Property-type

In his English translation of Bishop Georges Khodr's post "God Is Love", Noble writes: "When John the Beloved said, "God is love", he did not mean that it is one of His attributes. He meant that He is love" (2015, emphasis added). The structure in the original Arabic used to convey the phrase 'God is love' is a verbless clause (Khodr, 2015), and consists of the two words: الهـة allāh and محبّة maḥabba, a nominalization of the verb 'love'. This example and its
translation are used to exemplify the function of property-type predications used by NVPs. It follows that the last type of nonverbal predication to discuss is the one that assigns an entity a particular property or attribute. Generally speaking, PPs and locative NPs will tell us where the entity is located, and NPs and ADJPs (including the non-verbally functioning APs and PaPs ) will assign other types of properties, whether temporary or permanent. Syntactically and semantically there are two arguments: the subject/entity being discussed and the predicate/property assigned to the subject. Below are a number of examples with different kinds of predicate phrases, ADJP (40), $\mathrm{PP}(40,41), \mathrm{NP}(42)$, subordinate clause (43):
40. p

'And that is possible by many means; its vigorous pursuit that aims to solve the Kashmir problem is among those means.'
41. b

| fa-nahnu | bi-hājatin | $\mathfrak{i} \boldsymbol{i} \bar{a}$ | munāqašatin |  | 'ašiqq $\bar{a}$ í-nā |
| :---: | :---: | :---: | :---: | :---: | :---: |
| then-we | in-need.gen | for | discussion.GEN | with | siblings.GEN-our |

'For we are in need of a discussion with our siblings.'
42. p

43. p

فأجاب: "أهمّية الاتثّقاقِ أنّه أوّلا يعزّز العلاقات الاقتصاديّة بين أوروبا ولبنـان...."

| fa-'ajāba:" | 'ahammiyyatu |  | l-ittifāqi | 'anna-hu |
| :--- | :--- | :--- | :--- | :--- |
| then-reply.s-stem | $\underline{\text { important.NOM }}$ | the-agreement.GEN | awalan |  |
| sub.-him | first.ACC |  |  |  |

yu'azzizu l-ílāqāta l-iqtiṣādiyyata
strengthen.p-stem the-relationships.ACC the-economic.ACC
bayna 'ūrūbbā wa-lubnān
between Europe and-Lebanon
'The he answered: "the importance of the agreement is that, first of all, it strengthens the economic relationship between Europe and Lebanon..."

However, PPs can also be used in what would be translated into English as predicate adjectival structures. The preposition من min 'from, of', with a definite adjective, forms a PP that is translated into English as simple predicate adjectives. The entity being ascribed the property is either a clausal subject headed by the subordinating conjunction أن 'an—as in $(44,46)$ below—or a heavy NP, (45, 47):
44. p

| wa-min | al-miqarrari the-decide.PaP | an | yantaqila | l-yawm |  | 'ilà | l-'ubayvid |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| and-of |  | P sub. | move.p-stem | today |  | to | the-U. |
| fi | šamāli | kurdufān | wa-kādūqlī | fi | $j a n \bar{u} b i$ |  | kurdufān |
| in | north | K. | and-K. | in | south |  | K. |

'And that he moves today to Ubayyid in Northern Kordofan and Kaduqli in Southern Kordofan is scheduled."
45. p
 'Focusing on paragraph 54 is urgent.' 46. b
... .إدارته ترى أنّه من المهمّ جدّا أن تبقي إير ان جماعتها في دبارهم

| 'idāratu-hu | tarā | 'anna-hu | min | al-muhimmi | jiddan |
| ---: | :--- | :---: | :---: | :---: | :---: | :---: |
| administration-his | see.p-stem | sub.-him | of | the-importance | very |

' ...His administration sees that it is very important that Iran keeps its groups in their homes.' 47. b

| ...fa-'inna-hu so-sub.-him | minof | فإنّه من غير المؤمّل تحقيق اختر اقِ في مو اقف كلتا الحركتينِ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ğayri | l-mu'ammali | tahqīqu | xtirāqin |
|  |  | not | the-hope.PeP | achievement | breach |
| fi | mawāqifi | kilta ${ }^{\text {a }}$ | l-harak |  |  |
| in | positions | both | the-mov | s.dual |  |

'For it is not hopeful the achievement of a breach in positions for either of the two movements.'

In all of the above examples, the PP headed by min (marked as the syntactic predicate by the ATB) is semantically the adjectival property; and the entity to whom the deontic property is being ascribed is either a heavy NP or a clause headed by أن 'an.

This analysis is somewhat different from Anghelescu's analysis of this particular min-PP construction in a couple of ways. First, she considers this to be a modal construction, where she states that this min-PP construction "could be paraphrased by: "what I am stating belongs to the world of possibility (min al-mumkin), the world of necessity (min aḍ-darūrī)", etc." (2006, p. 138). There certainly are adjectives that can be interpreted as modals in this construction, but this construction is semi-productive (i.e., it does not allow for all adjectives, e.g., طويل ṭaw̄̄l 'long', جوعان jaw 'ān 'hungry') and includes other, non-modal usages, including describing expected or predictable occasions and personal judgment usages: e.g., من المقرّر min al-muqarrari 'of the scheduled (i.e., X is scheduled)', من المتوقّع min al-mutawaqqa 'i 'of the expected (i.e., X is expected)', من المفرح min al-mufrihi 'of the pleasing (i.e., X is pleasing)', من الغريب min al-ğgarībi 'of the unusual (i.e., X is weird)', etc. In fact, Abu-Chacra has also noticed some patterning around the types being expressed and which subordinating conjunction is used when he states, "There are now very many phrases of the min من + adjective or participle type followed by inverted subjects or noun clauses. Some will take 'anna أنّ ... if the clause is factual or verifiable, others take 'an أَنْ ... if the clause is dependent on an opinion or belief, and a few are found with both" (2007, p. 318).

Second, Anghelescu says that this construction is a periphrastic passive construction.
While it is true that $(44,47)$ could be rephrased with a passive p-stem, the other sentences $(45$, 46) could not. There does not even exist a corresponding verb for the adjective in (45) that
carries the same meaning. However, I do agree that this construction removes the experiencing agent from the clause, resulting in a agent-less clause, e.g., the decision makers in (44).

### 3.4.1 Adverbial collocation

Adverbially, this type has two patterns. The 'pure' property-type nonverbal predication only allows for present time adverbials, because sentences like (42) or (43), above, would not cooccur with anything but a present time adverbial, as (48) below, which is a modification of (42), illustrates:
48.

## (*'ǧadan/*bi-l-'amsi)

al-qadā'u
 (*tomorrow/*yesteday) the-judiciary the-Sudanese judiciary just 'The Sudanese judiciary is a just judiciary (*yesterday/*tomorrow).'

The adjectival min-subtype exemplified in sentences (44-47) can felicitously be coupled with a future adverbial, especially if it is planned, such as (49) below, cited from ("كارفاخال يناشد 2015 "جماهير المرينغي,", and (50), which is cited from ( $\left.\operatorname{Rabī}^{\prime \prime} \overline{1}, 2015\right):$
49.

'Tomorrow we are in need of your support in order to win.'
50.
...ومن بينها شر حـاهرة الكسوف التى من المقرر أن تظهِ غدا الجمعة

| wa-min | bayni-hā | šarhu | zāhirati | l-kusūfi | llat $\bar{\imath}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and-of | between-her | explanation | phenomenon | the-eclipse | that |
| min | al-muqarrari | 'an | tazhara | ğadan | al-jumu'ati |

'And it includes explaining the eclipse phenomenon that is scheduled to appear tomorrow, Friday.'

Embedding aside, a finite verb is required to place that state in a time other than speech.
Thus, adverbially, each subtype functions slightly differently than its sibling does, further supporting the decision to split them up, in my view. Now that I have looked at the different subtypes of this nonverbally predicational construction, let us discuss its stativity.

## 4. Stativity

I apply our stativity tests to this construction to see how it fares:

## A. The when test

I could not find examples illustrating the when-test in the data, which is indicative of one of the restrictions on this construction. This test is not applicable to this construction. The whentest establishes a reference time in the subordinate clause to which the matrix clause is compared. The matrix clause prototypically refers to a situation that has passed, or one that is expected in the future. For this to happen, the NVPs need to be embedded into a VP, as the following extracted examples from the web illustrate:
51. Taken from (Nusatya \& Fabi, 2014)
كانت الطائرة في طريقها المزمع عندما طلبت تحويل المسار...

| kānat | it-t $t \bar{a} ' r a t u$ | $\boldsymbol{f} \bar{i}$ | tarīqi-h $\overline{\boldsymbol{a}}$ | $l$-muzma' $i$ | inda-m $\bar{a}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| be.s-stem | the-plane | on | way.GEN-her | the-planned.GEN | when |

țalabat taḥwīla l-masāri
request.s-stem diversion.ACC the-path.GEN
'The plane was on its planned way when it requested a change of path...'
52. Taken from (Šawqī, 2015)

'And the paper said on its internet page that there were people in the building when the attack happened.'
53.

| kānabe.s-stem | l-hātifu | ma' ${ }^{-1}$ | 'inda-m $\bar{a}$ | كان الهاتف معي عندما اتصلت البارحة |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ttasalta | l-bārihata |
|  | the-phone.NOM | with-me | when | call.s-stem | yesterday |
| 'I had the phone when you called yesterday.' |  |  |  |  |  |
| 54. |  |  |  |  |  |
|  |  |  | سيكون عليّ الصيام عندما تزورني في الصيف المقبل |  |  |
| sa-yakūnu | 'alayya s | s-şiyāmu | 'inda-m $\bar{a}$ | $\underline{\text { tazūru-n̄}}$ |  |
| fut.-be.p-stem | on-me th | the-fast.nom | when | visit.p-sten. |  |
| $f i$ | $s$-spayfi | l-muqbili |  |  |  |
| in | the-summer.GEN | N the-comin |  |  |  |

'I will have to fast when you visit me next year.'
The propositions are clearly modified to accommodate the when-test. I have highlighted not only the NVP but the copular verb that is necessitated by this test. These clauses would be infelicitous without a temporally anchoring verb. This restriction does not mean that the construction is less stative, however. It simply illustrates the limitations of the construction's tensed expression.

## B. The indirect-discourse test

This test is applicable for the NVPs; the following NVPs are read as overlapping the reference time of their corresponding matrix verbs, i.e., the propositions expressed by the NVPs can be read as overlapping the moment of speech, as (55-58) illustrate:
55. Modified from ("Wazīratu t-tanmiyatu bi-l-'imārati", 2015) for length:

قالت الشيخة لبنى القاسمى ... إن لاينا فى الإمار ات نحو 21 ألف امرأة يدرن استتثمارات... qālat ǎ̌-šayxa lubnā l-qāsimī 'inna laday-nā fía l-'imārāti say.s-stem S.L.Q. SUB. at-our in the-E. naḥwa 21 mra'atin yadirna stiOmārātin around 21 thousand woman run.p-stem investments 'Sheikha Lubna al-Qasimi said that we have, in the Emirates, around 21 thousand women (who) run investments...'
56. Taken from ("al-Muftī daryān", 2013):


winds storm.p-stem in-the-area
the-Arab and-the-Islamic
'Then the delegation in the name of the Center assured that there were winds rocking the Arabic and Islamic regions.'
57. Modified from ('Abdulwahhāb \& Muḥammad, 2015) for length:

'And Razuri assured the reporters that he was in good health.'

## C. The expansion test

Similar to the issue with the when-test, this test does not apply to NVPs. In order to apply the expansion test, we must utilize a verb to place the state in a time previous to speech, like the particle-verb construction $m \bar{a} z \bar{a} l a$ ' X continues to speech time'. This no longer creates a nonverbal predication and demonstrates the same constraints that the when-test has shown: this construction is used to convey present-time indicative states. Also, keep in mind that utilizing a verb shifts the case of the predicate from nominative to accusative, as examples (59-62), below, illustrate:
59.

| kunti be.s-stem | qad | 'a 'taytī-n̄̄ | mālan | كنت قد أعطيتيني مالا لأحتظ به، ولا |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | li-'ahtafiza | bi-hi |
|  | PERF. | give.s-stem-me | money | for-keep.p-stem | with-him |
|  | zāla | ind-1 |  |  |  |
|  | ntinue | s-stem near-me |  |  |  |

'You had given me money to keep (for you), and (it) is still with me.'
60. Taken from ("Al-'andiyatu r-riyādiyyatu", 2011):

| kāna <br> be.s-stem | wa-lā zāla <br> and-continue.s-stem | hunāka there | كان - ولا زال - هناك فصل بين النساء والرجال |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | faslun separation | bayna between |
|  | $\begin{array}{ll} i & \text { wa-r-rijāli } \\ \text { omen } & \text { and-the-men } \end{array}$ |  |  |  |

'There was, and still is, a separation between the women and the men.'
61. Taken from (aḍ-Ḍāmin, 2013):

كان وما زال عليك كفلسطيني أن تأخذ إذنا عسكريا من إسرائيل لتغادر حدود الضفة الغربية

| kāna | wa-mā zāla | 'alay-ka | ka-filistı̄niyyin | 'an | ta'xuда |
| :---: | :---: | :---: | :---: | :---: | :---: |
| be.s-stem | and-continue.s-stem | on-you | as-Palestinian | SUB. | take.p-stem |


| 'iðnan | 'askariyyan | min | isrā̀lıl | li-tuğădira |
| :---: | :---: | :---: | :---: | :---: |
| permission | military | from | I. | for-leave.p-stem |
| ḥudūda | d-diffati | l-ğarbiyyati |  |  |
| border | the-bank | the-western |  |  |

'It was and still is (the case) that taking military permission from Israel to leave the West Bank is upon you, as a Palestinian.'
62.

| $k \bar{a} n a t$ | $\underline{\text { hind }}$ | , | wa-lā zālat, |
| :--- | :--- | :--- | :--- |$\quad$| tabībatan |
| :--- |
| be.s-stem |$\quad \underline{\text { H. }} \quad$| and-continue.s-stem | doctor |
| :--- | :--- | :--- |

'Hind was, and continues to be, a doctor.'

## D. The still and no longer tests

Again, this test cannot be applied because a verb is required. For Arabic, the constructions that would translate as still and no longer are verbal. Note that since a verb exists, the predicate is now going to be marked in the accusative. Here are examples of these from both corpora (however, there was no instance of no longer in the broadcast data):
63. Taken from (al-Ḥahafí, 2015):

| māzāla | laday-ya <br> continue.s-stem | l-katīru <br> at-my |
| :--- | :--- | :--- |
| the-many |  |  |

'I still have a lot.'
64. Taken from ("Al-faylasūfu 'aliksandar", 2015):
كانت هند ، ولا زالت ، طبيبة

| lā yazālu <br> continue.p-stem | hunāka there | htimālun <br> possibility | لا يز ال هناكّك احتمال لخروج اليونـان من اتحاد منطقة اليورو |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | li-xurūji for-exiting | l-yūnān <br> the-G. | min <br> from | ittihāādi <br> Union |
| mintaqati | $l-y \bar{u} r \bar{u}$ |  |  |  |  |  |
| region | the-E. |  |  |  |  |  |

'There is still a possibility for Greece to exit the Euro Region.'
66. Taken from (Raššād, 2015):

| $\underline{\text { lam }}$ | $\frac{\mathrm{ya} \text { 'ud }}{\text { return.p-stem }}$ | لم يعد هناك طائرات للحوثيين |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | hunāka | ta $\overline{\text { i irantun }}$ | li-l-hṻily ${ }^{\text {àna }}$ |
|  |  | there | planes | for-the-H. |

'There are no longer planes for the Houthis (or, The Houthis no longer have planes.)'
67. Taken from ("Yāyā tūrayh", 2015) :

| wa-huwa | وهو أمر مـازل علينا اكتثافه |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 'amrun | $\underline{m a ̄ z a ̄ l a ~}$ | 'alay-nā | ktišāfu-hu |
| and-he | thing | continue.s-stem | on-our | discovering-him |

'And that is something (that) discovering it is still on us (or: and this is something that we still need to discover).'
68. Taken from ("hamajiyyatu dā iš", 2014) :

لم يعد علينا أن نتخيل قيام دولة ارهابية فهي قائمة بالفعل

| $\underline{\text { lam }}$ | ya'ud | 'alay-n̄̄ | 'an | nataxayyala | qiyāma | dawlatin |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEG. | return.p-stem | on-our | SUB. | imagine.p-stem | establish | state |
|  | irhābiyyatin | fa-hiya |  | $q \bar{a}{ }^{\prime} m a t u n$ |  |  |
|  | terrorist | for-she |  | establish.AP | e-actualit |  |

'To imagine the establishment of a terrorist state is on us no longer (or: No longer do we have to imagine the establishment of a terrorist state), for it has actually been established.'
69. b

70. p

'Its acceptance is no longer possible under any circumstance.'
E. Complement of kāna test

As kāna is used to place these predicates in time, this test applies. As we shall see in the next chapter, $k \bar{a} n a$ is a stative head. When the verb is combined with a predicate, the resultant construction is stative. Keep in mind that when the predicate is nominal, it is marked in the accusative:
71. Taken from (ar-Rawāšida, 2015):

A.
'And if there were a disagreement, then it's a Euro-American (one).'
73. Taken from (an-Niṣf \& 'Abdurraḥmān, 2015):
كانِ عليهنَ أن يتاربنَ
kāna 'alay-hinna 'an yatadarrabna
be.s-stem on-them sub. train.p-stem
'That they trained was upon them (or, They needed/had to train).'
74. b

| وبالتالي يجب أن يكون آخر واحد ممكن أن يخرق القانون |  |  |
| :--- | :--- | :--- |
| 'āxira | wāhidin | mumkinun |
| last | one | able.AP |


| wa-bi-t-tāl̄̄ | yajibu | 'an | yakūna | 'āxira | wāhidin | mumkinun |
| ---: | :--- | :---: | :--- | :--- | :--- | :--- |
| and-thus | need.p-stem | SUB. | be.p-stem | last | one | able.AP |
| 'an | yaxriqa |  | l-qānūna |  |  |  |
| SUB. | breach.p-stem | the-law |  |  |  |  |

'Hence, (he) must be the last person who can break the law.'
75. p

كان خلف مكتبه جالسا على كرسيّ
kāna xalfa maktabi-hi jālisan'alā kursiyyin
be.s-stem behind office-his sit.AP on chair
'(He) was behind his office sitting on a chair.'
F. The circumstantial clause test

This test is applicable to the predication property construction. NVPs as a circumstantial clause are required to be headed with the circumstantial $w \bar{a} w$, which means 'as, while, when, etc.' As we shall see with the following examples:
76. p

’aдkurи
recall.p-stem and-we 'aḥlāma-nā dream.ACC-our l-filasț̄̄īyyati the-P.GEN
'I recall, when we were in the prime of our youth, that our dreams focused on the Palestinian issue...'

The print data was the only one to have examples of the property predicational types. The broadcast data had none with NVPs. There were no examples of the others in the data. I expected the existential sub-type to not show up as a circumstantial clause. Existentials are used to assert the existence of something. This is already assumed by the arguments of the matrix clause, so it would not show up as a clause that describes an argument during its reference time. No examples of the deontic NVPs exist, neither in the data nor through a Google search. Possession properties are slightly different when used in this construction. They utilize the locative preposition ${ }^{\text {ف }} f \hat{\imath}$ 'in'—instead of the more typical possession indicators, like the nouns عند/لاى 'inda/ladā 'near' or the preposition $\rfloor l i$-‘for', as the external example illustrates:
77. (Yūsuf, 2015)


In conclusion, this construction has its restrictions. NVPs in matrix clauses are used to express indicative, static situations that hold at speech. Conveying these types of situations outside of the present or not in the indicative mood requires a verb, for the most part.

## 5. Formal representation

I represent the nonverbal clause construction as a lexeme class construction, despite the fact that I had initially thought about a constituent class construction based on Sag's sub-pred-cl CxN (Sag, 2012, p. 146). However, that construction requires a finite verb as the second sign, and I needed something that took anything but a verb as that second sign. Each lexeme will not contain a verbal CAT. Here are the representations of each subtype:

### 5.1 Property Predication

Figure (4.1) is a representation of the predicate sign for NVPs that expresses property predication. Its PHON and FORM features are unspecified, as there is no singular expression used for this construction. Its ARG-ST feature contains its subject: either an NP or a clause (dependent or independent). The predicate's CAT feature is also unspecified because it can be any type of phrase or clause. However, there needs to be an "exception" feature for its CAT to indicate that verbs cannot fill this feature (which I illustrate using the exclamation mark !). The SEM feature has a stative index and includes an attribute frame containing the very subject described earlier and the predicate (which can be a NP or an independent clause) to show that this construction assigns a property from the predicate (PRD) to its subject. It also has the familiar state-frame and include-frames, which is used to show that the state includes the topic-time-frame.

Lexeme


Figure 4.1 NVP: Property predication

### 5.2 Existential

Figure (4.2) is the lexeme representation for the deictic existential demonstrative. Since there are three choices, it will remain unspecified, but its CAT will be, according to the ATB, an adverbial. Its VAL feature contains the NP whose existence it is asserting. The SEM feature will be similar to the above construction, except it will have an existential-frame co-indexed with the subject, as the predicate is an expletive and has no function.


Figure 4.2 NVP: Existential adverbial predication

### 5.3 Possession

Figure (4.3) is the representation for the possession predicate's lexeme. Its CAT is either an NP (e.g., near) or a PP (e.g., for). The VAL feature is used for the possessed NP and the possessor. The SEM feature will share the temporality features of its sister constructions, but it will include a possession-frame to show that the possessor has the possessed entity.


Figure 4.3 NVP: Possession predication

### 5.4 Deontic Modality

Figure (4.4) is a representation of the lexeme for deontic 'alā. It has a PHON and FORM feature. Its CAT feature is PP. Its VAL feature includes an NP or DC (dependent clause) to represent the situation under evaluation, and an NP to represent the party involved. Its SEM feature includes an obligation frame to show that the party involved is to perform the action.


Figure 4.4 NVP: Deontic 'alā

## 6. Conclusion

Blake (2001) states that " $[\mathrm{i}] \mathrm{n}$ many languages a nominal may instantiate the predicate without there being any grammatical verb, at least in the unmarked tense and mood" (p. 93). Arabic fits into this category without restricting itself solely to nominal predicates. These nonverbal predications are unlike small clauses in English-for example-in that they represent complete and independent clauses. Syntactically, nonverbal predications include a subject and a predicate that cannot be a verb, or a verbal participle. This is due to the fact that nonverbal predications are solely used to convey static situations, unlike the p-stem and participial constructions. In other words, "[s]tatic situations are prototypically described in Arabic through verbless sentences (verbs as the primary linguistic means of indicating change of state verbs are, by contrast, the central feature of narrative)" ("Topic and Comment," 2011). The implication is that this construction cannot be used to convey every type of stativity, such as progressive aspect
for example, which typically requires a dynamic event as input to show incremental change. Another distinction between these nonverbal predicates and the p-stem and participial constructions lies in the stativity tests. Applying these tests to the nonverbal predicates reveals that all but two of the stativity tests required the addition of a verb to this construction. This is evidence of the construction's inherent temporal constraints-especially when compared to the p-stem construction; there's only so much a clause can do without a (finite) verb.

Also, this construction is used in news genre for more than what would be translated as copular sentences in languages that require such a copula. Based on syntactic and semantic distinctions, four subtypes emerge from the data: property predication, existential, possession, and deontic modality. Further support for a sub-type division is that the latter type, unlike its former siblings, has a parallel, synonymous verbal construction. It appears that nonverbal predication for these sub-types may be a feature shared by Semitic languages-albeit to varying degrees. This is evident in Hetzron's The Semitic Languages (2006), in which a single section is dedicated to copular, possessive and existential usages for some of the various languages in the family, i.e., Modern Hebrew (Berman, 2006, pp. 329-330), Modern South Arabian languages (Simeone-Senelle, 2006, pp. 418-419), the Silte group (Guttt, 2006, pp. 532-533), and other Ethio-Semitic languages of languages in East Africa (Robert Hetzron, 2006, pp. 548-549).

Either way, this chapter is another reminder that a Construction Grammar approach to stativity in Arabic goes beyond the restrictions of the verbal phrase and must include other forms of predications. Up until now, the predications studied have been simple stative constructionsby which I mean constructions where the predicate is not a complex one. But that does not rule out complex stative constructions in the language. In the upcoming chapters, I investigate stative
constructions with complex, i.e., compound or multi-word, predicates. This includes complex predicates headed by the auxiliary, kāna, and a case-study exemplar of a paraphrastic, valencechanging progressive construction.

## Chapter 5: Auxiliary kāna

## 1. Introduction

In previous chapters, I have investigated simple stative predicates, i.e., predicates exemplifying various word-formation strategies: $p$ (refix)-stem verbal constructions, participial constructions, and nonverbal predication (NVP) constructions. By contrast, the predicate-formation pattern described in this chapter (and the subsequent one) is phrasal. Despite this difference, these multiword predicational constructions are similar to the previous predicates in that they combine to form a single predicational unit within their clause, i.e., syntactically they form a single VP , and semantically a single proposition is expressed. The lexical elements, always subordinated, forming this chapter's predicates include verbs and non-verbal units. What unifies these constructions is their head element: an auxiliary usage of the verb كَانَ kāna, which I gloss as 'to be'. As a verb, kāna should be familiar, as it has surfaced in every case-study chapter thus far. I have been utilizing it as a language-specific stativity test throughout this dissertation, so it should not come as a surprise to see its inclusion as its own stative construction. The type of states that $k \bar{a} n a$-as-auxiliary conveys seem to be marked states, marked mostly for tense, counter-factuality, or are formed out of syntactic necessity, as we shall see.

As discussed in previous chapters, kāna as an auxiliary can combine with p-stem verbs (1), participles (2), and nonverbal predications (3). Note that all the examples below predicate a single property of the subject referent, despite the multiple predicates highlighted in each clause:
1.
مهى كانت تحدَّث أحمد
mahā kānat tuḥaddiӨu 'ahmad
M. be.s-stem speak.p-stem A.
'Maha used to speak / was speaking with Ahmad (lit.: Maha was speaks with Ahmad).'
2.

| maysūn |  |  | ميسون كانت نائمة |
| :---: | :---: | :---: | :---: |
|  | kānat | nā iamtan |  |
| M. | be.s-stem | sleep.AP.ACC |  |
| 'Maysun was sleeping.' |  |  |  |
| 3. |  |  |  |
|  |  |  | كانت بلقبس في العمل |

kānat balqīs fì l-'amali
be.s-stem B. in the-work.GEN
'Balqis was at work.'
In addition, as an auxiliary, kāna also combines with the s(uffix)-stem inflected verb (4):
4.

| kāna be.s-stem | $\operatorname{lay} \theta$ | (qad) | intahā | كان ليث (قا) انتهى من واجباته عندما اتصلت بالأمس |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | min | wājibāti-hi | 'inda-mā |
|  |  | (QAD) | finish.s-stem | from | chores-his | when |
|  |  | bi-l-' $a m s i$ yesterday |  |  |  |  |

'Layth had finished his chores when you called, yesterday (lit.: Layth was (had) finished his chores).'

The particular compound verbal predicate exemplified in (4), carries a past in past, or pluperfect, meaning. The event time (E), 'finish', and the reference time (R), 'by the time you called', are both anterior to the moment of speech (S). Note that E and R are uncoupled because E was complete by R. The question arises, is kāna a type-shifter or a concord-construction? One could argue that it is a type shifter, for it combines with the s-stem and shifts it to a stative reading. Another argument could be that it is a type-selector because it combines with the p-stem and the NVPs. The participles are stative constructions, but they prefer dynamic inputs. For the purposes of this thesis, I consider kāna to do both, depending on the complement. With the complements that can have an eventive component in their construal (s-stem in (4)), kāna type shifts. With the complements that are stative and have no eventive component (the p-stem and the NVPs in (1-3)), kāna type-selects.

Just as kāna can take either the p-stem (1), or the s-stem inflection (4) of the verb as its complement, $k \bar{a} n a$ 's own inflection affects the resultant clausal reading. Sentences (1-4) all offered $k \bar{a} n a$ in the s-stem; let us contrast (5-8), in which $k \bar{a} n a$ is inflected in the p-stem:
5. Reproduced from (Goldenberg, 2013, p. 209)

حتّى أكون أنا أحدَّثه
ḥattā 'akūnu 'anā 'uḥaddiӨu-hu
until be.p-stem I speak.p-stem-him
'Until I speak / am speaking / will speak / will be speaking to him, myself (possibly: until I am (in a state of) speaking to him. Lit.: until I am speak to him).'
6.

7.
ستكون بلقيس في العمل غدا

| sa-takūnu | balq $\bar{s} s$ | $\boldsymbol{f i}$ | $\boldsymbol{l}$-'amali | ğadan |
| :--- | :--- | :--- | :--- | :--- |
| fut.-be.p-stem | B. | in | the-work.GEN | tomorrow |

'Balqis will be at work tomorrow.'
8.

| (sa-)yakūnu <br> (FUT.)-be.p-stem | (س-)يكون ليث (قد) انتهى من واجباته عندما ترجع إلى البيت |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\operatorname{lay} \theta$ | (qad) | intah $\bar{a}$ | min | wājibāti-hi | inda-mā |
|  | L. | (QAD) | finish.s-stem | from | chores-his | when |
| tarji 'u | 'ilā |  | l-bayti |  |  |  |
| return.p-stem | to |  | the-house |  |  |  |

'Layth will have finished his chores when you return home (lit.: Layth (will) is (have) finished his chores).'

When examining the pairs $(1) /(5),(2) /(6),(3) /(7)$, and (4)/(8), we note that the primary difference is time reference, as indexed by their respective temporal adverbials: the first member of each pair of examples place the event in an anterior time to speech, while the second members have a future reading. Thus, not only does the complement of kana contribute to the meaning of the construction, but the auxiliary's inflection also modifies the resultant meaning of the construction.

A kāna-headed construction can also be used to convey certain irrealis situations, as in
(9):
9.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| qabla | sanatayni | kuntu | sa-'askunu | hunā |
| before year.DUAL | be.s-stem | FUT.-live.p-stem | here |  |
| 'Two years ago, I was going to/would have lived here (lit.: I was will-live here)', |  |  |  |  |

In sentence (9), there is an overtly marked future $p$-stem inflected lexical verb that is headed by kāna in the s-stem inflection. This combination yields a counterfactual reading, in which a situation in the offering was unrealized. The counterfactual implication can, however, be overridden by the addition of a clause canceling it (e.g., with the addition of 'and I finally got in after all this time!')

Finally, when syntax requires specific subordinated complements to be verbal, kāna can be utilized as a dummy verb. For example, consider the verb 'want': it has two options for a sentential complement: a maṣdar 'verbal noun', or the maṣdar's corresponding p-stem inflected verb subordinated by the conjunction أن 'an. It is ungrammatical to have a bare NVP, a subject and its non-verbal predicate, fill in that complement slot. Sentence (10) illustrates the problem: 10.


Similarly, the particle قَ $q$ qad demands a verbal complement. One of this particle's
functions is to express present-time alethic modality when heading a p-stem inflected verb, but what about expressing this possible current state with what would otherwise be an NVP?
11.

# * قد بلقبس نـائمـة/طبيبة/في العمل الآن *qad balqīs nā̀imatun/ tabībatun/ fì l-'amali l-'āna *QAD B. sleep.AP.NOM/ doctor.NOM/ in the-work.GEN now '(Intended meaning): Balqis might be sleeping / a doctor / at work now.' 

As (11) illustrates, this is ungrammatical ${ }^{19}$. NVPs can use $k \bar{a} n a$, in its auxiliary capacity, to fulfill these particular syntactic requirements, see $(12,13)$ below and compare them to $(10,11)$ above:
12.
 want.p-stem SUB. be.p-stem sleep.AP.ACC/doctor.ACC / in the-work 'I want to be sleeping / a doctor / at work (lit.: I want that am sleeping / a doctor / at work).' 13.

| qad | $\underline{\text { takūnu }}$ | balqūs | nā imatan/ | tabībatan/ | $\boldsymbol{f i}$ | l- 'amali | 1-'āna |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| QAD | be.p-stem | B. | sleep.AP.AC | /doctor.ACC/ | in | the-work | now |
| 'Balqis might be sleeping / a doctor / at work now.' |  |  |  |  |  |  |  |

This chapter investigates the construction in which the head is auxiliary kana, and the manner in which its inflection affects meaning. The auxiliary's complements includes verbs (whether in the s-stem or p-stem inflections), and NVPs (regardless of syntactic category). Kāna is an auxiliary in all these examples because it is an insufficient sole predicate, i.e., its expression in this type of predication is restricted to temporality or modality; instead, a clause requires an overt predicating complement. Each combinatory option yields a slightly different type of state.

These states range from a habitual and in-process events $(1,2)$ and $(5,6)$, to completely static situations (3,7), to counterfactual situations (9), to states of aftermath, in which $E$ and $R$ are

[^14]\mathrm{ hltiwāii g}aḍab
MOD. be.s-stem aim.p-stem to containing anger
sukkāni l-'aqālīmi l-janūbiyyati ba'da l-ğārati
population the-provinces the-southern after the-raid
'alā kākrākāy
on K.

```
'And observers believe that the Governor of Kandahar's suggestion was perhaps aiming towards containing the southern provinces' populations' anger after the raid on Kakrakay.'

I do not consider the modal meaning conveyed in the above sentence as part of the construction's meaning, as some scholars have; it is the result of a modal construction headed by the particle. In (28) above, there is a past imperfective construction embedded within a modal construction expressing a likely opinion about the motivation behind the suggestion being discussed. However, embedding is not the only way with which the \(k \bar{a} n a_{\text {s-stem }}+{ }^{2}\) verb \(_{p-s t e m}\) sub-type can convey an irrealis situation.

\subsection*{5.1.1.2.1 Irrealis}

Another function of this construction is the creation of an alternative, potential reality.
However, I restrict this construction's irrealis usages to those unsubordinated usages only. This
analysis differs from other scholars who attribute wider modality meanings to this construction, e.g., (Bahloul, 2008, pp. 176-179). Those analyses typically include usages headed by conditional particles. From this dissertation's perspective, conditional constructions headed by such particles are modal constructions that take the auxiliary-kāna construction as a constituent. The temporal interactions between the verbs in these irrealis subtypes, however, are not straight forward. For example, Badawi et al. inform us that the structure \(\boldsymbol{k} \overline{\boldsymbol{a}} \boldsymbol{a}_{\boldsymbol{s} \text { stem }}+\) future marked pstem verb, "produces a calque of 'was going to do', 'would be doing'" (2013, p. 369), as (29) and (30) show:
29. p

'And it stressed that this Palestinian is a direct participant in the planning of the September 11th attacks and also in the planning for other operations (that) would have occurred/was going to occur/was about to occur/was to have occurred after this date in Europe.'
30. p


'But it is certain that the picture that Powell would have seen/was about to see/was going to see/was to have seen in the Jenin camp (would) shift the impact of the scenes he had seen from the military helicopter.'

In (29), the construction conveys a potential attack that would have occurred, in an alternate reality, under different circumstances (presumably not apprehending the man in question). The following sentence, (30), can convey a similar alternate reality to (29), or it can also convey the inception of an unrealized event, which leads to the same unrealized conclusion. What makes (30) also interesting is the scope of the auxiliary. Look at the verb 'change/shift'; it would not make sense for this event to happen since the first event carries a lost potential. Hence, this verb must be within the scope of \(k \bar{a} n a\) and continues that alternate reality where what Powell might have seen would have changed the impact, i.e., the verbs 'observe' and 'change' are within the same verbal phrase headed by kāna.

This construction can be embedded within further constructions, such as the protasis in a potential/alternate conditional clause, in which you would see the following structure,
\(\underline{\text { conditional particle }}+\boldsymbol{k} \overline{\boldsymbol{a}} \boldsymbol{n} \boldsymbol{a}_{\mathrm{s} \text {-stem }}+\) future marked \(\mathbf{p}\)-stem verb. See below examples (31-32):
31. p


What is interesting about sentences (31) is that it has a semantic equivalent, and that is to replace the conditional particle \(+\boldsymbol{k} \overline{\boldsymbol{a}} \boldsymbol{n} \boldsymbol{a}_{\mathbf{s} \text {-stem }}+\) future marked \(\mathbf{p}\)-stem verb structure with a conditional particle \(+\boldsymbol{s}\)-stem lexical verb, as we can see in the paraphrases below:
32. p
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{'anā} & \multirow[b]{2}{*}{ma'a} & \multirow[b]{2}{*}{'ilğā \(i\)} & & \multicolumn{3}{|l|}{أنا مع إلغاء الحماية للو كالات الحصريّة إلذا ألّى ذلك إلى خفض الأسعر} \\
\hline & & & l-himāya & & li-l-wikālāt & \\
\hline & ì \(\bar{a}\) & 'add \(\bar{a}\) & ðā-li-ka & 'il & xafdi & \\
\hline & if & lead.s-stem & that & to & decreasing & \\
\hline
\end{tabular}
'I am with the canceling of the protection of exclusive contracts if that (were to) lead to lower prices...'

Another example of embedding these constructions is (33) below. The \(k \bar{a} n a_{\text {s-stem }}+\mathrm{p}\)-stem
is embedded within a construction to expresses an alternate outcome:
33. b

'The Saudi security forces confirmed that investigations are being run for (the purpose of) uncovering the circumstances of this attack and determining its motivations and whether it carries the hallmarks of al-Qaida or fundamentalist groups.'
(33) is made up of the conjunction \(\boldsymbol{m} \overline{\boldsymbol{a}}+\) conditional particle \(+\boldsymbol{k} \overline{\boldsymbol{a}} \boldsymbol{n} \boldsymbol{a}_{\text {s-stem }}+\mathbf{p}\)-stem and discusses the ongoing investigations around an attack. The motivations for this investigation, according to the sentence, are about exposing the perpetrators, and whether al-Qaida is involved or not.

\subsection*{5.1.2 Käna \(_{\text {p-stem }}\)}

Now that we have investigated predicates headed by an s-stem inflected auxiliary, let us examine those with a p-stem inflected \(k \bar{a} n a\) head verb. The combinations investigated in this subsection are \(k \bar{a} n a_{\mathrm{p} \text {-stem }}+\operatorname{verb}_{\mathrm{s} \text {-stem }}\), and \(k \bar{a} n a_{\mathrm{p} \text {-stem }}+\) verb \(_{\mathrm{p} \text {-stem }}\), in that order. Both of these constructions represent the least frequent compound verbal predicate constructions in each corpus, with the former being marginally more common than the latter in both corpora.

\subsection*{5.1.2.1 Verbal complement \({ }_{\text {s-stem }}\)}

The \(k \bar{a} n a_{\mathrm{p} \text {-stem }}+\) verb \(_{\text {s-stem }}\) construction conveys perfect states. This is the second perfect construction we have seen in the compound verbs and, in both, the lexical complement is an sstem inflected verb. When discussed in the literature, this particular construction is usually given a future perfect analysis, with or without an overt future marker (Abu-Chacra, 2007, p. 241; Badawi et al., 2013, pp. 367-370; Bahloul, 2008, p. 64; Fehri, 2012, pp. 251-253; Clive Holes, 2004, p. 234), and I have found this meaning in the data, as the examples below illustrate:
34. b
 'Consequently, we will have lost a year because the upcoming Parliament must be resolved.'
35. p

وأذا أُقفلت كلّ الصّحف فنكون قّدمنا أكبر هديّة إلى الحكم لتمييع القضيّة....
wa-'iðā 'uqfilat kullu \begin{tabular}{ll} 
s-suhufi
\end{tabular}
\begin{tabular}{lcllll} 
qaddamnā & 'akbara & hadiyyatin & 'ila & l-hukmi & li-tamyl̄i \\
present.s-stem & biggest & gift & to & the-rule & for-diluting
\end{tabular}
l-qadiyyati
the-case
'And if all the newspapers were closed, then we will have presented the biggest gift towards the ruling for diluting the case...'

Sentences (34) and (35) are interpreted as future based on context. In (34), an upcoming parliament must be broken up. Assuming this would lead to new elections, the speaker says that once all these processes have been put into place a year will have passed without a functioning parliament. In (35) we have an apodosis that could potentially result in the future if the protasis were to come to fruition.

When the head of this construction is not overtly marked for future reading, this construction can also convey a present perfect reading, as in the examples (36-37) below.
36. b
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
wa-bi-hā-ðā \\
and-with-this
\end{tabular}} & \multirow[b]{2}{*}{nakūnu} & \multicolumn{3}{|l|}{وبهذا نكون قد وصلنا إلى نهاية هذه الحلقة من برنامج ملاعب الغد} \\
\hline & & qad & wa & nihāyati \\
\hline & be.p-stem & QAD & & end \\
\hline \(h \bar{a}\)-ðihi & l-halaqati & min & barnāmiji & l-ğadi \\
\hline this & the-episode & of & program & the-tomorrow \\
\hline
\end{tabular}
'And with this, we have reached the end of this episode for the program entitled Tomorrow's Sports Fields.'
37. p

وبإقراره قانون خصخصة الكهرباء يكون مجلس النو اب قد أقرّ في غضون أثهر قليبة القانون الثالث لخصخصة القطاعات المدرجة في هذا الجدول
\begin{tabular}{lllll} 
wa-bi-'iqrāri-hi & qānūna & xașxașata l-kahrabā'i yakūnu majlisu \\
and-with-endorsement-his & law & privatization & the-electricity be.p-stem & house
\end{tabular}
\begin{tabular}{llllll} 
n-nuwwābi & qad & 'aqarra & fī & ǧudūni & ašhurin \\
the-representative & QAD & approve.s-stem & in & few & months
\end{tabular}
qalīlatin il-qānūna \(\theta\) - \(\theta\) āli \(\theta a \quad\) li-xaṣxaṣati
little the-law the-third for-privatization
l-qiṭā \(\operatorname{a}\) ti \(\quad\) l-mudrajati \(\quad\) fì ha-ðà \(\quad l\)-jadwali
the-sectors the-included in this the-calendar
'And with its endorsement for the privatization of electricity law, the House of Representatives has approved/will have approved in a few short months the third law for the privatization of sectors that is included in this calendar.'

In (36), the host of the show is announcing that the show has come to a close at S . (37), on the other hand, is ambiguous as to a present or future perfect reading. It depends on when the
(R) decision-event was taken. If it has already been taken, then (37) has a present perfect reading. If it is to be taken sometime in the future, then it is a future-perfect reading. Thus, confining this construction to a future perfect reading does not reveal the whole picture, as it can also convey present perfect.

Additionally, since the auxiliary is inflected in the p-stem, and we know from Chapter 2 that an embedded p-stem's reference time can leech off the matrix clause's reference time, it should come as no surprise that when this construction is embedded, it can lose its non-past temporal reference, as exemplified below by the following two sentences:
38. b

ردّ محمّد علي العبّار رئيس مجلس إدارة شركة إعمار العقاريَّة بشدّة على الحملة الإعلاميّة التي تتاولت زيارته للأراضي الفلسطينيّة كما نفى العبّار أنِ يكون قد التّقى أرييل شارون
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline radda respond.s-stem & & \multicolumn{2}{|l|}{muhammad 'alı̄ l-'abbār} & raî̀su president & \begin{tabular}{l}
majlisi \\
board
\end{tabular} & \begin{tabular}{l}
'idārati \\
directing
\end{tabular} \\
\hline šarikati & 'ímā & u l-'aqà & riyyati & bi-šiddatin & 'alā & l-hamlati \\
\hline company & I. & the-rea & 1 estate & with-force & on & the-campaign \\
\hline l-'i'lāniyyati & llatī & & tanāwalat & ziyārata-hu & li-l-' & \(\bar{a} d \bar{l}\) \\
\hline the-media & that & & deal.s-stem & visitation-his & to-th & -lands \\
\hline l-filastīniyyati & & \(k a-m \bar{a}\) & \(\underline{n a f a}\) & \(l-' a b b a ̄ r\) & \(r\) 'an & \\
\hline the-P. & & as & deny. & -stem A. & SUB. & \\
\hline yakūna & qad & iltaq \(\bar{a}\) & 'ārìy & sārawn & & \\
\hline be.p-stem & perf. & meet.s & stem A. S. & & & \\
\hline
\end{tabular}
'Muhammad Ali al-Abbar, the Chairman of Emaar Properties, responded strongly to the media campaigns that discussed his visit to the Palestinian territories, and al-Abbar also denied having met Ariel Sharon'.
39. p

'And he denied that the Arab League and the Arab World had taken the stance of an observer regarding the situation in Iraq with the American threats of a military strike.'

In (38), al-Abbar denies the meeting-event with Sharon to have happened. This anterior event is expressed by the perfect construction embedded within an s-stem clause. In (39), one can get a past perfect or a present perfect reading depending on when R is located with respect to S . Also, note the inflections on the verbs in this clause. It is the only example of gender and number disagreement in the data. Despite the differences in subject inflections, I maintain that (39) is a complex verb because removing \(k \bar{a} n a\) will change the meaning of the proposition to the point of ungrammaticality. A future perfect is needed there. Without \(k \bar{a} n a\), it would be a simple s-stem verb, which would imply a completed event, not one that will be complete by a particular R.

It is important to bear in mind that these constructions can be embedded within other constructions or subordinated syntactically, as (40) illustrates:
40. b
\begin{tabular}{|c|c|c|c|c|}
\hline wa-yuxšā & min & 'an & takūna & qad \\
\hline and-fear.p-stem.PASS & from & SUB. & be.p-stem & QAD \\
\hline \multicolumn{5}{|l|}{'And it is feared to have crashed.'} \\
\hline
\end{tabular}


The passive matrix verb 'be feared' sometimes takes a prepositional complement headed by من min, as the sentence illustrates. The object of that preposition, what is essentially the thing feared, is a perfect construction. It expressed presentness because of the matrix clause's "default" reference time.

\subsection*{5.1.2.2 Verbal complement \({ }_{\text {p-stem }}\)}

This particular combination seems redundant. What is the function of a double p-stem construction when a lexical p-stem should suffice for expressing stative situations? Initially, I considered disfluencies, especially since the spoken corpus deals with 'real-time' language coding. Here is an example:
41. b

'... ummm it might be umm rises/rising with the, I mean, umm increased aid...'
Sentence (41) above might be a complex predicate, or it might be a disfluency because the auxiliary can easily be deleted and the sentence would still retain its core meaning. The transcribed hesitations, false starts, and filler words hint that the speaker might have been having trouble articulating their thought, and thus could have not meant to express this particular construction. But what about those instances in which it is clearly not a mistake, including those in the written genre, which, one assumes, were intentionally written up? One might suggest that a heavy intermediate subject might play a part in this double p-stem construction, as sentence (42) illustrates:
42. p

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline l-'arabiyyu the-A. & \[
\begin{aligned}
& \frac{l-\text { 'isri }}{} \\
& \text { the-I. }
\end{aligned}
\] & \begin{tabular}{l}
liyyu \(\quad\) ā \\
NEG.
\end{tabular} & \begin{tabular}{l}
taxtalifu \\
differ.p-stem
\end{tabular} & & šay'in thing & an about & \\
\hline in-natījati & llatī & tala'at & \(b i-h a ̄\) & & & \(t\)-taḥqīqi & типби \\
\hline \[
197
\] & & & & & & & \\
\hline 1978 & in & issue & hiding & the-s & urce & & \\
\hline
\end{tabular}
'And the fear is that of the result that may appear in the future Arab Summit regarding the true problem in the area, namely the Arab-Israeli conflict, not differing at all from the result that (have) appeared in the commissions of inquiry since 1978 with regards to hiding the source.'

Perhaps a heavy intervening subject necessitates a lexical verb after it to remind the reader of the predicate-thus placing an auxiliary in the beginning to fulfill certain preferred syntactic or pragmatic requirements. To follow that logic, let us investigate the realization and position of the shared subject by looking at the table (5.8) below (interestingly enough, unlike all the previous subtypes of compound verbs, the inflections on the auxiliary and lexical verb all match for number, gender, and person. Hence, the table below has no numbers on the disagreement):

Table 5.8 Realization, position and size of shared subject for double p-stem compound verb constructions
\begin{tabular}{|c|c|c|}
\hline \multirow{2}{*}{\begin{tabular}{c} 
Realization \& position of shared \\
subject
\end{tabular}} \\
\hline \multirow{3}{*}{ print } & dropped & 2 \\
\cline { 2 - 4 } & pre-complex & 2 \\
\cline { 2 - 4 } & intermediate & \(\mathbf{2}\) \\
\cline { 2 - 4 } & post-complex & 0 \\
\hline
\end{tabular}

Clearly, the table shows that intermediate subjects are not a major player in this construction. The two in the print data are both heavier subjects, and only one of the broadcast data's medial subjects is larger than a singular lexical item. Hence, there must be something else at play with this particular compound verbal predicate.

Unlike its previous sister constructions, this particular complex predicate is not discussed as frequently in the literature, but from what I have seen the predicate is typically given a future imperfective meaning. Badawi et al., who have a compositional approach to these predicates, have this to say about the double p-stem compound verb: "[c]ompound future continuous, where imperfect yakūnu يكون 'will be' indicates that the action is not finished (usually implying future) and the imperf. 2nd verb denotes that it is still not complete" (2013, p. 369). However, their examples include an overt future marker on the auxiliary. This future-marked head is only represented once, in both corpora:
43. b

'We will be implementing the desires and orders of our Lebanese brothers with what serves the Lebanese interest.'

Badawi et al. do not clearly say how this is distinguished from the non-paraphrastic future, which is the p-stem with or without an overt future particle attached to it. It does seem, however, that from the English translations they use, they see the latter as a simple future, while the former as an imperfective future. Similar analyses have shown up with this construction
elsewhere in the literature (Bahloul, 2008, p. 136; Goldenberg, 2013, pp. 205-211). It is an interesting statement, since the p-stem is underspecified for the type of imperfective state it expresses. It certainly can convey a future imperfective on its own; however, this double p-stem compound could be a method of delimiting the type of imperfective situation.

Regardless, a future continuous is not the full picture. All of the examples in the corpora are either subordinate-whether verbally or otherwise, or negated. Let us look at some of the subordinations, as the sentences below illustrate:
44. b

'But when any tension or umm.. aggression is being imposed upon her, of course the response will be bigger than he imagined it.'
45. p
\begin{tabular}{|c|c|c|c|c|c|}
\hline šarta & 'an & takūna & & li-hisābi & mu'assasatin \\
\hline stipulation & SUB. & be.p-stem & ork.p-stem & for-behalf & ns \\
\hline \multicolumn{6}{|l|}{'... on the condition that she/it is working on behalf of an institution (or: on the condition that it is (in a state) of working on behalf of an institution.)'} \\
\hline
\end{tabular}
46. b
\begin{tabular}{|c|c|c|c|c|c|}
\hline 'arjū & 'an & takūnı̄ & tasma 'īna-n̄̄ & \(h \bar{a}\)-才ihi & l-marrati \\
\hline hope.p-stem & SUB. & be.p-stem & listen.p-stem-me & this & the-time \\
\hline
\end{tabular}
'I hope that you are listening to me this time (or: I hope that you are (in a state of) listening to me this time.)'

As a reminder, in all of the examples above, the auxiliary can be removed without a major shift in meaning. (44) has a habitual reading, not a future one, as is indexed by the
temporal subordinating conjunction 'whenever'. (45) is a conditional headed by the maṣdar glossed as 'stipulation/condition', and (46) has a present meaning as indexed by the matrix clause. The three are clearly not future imperfective. Instead, it seems that the p-stem inflected auxiliary head is leeching its reference time from its matrix clause's predicate. Thus expanding on its future progressive reading. But what does this auxiliary do in these sentences?

To answer that question, let us look at the optional translations, which hint to it. In these clauses, there seems to be a dynamisation of the state. If I were to correlate it with English, although this is not completely equivalent, it is akin to adding a progressive to a stative verb, such as the now familiar I'm loving it. The progressive usage of the normally stative verb 'love' lends a dynamic reading of incremental appreciation for the object in question, as opposed to a stative phase of being in love with it. The same logic can be applied to (44-46) above, but with an additional layer of stativity being dynamised. Hence, the two sentences are almost translated as progressive in nature, i.e., the state conveyed is an internal phasal look into an event-type that is currently in advancement. This double p-stem auxiliary construction's usage can be analyzed as adding an underlying dynamic reading to the stative construction, making it similar (but not identical) to the English's Progressive construction, for which Michaelis states, "[s]tativization is a linguistic procedure through which a speaker creates a stative predication from one whose lexical verb or argument array, or both, requires a dynamic construal" (2011, p. 1361). She continues to discuss progressives in English, which, despite being stative, are medial chunks of an event representation that are prototypically seen as activities (p. 1364). Keep that in consideration with regard to this construction, which could be seen as a stativization usage, thus adding to \(k \bar{a} n a\) 's stative and its stativizing functions. Recall in Chapter 2 that the p -stem is
underspecified for the type of state it represents; it can represent a habit, a continuous event, a progressive event, etc. Having a p-stem inflected stative auxiliary heading a p-stem lexical verb, gives a particular kind of stative reading: one that conveys a medial portion of an event. This paraphrasing could be utilized as a method of specifying the type of imperfective state, albeit a marginal one due to other competing tools (e.g., adverbials, other phrasal forms), and due to its infrequency. But what about those negated samples, which make up the remainder, and largest portion, of the data?

In fact, even within this small token count, the data uncovered a noticeable pattern. The majority (three out of the total six sentences in the print, and 20 out of the 28 in the broadcast data) are negated, and all but one are negated with the past/perfect negation of lam, which assigns its verb (the auxiliary head in this case) jussive mood. They all seem to share an emphatic quality to them. Let us explore some examples:
47. p

'and in an attempt to explain this issue that was not based/has not been based, until now, on any biological proof, the French researchers (have) decided to study the plasticity of a specific area in the mice's brains.'
48. b
\(\begin{array}{llllll}\text { 'anhā l-'irāqiyyūna hunā } \quad \text { āma } & \text { l-lujū̀i } & \theta-\theta a \overline{l i \theta a}\end{array}\)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{end.s-stem the} & here & \multicolumn{2}{|l|}{year the-assylum the-third} & \multirow[b]{2}{*}{an} \\
\hline lam & yakun & 'ahadan & min-hum & yatasawwaru & \\
\hline neg. & be.p-stem & any one & of-them & imagine.p-stem & SUB. \\
\hline \[
l-i q
\] &  & lu & 'ila & \[
h a-\partial \bar{a}
\] & \begin{tabular}{l}
l-haddi \\
the-limit
\end{tabular} \\
\hline
\end{tabular}
'The Iraqis (have) finished their third year of asylum, none of them would have imagined that their residence would last this long (lit.: not one of them (had) imagined),

Again, removing the auxiliary would have made the clauses completely grammatical and semantically similar. However, in all of these instances, there seems to be an emphasis on the negative proposition. The negation is marked. In (47), the 'until now' makes it sound as though there is something recent that might, in fact support it, or that they expect one to come along. While in (48), there is a clear, unexpected length of asylum by the Iraqis for their duration of stay. So, one can deduce that this particular construction of lam + yakun + verb \(_{\mathrm{p} \text {-stem }}\) is used to express a marked negation, either as emphasis or an unexpected result.

In summary, this construction is the least frequent one in the corpora. Again, this makes sense because the auxiliary head could be seen as redundant. When this construction has been analyzed by other scholars, it is assigned a future imperfective meaning. While this might be the case sometimes (e.g., in unsubordinated clauses), we know that the p-stem functions differently when subordinated. And just like simple p-stem verbs, subordinated double p-stem complex verbs will take on the reference time of the matrix clause, foregoing a non-past reference. In addition, the auxiliary's presence in the p-stem does seem to add an underlying dynamic reading to the resultant state, narrowing down the type of resultant imperfectivity. The second function it seems to do, concerns negation. The vast majority of these uses seem to have the double p-stem construction headed by the negation marker lam, and that seems to convey a marked, either
unexpected or emphasized, negative proposition. This finding seems to match what Haak has said with respect to rarer auxiliary forms:

Some verbal complexes which would be expected to occur, such as ?(sa-)yakūnu yaf'alu 'he will be doing' are not mentioned in grammars or attested in descriptive studies. Apart from their use in the negation of the perfect (lam yakun fa 'ala 'he had not done' or lam yakun yaf'alu 'he was not doing'), jussive forms must be rare or nonexistent in verbal complexes, as they have not been described so far. (2011)

This concludes the discussion on combinational verbal constructions headed by kāna.

Now, I turn to the other type of predicate headed by the auxiliary function of that verb, where its complement is not a verb.

\subsection*{5.2 Non-verbal predicate complements (NVPs)}

We have seen four predicates made up of an auxiliary kāna head and a lexical verbal complement. The difference between each sub-type is based on the inflection of the head, or the inflection of the complement. Very broadly, we see that a complemental s-stem verb is likely to produce a perfect complex verb, while a complemental p-stem renders an imperfective predicate type. Again broadly, the s-stem head favors an anterior predicate where the E is placed anterior to S; while a p-stem head conveys E that is posterior to S . A p-stem auxiliary head can be subordinate, similarly to a simple p -stem inflected verb, and thus, takes on the R of its matrix clause. However, with non-verbal predicates, the variations are simpler as there is one verb: one item being temporally inflected. Predictably, the options are a s-stem or a p-stem auxiliary head. It appears that the auxiliary, when paired with NVPs, functions as either a tense/mood marker
(Badawi et al., 2013, pp. 400-405), or as a tense, mood, modal, and aspectual (especially habitual) marker (Bahloul, 2011b), or even a syntactic copula. Let us investigate further.

\subsection*{5.2.1 \(K \bar{a} \boldsymbol{n a}_{\mathrm{s} \text {-stem }}\)}

As Chapter 4 discussed, a simple and unsubordinated NVP is understood as conveying a purely static situation, i.e., no dynamic readings, that holds at S. An NVP embedded within a \(k \bar{a} n a_{\mathrm{s} \text {-stem }}\) anteriorizes E to S, regardless of the subtype of NVP: prepositional phrase (49-50), adjectival phrase (51-52), noun phrase (53-54), adverbial phrase (54-55), etc.
49. p

'This and the authorities have arrested a person (who) was with a suicide (bomber) during his presence in an internet cafe.'
50. b

'It was not not one resolution, but seventeen different resolutions that we apply them on Iraq was (incumbent) upon us.'
51. p

'And the effective media was confined to a very small number of newspapers, at the forefront of which (was) al-Nahār and al-Ḥawādith.'
52. b

وكلّ شيء كان واضحـ[ا]
\begin{tabular}{llll} 
wa-kullu & šay'in & kāna & wädih_[an] \\
and-every & thing & be.s-stem & clear.AP
\end{tabular}
'And everything was clear.'
53. b

'We had a good family and luxury furniture, but we left all that and ran to save our lives.'
54. p
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\[
\begin{aligned}
& \text { wa- } f i \\
& \text { and-in }
\end{aligned}
\]} & \multirow[b]{3}{*}{kulli every} & & \multirow[b]{3}{*}{marratin time} & \multirow[b]{3}{*}{\begin{tabular}{l}
kāna \\
be.s-stem
\end{tabular}} & \multicolumn{2}{|l|}{} \\
\hline & & & & & hunāka & rābihūna \\
\hline & & & & & there & winners \\
\hline & na & \begin{tabular}{l}
huwa \\
he
\end{tabular} & \[
l-x a ̄ s i r u
\] & & & \\
\hline
\end{tabular}
'And every time, there were winners and he was the loser.'
55. b
\begin{tabular}{lll} 
kāna & \begin{tabular}{l} 
hunāka \\
be.s-stem
\end{tabular} & ba'ḍu l-injilīzi \\
there & some the-English...
\end{tabular}
'There were some English (people)...'

Again, once this construction is formed, it can be embedded within other constructions, such as conditional constructions, to convey potential past states:
56. b


\subsection*{5.2.2 Kāna \(_{\mathrm{p} \text {-stem }}\)}

The NVPs with a p-stem inflected auxiliary head are slightly more complicated than their s-stem counterpart. This is because \(k \bar{a} n a\) with a p-stem inflection has a few uses, which should all be somewhat familiar at this stage in the dissertation.

\subsection*{5.2.2.1 Unsubordinated construction}

When this construction is unsubordinated, it gives a future state reading where the situation is placed posterior to \(S\) regardless of whether or not the verb has an overt future marker, such as in the examples below:
57. p

'And he added: there will be several mutual accusations in the upcoming days.'
58. b
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
wa-sa-yakūnu \\
and-FUT.-be.p-stem
\end{tabular}} & \multirow[b]{3}{*}{\begin{tabular}{l}
qarāru \\
decision
\end{tabular}} & \multicolumn{4}{|l|}{وسيكون قرار بوش زيادة عدد القّّات الأمريكّة في العر اق تحدّيا للايمقراطيّن} \\
\hline & & \(b u \bar{s}\) & ziyādata & 'adadi & l-quwwāti \\
\hline & & B. & increasing & number & the-forces \\
\hline l- 'amrīkiyyati & \[
f i
\] & l- 'irāqi & & diyan & muqrātityyina \\
\hline
\end{tabular}
'And Bush's decision to increase the number of American forces in Iraq will be in defiance of the democrats.'

\subsection*{5.2.2.2 Subordinated construction}

Syntactically, there are a number of positions in which a bare NVP is ungrammatical. In order to get around this, a verb is used. Kāna can fulfill that function, and here are examples of that:
- Within temporal adverbials:
59. p
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
wa-tahrubu \\
and-escape.s-stem
\end{tabular}} & \multicolumn{4}{|r|}{وتهرب السلاحف من الضجيج و الضوء ولا تبيض أبدا عندما يكون القمر بدرا} \\
\hline & \multirow[t]{2}{*}{s-salāhifu the-turtles} & \multicolumn{3}{|l|}{min ad-dajūji wa-d-daw'i} \\
\hline & & from th & se & e-light \\
\hline wa-là & tabīdu & 'abadan & 'inda-m \(\bar{a}\) & yakūnu \\
\hline and-NEG. & lay egg.p-stem & at all & whenever & be.p-stem \\
\hline l-qamaru & badran & & & \\
\hline the-moon & full & & & \\
\hline
\end{tabular}
'And the turtles run away from noise and light and they never lay eggs at all whenever the moon is full.'
60. b
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & \multicolumn{4}{|r|}{لا يمكن الحديث عن تهدئة قبل ألِ يكون هناكّ تهدئة من الجانب الإسرائيليّ} \\
\hline \(l a \bar{l}\) & yumkinu & \(l-h\) adī \(\theta u\) & 'an tahdi'atin & qabla & 'an \\
\hline NEG. & possible.p-stem & the-speaking & about truce & before & SUB. \\
\hline & yakūna & hunāka & tahdi'atun min & al-jānibi & \\
\hline & be.p-stem & there & truce from & the-side & \\
\hline & l- 'isrā 'ìliyyi & & & & \\
\hline
\end{tabular}
'Speaking about a truce in not possible before there being a truce from the Israeli side.'

Example (59) is a generic time period informing the reader oh when turtles do not lay eggs. (60) discusses a condition before which peace talks are not possible. These are clearly not futurate readings.
- Complements of (a certain class of) verbs that do not require a subordinating conjunction:
61. b
.....
\begin{tabular}{|c|c|c|c|c|}
\hline \(q \bar{a} l a\) & 'inna-hu & yakādu & yakūnu & jahịman \\
\hline say.s-stem & SUB.-him & be about to.p-stem & be.p-stem & hell \\
\hline
\end{tabular}
- With verbal particles (i.e., particles that must head verbs):
62. p
\begin{tabular}{lll} 
wa-xatama 'anna-hu & yuṣallī & \(\underline{\text { li-yakūna hayyan }}\) \\
and-conclude.s-stem SUB.-him & pray.p-stem & \(\underline{\text { for-be.p-stem alive }}\) \\
'And he concluded that he prays to be alive.' & \\
63. b &
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{aş-ṣāḍirātu the-exports} & & أكر المتضرّرين من هذ & أيضا & " \\
\hline & l-misriyyatu & qad takūnu & hiya & 'aydan \\
\hline & the-E. & MOD. be.p-stem & she & too \\
\hline \(\boldsymbol{m i n}\) & 'akbari & l-mutadarririna & min & ha-ð̄̄ \\
\hline of & bigger & the-hurt & from & this \\
\hline s-ṣu \({ }^{\text {'u}} d i\) & & & & \\
\hline
\end{tabular}
'The Egyptian exports might be, as well, (one) of the biggest hurt by this escalation...'

This category includes complements of matrix predicates (which could be verbal (64), nominal (65) or (60) above, or a PP (66)) that require a subordinating conjunction:
64. p
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
wa-taqarrara \\
and-decide.s-stem
\end{tabular}} & \multirow[b]{3}{*}{\[
\begin{aligned}
& \frac{\prime a n}{\prime} \\
& \underline{\text { SUB. }} .
\end{aligned}
\]} & \multirow[b]{3}{*}{yakūna be.p-stem} & \multirow[b]{3}{*}{funduqu hotel} & \multicolumn{2}{|r|}{} \\
\hline & & & & finūsiyā & maqarran \\
\hline & & & & V. & headquarters \\
\hline li-l-qimmati for-the-sum & & & & & \\
\hline
\end{tabular}
'And that hotel Venice is the headquarters of the summit is decided...'
65. b
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{4}{|r|}{فالمهّهِّ أنِ يكون سعر السلعة مناسبا وضمن مقور اته الثرائية} \\
\hline fa-l-muhimmu & 'an yakūna & si'ru & \(s\)-sil' 'ati & munāsiban \\
\hline then-the-important & that be.p-stem & price & the-commodity & appropriate \\
\hline wa-dimna & maqdūrāti-hi & \(\check{s}\)-širā \({ }^{\text {l }}\) 'lyyati & & \\
\hline and-within & abilities-his & the-purchasing & & \\
\hline
\end{tabular}
'That the price of the commodity is appropriate and within his purchasing powers is important.'
66. b
\begin{tabular}{|c|c|c|}
\hline 'alay-nā & ’al-lā & nakūna \\
\hline on-us & SUB.-NEG. & be.p-stem.subJ \\
\hline \multicolumn{3}{|c|}{nakūna} \\
\hline \multicolumn{3}{|r|}{be.p-stem.SUBJ smart} \\
\hline
\end{tabular}

'We must not only be strong, but be smart, too.'
It also includes those negation particles that negate VPs and also function temporality:
67. b
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{wa-bidūni} & \multirow[b]{2}{*}{ðālika} & \multicolumn{4}{|r|}{وبدون ذللك لِّ يكون المناخ مواتيا لتحقيق تقنّم في مفاوضات السلام} \\
\hline & & \(\underline{l} \underline{a}\) & yakūnu & l-manāxu & muwātiyan. \(A P\) \\
\hline and-without & that & NEG. & be.p-stem & the-climate & conducive \\
\hline li-tahquìqi & & taqaddumi & mufāwaḍāti & s-salāmi & \\
\hline
\end{tabular}
for-achieving progress negotiations the-peace
'And without that the climate is not conducive for achieving progress in the peace negotiations.' 68. p

'.. He was not the first and he won't be the last...'
As you can see, a p-stem inflected kāna, regardless of its predicational complement, has a primary or unsubordinated function, and a subordinated function. When it is subordinated, the \(k \bar{a} n a\) in p -stem loses its reference time and takes on the reference time of the matrix clause. This subordination, especially with NVPs, is mostly a reflection of syntactic requirements, in which a bare NVP would be ungrammatical otherwise.

\section*{6. Stativity tests}

Let us now apply the different stativity tests to this construction group to see how many of the tests this construction passes, i.e., uncover any functional and syntactic restrictions this construction has. Each sub-type is examined with each test:

\section*{A. The when test}

Käna \(_{s-\text { stem }}+\operatorname{ver}_{s-\text { stem }}:\)
This combination is revealed to be stative:
69. ("Eritrea," 2015)

'Darkness had descended when I noticed two youth passing near me.'
70. ("Millionaire," 2014)

\begin{tabular}{llll} 
the-worker & \(\underline{\text { sub. }}\) & on-me & sub. choose.p-stem \\
\begin{tabular}{ll} 
idāfiyyan & āxar
\end{tabular} & \\
\(\underline{\text { extra }}\) & \(\underline{\text { other }}\) & &
\end{tabular}
'I had chosen 6 number when the worker informed me that I need to choose another number.'
Kāna \(_{\text {s-stem }}+\) verb \(_{p-\text { stem }}:\)
I had to run Google searches to find examples for this test. This construction passes the when test, as exemplified by the sentences below:
71. ("Garbage," 2012)

ونقلت وسائل إعلام أميركية عن الشرطة أن، شاد آدمز، البالغ من العمر 41 عاماً، كان ينام في حاوية لللفايات عندما جاءت شاحنة خاصـة ورفعتها لإفر اغها
\begin{tabular}{cllllllll} 
wa-naqalat & wasà'ilu & 'i'lāmin & 'amrīkiyyatin & 'an & aš-šurtati \\
and-report.s-stem & media & information & A. & by & the-police \\
'anna & šād 'ādamz & al-bāliğa & min & al- 'umri & 41 & 'āman \\
sub. & C.A. & the-reach.AP & of & the-age & 41 & year
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline kāna be.s-stem 'inda-mā & yanāmи \(\quad f i ̄\) sleep.p-stem in & \begin{tabular}{l}
hāwiyatin bin \\
šāhinatun
\end{tabular} & l-n-nifāyāti for-the-garbage xāssatun \\
\hline when & come.s-stem & truck & special \\
\hline wa-rafa'at-hā & li-'ifrāǧi-hā & & \\
\hline
\end{tabular}
'The American media reported from the police that Chad Adams, 41 years, was sleeping in a garbage bin when a special truck raised it to empty it.'
72. (ar-Rannāmī, 2015)

'And Latasha Dayer, the mother of the victim, said that her daughter "Michaela" was playing outside when the child neighbor asked to see her puppy.'
\(k \bar{a} n a_{p-s t e m}+v^{2} e r b_{s-\text { stem }}\)
While the data has no examples of when-subordinated clauses of this type, I did find
many in a Google News search. It passes the test as (73) and (74) show:
73. (Majdī, 2014)
sa-yakūnu

\section*{qad balağa}

17 'āman inda-mā yaxūdu

'He will have reached 17 years when he enters his first race.'
74. ("Cedar," 2013)
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{4}{|r|}{بدأ بالعمل عندما أصل إلى البيت.} \\
\hline sa-yakūnu ' \({ }^{\text {ab-i }}\) & qad & bada'a & bi-l- 'amali & inda-ma \\
\hline fut.-be.p-stemdad-my & qad & start.s-stem & with-the-work & when \\
\hline 'asilu 'ilā & & l-bayti & & \\
\hline reach.p-stem to & & the-house & & \\
\hline
\end{tabular}
'My dad will have started work when I get home.'

The uncoupling of the reference time from the event time is evident in both of these
cases. In (73) above, the event is him reaching the age of 17, which overlaps his entering his first race. (74)'s reference time is reaching home, which occurs in the post-state of the father starting work.
\(k \bar{a} n a_{p-s t e m}+v^{2} \operatorname{cr}_{p-\text { stem }}\)
There were no examples of a when-embedded clause in the data, nor could I find some easily in an internet search. This is unsurprising as this particular construction is somewhat redundant.
\(k \bar{a} n a_{s-s t e m}+N V P s\)
The test applies:
75. b
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
lākinna \\
but
\end{tabular}} & \multirow[b]{3}{*}{s-sayyārata the-car} & \multirow[b]{2}{*}{kānat} & \multicolumn{2}{|l|}{. .. لكنّ السّّارة كانت خالية حينما قصفها بالصواريخ} \\
\hline & & & xāliyatan & hīna-mā \\
\hline & & be.s-stem & empty & when \\
\hline & qasafa-hā & \(\underline{\text { bi-s-sawa }}\) rē̄xi & & \\
\hline & shell.s-stem-her & with-the-rockets & & \\
\hline
\end{tabular}
' ...But the car was empty when (they) shelled it with rockets.'
76. p
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
wa-kāna \\
and-be.s-stem
\end{tabular}} & \multirow[b]{2}{*}{\(f\)} & \multirow[b]{2}{*}{- \(\theta\)-āli \({ }^{\text {atiti }}\)} & \multicolumn{2}{|l|}{رة عندما فرّت عائلته إبان ثورة 1958...} & في الثالثة عثرة \\
\hline & & & 'ašrata & inda-ma & farrat \\
\hline & in & the-third & ten & when & escape.s-stem \\
\hline 'à 'latu-hu & & 'ibāna & Oawrati & 1958 & \\
\hline
\end{tabular}
family-his during revolution
' \(\ldots\) and he was 13 when his family fled during the 1958 revolution...'
\(k \bar{a} n a_{p-\text { stem }}+N V P s\)
This test applies:
77. b
. .. أيضـا فلت له إنّني سـأكون معكك سبّّي الرّئبس عندما ستعلن متى نتنصر ....

'...And also I said to him that I will be with you, my chief, when you announce our victorious moment...'
78. Taken from ("Naymār yu'akkidu", 2015)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{3}{*}{sa-nakūnu} & & & & سنكون \\
\hline & \({ }^{\prime} \boldsymbol{a q w} \boldsymbol{a}\) & inda-m \(\bar{a}\) & yakūnū & ma'a-nā \\
\hline & stronger & when & be.p-stem & with-us \\
\hline \multicolumn{5}{|l|}{'We will be stronger when they are with us.'} \\
\hline
\end{tabular}

\section*{B. The indirect-discourse test}

This test applies. Embedding a 'deficient' kāna clause in a verb of declaration can be read as either simultaneous to the time of speech or anterior to it, with a slight preference to the anterior reading following Grice's Maxim of manner (Levinson, 1983, p. 102), which includes avoiding ambiguity in communication. Thus, a clause such as (79) below has two events that are being spoken about. The attack event is anterior to the saying event. However, the state-phase posterior to the infiltration event still holds at the time of speech. In (80), however, the event of constantly demonstrating (in which 'constantly' is conveyed with the idiomatic expression 'standing and sitting') is clearly anterior to the time of speech and is indexed as such by the adverbial 'before the war'. On the other hand, (37) and (39), earlier, are truly ambiguous as to whether the respective states under discussion hold at the time of speech or if they strictly hold anterior to that time.
79. b

'And he stressed that the rebels/insurgents had infiltrated, recently, through the Pakistani border and launched an attack on military targets on Afghan territory.'
80. p

قبل يومين قال لي سائق سيّارةٍ أجرةٍ أنّ البلدَ كان يقوم ويقعد بالتظاهرات قبل الحرب من أجل لقمة العيش...
qabla yawmayni qāla l-ī sā̀iqu sayyārati ’ujratin
before day.dual
say.s-stem 'anna
sub. the-country
bi-t-tazā̄hurāti
with-the-demonstrations
luqmti l-'ayši
morsel the-living
'Two days ago a taxi driver said to me that the country was constantly demonstrating before the war in order to make ends meet.'
81. p

'And the director of the Aid Fund in the college of education, Husayn Sulayman Muhammad, said that the difference between the students and the fund was due to political motivations.' 82. b

'The Popular Delegation stated that the Parliament's presidency was receptive to their demands...'

\section*{C. The expansion test}

In order for the expansion test to work, the auxiliary needs to be inflected in the s-stem
form, otherwise the clause gives us a non-past reading that cannot be extended \(u p\) to the present, as my own examples below illustrate:
83.
كانت ربى في المكتب ولا تز ال
\begin{tabular}{|c|c|c|c|c|}
\hline kānat & rubā & fi & l-maktabi & wa-lā tazālu \\
\hline be.s-stem & R . & in & the-office & and-continue.p-stem \\
\hline \multicolumn{5}{|l|}{'Ruba was in the office, and she still is.} \\
\hline
\end{tabular}
84.
\begin{tabular}{lll} 
kāna & bandar & mudarrisan \\
be.s-stem & B. & teach.AP
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
hina-mā \\
when
\end{tabular} & kuntu be.s-stem & \begin{tabular}{l}
ṭāliban \\
student
\end{tabular} \\
\hline \multicolumn{3}{|c|}{bnat-i} \\
\hline \multicolumn{3}{|c|}{daughter-my} \\
\hline
\end{tabular}
'Bandar was a teacher/teaching when I was a student, and he now teaches my daughter.'
85.
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & \multicolumn{4}{|r|}{بالأمس كنت قد أخفيت المال لكي لا يضيع... ولم أجده بعد} \\
\hline bi-l-' \({ }^{\text {amsi }}\) & \multirow[t]{2}{*}{kuntu be.s-stem} & \multicolumn{2}{|l|}{qad 'axfaytu} & l-māla & li-kay \\
\hline yesterday & & PERF. hi & stem th & the-money & for-purpose \\
\hline \(l a ̄\) & yadi \(u\) & wa-lam & 'ajid-hu & \(\underline{\text { ba'd }}\) & \\
\hline NEG. & lose.p-stem & and-NEG. & find.p-stem-him & \(m\) yet & \\
\hline
\end{tabular}
'Yesterday I had hidden the money, so it would not get lost... I have not found it, yet!'
86. m

'The two children were playing in their room and and they are still playing there until now.'
D. The still and no longer tests

Again, as the expansion test in section c. illustrates, the auxiliary verb has to be in the sstem form for it to pass this test. Sentences (83-86) illustrate its felicity.

\section*{E. The complement of kāna test}

The data did not contain an auxiliary kāna heading a complement \(k \bar{a} n a\), but there are
instances where a kanna clause is combined with a clause headed by her so-called sisters, as
(88-89) illustrate.
87. p
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{riwāyati novel} & \multicolumn{6}{|l|}{في رواية داود الأولى "بناية ماتيلد"، كانت الحرب لا تزال حاضرة في فوّة وكانت جزءا} \\
\hline & \begin{tabular}{l}
dāwūd \\
D.
\end{tabular} & il- 'ūlā the-first & \begin{tabular}{l}
bin \\
bui
\end{tabular} & & \begin{tabular}{l}
mātīld \\
M.
\end{tabular} & \begin{tabular}{l}
kānat \\
be s-stem
\end{tabular} \\
\hline il-harbu & là tazālu & & hādiratan & fid & quwwatin & \\
\hline the-war & continue & & present & & in & \\
\hline wa-kānat & \(j u z ' a n\) & & min ar & & & \\
\hline and-be.s-stem & piece & & of the- & & & \\
\hline
\end{tabular}
'In Daoud's first novel "The House of Mathilde", the war was still present in force and it was a piece of the novel...'
88. b


That being said, there are instances where we can embed a kāna clause in another kāna
clause:
89. (as-Sa'āfìn, 2015)

'The food was awful and limited; we would only get 150-200 calories per day, and there was barely time to breathe.'

\section*{F. The circumstantial clause test}

This test illustrates that only stative clauses can be used for the \(h \bar{a} l\) clauses, a subordinate
clause that describe the state of one of the arguments during the reference time of the matrix
clause. This test is applicable to the construction, as we see in the following examples (most of which were taken from outside the data):
90. p

91. (Mohamed, 2015)

'And it is mentioned that Apple is currently investing in renewable energy to get rid of pollution in China, as it had pledged to build solar stations to reduce pollution...'
92. (Ḥallāl, 2015)

'After the evening out, Waïl thinks about leaving, then his beloved catches up with him, as he had started packing his stuff...'


'Instead of arresting the 19 year old accused, as he was escaping the police on motor cycle, a police car driver ran him over...,

I could not find examples of the double p-stem through a Google search, but that is to be expected. In all of the above examples, the bolded clauses are understood as describing an argument of the clause at the time of the clause's reference time, i.e., overlap. To conclude the stativity tests, this construction has its limitations. That does not diminish its stative properties, however, it simply reflects the restraints that some of these tests require and how they clash with certain components of particular constructions. In this particular case, when \(k \bar{a} n a\) is used as an auxiliary, it has specific semantic functions and syntactic restrictions that limit the realized clause in a way that previous constructions were not limited. This partially-applicable stativity test is a result of how these constructions diverge in function and meaning.

\section*{7. Formal representation}

Unlike the previous constructions discussed in this dissertation, which have all been simple predicates, this chapter examines what is essentially a family of predicates that are formed by a combination of words sharing a head: auxiliary kāna. Construction Grammar does not see complex predicates as different from simple predicates. After all, constructions are unpredictable pairings of form and meaning. Form can include a phoneme, a morpheme, a
lexical item, phrase, etc. As long as it has a meaning attached to it, and that meaning is not entirely predictable from its form, it is a construction. Therefore, stative predicates, verbal or otherwise; simple or complex, can have similar analyses based on their shared predication function. Many analyses of multi-word predicates have been done utilizing Construction Grammar theory (Bonial, 2014; A. Goldberg, 1996, 2003; Hwang, 2014; Michaelis, 2011; Vaidya, 2015).

As we have seen, not only does the auxiliary combine with different complements to convey different types of states, but \(k \bar{a} n a\) 's inflection also affects the resultant construction's meaning. A little review before we look at the formal representations: 1) Syntactically, the auxiliary must come before the lexical verb. 2) The resulting compound predicate must convey a single proposition. 3) An s-stem verbal complement renders a perfect reading—regardless of the auxiliary's inflection. 4) A p-stem complement without an overt future marker renders an imperfective reading. 5) An unsubordinated p-stem inflected auxiliary frequently results in a non-past reading, but subordination changes that. 6) An s-stem \(k \bar{a} n a\) frequently results in a past state but can also yield an irrealis proposition. 7) A single auxiliary kāna can head multiple, serial predicates (i.e., it can have a scope larger than one complement). However, these serial predicates need to remain in their categories, such as the examples below:
94.

'I would/used to stand on the beach and stare at the sea.'
96.

\begin{tabular}{lllll}
\begin{tabular}{ll} 
kuntu \\
be.s-stem
\end{tabular} & \begin{tabular}{l} 
'akaltu \\
eat.s-stem
\end{tabular} & \begin{tabular}{l} 
wa-ntahaytu \\
and-finish.s-stem
\end{tabular} & \begin{tabular}{l} 
min \\
from
\end{tabular} & al-'akli \\
the-eating
\end{tabular}
'I had eaten and finished eating before they came.'
97.
\begin{tabular}{lllll} 
* kuntu & 'akaltu & wa-'aqifu & 'alā & \begin{tabular}{l} 
š-šātici \(i\) \\
be.s-stem
\end{tabular} \\
eat.s-stem \\
and-stand.p-stem & on & the-beach
\end{tabular}
'*I had eaten and used to stand on the beach.'
As a result of all the possible meanings, each kāna sub-type shall have its own SBCG representation, and I only provide a representation for the basic temporal type of kāna, i.e., I do not provide one the marked negation of the \(k \bar{a} n a_{\mathrm{p}-\mathrm{stem}}+\mathrm{verb}_{\mathrm{p}-\mathrm{stem}}\) or the irrealis usage of the \(k \bar{a} n a_{\mathrm{s}-}\) stem.

\subsection*{7.1 Kä \(_{n} a_{\text {s-stem }}+\) verb \(_{s-s t e m}(\) pluperfect)}

The following constructions are based on Michaelis' work on the English's perfect and progressive constructions (2011). Figure (5.1) shows a lexeme entry for pluperfect \(k \bar{a} n a\). Both verbs have a CATEGORY value of finite, s-stem. The VALENCE category of the auxiliary includes the subject NP (co-indexed with the subject of the lexical verb in its VAL feature), an optional qad particle, and the lexical verb. The construction as a whole gets an \(s\) index, for its stativity. The lexical verb gets an \(e\) index, for event type. The FRAME value of the lexical verb includes a Final-rest-frame because, similar to the progressive, the representation of situation inputted into the construction is an event, which, unlike states, have final transitions. This is coindexed with the State-frame of the larger construction to illustrate that the state phase of the construction is the post-rest frame of the lexical verb. The construction's frame also includes a

Past-frame to indicate that this state is anterior to S .


Figure 5.1 Kāna \(+s\)-stem

\subsection*{7.2 Käna \(_{\text {s-stem }}+\) verb \(_{\text {p-stem }}\)}

Figure (5.2) shows the lexeme for the past-progressive \(k \bar{a} n a\). The auxiliary's
CATEGORY value is finite, and s-stemmed, while the lexical verb is p -stemmed. The VALENCE for kāna includes the NP and the p-stem verb. The p-stem verb carries an \(s\) index to indicate its stativity, and the entire construction is also stative, thus the \(s\) index. The State-phaseframe of the lexical verb is co-indexed with the state index of the construction. The construction also carries a Past-frame.


Figure 5.2 Kāna \(+p\)-stem

\subsection*{7.3 Käna \(_{\mathrm{p} \text {-stem }}+\) verb \(_{\text {s-stem }}\)}

Figure (5.3) shows the lexeme for a p-stem-inflected \(k \bar{a} n a\) with an s-stem verbal complement. The Auxiliary has a CATEGORY value of finite: p -stem. Its VALENCE value includes the co-indexed NP, an optional qad particle, and the lexical verb. The entire construction is indexed with \(s\) for stative. The lexical verb, the s-stem, is indexed with \(e\) for eventive. The frames of the lexical verb are identical to that of the pluperfect above. The lexical verb's FRAME value includes a Final-rest-frame similar to the pluperfect construction. This frame is co-indexed
with the construction's State-frame.


Figure 5.3 yakūnu \(+s\)-stem

\subsection*{7.4 Kä \(_{n} a_{p-s t e m}+\) verb \(_{p \text {-stem }}\)}

Figure (5.4) shows the lexeme for a p-stem-inflected \(k \bar{a} n a\) with a p-stem verbal complement. The Auxiliary has a CATEGORY value of finite: \(p\)-stem. Its VALENCE value includes the co-indexed NP, an optional qad particle, and the lexical verb. The entire construction is indexed with \(s\) for stative. The lexical verb is indexed with \(s\) for stative type. The frames of the lexical verb are simply State-phase-frame because it is a stative construction. This frame is coindexed with the construction's State-frame. It also includes a topic-time-frame to show that,
when subordinated, it takes on the topic time of the matrix clause, otherwise it is understood as non-past.


Figure 5.4 yakūnu \(+p\)-stem

\subsection*{7.5 Kāna \(_{\text {s-stem }}+\mathbf{N V P}\)}

Figure (5.5) shows an s-stemmed \(k \bar{a} n a\) with an NVP complement. This is really an
inflectional construction, one that places the state anterior to S. Based on that, the VALENCE category of the auxiliary includes an NP or a clausal subject (recall the types of NVP subjects) co-indexed with the subject of the NVP, and it includes the NVP itself (which only carries an accusative marking if it is nominal). The NVP's frame and the construction's frame both carry \(s\) for stativity. The FRAME category for the NVP is a State-phase (from the temporal
representation of a state) that is co-indexed with the State-frame of the construction. And the construction includes a Past-frame to convey its anteriority.


Figure 5.5 Kāna + NVP

\subsection*{7.6 Käna \(_{\text {p-stem }}+\mathbf{N V P}\)}

Figure (5.6) shows a p-stemmed kāna with an NVP complement. The PHON category allows for different person prefixes and suffixes, as well as mood markings. This lexeme is a pstem inflected finite verb. The VALENCE category of the auxiliary includes an NP or a clausal (recall the types of NVP subjects) subject co-indexed with the subject of the NVP and the NVP
itself. The NVP's frame and the construction's frame both carry \(s\) for stativity. The FRAME category for the NVP is a Static-phase (or state-phase from the temporal representation of a state) that is co-indexed with the State-frame of the construction. And the construction includes a reference-time frame to convey that, when subordinated, it takes on the reference time of the matrix clause-otherwise it is read as posterior to S .


Figure 5.6 yakūnu \(+N V P\)

\section*{8. Conclusion}

This chapter explores a family of auxiliary constructions, all of which are more common in the broadcast data than in the written data. It appears that kana's stative aktionsart is one that is inherited by its constructions. The constructions headed by auxiliary kāna are used to express states that require either temporal or modal markers, or it is used in syntactic modification for subordinated NVPs in positions that require a verbal copula. As we have seen, \(k \bar{a} n a\) 's inflection can affect the resultant construction. An s-stem auxiliary gives a past reading. While an unsubordinated p-stem auxiliary expresses a non-past state, a subordinated one takes on its matrix clause's R. If the complement is a finite verb, then an s-stem auxiliary expresses a perfect state-one in which E and R are uncoupled and a post- E state phase is highlighted linguistically. However, if the complement is p -stem inflected, then the resultant predication receives a progressive construal-one that gives us an internal perspective on an event or a series of events over time. Finally, if the auxiliary complement is an NVP, the s-stem inflected auxiliary functions inflectionally by placing the state described by the NVP in the past. A p-stem inflected auxiliary is used for future states, and for syntactic copular subordination.

There are additional functions that auxiliary kāna performs, such as irrealis. It does so either by combining with conditional constructions, or by featuring a \(k \bar{a} n a_{\text {s-stem }}+\) fut-verb \(_{p-s t e m}\). One other irrealis construction that comes to mind using auxiliary kāna was not represented in the data, it seems; its structure is \(k \bar{a} n a_{\text {s-stem }}+\) desiderative verb \(_{p-s t e m}+\) action to have taken, as exemplified by the sentence below:
98. ('adīb, 2015)
'āsif kuntu 'awaddu musā'adatu-ka lākinn al-waḍ'u
\begin{tabular}{lllll} 
sorry & be.s-stem & want.p-stem & help.AP-you \(\quad\) but the-situation \\
\(f \bar{l}\) & \(l-k \bar{u} n j r i s\) & \(l \bar{a}\) & \(y u s \bar{a} i d u-n \bar{l}\)
\end{tabular}
'Sorry, I would have liked to help you, but the situation in congress doesn't help me.'

The compound verbal constructions in this chapter have not been traditionally seen as part of the verbal system within Arabic. However, they clearly exist. Using a CxG approach has not only enabled us to look beyond the verb as the locus of predication, but has also enabled us to look at complex verb phrases as predications, as well. In the following chapter, we turn to a case study of another phrasal verb predication, a somewhat recent construction with valencedecreasing implications.

\section*{Chapter 6: The yatimmu construction}

\section*{1. Introduction}

In the previous chapters, I explored a number of stative and stativizing constructions. I began with the p-stem, an inflectional stative construction that is oriented around R and has all the stative tests apply to it. I then showed how the participles are inflectional stativizing constructions that are also oriented around R. The AP can function as a progressive or a perfect, and the PaP is seen as a perfect/resultative. I then moved down the predicational spectrum and discussed the NVPs as stative constructions and demonstrated how they convey more than property predication; they can be used to convey deontic modality, possession, and existential states, as well. Not all of the tests apply to the participles and the NVPs, as some of those tests require verbs in Arabic. Following that, I explored the periphrastic constructions headed by the auxiliary \(k \bar{a} n a\). This group of constructions is used for a number of functions, including conveying past-situations, perfect situations, irrealis situations, and as a verbal anchor for NVPs when the syntax demands it. These are some of the major stative and stativizing constructions the genre utilizes in Arabic. There are a few other smaller constructions. The topic of this chapter is an example of such smaller constructions.

The construction under study in this chapter illustrates the need to recognize idiomatic meaning, as it illustrates an exceptional usage of the p-stem form of the verb يَتٌٌِّ tamma yatimmu. The construction also has a number of idiosyncratic properties, including valence reduction and polysemy; the construction can have both perfect and progressive readings. The verb yatimmu, in this instance, can be considered to head a periphrastic passive construction, and
this constitutes a departure from the usual valence-decreasing constructions in Arabic, which are signaled by verbal morphology alone. Unlike passive constructions, in more familiar European languages, which contain an auxiliary and a (passive) participle, the passive tamma/yatimmu operates as a semantically bleached auxiliary that reduces the valency of the arguments of the مصدر maṣdar , "a noun, conditioned in its combinatorial behavior at phrase and sentence level by the semantic value and argument structure of the corresponding verb" (Ditters, 2011, Para. 22), that is its complement. In addition to its passive meaning, yatimmu may also convey a perfect reading, as we shall see. Additionally, under certain circumstances, yatimmu stativizes verbal nouns and denotes a situation that includes its reference time. This is not surprising as we are looking at a construction whose head is verb inflected in the p-stem, as such, it inherits certain properties from the p-stem construction. Michaelis explains the concept of inheritance hierarchy in SBCG thusly: "a type B inherits from (is a subtype of) another type A, if and only if the set of feature structures picked out by B is a subset of the set of feature structures described by A" (2009, p. 153). An Aktionsart-based examination of the verbal noun is also required, as the data shows that this construction is remarkably partial to telic, dynamic verbal nouns - as opposed to stative and atelic verbal nouns. This is important because it appears that yatimmu, under the right conditions, produces states from telic situations, similarly to the English progressive construction. In addition, just like the English progressive, yatimmu triggers coercion by shifting the temporal representation of those input events that are non-dynamic. However, in other conditions, yatimmu functions like the English's perfect construction, which is also a typeshifter; the selected state is one that comes into existence after the event is over, instead of within an event.

At first glance, tamma/yatimmu appears to have one of its (potentially related) "core" senses: 'to be finished/completed', or 'to be perfect/ideal' (Baalbakki, 1995, p. 376; Wehr, 1976, p. 97). Derivations of this verb appear frequently in Arabic and other languages. For example, from this verb we get the maṣdar 'verbal noun' نََّام tamām that has found its way into languages such as Persian, as in the verbal construction تمام كردن tamâm kardan 'to finish, complete, finalize', or Turkish as in: tamam 'done, finished'. Also in Turkish - similar to some spoken varieties of Arabic - tamam is used to mean 'OK, fine.' These definitions work well with some of the more "canonical" usages of the verb. As an example, a phrase often found in wedding invitations in Saudi Arabia is the following:
1.

'We hope (for) your attendance, so that (our) happiness will be complete with your presence (lit.: so that the happiness completes).'

Note that the verb yatimmи is inflected in the p-stem and marked for 3rd person singular feminine to match its subject, the noun 'happiness,' whose fulfillment/completion is under discussion.

Surprisingly then, there is a particular usage of this verb that does not convey completion of the event being discussed, but rather gives the interlocutors an internal window into said event without access to its boundaries - including its terminal point. An example is given in (2):
2. p
... ولا يتمّ التلاعب بالمتعاطفين...
\(w a-l \bar{a}\) and-neg

\section*{yatimmu} be complete.p-stem the-playing.NOM
bi-l-muta \({ }^{\text {cat }}\) tifina
with-the-sympathizers.GEN
' ... and there is no manipulating of the sympathizers... (lit. the manipulation of the sympathizers is not completing/being complete.)'

Note the difference between the above sentence (2), and the phrase found in the wedding invitations (1), which centered on the fulfillment of the host's happiness through the invitees' attendance. In (2), rather than conveying something about the ending of the manipulation-event, the p-stem usage of the verb appears to be conveying a state that holds (or does not hold, as in this particular case) at its reference time, which happens to be the time of speech in this example. As in (1), the verb is marked for third-person singular. In (2), however, it is marked for a masculine subject: the transitive maṣdar or verbal noun, تلاعب talā 'ub 'manipulation.' The event of (a lack of) player-manipulation is included within its reference time, as overlaps the moment of utterance in this example, because-as we have learned from Chapter (2), the default reference time for the p -stem coincides with S . This event extends on both sides of the moment of utterance and we have no access to its inception or its termination. The final thing to note, is that the subject of the verb, 'manipulation/manipulating of the sympathizers,' lacks an agent argument - the manipulator; we only know who is being manipulated. Such cases seem to involve a semantic bleaching of the verb; yatimmи acts like a valence-reducing auxiliary, and is not appropriately glossed as 'to be finished or completed'. These features combined to produce, what I will call, the yatimmи construction. This chapter will be devoted to a description of its properties and function as a sativizer.

In addition to a progressive reading, yatimmи construction can lend a perfect reading, as in the example below:
3. b

\begin{tabular}{lllll} 
mat \(\bar{a}\) & yatimmu & \(\boldsymbol{l}\)-wus̄ūlu & bi-h \(\bar{a}\)-ðihi & \(l\)-quww \(\bar{a} t i\) \\
when & be.complete & the-arrival.NOM & with-this & the-forces.GEN
\end{tabular}
'When (will) this force have reached the desired level? (lit.: when (will) this force reach the desired level complete?)

In sentence (3), the yatimmu construction conveys a state achieved once the force has reached a specific level. This state overlaps its reference time, which would be the answer to 'when'. This is in contrast with (2) that conveys a progressive event, and we will see that futurate sentences lend to perfect readings.

The remainder of the chapter will be set up as follows: Section 2 will introduce the form and components of the construction, \(\mathbf{2 . 1}\) focuses on the verb and \(\mathbf{2 . 2}\) discusses its complement, the maṣdar. Section 3 explores the construction's distribution in the data. An Aktionsart analysis of the mașdar is also included here. Section 4 investigates the usages in which a perfect, instead of a progressive, reading is available. Section 5 briefly considers what this construction offers as a passive when compared to the traditional vocalic passive formation. Section 6 explores the construction's stativity via the familiar stative tests. Section 7 gives a formal SBCG representation for the construction. Finally, Section 8 concludes the chapter.

\section*{2. The construction's form and components}

In this section, I explore the construction's constituents. I briefly introduce what I consider to be a semantically-bleached verbal head, as its function in the p-stem inflection has been covered in Chapter (2). Then I discuss the verb's lexical complement: the verbal noun. Included in this discussion is a section on the maṣdar's transitive requirement.

\subsection*{2.1 The verb}

The bilingual dictionary entries for tamma's senses are rather long: the Hans Wehr dictionary's (1976) entry for the root \(\sqrt{ } \operatorname{tm}(\mathrm{m})^{28}\) gives us "to be or become complete, completed, finished, done; to be performed, be accomplished" (p. 97). Al-Mawrid gives us this definition: "to be complete, full, whole, entire, total, perfect, consummate; to be completed, concluded, finished, done, over, through, wound up, finalized, terminated; to end, finish, terminate, come to an end, come to a close; to be accomplished, achieved, carried out, executed, performed, fulfilled, to be rounded off, perfected, consummated; to happen, take place, occur, come to pass, come about" (Baalbaki, 1995, p. 376). It appears as though the dictionaries have given the auxiliary usage of the verb as 'to happen' or 'to be performed'. Thus highlighting an intransitive, agentless, semantically bleached usage of the verb that might be a relatively recent usage in the language.

Gully notes that "[a]lthough the intransitive verb tamma/yatimmu has a number of meanings [...], it is being employed in the Arab press on a very regular basis nowadays in conjunction with a verbal noun (derived from the main verb) as an alternative to the passive construction" (1993, pp. 43-44). Gully goes on to state that "[ t\(]\) his function of tamma is not new since isolated examples can be found in the press at least as far back as the beginning of this century" (p. 44). Gully notes that the verb "only occurs in the third person masculine and feminine singular forms, because its subject is invariably a verbal noun which will always be masculine or feminine singular" (p. 44). This morphological restriction on its person markings makes sense, since the verb never takes an agentive subject.

\footnotetext{
\({ }^{28}\) Apparently, a cognate exists in Hebrew where the verb means "to be completed, to be finished" (Morfix, 2015).
}

Let us look at the following example discussing energy in Baghdad:
4. b
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{\begin{tabular}{l}
hunā-ka \\
there
\end{tabular}} & \multirow[b]{2}{*}{wiḩdātun} & \multicolumn{3}{|r|}{هنـاكّ وحدات غازيّة يتمّ إضافتها حاليّا في الحرّيّة} \\
\hline & & ğāziyyatun & yatimmu & iḍāfatu-hā \\
\hline & units.NOM & gaseous.NOM & is complete.p-stem & addition.NOM-her \\
\hline & hāliyyan fí & l-hurriyya & & \\
\hline & presently.ACC in & the-Hurriya & & \\
\hline There a & are gas units curre & being added & Hurriya City (lit & addition comple \\
\hline
\end{tabular}

Looking at (4), the verb supplies an aspectual, i.e., stative, coloring of the predication, nothing more. The verb is agentless: the clause does not specify who is adding these units, only that the units are being added. It is intransitive, with its subject being the maṣdar 'adding'. The maṣdar has a genitive complement: the pronoun 'her' that refers antecedently to the 'gas units'. The state the p-stem selects for in this example is one that is in progress of the accomplishment's temporal representation. The reader does not know when the process of installing these units began, nor do we have access to the event's termination. Thus, the entire construction conveys an event of gas units being added that overlaps its R, 'currently'. To summarize, in order for the construction to function as a semantically-bleached auxiliary in a valence-decreasing construction that conveys a progressive or perfect meaning, the intransitive verb must be in the p-stem form, with a singular third person inflection. Now that we have looked at the verb, the following section discusses its subject: the verbal noun.

\subsection*{2.2 The masdar}

The nominal component of the construction is known as the saṣdar, frequently translated into English as a verbal noun, nomen verbi, or infinitive (Ba‘albakkī, 1995, p. 1052 ; Wehr, 1976, p. 507). Outside of grammar, the word maṣdar translates as 'origin' or 'source'. The word class gets this name, because, apparently "[i]n the context of transitive verbs, Sībawayhi
speaks about the 'event' and the 'noun of the event' from which the verb originates, hence its name maṣdar 'origin, source'" (Ditters, 2011, Para. 2). Regardless, the rules of derivation are outside the scope of the current project. Traditionally, verbal nouns are nouns that refer to the event without conveying any temporal information and share the consonantal roots of the verbs from which they are derived. Heassān makes a distinction in eventiveness between verbs (which he says contain both temporal information and convey the event), adjectives (which refers to that which is described by the event), and اسم الحدث ismu l-hada 'eventive nouns,' a category which includes the maṣdar as nouns that simply refer to the event (1994, p. 95) Syntactically, Holes informs us that the maṣdar "corresponds both to the English infinitive in sentences such as 'he likes to eat sweets' and to the gerund in 'eating sweets is his favorite pastime'" (2004, p. 146).

A function of this construction is valence-reduction. Since the lexical complement is the masdar, it needs to be transitive. This explains why the wedding invitation (1), above, and the example involving the ceremony in (5), below, do not carry the meaning associated with the yatimти construction:
5. p

'...And that the inauguration ceremony is held (lit. is complete/is being complete) at the BIEL Center.'

The subjects of both of the above sentences are derived from semantically intransitive verbs فرح fariḥa 'to be happy/rejoice' and hafala 'to be gathered,' that give us the nouns: فرحة farḥa 'happiness' and hafl hafl 'gathering/ceremony/party.'

That being said, the transitivity of the maṣdar need not be syntactic only. It can be semantically transitive, as we see in the example below:
6. Taken from (Qafṭān, 1982, p. 26)

'...Where the produced gold's transportation is currently being completed directly to its consumers.'

The verbal noun intiqāl used in (6) is derived from the verb intaqala. This verb has two senses: 'to transfer / to be transferred'. Since it is combined with the yatimmu construction, the former sense is the only one available, and its argument structure includes an agent and a theme. The presence of a semantically agentive nominal complement is a critical component of the yatimmu construction. This sentence illustrates that the verb need not be monovalent: in addition to the theme argument, the verb includes an obliquely marked goal argument. A source argument would also be feasible in this sentence, e.g. from the mines. The condition is simply that the maṣdar's nominal complement have at least one non-agentive argument, and that the complement is assigned genitive case by the verbal noun.

Although an agent is not required above, one could felicitously mention an oblique agent by means of a prepositional phrase, such as على يد 'ala yadi 'on the hand of', as the example illustrates:
7. Taken from ("Workers," 2014)


It is the army that detains around 700 children a year, and this agent argument is conveyed by a PP. Because it conveys an agentless proposition, the construction is frequently cited as a passive, which I explore in the next section.

\section*{3. The data}

Keeping the scope of this dissertation in mind, I restricted the search to the p-stem form of the verb, as it is the only form that will give me both a progressive and a perfect reading, ignoring any other verbal forms or nominal derivations \({ }^{29}\). Once the data was extracted, I manually coded the instances for Aktionsart type and syntactic and/or semantic subordination. In the larger corpus (the print data: \(\sim 400 \mathrm{~K}\) word count), there are 78 uses of this form that I studied, compared to 49 uses in the broadcast data ( \(\sim 80 \mathrm{~K}\) ). This is, numerically, the smallest construction I have looked at in this thesis. In both corpora, the construction tended to be found in subordinate clauses (e.g., the construction is headed by modals, tenses negation particles, and subordinating conjunctions): 60 out of the 78 sentences in the print data are subordinate (over three quarters, or \(77 \%\) ), while 32 out of a total of 49 instances in the broadcast data are subordinate (almost two-thirds, or 65\%). The predominance of the construction in subordinate clauses is interesting, as this lends credence to the view that this construction indicates temporal subordination; its reference time is that of the matrix clause \({ }^{30}\), which seems to be a pattern it shares with the other stative predicational constructions in this dissertation.

\footnotetext{
\({ }^{29}\) Although the s-stem form of this verb is also stative (in that it represents only a perfect reading), early on in the dissertation, I limited my search solely to the p-stem form of the verb, as it was more interesting in that it conveys both a progressive and a perfect reading.
\({ }^{30}\) For more reading on the issue, see Comrie (1985, pp. 56-60), who describes subordinate clauses with reference times anchored in the matrix clause. Whereas in this dissertation temporal subordination is seen as a product of stativity, Comrie analyses it through the lens of relative tense.
}

The maṣdar (verbal nouns), the verb's lexical complement, shows some interesting aspectual features, Table (6.1). The numbers, that I will show shortly, indicate that the construction in both corpora strongly favors dynamic verbal nouns. This supports the understanding that the yatimmu construction is, in fact, a stativizing one: it takes dynamic inputs and produces states. The data only has two examples of stative verbal nouns. Stative inputs are coerced into eventives, as we will see in the following section. In the broadcast data the construction shows a marked preference for dynamic events (94\%): \(19 \%\) activity verbal nouns, \(31 \%\) accomplishments, \(44 \%\) achievements, a singular state, and two uses where there is no verbal noun complement (one is a dropped subject that cannot be retrieved from the clause; while the other is a topicalized relativizer with no antecedent in the clause).

Table 6.1 Analysis of tamma's maṣdar in the data
\begin{tabular}{|l|c|c|c|}
\hline \multicolumn{1}{|c|}{ Broadcast } & \multicolumn{1}{c|}{ Print } & Combined \\
\hline State & \(1(2.1 \%)\) & \(1(1.3 \%)\) & \(2(1.6 \%)\) \\
\hline Activity & \(9(19 \%)\) & \(7(9 \%)\) & \(16(12.7 \%)\) \\
\hline atelic & \(\mathbf{1 0 ( 2 0 . 8 \% )}\) & \(\mathbf{8 ( 1 0 . 3 \% )}\) & \(\mathbf{1 8}(\mathbf{1 4 . 3 \% )}\) \\
\hline Accomplishment & \(15(31.3 \%)\) & \(25(32.1 \%)\) & \(40(31.7 \%)\) \\
\hline Achievement & \(21(43.8 \%)\) & \(43(55.1 \%)\) & \(64(50.8 \%)\) \\
\hline telic & \(\mathbf{3 6 ( 7 5 \% )}\) & \(\mathbf{6 8 ( 8 7 . 2 \% )}\) & \(\mathbf{1 0 4}(\mathbf{8 2 . 5 \% )}\) \\
\hline no VN & \(2(4 \%)\) & \(2(2.6 \%)\) & \(4(3.2 \%)\) \\
\hline total & \(\mathbf{4 8}\) & \(\mathbf{7 8}\) & \(\mathbf{1 2 6}\) \\
\hline Intransitive & 0 & 1 & \\
\hline Topicalized & \(3(6.3 \%)\) & \(14(17.9 \%)\) & \\
\hline
\end{tabular}

The print data was divided into \(9 \%\) activities, \(55.1 \%\) achievements, \(32.1 \%\) accomplishments, and a singular state; the majority of the lexical complements are again eventives. There are two instances of a non-maṣdar complements. To recap, the data shows that
this construction prefers to be in 1) subordinate clauses ( \(\sim 73 \%\) of both corpora), and the verb heads 2) transitive (whether semantic or syntactic), 3) dynamic ( \(\sim 95 \%\) ), and 4) telic events (82.5\%).

\section*{4. Perfect reading}

The construction seems to be polysemous, because in addition to a progressive reading of an event, the yatimmu construction lends a perfect reading. The state that the yatimmu construction selects for is usually an internal one between, but never including, the initial and terminal points of the verbal noun's temporal representation. However, there are instances where this construction selects for a state that comes into being after the event is over. These readings seem to be restricted syntactically and semantically, and one could argue that a perfect reading might be seen as a return to the verb's "core" sense or 'being complete'. These usages include, futurate readings, tensed negations, and syntactic subordination, as we shall see.

\subsection*{4.1 Futurate readings}

A futurate reference time seems to shift the yatimmu construction's state selection from
an internal one, to a posterior one, as the example below illustrates:
8. p

وبأيّ وسبلة سيتّمّ نقل الطَّاِّبٌ
wa-bi-'ayyi wasīlatin sa-yatimmu naqlu
and-with-which.GEN method.GEN fut.-be complete.p-stem transportation.NOM t-țullābi the-students.GEN
'and how will the transportation of the students be complete? (Or: and how will the students have been transported?)'

In the above sentence, the state that comes after the student-transporting event is
purported to happen sometime in the future, as the future particle indicates. Notice that in this
particular case, the construction no longer conveys an internal reading of the event. We are no longer within the phase of student-transportation. This perfect reading occurs despite the fact that the tamma verb is inflected in the p-stem form.

Let us look at a similar example from the broadcast data:
9. b

وسيتمّ منح هذه المساعدة عبر اللفوّضيّة العليا للاجئين في دمشق.
wa-sa-yatimmu
and-fut-complete.p-stem
l-mufawwadiyyati
the-commissioner.GEN
manhu
granting.NOM
hādihi l-musā 'adati 'abra this the-aid.gen through.ACC l-'ulyā li-l-lāji'īna fì dimašq the-high.GEN to-the-refugees.GEN in Damascus
'The granting of this aid will be completed by the UNHCR in Damascus (or: This aid will have been awarded through the (U.N.) High Commissioner for Refugees in Damascus.)'

Again, in the above example, the future reading nullifies the progressive reading and gives us a perfect reading of the granting event, i.e., a state that exists after the granting-event is complete. What is noteworthy in this example is the realization of the agent (or mediator, depending on the reading) via an NP headed by 'abra 'via or through.'

Even future adverbials without a future particle illicit this perfect reading:
10.


In sentence (10), the reference time indexed by 'tomorrow' is the time when the postcable setting up accomplishment is finalized.

\subsection*{4.2 Modality}

If the yatimm \(u\) construction is in the clause that contains the condition, then we lose an progressive reading and obtain a perfect reading instead. Let us look at examples:
11.

'His Highness reassured that the Palestinian cause is the source of tension in the region which cannot obtain peace and stability unless reaching a just and lasting solution is complete for this issue (or: unless a just and lasting peace will have been reached.)'

Again, this is a perfective reading of the reaching of a just and lasting solution for the
Palestinian question-event whose fulfillment, the state after the deal is reached, is the condition to obtaining peace and stability in the region.
12. p
\begin{tabular}{lllll} 
fa-hallan & \begin{tabular}{l} 
mu'aqqatan \\
so-solution.ACC \\
temporary.ACC
\end{tabular} & \(\underline{\text { qad }}\) & \begin{tabular}{l} 
yatimmu \\
complete.p-stem
\end{tabular} & \begin{tabular}{l} 
tabanniyu-hu \\
adoption.NOM-him
\end{tabular} \\
li-l-c-uqdati & l-hāliyyati & & & \\
for-the-knot.GEN & the-current.GEN & &
\end{tabular}
'So a temporary solution whose adoption might be complete for the current issue (or: So a temporary solution might have been adopted/undertaken for the current issue.)

The presence of the modal qad indexes the state after the event, not during. Either the temporary state exists after a solution is adopted, or it is not.

\subsection*{4.3 Embedded in Temporal Adverbials}

If yatimmu is within a clause that acts as a temporal adverbial for a matrix clause, then
the reading is a perfective one and not a progressive one, such as:


Here the yatimmи clause is embedded in an adverbial headed by 'until,' informing us of the upper limit for the state that comes into being after the surgeries indexed by 'tomorrow'. 14. b

 'and after that, when things calm down and the peace treaty's installation is complete, the discussion about the resumption of national dialogue will be complete at a later time (or: when things calm down and a peace treaty has been installed)'

In (14), the adverbial after that coincides with the subordinate clause conveying things calming down and the state that exists after the peace treaty's installation. Note that the matrix clause also contains a perfect-conveying yatimmu construction that conveys a state that comes into being after the resumption of a national dialogue.

\subsection*{4.4 Clausal complements}

When this construction is subordinated by the two conjunctions 'an(na) and 'inna, we get a perfect reading. Let us look at some examples below:
15. b

hum yurīdūna 'an yatimma ta'mīnu l-maḥāṣili
they want.p-stem rel. be.comple.p-stem insure the-crops
l-mustaqillati 'alā 'asāsin mustaqillin bi-sti'māli
the-indepenant upon basis independent with-using
tajārubin wāsi'atin 'alā l-'arḍi
experiments wide on the-land
'They want that the insuring of independent crops is complete based on independent measures using a wide range of tests on the land (or: to have insured the independent crops.)'

The state desired is one in which the independent crops are already insured. Another example is given below:
16. b

'And the Democrats hope that the appending of this table is complete to the decision to allocate \(\$ 100\) million to the war in Iraq (or: they hope for the table to have been appended to the decision to allocate \(\$ 100 \mathrm{M}\) to the Iraqi war.)'

Again, the state being hoped for is one in which the table is already appended. This also applies to complements of nominal derivations of these verbs, as is shown below:
17. b

'That the negotiations between the government and the minister of interior be complete directly is supposed (or: Negotiations between the government and the Minister of Interior are supposed to have happened directly.)'

In the above sentence, the state that is supposed to have happened is one after which the negotiations have already happened. Thus, it seems that the yatimmu construction is a valencereducing progressive construction. However, a progressive reading is supplanted by a perfect one, in which a post-eventive state is selected-rather than an internal one-when the construction is embedded semantically or syntactically in other constructions. This perfective reading is still a stative one because it expresses a state, albeit sometimes that state is bounded at one of its transition.

\section*{5. Periphrastic Passive}

This valence-shifting capability of the construction has been the focus of prior research and grammatical descriptions, with most referring to this function as a periphrastic passive (Abdul-Raof, 2001, p. 12). Periphrastic because, instead of using the vocalic templates from which passives are traditionally formed (e.g., qabada 'to capture' vs. qubida 'to be captured'), the construction uses an auxiliary verb + a lexical verbal noun + the verbal noun's complement in genitive case. Scholars have compared the functions of this periphrastic construction and compared it with the more traditional, derivational passive construction. Some do not see a distinction in usage, e.g. Esseessy (2010, p. 14). Others, however, have considered looking at the aspectual classes that the yatimmu construction favors. For example, Lipiński says that "[a]
periphrastic passive formed with tamma, "to be done", + verbal noun is used in Modern Arabic to report durative actions" (2001, p. 417). The data collected for this thesis, however, reveal numerous non-durative examples, including the example below:
18.

'Except that the program's halting might indeed be complete today (the program may indeed be halted) if the federal judge rules as such.'

From the context given, should the judge have given the orders that the program (whatever it may be) will have been shut down that day.

Gully states that the verbal nouns "are of the punctual type, viz. referring to a momentary event"; he goes on to say that "[i]t may also occur with durative verbs, such as nāqaša "to discuss," although it is never used with stative verbs such as \(i\) 'taqada "to believe" or 'arafa "to know." The verbal nouns that accompany yatimmu are from transitive verbs, including those which require a preposition" (Gully, 1993, p. 45). Again, per the data, I have analyzed that the majority of verbs are telic and dynamic, but activities do show up as well. I also have a singular usage of a stative masdar, as in the below example:
19. b
sawfa yatimmu ítibāru-hā
FUT. be complete consideration.NOM-her force.ACC non.ACC legitimate.GEN '...will be considered illegitimate... (lit. the consideration of its illegitimacy/unlawfulness will be complete.)'

Sentence (19) lends a perfect reading, one in which the post-considering state overlaps its future reference time indexed by the future particle. Also, note that the temporal representation of the state is augmented into an eventive representation, one with transitions, so it can fit the construction's selectional requirements.

Larcher \& Girod compare two periphrastic passive constructions, جّ \(\operatorname{\text {tamara}}\) tama and state that currently the former is more common and conveys "pure" passivity, while the latter includes the progressive aspect (1990, p. 144). My data, however, has plenty of examples where yatimти conveys progressive events, such as the one below:
20. p


In the above example, it is clear that the area's telephone cable renovation was in progress at R, which is the reference time of the matrix verb 'he assured'.

Turning away from an aspectually-driven motivation, Larcher \& Girod discuss another difference between the traditionally derived passive and the periphrastic passive. They say the periphrastic passive is used to distinguish between the active and passive counterparts when the orthography might confuse them (p. 146) \({ }^{31}\). Although there are exceptions, typically, the

\footnotetext{
31"on n'emploie pas le PP, là où la distinction entre actif et PG a un corrélat graphique" (146).
}
grammatical passive is internally vocalized differently than its active counterpart. This becomes a written issue since these vowels are usually omitted (e.g. سلمت could either be: سَّلَّتَت sallamat 'she/it delivered' vs. سُّلِّتَت sullimat 'she/it was delivered'.) One way to avoid this confusion would be to use a periphrastic construction that adds an "auxiliary" to mark these as passive sentences. They continue to say, however, that even if the active and the grammatical passive forms are identical, the grammatical passive is still used if the context makes the distinction clear (p. 147) \({ }^{32}\). They end their analysis by stating their belief that we are currently in a transitional phase, and that there is a move towards relegating the grammatical passive as primary passive to history while periphrastic passives take over the burden (p. 150) \({ }^{33}\). This reasoning seems to be pretty convincing; perhaps this is the motivation for the usage of these periphrastic passives in current technology, like iOS and android notifications. It certainly disambiguates an active reading from a passive one in these apps.

\section*{6. Tests of stativity}

The premise of this entire chapter is that the yatimmu construction is a "type-shifting device" (Michaelis, 2011, p. 1363) that conveys a state, either a progressive one or a perfect one, despite having a lexically dynamic eventive verbal noun.

\section*{A. The when test}

Michaelis (2011) tells us that, should the main clause's event overlap with a non-stative subordinate when-clause, the main clause is a state (p. 1366). I could not find examples in the

\footnotetext{
32 "on n'emploie pas le PP là où, en l'absence d'une discrimination graphique de l'actif et du PG, le contexte syntaxique opère néanmoins cette discrimination" (147).

33 "une grammaire descriptivement adéquate de l'ACM doit mentionner, selon nous, l'existence, à côte du PG, d'un autre passif, qui a la structure d'un auxiliaire, mais fonctionne pour l'instant comme un simple... auxiliaire du PG. Il faut et il suffit cependant que les exemples du type de 26-28 se multiplient pour que l'ACM ait avec le PP non plus un simple <<passif auxiliaire>> mais un véritable <<auxiliaire du passif>> reléguant le PG au rang \(d^{\prime} \ll\) archaïsme \(\gg\) " (150).
}
data, so I had to mine Google for these. Based on section (4) above, it should come as no surprise that this test lends a perfect reading, not a progressive one:
21. Taken from ("Child Rearing," 2014):

'For when the child cries, the preparation of food or approaching him is complete in order for them to feel reassured (or, when the child cries, the preparation of food or approaching them is to have been done in order to comfort them.)'

The sentence above implies that the food should already be in a state of preparation when the child cries, illustrating an overlap with a post-food preparing event. Here is another example illustrating this perfect reading:
22. Taken from (al-Jufayr, 2014)

'When a medical mistake occurs, the throwing of all the blame on the doctor is immediately complete (or: when a mistake occurs, fully blaming the doctor ensues.)'

In sentence (22), the yatimmu predication lends a consecutive reading, as opposed to one that conveys overlap. We cannot interpret it as meaning that the blaming of the physician is going on prior to the occurrence of the medical mistake. Instead, we have a sequential reading in which the blaming begins after the medical mistake; the onset of the blaming is marked by the adverbial fawran 'immediately.' Here, the yatimmu predication functions to convey a post-
transitional phase: the reference time is located after an event of casting blame on doctors, which itself is posterior to a medical-mistake event. In such sentences, the yatimmu predication appears to denote a situation that has occurred multiple times in the past, with each such event following a causal event (a child crying, a doctor making a mistake). In these contexts, the yatimmu construction has a meaning like that of the existential present perfect, as described by Michaelis (2011) and others. Thus, its function, in these contexts, is similar to that of the English perfect sentence in (23):
23. Whenever a medical error occurs, the family has blamed the doctor.

\section*{B. The indirect-discourse test}

If the event being reported can be understood as "overlapping the time of the speech-act event in the matrix clause (i.e., reference time), we view the reported statement as a stative predication" (Michaelis, 2011, p. 1367). This test is applicable to the construction, since we know the yatimmи construction inherited its orientation around R from the p -stem construction. The following appears to be a dispositive example of this test:
24. p


From the above sentence, it is clear that the event of setting the area up with telecommunication cables does not overlap the moment this whole sentence was uttered (i.e.
meaning that the cables are being setup right as the reported said it). Instead, the area's set up overlaps the minister's assurance, which is 1) sometime in the past based on the s-stem inflection of the matrix verb 'assured', and 2) it is that past reference time that is being indexed by the adverbial 'currently' in the above sentence. This test, thus, is applicable with the yatimmu construction.

\section*{C. The expansion test}

The expansion test states that a past state can felicitously be extended to the moment of speech. A slight modification of (24) yields the following:
25.
\begin{tabular}{|c|c|c|c|c|}
\hline 'akkada assured.s-stem & \[
\begin{array}{ll}
\text { 'anna-hu } \\
\text { rel-him }
\end{array}
\] & yatimmu complete.p-stem & hāliyyan currently & \begin{tabular}{l}
ta'hīlu \\
y development
\end{tabular} \\
\hline l-mantiqati & \(b i-k a ̄ b i l a ̄ t i\) & \(l-h a ̄ t i f i ~\) & \(\underline{1}\) & wa-mā zāla \\
\hline the-area.gen & with-cables.gen & n the-phone.gen & & and-continue.s-stem \\
\hline \(t\)-ta'hīlu & \(q \overline{\text { a }}\) iman & & & \\
\hline the-developme & nt standing & & & \\
\hline
\end{tabular}
'He assured that the development of the area with telephone cables is currently being completed ... and the development currently continues.'

We have simply added a clause that extends the boundaries of the state of renovating the area's telephone cables to overlap the moment of speech. Michaelis (2011) mentions that "[s]uch a clause may contain the temporal adverbial still" (p. 1367), hence, the usage of the phrasal verb \(m \bar{a} z \bar{a} l a\). This phrasal verb is used to convey the continuity/extendedness of a situation and can be translated into English as still.

\section*{D. The circumstantial clause test}

No examples were found for this in the data. I could not even find examples by searching on the internet. I believe that there are semantic restrictions on the yatimmu construction that make this test inapplicable, or difficult at best. If the circumstantial clause is meant to convey the
state of an argument during another situation, that argument cannot be agentive for it to be described by the yatimmu construction. The types of complements the yatimmu construction requires are impersonal. These types are arguments might not need descriptors that overlap another event.

\section*{E. The still and no longer tests}

Katz (2000) says that the adverbials still and no longer test for the subinterval properties of a state, i.e. because "still \(P\) means that \(P\) is true at some time t , that it was true at some time t ' previous to that, and that it has been true at all the time in between \(t\) and \(t ">(p .145)\). In this connection, let us look at (26), and (27) below, taken from an internet search:
26. Taken from ( \(\mathrm{Sa}^{`} \mathrm{i} d, 2014\) )
wa-'awdaha
and-clarify.s-stem
s-siyāhati
the-touristy.GEN continue.s-stem
mawsimiyyin
seasonal.GEN
'And he clarified that the dealings with touring companies is still/continues to be finished in a seasonal manner (or, the dealings with the touring companies still/continues to happen(s) seasonally.)'
27. Taken from (Afiškū, 2014)


ḩayӨu 'anna l-'iqnā'a wa-jaəba l-intibāhi lamya'ud where rel. the-persuasion.ACC and-attracting.ACC the-attention.GEN no longer yatimmи bi-t-țuruqi t-taqlīdiyyati 'abadan be complete.p-stem with-the-ways.GEN the-traditional.GEN at.all.ACC 'Since persuading (people) and gaining their attention is no longer being completed by traditional means at all ( or persuading people and gaining attention no longer happens by traditional means at all.),

Again, according to this diagnostic, the construction appears to denote a stative situation.

\section*{F. Complement of kāna test}

As previously stated, when kāna requires a verbal predicate, it is a stative complement, as in (28) below:
28. (Ḥabaš, 2014)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{wa-bayyanat and-clarify.s-stem} & \multicolumn{4}{|r|}{وبيّنت أنّه كانِ يتّّ جمع الصور كلّ خمس دقائق} \\
\hline & 'anna-hu & kāna & \multirow[t]{2}{*}{be complete.p-stem} & jam 'u \\
\hline & rel.-him & be.p-stem & & collection.NOM \\
\hline s-suwari & kulla & xamsi & daqa \({ }^{\text {iquin }}\) & \\
\hline the-pictur & all.A & five. & minutes.GEN & \\
\hline
\end{tabular}
'And it brought to light that the collection of images every five minutes was being/used to be complete (or: that images were being / used to be collected every five minutes.)'

We see that the construction does combine with \(k \bar{a} n a\), and since only stative constructions do so, this test's stativity applies to the construction.

\section*{G. The from now on test}
29.

'From now on, supplying the military operation in Afghanistan is complete through Constanța airport in Romania (or: From now on, providing support for the military operations in Afghanistan is to go through Constanța airport in Romania.)'

We see that this test is applicable to this construction and illustrates its stativity. Thus, it appears that all but one of the tests are applicable to the construction. This should not be a surprise as it shares a lot in common with the p -stem construction. The restriction on the circumstantial clause seems to stem from the type of complement the construction requires.

\section*{7. Formal Representation}

Figure (6.1) illustrates the progressive yatimmu construction. The construction is composed of yatimm- (or the unattested feminine form tatimm-)+ NP subject. That NP is headed by the masdar of a transitive verb followed by any non-agentive arguments (e.g., the object or the indirect object) of the maṣdar as either genitive NPs or PPs (agentive arguments can show up as obliques after the other arguments appear.) The event expressed by the maṣdar and its arguments must be dynamic and indexed as such, but the index of the entire construction is stative. Stative events are coerced into a dynamic reading, and both states and achievements are coerced so that they have a medial phase with two transitional points on each side. The frames of the event will include the onset, medial-rest, and offset-rest frames, which is the basic temporal representation of activities (note the index of the masdar reflects that). The index for that medialrest frame shows up in the frames of the construction, where it is the argument of the state frame. This is done to reflect the fact that the middle phase of the event is what is conveyed by the construction. That medial phase index is also an argument of the include frame to show that the reference time of the event is included in the expressed state. This representation is based on the English progressive in (Michaelis, 2011, p. 1380).


Figure 6.1 The progressive yatimmu construction
For perfect yatimmu Figure (6.2), the semantic frames of the construction select for the final rest-frame of the verbal noun's semantic frames-instead of the medial-frame in the verbal noun's for the progressive reading. This shows that the resultant construction is one that
highlights a state that comes into being after the end of the event.


Figure 6.2 The Perfect yatimmu construction

\section*{8. Conclusion}

This chapter looks at an idiomatic periphrastic, valence decreasing stativizing construction that seems to be popular in news stories. This is because it is an agentless construction that informs us of an event in progress, or the state after one is completed. The yatimmu construction is ambiguous. A perfect reading surfaces when the narrative requires a focus on the post-event state from an eventive representation, rather than on an internal state of an event. This construction is also a good example of how the mother feature cannot be predicted from the daughter features; a progressive reading would not be expected from a verb glossed as 'be complete.' With that said, let us look at further possibilities for this type of analysis.

\section*{Chapter 7: Conclusion}

\section*{1. Summary of the Findings in the dissertation}

The constructions, their functions, and types are summarized in Table (7.1). The types are based on the selection-based model of aspect assumed here.

Table 7.1 The constructions and their functions in the data
\begin{tabular}{|c|c|c|}
\hline Construction & Stative Function & Stative Construction Type \\
\hline P-stem & Unspecified (progressive, habitual, resultative, etc.) & Concord/type-selector \\
\hline Participles & AP: Progressive and perfect PaP: Perfect & Stativizer \\
\hline NVPs & Property predication Existence Possession Deontic modality & Concord/type-selector \\
\hline Käna & \begin{tabular}{l}
Anterior states Irrealis states \\
Periphrastic perfect states Periphrastic progressive states Syntactic copula
\end{tabular} & Stativizer
\(\&\)
Concord/type-selector \\
\hline Yatimmu & Unsubordination: progressive states Subordination: perfect states & Stativizer \\
\hline
\end{tabular}

From the table above, we see a variety in the types of constructions we have, and we observe the different ways these constructions select their states, keeping in mind that \(k \bar{a} n a\) is both a selector and a shifter.

Let us now examine the relative frequencies of these constructions in the data.
Determining the more frequent stative constructions helps complete the picture of how these constructions interact with each other in the data. Frequency patterns reveal which constructions are favored and which are not. We can extrapolate as to why this is. Table (7.2) shows the token count for all the constructions examined in this dissertation, and compares the construction's token counts to the total token count of all the constructions that are covered in this thesis. It is
not surprising that the larger of the two corpora, the print corpus ( 400 K words), represents \(73 \%\) of all the tokens of the various constructions. Correspondingly, most of the tokens of each of the constructions are found in the print corpus, with the exception of the kāna construction. The majority of the \(k \bar{a} n a\) construction's tokens, \(83 \%\), are found in the smaller broadcast data ( 80 K words). I have already speculated that this might be the case because of the more frequent topic shifts involved in on-air interviews, discussions, and oral news reports, which require the (re-)introduction and (re-)establishment of a topic and its temporal reference.

Table 7.2 Frequency of the constructions within the data
\begin{tabular}{|c|c|c|c|}
\hline Constructions & Print & Broadcast & Total \\
\hline P-stem & \[
\begin{gathered}
14,989(80 \% \text { of total p- } \\
\text { stems) }
\end{gathered}
\] & \[
\begin{gathered}
3,822(20 \% \text { of total p- } \\
\text { stems })
\end{gathered}
\] & 18,811 (73.5\%) \\
\hline Participles & 2,215 (85\% of total participles) & 397 (15\% of total participles) & 2,612 (10\%) \\
\hline NVPs & 866 (84\% of total NVPs) & 169 (16\% of total NVPs) & 1,035 (4\%) \\
\hline Kāna & 499 (17\% of total kāna constructions) & 2,489 (83\% of total kāna constructions) & 2,988 (12\%) \\
\hline Yatimmu & 78 (61\% of total yatimmu constructions) & 49 (39\% of total yatimmu constructions) & 127 (0.5\%) \\
\hline Totals & 18,647 (73\%) & 6,926 (27\%) & 25,573 \\
\hline
\end{tabular}

The p-stem construction is by far the most frequent stative construction, as it represents \(73.5 \%\) of all constructions' token counts. Unsurprisingly, the yatimmu construction represents the least frequent construction. However, the second least frequent construction is the NVP. This might reflect the fact that it is also the most semantically and syntactically restricted. As a matrix clause's predicate, it requires a verb if the state it conveys does not overlap S. In addition to that,
many syntactic subordinators require a verbal complement, which means the NVPs must be headed by an auxiliary. The participles, in their verbal functions, and the \(k \bar{a} n a\) construction represent \(10 \%\) and \(12 \%\) of the total counts, respectively. It is noteworthy that despite the fact that non-verbal word classes can predicate, simple and the compound verbal constructions reflect a cumulative percentage total of \(85.5 \%\) of all the token counts in these constructions. Verbal predications still comprise the vast majority of stative predications in the corpora.

Table (7.3) below, looks at the relative frequencies of the target constructions in each corpus. In the print corpus, the p-stem accounts for \(80 \%\) of stative-predication tokens. The other tokens represent account for \(20 \%\) of the stative constructions in that corpus-with the participles accounting for \(12 \%\) of that remaining \(20 \%\). The relative prevalences of the stative constructions in the broadcast data, however, are different. Verbally headed tokens represent a total of \(91 \%\) of all the broadcast stative constructions: \(55 \%\) are p-stem, and \(36 \%\) are \(k \bar{a} n a\)-headed constructions. The other constructions, in total, make up less than \(10 \%\) of the stative constructions in the broadcast data. Based on these numbers, it appears that verbs, whether simple or compound, are clearly the favored constructions to convey stative situations in the corpora. The p-stems are unmarked for the types of states they convey (i.e., they can convey habitual situations, progressive situations, etc.) It is obvious they would be chosen for these types of states. The only restriction placed upon them is in non-dynamic property predications, possessive constructions, and certain deontic constructions and existential constructions.

Table 7.3 Percentage of each corpus' construction
\begin{tabular}{|c|c|c|}
\hline Constructions & Print & Broadcast \\
\hline P-stem & \(80 \%\) & \(55 \%\) \\
\hline Participles & \(12 \%\) & \(6 \%\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Constructions & Print & Broadcast \\
\hline NVPs & \(5 \%\) & \(2 \%\) \\
\hline Kāna & \(2.7 \%\) & \(36 \%\) \\
\hline Yatimmu & \(0.4 \%\) & \(0.7 \%\) \\
\hline Totals & 18,647 & 6,926 \\
\hline
\end{tabular}

This dissertation has shown that Arabic has a variety of ways to express stativity. Some are more expected, such as verbal constructions, while others might not be as common, like the participles and the NVPs. Further investigation has shown that not all stative predicates are identical, so to speak, and distinct restrictions in meaning, function, and usage become apparent. Some constructions are type shifters, like the participles and the yatimmu constructions. Other constructions are type-selectors, like the p-stem and NVP constructions. And then there is a construction that are ambiguous in that respect: the \(k \bar{a} n a\) construction functions inflectionally with NVPs and is a state selector. However, with s-stem complements it acts in a similar fashion to English's Perfect constructions: a type-shifter. This type-shifting/selecting analysis has proven helpful in explaining the different functions of these constructions and in explaining some of the ambiguities associated with them.

This dissertation also emphasizes that overlapping R—not S—is a key feature in understanding the duties of these constructions. This type of analysis explains their "main" and "peripheral" functions, i.e., their functions as matrix clauses and their functions in clauses where they are subordinated, either syntactically or semantically. It has also shown that subordination is where we frequently find some of these constructions, especially the participles (above \(90 \%\) of the total construction are subordinated), NVPs (above 60\%), and the yatimmu construction
(above \(80 \%\) ). The fact that these constructions overlap R and that they are frequently subordinated is not coincidental. The former is a functional extension of the latter.

This thesis has shown that these construction can convey more than temporality. The yatimти construction, for example, illustrates constructional polysemy. The yatimmu construction is a periphrastic valence-reducer that cannot include a volitional subject. An s-steminflected \(k \bar{a} n a\) generally expresses anterior states, but a more limited usage of the \(k \bar{a} n a\) conveys an unrealized state. The multi-functional participles have two stative functions with clear syntactic markers when the direct object is realized. Without these syntactic markers, context is the only way to disambiguate which stative usage is meant. Thus, even though these constructions share a stative predicational ability, and that ability is only shared to a particular extent, they are distinct constructions based on their overall semantic functions, as well as their morphosyntactic features.

This thesis also shows that identifying Arabic's temporal system as either tense-based or aspectual-based overlooks the complex interaction between these forms of time reference in Arabic. Even though the majority of these constructions are aspectual, there are intersections with tense constructions. For example, the future particles that combine with the p-stem to express a situation posterior to S . Also, an s-stemmed \(k \bar{a} n a\) conveys an unbounded state that overlaps an anterior reference time. It is unbounded because you can felicitously extend both ways, as evidenced by its extension to the moment of utterance. Both of these tense-expressing constructions interact with aspectually-based constructions continuously in narratives.

These constructional features are captured and described in SBCG representations. This dissertation has applied the SBCG analysis to Arabic. This application was not without its
challenges. Certain features in SBCG do not reflect Arabic grammar. For example, the feature structure for Independent Clause demands a finite verb, which we know is not necessary in Arabic. Despite these smaller challenges, the use of SBCG enabled us to focus on the function of stativity, regardless of its formal expression. A selection-based aspectual analysis was incredibly useful in this thesis. However, not all the constructions neatly fit into the two categories, as Table (7.1) illustrates with \(k \bar{a} n a\). Another challenge I had with the thesis stemmed from the register of the language. The data guided my own intuitions with regards to these constructions. Using the circumstantial construction as a stative test was a direct result of the frequency in which the participles were nested in these constructions in the data. This is one benefit of a corpus-based investigation.

\section*{2. Contributions}

Verbs are the sovereigns of predication, so it is not unreasonable that they are the focus of investigation when it comes to predicational properties. However, as we know, languages do not all function identically. This dissertation is an example of that. Arabic has a dedicated stative verbal form, but it also expresses other types of stativity with different predicates. These stative predicates are, generally, more semantically and syntactically restricted than the p-stem. Indeed, if we were to solely focus on the verbal qualities of the p-stem, we would see some uncharacteristic usages, like its function as a verbal/predicational complement -a spot that English and even Modern Hebrew allocate to infinitives (the spoken dialects have further modified this particular usage, and have done away with any subordinating conjunction in between the matrix clause and its verbal complement). Hence, this examination into stative predicates works to include different types of predicates in aspectual analyses.

Historically, grammatical analyses of the Arabic verbal system have focused on the simple verb. Recently, that has begun to change with scholars including compound verbal predicates in their descriptions, e.g., Holes (2004) and Ryding (2005). Further work on the compound verbal system needs to be done. The nuances of modality found in a subset of the sstemmed auxiliary combined with a p-stem complement, is an example of what is yet to be fully examined. I know that Modern Hebrew has a compound tense using its auxiliary hāyāh. It would be interesting to do a typological survey of the Semitic, and even larger Afro-Asiatic languages, to see where they converge and diverge, and how it all fits in with larger typological surveys.

This semantic level of analysis would also facilitate information extraction and natural language processing. A detailed descriptive analysis in how linguistic structures are coded and structured to create meaning aids in the efficacy of machine learning and translation. These types of representation can be used to enrich semantic representations and events' temporal sequencing -especially in, but not restricted to, narratives. This is also true in detailed analyses around of the NVP and its subtypes, where, in addition to subject attribution, possession, obligation, and existential meanings are also conveyed. In addition, focusing attention on the participles’ predicational usages, e.g., when looking at those usages where it supplants the p-stem as a progressive, adds a more complete layer of meaning.

\section*{3. Future work}

This dissertation is far from complete in its look at stative constructions of Arabic. The sstem form of the verb has its own stative functions, as in the following examples:
1.
qultu la-hu 'anna-n̄̄ fahimtu
say.s-stem to-him sub.-me understand.s-stem
'I told him that I understand/have understood.'
2.
la-qad \(\quad\) ju'tu
QAD \(\quad\) hunger.s-stem
'I am hungry (lit: I have hungered.)'

The resultative usages of the s-stem, and the passive verbal forms, would benefit from a corpus study, and the type of aspectual analysis that explains its present-time reporting usages.

An aspectual analysis of the verb \(\underset{\sim}{\text { ttamma in all its inflections should also be undertaken, }}\) not just focusing on the p-stem inflection. Frequently associated with tamma is jarā 'to run/ do’—especially its AP جار) \(j \bar{a} r i(y)\). Both of these constructions are considered periphrastic passives that are associated with the news genre but also, more increasingly, with technology, as well. Analyzing how the shift in genres, if any, might be affecting or changing these constructions would also be of interest.

In addition, an analysis of the particle \(\begin{gathered}\text { قَ } \\ \text { qad } \\ \text { using SBCG would be beneficial. This is a }\end{gathered}\) perfect example of a construction that cannot be anticipated based on its parts. It is a verbal particle and cannot be separated from the verb that it precedes. Traditionally, grammarians have described it as a type of epistemic or evidential marker, with its meaning dependent on its complement. Combined with an s-stem complement, it is said to verify the situation described in the verb, see (2) above, which is why I translate it as a perfect marker in this dissertation. That confirmation gives it present time relevance. However, when paired with a p-stem, it has the opposite meaning: it conveys doubt or potentiality, as examples in chapter (5) have shown. It also seems to have pragmatic usages in the compound verbs, as that chapter alluded to. Finally, it
seems to be the origin of the hij \(\bar{a} z \bar{\imath}\) dialect's particle قيد/گيد gìd, which is used with the s-stem to show a perfect relationship. This usage resembles that of already in English, in which "already not only encodes the existence of a given state of affairs at the reference time, but also presupposes that the inception of this state is anterior to an interval of a specific time" (Michaelis, 1996, p. 485).

The aspectual treatment offered here, while based on MSA, can be applied to a comparative study of the dialects of Arabic. For example, based on the description of the pstem's functions, it should not be surprising that dialects use this very form in their respective progressive constructions. An analysis based on aspectual selection can expose how the grammatical markers constrain the lexical aspect of the verbs with which they combine. A number of dialects have innovated distinct progressive forms, and it would be worthwhile to investigate how these interact with the p-stem encoding option across dialects. Some dialects have a dedicated particle that conveys an event as ongoing, (e.g., the Levantine’s 'amm (Ryding \& Zaiback, 2004, p. 117), Northern Iraq and Anatolia’s \(k \bar{u}-(C\). Holes \& de Jong, 2013, p. 112)), while other dialects use periphrastic constructions (e.g., the Gulf’s قاعد/گاعد gà 'id (C. Holes, 1990, p. 198) / جالس jālis, both of which are APs of the verb 'sit', or the Tunisian dialect's usage of preverbal \(q \bar{a}\) 'id or post-verbal \({ }^{\text {عمّال } f i}\) (Saddour, 2009), and the Egyptian dialect's 'ammāl (Badawi \& Hinds, 1986, p. 602), which seems to be an "exaggeration participle" (Hawwari et al., 2011, p. 46)—an adjectival participle denoting a repeated state or event-derived from the root 'to work'). A 'function first' approach, based on the supposition that all languages and dialects stativize, would allow us to compare the dialects with a focus on the reliance that each one places on coercion versus overt means of stative type-shifting.

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\%D8\%B7\%D8\%A7\%D8\%A6\%D8\%B1\%D8\%A7\%D8\%AA-\%D9\%84\%D9\%84\%D8\%AD
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[^0]:    ${ }^{1}$ A third verbal form exists, الفعل الأمر al-fi 'lu l-'amru 'the imperative/command verb' exists, but it is not usually included as its function is pretty restricted comparatively.

[^1]:    ${ }^{2}$ It is important to note that the Arabic terms do not completely line up with their English counterparts. For one, the first two nominal cases share their labels with the first two verbal moods. That is because the phonological markers (for a class of nouns and verbs) is identical. Another reason these labels are not identical to the English terms I have used is exemplified by the fact that majrūr is designated as 'genitive' but is also the case assigned to the objects of prepositions, or the term translated as 'jussive' is applied to more than commands in Arabic.

[^2]:    ${ }^{3}$ There is a subgroup of inflected p-stem verbs (the dual: second and third person, the masculine plural: second and third person, and the second person female singular) whose subjunctive and jussive marker is the deletion of the final $/ \mathrm{n} /$. In addition, some verbs with vowels in the root have additional markers to show mood.

[^3]:    ${ }^{4}$ See Bahloul (2008) on negation in general and the merger of the present perfect negation using ${ }^{\mu}$ lamm $\bar{a}$ and the simple past negation using لم lam into the latter.

[^4]:    ${ }^{5}$ Literally: 'the doer's noun/nominal' (though, in grammar, فاعل fa 'il is the term used for 'subject', so 'the subject's noun' is also an available translation). Wehr's dictionary translates ism al-fá 'il as "nomen agentis, active participle" (1976, p. 427), while Baalbaki's al-Mawrid dictionary gives us "active participle, nomen agentis, present participle, deverbative" (1995, p. 108).
    ${ }^{6}$ Literally: 'the done's noun/nominal' (again, (ب) مفعول maf" 'ull (bi-hi) 'done (to him/it)', is grammatically used for an 'object'; thus making 'the object's noun' a possible translation, too). Wehr (ibid., p.721) and Baalbaki (ibid., p.108) refer to it as "nomen patientis, passive participles".

[^5]:    ${ }^{7}$ For a detailed look at the different functions the participles perform in Arabic, see Ryding (2005, pp. 103-118).

[^6]:    ${ }^{8}$ For a thorough account on the syntactic restrictions that distinguish a predicate adjectival usage from a verbal usage that assigns case, see $\mathrm{Ni}^{\prime}$ mah (1973, pp. 42-43) for the AP, and (ibid., pp. 45-48) for the PaP.

[^7]:    9"فالكلم: اسم وفحل وحرف."

[^8]:    ${ }^{10}$ The multi-functionality of these participles seems to be shared with other Semitic languages. For example, from a morphological perspective, Arabic's AP has cognates in a number of its sister languages. In his discussion regarding the AP, Wright (2002) mentions the existence of cognates to the AP in Ethiopic, Assyrian, Aramaic, and Hebrew (p.196-8); he has less to say about the PaP and mentions, in passing, that Hebrew and Arabic use different forms for their equivalent passive participles (p. 133). The predicative function of the participle is not restricted to Arabic. In their analysis of Biblical Hebrew, Dyk and Talstra (1999) reveal the complexities of participles and their predicative nature (i.e., whether or not they should be classified as nouns or as verbs), when they state:

    The crux of the matter is, of course, the double nature of the participle: its full verbal potential encased within its nominal form with full nominal potential. It is undeniable that the participle later came to be used as a part of the verbal system and that the start of this development is discernible within the Hebrew Bible; nonetheless, it should be remembered that a participle never became only a verb but, rather, preserved its double potential (p.165).
    This statement can also be applied to the use of participles in Arabic today. The participial predicative abilities have helped it become Modern Hebrew's present tense form, as Shlonsky (1997) states:

    Alongside the prefixal and suffixal conjugations (future and past, respectively ...), a third verbal form called Benoni 'intermediate', is employed for the expression of the present tense. The Benoni is found across the Semitic languages. In Arabic, its primary role is that of an active participle, and although it does occur as a present tense form with some verbs and in some contexts, it is in Hebrew that this "participial" form serves as the unmarked and productive form of the present tense (p.11-12).

[^9]:    ${ }^{11}$ For a concise description around this issue and the types of nominal clauses traditionally dealt with in Arabic, see ("Nominal Clauses," 2011; "Verbal Clause," 2011).

[^10]:    ${ }^{12}$ In classical Arabic, there have been discussions about rare usages of what is called كان الز ائدة kāna z$z \bar{a}$ 'idatu 'superfluous/redundant kāna'. This seems to be a syntactically restrictive case, with most evidence from poetry, in which $k \bar{a} n a$ is mostly inflected in the s-stem and does not assign case to its arguments. For further discussion, see Dukhayyil (2004) and Badawi \& Abdel Haleem (2013). This usage has lead some scholars to hypothetically pose a time in Arabic's development when $k \bar{a} n a$ may have always been obligatory (al-Maxzūmī, 1986, p. 32). I find this less likely since sister languages, as well as other unrelated languages, also contain similar constructions.
    ${ }^{13}$ Of course, the implications are more than mere nomenclature. Grammatical analyses of these types of clauses range from positing an underlying or deleted copula (as Sinclair (1999) does for Biblical Hebrew), to a simple analysis that does not posit an underlying verb, like that of Aoun, Choueiri \& Benmamoun (2010) and Al-Horais (2006). See (Bahloul, 2011c) for a synopsis.

[^11]:    ${ }^{14}$ Grammarians have grappled with the nature of this pronoun and its function, specifically if it is to be analyzed as a copula or not. For Biblical Hebrew, review (Muraoka, 1999; Woodard Jr., 2009; Zewi, 1999) for Syriac (Al-Kfarnissy, 2005, pp. 324-330; Nöldeke, 1904, pp. 245-249). For a historical analysis that touches upon the different interpretations of this pleonastic pronoun within the Arabic grammatical system, read Peled (2009, pp. 126-134).
    ${ }^{15}$ Keeping in mind that Eid's work was specific for the Cairene dialect of Arabic.

[^12]:    ${ }^{16}$ As it happens, the Treebank maintains two constituents for the construction by mostly placing this pronoun within the syntactic subject's phrase. I found a singular instance in which it was placed within the predicate phrase. This is a relatively small number of property predicational clauses in total in the data. About 15 of these instances show up in the broadcast data, while 19 show up in the print data.

[^13]:    ${ }^{17}$ For further readings on the different possession constructions in Arabic, read "Prepositions," 2011; Shboul, 1983.
    ${ }^{18}$ For further discussions on nonverbal predications in Maltese, refer to (Borg, 1988; Fabri, 2009, pp. 44-52).

[^14]:    ${ }^{19}$ Of course there are other methods of relaying present uncertainty with NVPs without using a VP, e.g.:

    | rubba-mā | hiya | $n \bar{a}$ imatun/ | tabībatun/ | $\boldsymbol{f i}$ | amali |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | MOD. | she | sleep.AP.NO | /doctor.NOM/ | in |  |

    decoupled $(4,8)$. In sum, auxiliary kāna construction appears to primarily convey non-present states, counterfactual states, and to serve as a marker of syntactic subordination.

    The remainder of this chapter is organized as follows: Section (2) focuses on the auxiliary head of the construction. This brief overview will include a look into the larger group that kāna belongs to and considers their "complete" and "deficient" usages, and how these usages have been treated by different grammarians over time. Continuing this look into kāna, section (2.1) examines the "deficient" usage of kāna by questioning whether this is an auxiliary, a copula, or both. Following this, section (3) asks whether these predicates (with a particular focus on verbal complements) do in fact comprise a single predication, or whether, alternatively, the construction has the characteristics of a serial verb type construction. Section (4) looks at the functions, distribution, and the syntactic structure of this constructional group. Section (5) analyses the functions of the construction, focusing in turn on each sub-type. Section (5.1) examines the types headed by an s-stem inflected kāna, with (5.1.1) devoted to s-stem complements and (5.1.2) to p-stems. Section (5.2) then looks at p-stem inflected $k \bar{a} n a$ headed constructions, with (5.2.1) deals with s-stems complements and (5.2.2) deals with p-stem complements. Finally, section (5.3) looks at NVP complements. Section (6) applies the now familiar stativity tests to this constructional group. Section (7) analyses each subtype's formal representation in SBCG, highlighting the fact that each subtype has its own semantic and syntactic function. Section (8) concludes the chapter by relating this family of constructions to the range of expressions of stative meanings described in this thesis.

    ## 2. A brief discussion of $\boldsymbol{k} \bar{a} \boldsymbol{n} a$

    This section introduces the reader to the head of this construction: kāna. Kāna is a verb comprising of the root $\sqrt{ }$ k.w.n, which conveys a core semantic value of 'existence, occurrence, being' (as in, e.g., its maṣdar 'verbal noun' كون kawn 'universe, existence, being, etc.', the noun كيان kayān 'entity, structure, essence, etc.'). The glide in the middle is not realized in all its inflections, as in the verb's name-taken from the third person singular masculine form: kāna is also literally 'he/it existed/happened/was'. Its auxiliary function is highlighted in dictionary entries. For example, al-Mawrid (Baalbaki, 1995, p. 884) and A Dictionary of Modern Written Arabic (Wehr, 1976, p. 847) include an entry for the "full, lexical" verb itself, as well as a few other entries as examples of its different auxiliary usages based on its complement.

    Traditionally, Arabic grammarians have classified $k \bar{a} n a$ as part of a group of auxiliary verbs known as كان وأخواتها kāna wa-'axawātuhā ‘kāna and her sisters' (a special group of verbs as evidenced by their classifications within Arabic modals ("Modal Verbs," 2011) or within auxiliaries and pseudo-auxiliaries (Messaoudi, 1985, pp. 156-158)). The verbs in this class convey some form of temporality: placing a situation in a particular time or in an alternate/ potential reality (كان kāna), indicating that a previous situation has transformed into a new one (e.g., $ص$ ṣāra 'to become'), conveying that a prior situation continues up until and includes the moment of speech (e.g., ما زال mā zāla 'to continue until speech time' also used for 'still'), or delimiting a time when a situation holds (ما دام mā dāma 'as long as / while'). Its lone cognate form ليس laysa is used to negate a clause, which some see as the antonym of kāna, because it denies existence (Wright et al., 2005, p. 102), thus relating laysa to the group semantically and
    syntactically. These verbs vary in their inflectional behavior, but $k \bar{a} n a$ is one of the verbs that has full inflectional abilities: s-stem, p-stem, and imperative.

    Functionally, this group of verbs does not predicate a property, although they are bivalent: they assign their subject (اسم ism 'noun/nominal') nominative case and assign their verbal complements (خبر xabar 'report/predicate’) accusative case when nominal-as examples (2), (6), (12), and (13) illustrate. Note the terminology; unlike other verbs that take a $f \bar{a}$ 'il 'subject (lit.: doer)' and an optional سفعول به maf' $\overline{4} l$ bi-hi 'object (lit.: done to him/it)' or two, this group of verbs requires both a 'noun' and a 'predicate'. This nomenclature is indicative of $k \bar{a} n a$ and its sisters' special (i.e., not fully predicative) function. Nevertheless, a portion of the verbs in this group, including kāna, have two functions, فعل تامٌ íl t tāmm 'complete or sufficient verb' and فعل ناقص fi'l nāqiṣ 'incomplete or defective verb' ${ }^{20}$. Of this distinction in function, specifically as it relates to kāna, Wright et al. state that the former is "called by grammarians كَانَ ألَّاقِصَةُة $k k \bar{a} n a n$ nāqiṣatu], the incomplete or defective, relative kāna, because it requires an attribute to complete the sense" plus "كَانَ ألْتَّامَّةُّ [kāna t-tāmmatu], the complete, absolute kāna, because it contains the attribute in itself and does not require any other" (2005, p. 100). Kāna's "complete" function is outside the scope of today's study, because it is a lexical verbal function and not an auxiliary, i.e., it is its own sufficient predicate meaning 'to exist/happen/occur', as the example below illustrates:
    14.

    |  |  |  | سأسعد |
    | :--- | :--- | :--- | :--- |
    | sa- 'as 'adu | 'in | kāna | l-farahu |
    | FUT.-be happy.p-stem | if | exist.s-stem | the-wedding.NOM |


    'I will be happy if the wedding occurs (lit.: occurred).'

    Hence, the latter function is a stand-alone predicate, while the former requires something else to complete the predication. Levin further explicates, "[ [] he distinction between these two kinds of $k \bar{a} n a$ originates in the grammarian's notion that most verb forms denote two things: occurrence of an act (= hadat) and time (= zamān)". He continues, "[t]he verb called kāna attāmma 'the complete $k \bar{a} n a$ ' is conceived of as a complete verb because it denotes both an act and time. In contrast, kāna an-nāqiṣa 'the incomplete $k \bar{a} n a$ ' is regarded as an incomplete verb because it does not denote an act but only time, thus lacking one of the elements expressed in most verb forms" (2011).

    Whether or not there is a relationship between these two functions of kāna has been a point of discussion. However, the majority of scholars seem to Imply that the auxiliary function, my term for what the grammarians label as 'incomplete', might have extended from its 'complete' function via semantic bleaching. As early as the 14th century C.E., Lisānu l- 'Arabi, a multi-volume dictionary, references another grammarian's comment that this group of verbs are stripped of event-meaning ${ }^{21}$ (Ibn Manzūur, 1999, p. 195). And in his discussion of the auxiliary $k \bar{a} n a$, Peled recounts a 7th century analysis by $\mathrm{Ibn}{ }^{\prime} \mathrm{Ab}^{\overline{1}} 1-\mathrm{Rab}^{-1}$, who himself is responding to a claim by the grammarian al-Zajjājī. It appears the latter categorized the auxiliary kāna and its sisters not as verbs, but as hurūf-lit. 'letter (of the alphabet)', and also 'particle', but "[n]o attempt was made by him to explain this categorization" (2009, p. 200). Ibn 'Abī l-Rabī' critiques al-Zajjājī's claim by first stating that the latter's use of harf was ambiguous, as he had also used it to simply mean 'word'-thus, removing this group from their verbal category. Ibn

    $$
    21 \text { ״"واعلم أنه يلحق بباب كان وأخو اتها كل فعل سُلِب الدلالة على الحدث"، }
    $$

    'Abī l-Rabī's supports this non-verbal categorization by looking at functional differences. Transitive verbs, he says, can still convey a meaning without their "accusative complement", whereas these verbs cannot. In addition, other verbs allow an absolute accusative object formed out of the maṣdar, while the auxiliary forms of these verbs do not, "which shows that $k \bar{a} n a$ is not intended to denote an event (hadat ) but only time" (p. 200). This discussion, early as it was, shows us that grammarians have been grappling with what is essentially a particular semantically bleached function of this verb with its own complement restrictions.

    This extension of meaning has been analyzed in a multitude of ways. For example, in his discussion of semantic bleaching in general Esseesy (2011) links other usages, such as "remoteness in propositional meaning", to what he calls its "pastness" meaning using the following example, which I have reprinted below:
    15.
    لِو كنت في مكانك
    law kuntu fi makāni-ki
    if be.s-stem in place-your 'If I were in your place.'

    In his analysis of the above clause, Esseesy states, "As an auxiliary, kāna has temporal meaning, namely pastness; in example [(15)], pastness in temporal meaning was extended to include remoteness of the proposition and possible exclusion from occurring, counterfactuality, and nonattainment of the condition expressed in the clause" (ibid., para. 12). What is missing from the analysis, especially as it pertains to (15), is the function of the conditional particle لو law 'if', which I think combines with $k \bar{a} n a+$ another predicate to create this particular counterfactual clause.

    To summarize then, there exists multiple usages for kāna. I am specifically investigating those usages in which it does not predicate and is restricted to temporality, irrealis, or syntactically copular functions for NVPs, and where it co-creates predication in combination with another lexical item to form stative propositions.

    ### 2.1 Copula, auxiliary, a combination, or something else? ${ }^{22}$

    Reviewing some of the clauses used as examples earlier, we see that "deficient" kāna can translate into English as a copular verb (albeit a part-time one ${ }^{23}$ ), as it is morphologically a verb that links the subject to nonverbal predicates, but only in tenses not the present $(2,3,6,7)$, or present irrealis states (9), or NVPs that are syntactically complements of other verbs $(12,13)$. However, it is an unusual copula in that it also assigns its nominal predicate accusative case (2,6,12,13). Likewise, $k \bar{a} n a$ 's English translation can fulfill the role of an auxiliary verb $(1,4,5,8,9)$. After all, $k \bar{a} n a$ falls into Payne's category of auxiliary verbs; it is a verb due to language-specific, in this case Arabic's own, morphosyntactic patterns. And it is categorized as an auxiliary because, like auxiliary verbs in other languages, "they are auxiliary in that they do not embody the major conceptual relation, state, or activity expressed by the clause. They are often semantically "empty" (e.g., do in English He does go to school), or they express "auxiliary" information such as tense, aspect, or mode, e.g., can and hoefta in English" (Payne, 1997, p. 84).

    In view of auxiliary $k \bar{a} n a$ 's multiple functions, some scholars have developed further classifications for $k \bar{a} n a$. Messaoudi, for example, identifies three functions for $k \bar{a} n a$ : an autonomous verb (i.e., its "complete" usage), a copula, and an auxiliary (1985, p. 174), and


    scholars have dedicated analyses to kāna's copular usage (Bahloul, 2011b). However, based on the fact that copula and auxiliary classifications are compatible, I will conflate $k \bar{a} n a$ 's auxiliary and copular functions and simply refer to both as auxiliary. The question now becomes, does the $k a ̄ n a$ construction express a single predicate or some other type of predicational grouping, e.g., conjunction?

    ## 3. Is it a single predicational construction or not?

    Most scholars treat kāna constructions as expressing a unitary predicate (Badawi et al., 2013, pp. 367-371; Bahloul, 2008, pp. 157-166; Fehri, 1993, pp. 51-53; 2012, pp. 94-99; Fischer, 2006, pp. 107-108; Goldenberg, 2013, pp. 205-211; Haak, 2011; Hassān, 1994; Clive Holes, 2004, pp. 232-238; "Māḍī and Muḍāri'," 2011; Messaoudi, 1985, pp. 173-189; Peled, 2009, pp. 187-209; Ryding, 2005, pp. 446-449). Not all scholars adopt this perspective. Larcher (2003), for example, argues against the view that $k \bar{a} n a$ is an auxiliary verb ${ }^{24}$. Instead, he claims it is either a temporal operator or a mood marker. He supports this position with examples like the following:

    ## 16.

    

    Larcher's French translation: "et l'on m'avait déjà dit auparavant à ce sujet: 'il..."" (p. 143). The author's English translation of the original Arabic: 'And I was (in a state of) having been said to me that matter, prior, that...,

    Larcher points out that $k \bar{a} n a$ and its complement have distinct inflectional properties in (16): the first verb is inflected for a first person singular subject, and the second verb is passive and marked for a third person masculine singular subject. The perfect reading of 'having been


    told' is conveyed by the multi-functional particle $q a d+$ the s-stem verb; combining $q a d$ with a bare s-stem verb produces a (usually present) perfect reading. Accordingly, Larcher concludes that this clause's direct translation is not, 'I had already been told', but rather, 'I found of myself that someone had told me' ${ }^{25}$. This is clearly not an auxiliary function because each verb has its distinct subject. Kāna's subject is the speaker, and the verb 'say' is marked in the passive (and thus functions as an evidential marker to index hearsay), with the subordinate clause as its subject. The recipient/audience of the lexical verb, which coincides with the subject of the auxiliary, is marked obliquely. This in itself does not vitiate an auxiliary analysis of kāna.

    Larcher goes on to claim that even when the two verbs are identically inflected for person, number, and gender, $k \bar{a} n a$ is still not an auxiliary, as exemplified by his example (8) which I repeat here as (17):
    17.
    كان من أهل القاهرة قد جاء إلى الإقليم زائر الصـاحبه

    ## kāna

    min
    'ahli l-qāhirati
    qad $j \vec{a} \cdot a$
    be.s-stem.3.msc.sn from people the-C. QAD come.s-stem.3.msc.sn
    'ilā l-'iqlīmi zā'iran li-ṣāhibi-hi
    to the-province visit.AP to-friend-his
    French translation: "Il était du Caire, venu en province rendre visite à son ami" (p. 144).
    My translation: 'He was from Cairo; he has come to the province as a visitor to his friend.'
    Larcher, again correctly, observes that the verb $j \bar{a}$ ' $a$ 'come' is not a complement of $k \bar{a} n a$ in the above sentence, but is instead its own clause. He supports this claim by indicating that removal of the kāna clause still leaves us with a perfect reading in a complete clause (ibid.,
    p. 144). Based on these examples, Larcher concludes that kāna does not head an auxiliary


    complex predicate. Instead, he claims auxiliary readings are an illusionary artifact of the French translations, but not a true reflection of the original Arabic ${ }^{26}$.

    Larcher's observation about sentence (17) appears valid, inasmuch as (17) expresses two separate propositions-even if the two finite verbs refer to the same subject. For context, I reproduce the source of Larcher's example below, highlighting the context:
    18. (Husayn, 1943, p. 9)

    |  |  |  | الاقليم زائرا لصا | لقاهرة قف جاء الـى | كان من |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | $\underline{\text { lam }}$ | yakun | $\underline{\text { min }}$ | 'ahli l-'iqlīmi | wa-'inna-mā | $k a ̄ n a$ | min 'ahli |
    | neg. | be.p-stem.juss from |  | people the-province | instead | be.s-stem | from people |
    |  | l-qāhirati | qad | $j \bar{a}^{\prime} \boldsymbol{a}$ a ${ }^{\text {ala }}$ | l-'iqlīmi | zäiran | li-ṣăhibi-hi |
    |  | the-C. | QAD | come.s-stem to | the-province | visit.AP | to-friend-his |

    'He was not from the province; instead he was from Cairo, [and] he has come to province visiting his friend.'

    As (18) makes evident, there are in fact two independent propositions here: 'but he is from Cairo' (i.e., the predicational unit includes the PP) and 'he has come to the province'. Sentence (18) is quite distinct in both structure and meaning from the introductory examples used to exemplify the auxiliary use of $k \bar{a} n a(1),(4-5)$, and (8-9). Sentence (18) is in fact also distinct from (16). I propose that (17-18) exemplify a non-auxiliary use of $k \bar{a} n a$ akin to the use of the English copula to express provenance (e.g., He was from Cairo). The existence of nonauxiliary uses has already been acknowledged. In other words, examples like (16-19) do not ultimately bear on the appropriate analysis of those cases in which $k \bar{a} n a$ does not constitute a distinct predication. Let us now turn to the data and how this construction surfaces in the media genre.


    ## 4. Data

    This section investigates how auxiliary $k \bar{a} n a$ constructions surface and are distributed in the newsprint and news broadcast data I have been examining throughout this dissertation. The Treebank guidelines (Maamouri et al., 2011, pp. 243-247) lists kāna under non-eventive verbs and syntactically divides its 'deficient' function into main and auxiliary verbs. The main-verb usage is that in which the verb takes a non-verbal predicate and its complement, while the auxiliary usage is one where $k \bar{a} n a$ 's complement is a VP. Both usages fall under the rubric of this chapter. For the extraction process, the focus was on the lexeme, if that information was available in the TB. If not, the different forms the verb takes, e.g., person inflection or voweldeletion in the jussive, were searched for. In an attempt to weed out any usages of a fully lexical $k \bar{a} n a$, I used the APB's frames as a guide; any token marked by the frame set 'existential' was excluded, as this frame includes only one argument for the verb: the subject. Once that was decided, the groupings were based on the following criteria: corpus type, inflection of the auxiliary, type of complement (verb or otherwise), and inflection of the complementary verb. Then, I manually coded-when possible-the data for a number of things: mood markings on the auxiliary, instantiation and position of subject, subject inflection on auxiliary and complementary verb, syntactic and/or semantic subordination, and an intervening قد qad particle. Let us look at the results.

    Table (5.1) displays raw numbers and percentages of the various subtypes of this construction, with totals at either end of the columns and rows.

    Table 5.1 The distribution of the auxiliary kāna construction according to complement type and auxiliary inflection.

    | Data type | $k a ̄ n a$ inflection | $\begin{gathered} \text { s-stem } \\ \text { complement } \\ (\%) \end{gathered}$ | $\begin{gathered} \text { p-stem } \\ \text { complement } \\ (\%) \end{gathered}$ | $\begin{aligned} & \text { NVP } \\ & \text { complement } \\ & (\%) \end{aligned}$ | Totals (\%) |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | Print | s-stem | $31(\sim 16)$ | 305 (~79.4) | 86 ( $\sim 3.6$ ) | 422 (~14.1) |
    |  | p-stem | 8 ( $\sim 4.1$ ) | 6 ( 1.6 ) | 63 ( 2.6) | 77 ( 2.6) |
    | Broadcast | s-stem | 117 ( $\sim 60.3$ ) | 45 (~11.7) | 1110 (~46.1) | 1272 (~42.6) |
    |  | p-stem | 38 (~19.6) | 28 (~7.3) | 1151 ( $\sim 47.8$ ) | 1217 ( $\sim 40.7$ ) |
    | Totals |  | 194 | 384 | 2410 | 2988 |

    The final, right-most column contains the total count for all the cells in each row, save for the bottom-most cell in that column, which is a total of the cells above it. The final, bottom row is a calculation of each of the cells directly above it, including the final column. Additionally, the percentages in parenthesis are by column (i.e., the bottom row's numbers account for $100 \%$ of their respective columns.)

    The auxiliary kāna construction is, by and large, a feature of the broadcast corpus, which accounts for about $83.3 \%$ of all these clauses. The print data, which is a much larger corpus, accounts for only about $16.7 \%$ of these types of clauses. Why would speech lend itself more readily to this type of construction than print? For some reason, this spoken genre strongly prefers these complex predicates than the written genre does. My only conjecture is that, as reporters cover the news or hold interviews, the need to reframe and re-anchor the event time is more pressing. Additionally, speech can be less linear in its trajectory, while a written article can, in theory at least, establish a time-anchor early in the story and use it as a focal point, establishing it as the main reference time that is turned to throughout the article. Spoken reports
    can function similarly, albeit lacking a visual anchor that the audience can access, but other forms of spoken news, like interviews for example, which include multiple interlocutors each with their own potential topical and temporal reference points, require a (re-)establishing of their reference times. However, since I do not have access to any context around the sentences or any sentences outside what has been extracted because the extraction only focused on the clause, this is all conjecture.

    As we can see, s-stem complements, in general, seem to be preferred in speech over print, with the pluperfect forms in the speech data accounting for over $60 \%$ of all the s-stem usages in the corpora. This, again, despite the fact that print media is a much larger corpus. The broadcast corpus also seems to overwhelmingly use NVP complements over the print media (taking almost $94 \%$ of NVP complements in both corpora), with an almost equal distribution across auxiliary inflections. Speech seems to prefer these states either placed in the past, future, irrealis, or in subordinated clauses. The p-stem complements are much better represented in the print data than the broadcast data ( $81 \%$ in total). It seems that past imperfective states have the lion's share of these. Let us take a look at how each subtype appears in the data.

    ### 4.1 Kāna $_{\text {s-stem }}+$ verb $_{s-s t e m}$

    The print data has revealed a total of 31 instances of this construction, and the broadcast data has 117 instances. As previously discussed, in order for this to be a single predicate, both verbs must refer the same subject, so one would assume $k \bar{a} n a$ and the lexical verb must match in their morphological subject inflections. However, the data shows otherwise; the two verbs do not need to match their subject inflections, especially if the subject is realized and comes after the initial auxiliary—but before the lexical verb. This is an artifact of subject agreement inflection
    rule with verbs in Arabic, in general; as Bahloul notes: "Subject agreement morphology on the verb is sensitive to the subject position in the sentence. As such, if the subject precedes the verb, all agreement morphemes (person, gender, and number) are realized on the verb. If the subject follows the verb, person and gender are realized, while number agreement is not observed" (2011a, para. 6). It makes sense then, that a medially realized subject would force all agreement on the subsequent lexical verb, but only partial agreement on the previous auxiliary verb, while a pre- or post-complex subject would influence these verbal inflections similarly, see Table (5.2). This, as we shall see, is a pattern across auxiliary kāna constructions.

    Table 5.2 Position, realization, and agreement of auxiliary(s-stem) +verb(s-stem)'s shared subject

    |  | Position of shared subject |  | Auxiliary-Lexical verb disagreement |
    | :---: | :---: | :---: | :---: |
    | Print | pre verbal-complex | 5 ( $\sim 16 \%$ ) | - |
    |  | intermediary | 24 (~77.4\%) | 4 ( $\sim 12.9 \%$ ) |
    |  | post verbal-complex | 1 ( $\sim 3.2 \%$ ) | - |
    |  | nonlexical subject | 1 ( 3.2\%) | - |
    | Broadcast | pre verbal-complex | 59 ( $\sim 50.4 \%$ ) | - |
    |  | intermediary | 35 ( $29.9 \%$ ) | 3 ( 2.6\%) |
    |  | post verbal-complexes | 10 ( 8.5\%) | $1(\sim 0.9 \%)$ |
    |  | nonlexical subject | 13 ( $\sim 11.1 \%$ ) | - |

    Table (5.2) illustrates that the predicate's subject can occur in any position: pre-complex, mid-complex, post-complex, or not be realized lexically. In the print data, the vast majority of subjects are medially realized. While in broadcast, almost half of the subjects are pre-verbal complex, with about a third showing medially. Agreement in person and number between the auxiliary and the lexical verb is always maintained in this data. Agreement in gender is broken
    once in a broadcast example. It also happens to be the only example of disagreement with a subject that is post-verbal complex:
    19. b

    ف... ف... ف... شيء مضحك كان سقطت فضائيّة العربيّة أسفا أقول بفخّ هذا الصيد...
    
    'Th... th... then (that) the satellite (news channel) al-Arabiya had fallen, I regretfully say, into this trap...'

    The lexical verb matches the gender of the subject 'satellite', where both are feminine.
    The auxiliary is marked in the masculine, however. Based on the false starts and the disfluencies with this clause, it is not clear if this is an intended pluperfect construction, or if kāna heads a different clause from what was ultimately expressed. Because of the inability to determine the speaker's intent, I have removed this clause from the set. Spoken language is processing on the go, so it is not surprising that there would be more disagreements, and that these disagreements would violate more than the number markings.

    The remaining disagreements between the subject markings on $k \bar{a} n a$ and the main verb differ in number alone. These seven sentences all occur with 3rd person subjects, and they have a singular kāna precede the plural subject, with the lexical verb marked for number (either dual or plural) following it, as in the examples below:
    20. p

    |  | وكان مسؤولون أوكرانيّون أكّدوا أنّ في استطاعتهم حصر كلّ مبيعات ״كولنشّا، |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | wa-kāna | mas'ülūna 'ū |  | 'ūkrāniyyūna | 'akkadū | 'anna |  |
    | and-be.s-stem.sn | offic | U. |  | assure.s-stem.pl |  | SUB. |
    | $f i \quad s t i$ | -him | hasra kull | $m a b i ̄ ~ ¢ a ̄ t ~$ | kūltšā |  |  |
    | in ab | heir | restrict all | sales | K. |  |  |

    'And Ukrainian officials had confirmed their ability to restrict all the sales of "Kulca"...'
    21. b

    كان شهود عيان قد ذكروا أنّ اشتباكات مسلّحة اندلعت بين قوّات الأمن ومسلّحين...
    
    'Eyewitnesses had mentioned that armed clashes erupted between the security forces and gunmen...'

    In the above sentences, while the auxiliary and the lexical verb maintain agreement in person and gender, we have a masculine plural subject inserted between the two verbs in the predicate with a masculine singular auxiliary preceding it, and a masculine plural lexical verb following the subject. Despite this, these differently-inflected verbs still combine to form a single predicating element, i.e., the sentences express a single situation type and not multiple situations.

    There exists a slight variation with this compound verbal construction in the data. Hassān mentions that this particular predicate sub-type conveys two similar types of situations: A) $k \bar{a} n a_{s-}$ stem + verb ${ }_{s-s t e m}$ gives a distant pluperfect reading-or what he calls, "الماضي البعيد المنقطع" " the discontinuous/disconnected distant past'; B) while $k \bar{a} n a_{s-s t e m}+\mathrm{QAD}+\mathrm{verb}_{\mathrm{s} \text {-stem }}$ results in a more recent pluperfect-or what he calls, "الماضي القريب المنقطع" 'the discontinuous/disconnected recent past' reading (1994, p. 245). Other scholars seem to agree with this analysis of an intervening qad in this particular construction (Ranginwala, 2013, p. 64) ${ }^{27}$. Thus, it seems that the distinction between an intervening qad is about how recent the event time E is to S . Table (5.3) below shows us the distribution of a medial qad in the construction. Overall, and across both corpora, it seems to be split evenly. However, the broadcast data shows a higher usage, in the percentage and token count, of an intervening qad than what shows up in the print data.

    Table 5.3 Distribution of qad in kāna(s-stem)+verb(s-stem) construction

    | Intervening qad |  | Absent qad |
    | :--- | :---: | :---: |
    | Print | $10(\sim 32.3 \%)$ | $21(\sim 67.7 \%)$ |
    | Broadcast | $63(\sim 53.8 \%)$ | $54(\sim 46.2 \%)$ |
    | Totals | $73(\sim 49.3 \%)$ | $75(\sim 50.7 \%)$ |

    As previously mentioned, the Broadcast data includes more total instances of $k \bar{a} n a_{s-s t e m}+$ verb $_{s-\text { stem }}$ in general, and an intermediary $q a d$ particle is used more frequently up to 63 instances $(\sim 53.8 \%$ of the total kana + s-stem), see Table (5.3). This is in contrast with the print data, which only contains 10 instances ( $\sim 32.3 \%$ ) of an intervening $q a d$. One might argue that this implies that spoken news heavily favors more recent events than printed news does. However, the recent/distant distinction is not consistent. Sometimes there is a clearly expected nearness to the event, as in (22) below. However, a sentence like (23) below, which communicates a state commenced in the distant past extending to the moment of speech, also utilizes the qad particle:
    22. b

    |  | كان الجيش الإسر ائيليّ قِدِّفّذ غارة شرق مدينة جباليا شمال القطاع. . |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | kāna | l-jayšu | l- 'isrā 'iliyyu | gad | naffaða | ğāratan | šarqa |
    | be.s-stem | the-army | the-I. | QAD | execute.s-stem | raid | east |


    | madīnati | jabāliyā | šamāla | l-qitā $i$ |
    | :--- | :--- | :--- | :--- |
    | city | J. | north | the-strip |

    'The Israeli army had (just) carried out a raid east of the city of Jabaliya, north of the strip...' 23. p
    
    'And Greece had hampered, from its end, the agreement for a long while.'

    I tried to search for a correlation of when $q a d$ surfaces. I searched sentence-internally to see if a potential trigger, such as a temporal adverbial (e.g., yesterday, this week, etc.), fostered the realization of this particle. Table (5.4) below looks at that distribution:

    Table 5.4 distribution of qad + adverbial in the pluperfect construction

    |  | Intervening qad, <br> + adverbial | Intervening qad, <br> - adverbial | no qad + adverbial |
    | :---: | :---: | :---: | :---: |
    | Print | 4 | 6 | 3 |
    | Broadcast | 19 | 45 | 6 |

    It appears, from the table, that there is a higher token count of an existing qad particle that is internal to this construction without an overt adverbial trigger in the clause $(60 \%$ of the print data with a qad particle and $70.3 \%$ of the broadcast data). The table also shows that a small number of clauses show an overt adverbial without a realized qad-this includes adverbials such as last week, on the 17th of this month, etc. Practically, then, the presence or absence of qad and the recentness of the Event time $(\mathrm{E})$ is perhaps a pragmatic choice vs. a hard and fast rule. Regardless, with or without a pre-lexical qad, it seems that a double s-stem compound verb expresses a pluperfect state. Now that we have seen how the s-stem $k \bar{a} n a+s$-stem lexical verb are realized in the data, let us look at that same auxiliary inflection with the p-stem form of the verb.

    ### 4.2 Kāna $_{\text {s-stem }}+$ verb $_{\text {p-stem }}$

    There are 305 instances of the $k \bar{a} n a_{s-s t e m}+$ verb $_{p-s t e m}$ construction in the print data, and 45 in the broadcast data. Mimicking the previous complex predicate of $k \bar{a} n a_{\text {s-stem }}+$ verb $_{s-s t e m}$, subject-inflectional number disagreements only occur a few times, and, again, seem to only happen when the subject is medially realized between the verbs, as Table (5.5) below illustrates:

    Table 5.5 Syntactic realization and position of compound verb's subject + verbal inflectional agreement

    |  | Position of shared subject |  | Auxiliary-Lexical verb disagreement |
    | :---: | :---: | :---: | :---: |
    | Print | pre verbal-complex | 163 ( 53.4\%) | - |
    |  | intermediary | 92 ( $\sim 30.2 \%$ ) | 19 ( $\sim 6.2 \%$ ) |
    |  | post verbal-complex | 25 ( $\sim 8.2 \%$ ) | - |
    |  | nonlexical subject | 27 ( 88.9\%) | - |
    | Broadcast | pre verbal-complex | 31 (68.9\%) | - |
    |  | intermediary | 8 ( $\sim 17.8 \%$ ) | 1 ( $\sim 2.2 \%$ ) |
    |  | post verbal-complexes | 4 ( 8.9\%) | - |
    |  | nonlexical subject | 2 ( $\sim 4.4 \%$ ) | - |

    Accordingly, both corpora show a strong preference for a realized, pre-complex subject (with about half of this complex predicate type in the print data, and a little over two thirds of the total instances within the broadcast data), which is followed by a medial subject. Realized subjects positioned after the complex predicate represent a similar percentage of the type in both corpora (about 8 per every hundred instances). The percentage of unrealized subjects seem to double in frequency, in the print data more than they do in the broadcast data. This is probably an artifact of how the differing corpora select sentences. Written articles (should) contain scannable referents within their respective contained space. Hence, if a few sentences are still discussing a unified topic, referring to it might be quicker in subsequent clauses.

    ### 4.3 Käna $_{\text {p-stem }}+$ verb $_{\text {s-stem }}$

    The print data has a total of 8 instances of this construction, while the broadcast data has 38; see the table below (5.6) for subject position and inflectional agreement between the verbs:

    Table 5.6 Subject position and agreement between verbal inflections for kānap-stem+stem

    | Data type | Subject position | Verbal inflectional disagreement |
    | :---: | :---: | :---: |
    | Print | pre-complex 1 (12.5\%) |  |
    |  | mid-complex 4 (50\%) | 1 in number + gender |
    |  | post-complex 1 (12.5\%) |  |
    |  | unrealized 2 (25\%) |  |
    | Broadcast | pre-complex 8 ( $\sim 21.1 \%$ ) |  |
    |  | mid-complex 19 (50\%) | 3 |
    |  | post-complex 2 ( $\sim 5.3 \%$ ) |  |
    |  | unrealized 9 ( $\sim 23.7 \%$ ) | 1 |

    In this data, half of all of these constructions have a medial subject. Also, this is the data in which the discrepancy in subject inflections between the verbs is more than just number marking, it also includes gender and person (see (39) further below).

    Since the complement is an s-stem verb, an optional, directly preceding qad particle functions as a perfect marker. The overall percentages are similar to the presence of a medial qad in the pluperfect construction. Table (5.7) below illustrates the numbers:

    Table 5.7 Qad's distribution in $k \bar{a} n a(p-s t e m)+s-s t e m$

    | Data Type | Intervening qad present | absent qad |
    | :---: | :---: | :---: |
    | Print (\%) | $\mathbf{5}(\mathbf{6 2 . 5 \%})$ | $3(37.5 \%)$ |
    | Broadcast (\%) | $\mathbf{2 0}(\sim \mathbf{5 2 . 6 \%})$ | $18(\sim 47.4)$ |
    | Totals (\%) | $25(\sim 54.3 \%)$ | $21(\sim 45.7 \%)$ |

    The above table shows that this construction is favored within the broadcast data versus the print data. In the broadcast data, a little over half of the instances include an intervening qad, whereas five out of the eight instances in the print data include qad. When we combine the numbers of both corpora, we get a slight preference for an intervening qad, whereas with the
    pluperfect, there was an ever so slight preference for a lack of a qad particle (see Table 5.3). Unlike the pluperfect, there was rarely, if ever, an adverbial around this construction.

    ### 4.4 Kä $_{\boldsymbol{n}} \boldsymbol{a}_{\mathrm{p} \text {-stem }}+$ verb $_{\mathrm{p} \text {-stem }}$

    Let us now turn to the fourth kāna-headed predicate-type in this chapter, a lexical verb headed by $k \bar{a} n a$, in which both are in the p -stem inflection. This subgroup is the least frequent compound verbal paradigm. This deficiency makes sense as the resultant construction would, at least theoretically, do similar work as a lone p-stem verb. In fact, in every sentence in the data, semantic equivalence is achieved if we were to remove the auxiliary and keep the lexical verb. However, the construction does exist in the data, though, unsurprisingly, not that frequently. The print data only contains a total of six complex double p-stem predicates. While, continuing with the trend that these complex predicates are commoner in the smaller corpus, the broadcast data has 28 .

    ### 4.5 Käna $_{\text {s-stem }}+\mathrm{NVP}$

    This is a fairly frequent, straightforward construction, as there are 86 instances in the written data, and 1,110 sentences in the spoken data.

    ### 4.6 Käna $_{\text {p-stem }}+\mathrm{NVP}$

    As far as numbers go, 1,151 instances were logged in the spoken data and 63 in the written data.

    Let us now turn to each construction sub-type and analyze it functionally. I have divided the construction based on the inflection of the head, then on the complement types. First, we examine verbal complements, then the NVP-type complements.

    ## 5. Meaning and function of kāna construction

    This section looks at the meanings and functions conveyed by this construction and is classified into verbal and nonverbal complements. The verbal complements are split by the auxiliary's inflection, then the complement's inflection. The NVP complements are divided based on the auxiliary's inflection only.

    ### 5.1 Verbs

    The following excerpt gives a general overview of verbal-complement types. Recall that $m \bar{a} d \bar{l}$ is the Arabic term for the s-stem inflection in this dissertation, and mud̄āri ${ }^{\circ}$ refers to the pstem.

    Arabic has only four compound verb forms, one with a variant, all involving kāna 'be'.
    These are, with ad hoc translations, (i) māḍ̄̀ + muḍāri', e.g. kāna yaktubu 'he was writing'; (ii) muḍāri' + muḍāri', e.g. yakūnu yaktubu 'he will be writing'; (iii) mād̄̄ + $m a \bar{d} d \bar{\imath}$, e.g. kāna [qad] kataba 'he had written'; and (iv) muḍāri' $+m a \bar{a} d \bar{\imath}$, e.g. yakūnu [qad] kataba 'he will have written'. Type (i) has a variant with the future prefix, kāna sayaktubu, which might be translated 'he was going to write’. ("Māḍī and Muḍāri‘," 2011, para. 12)

    In the chapter's investigation, the verbal section is split according to the inflection of the auxiliary, then according to the inflection of the lexical verb. We start with s-stemmed kāna.

    ### 5.1.1 Kāna ${ }_{s \text {-stem }}$

    The following two subsections look at the auxiliary kāna construction, in which kāna is inflected in the s-stem form. We shall see that the multi-verb constructions headed by an sstemmed $k \bar{a} n a$ seem to convey one of two things: a past situation or a potential past situation.

    This fact might be the motivation behind why Holes has stated the following about the auxiliary function of this verb: "ka:na, and its negative counterpart lam yakun, has an anteriorizing affect on any verb to which it is proposed, whatever its aspectual value" (Clive Holes, 2004, p. 233). Let us start by looking at the s-stemmed $k \bar{a} n a$ with an s-stemmed lexical verb.

    ### 5.1.1.1 Verbal complement ${ }_{\text {s-stem }}$

    The combination of $k \bar{a} n a$ with an s-stem inflected verb results in a decoupling of what Reichenbach calls event time (E), the time of the situation being discussed, and reference time (R), a usually pivotal, relevant time that is neither the moment of utterance (S) nor E (Michaelis, 2006, p. 221). For a pluperfect reading, $k \bar{a} n a$ needs to precede the verb, and both verbs belonging to the complex predicate must be inflected in the s(uffix)-stem.

    Scholars seem to agree that this particular compound verb forms what is understood as a pluperfect predicate (Abu-Chacra, 2007, p. 241; Badawi et al., 2013, pp. 367-369; Bahloul, 2008, p. 64; Goldenberg, 2013, pp. 205-211; Clive Holes, 2004, pp. 232-233; Ryding, 2005, pp. 448-449). Let us look at an example from the data:
    24. p
    
    'And the employees had requested the end of service compensation...'
    In the above sentence, at speech time (S), we are in a phase post event-time (E), which happens to be the request. The fact that R can be decoupled is exemplified by a modification of the sentence above to (25) below:
    25. p
    

    In (25), the reference time (R) is marked by the subordinate clause 'by the time their news reached the papers', which is anterior to S , but posterior to E . It is interesting to note that E is always going to be the complement position of the auxiliary, i.e., E's realization is mandatory while R is optional.

    ### 5.1.1.2 Verbal complement ${ }_{p-s t e m}$

    The compound verbal predicate construction comprising $k \bar{a} n a_{\text {s-stem }}+$ verb $_{p-s t e m}$ communicates a past imperfective state (Abu-Chacra, 2007, p. 241; Badawi et al., 2013, pp. 367-369; Bahloul, 2008, p. 136; Goldenberg, 2013, pp. 205-211; Clive Holes, 2004, p. 232;

    Ryding, 2005, pp. 446-447). This is in contrast to a past perfect state when the complement is sstemmed. Let us look at some examples below:
    26. b
    

    | 'alā | 'aksi | hajamāti | l-qā'idati llat $\bar{\imath}$ | kānat | tastahdifu |  |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | on | opposite | attacks | the-Q. | that | be.s-stem | target.p-stem |
    |  | marākiza | l-'amni | wa-l-mujamma'āti | dāxila | l-muduni |  |
    |  | centers | the-security | and-the-complexes | in | the-cities |  |
    |  | r-ra'īsiyyati |  |  |  |  |  |
    |  |  |  |  |  |  |  |

    '. . as opposed to al-Qaida, which used to target/was targeting the security centers and complexes in the main cities...'
    27. p
    
    'And it added that the man, who is a father of six children, two white men with shaved heads stabbed him in the back along with a woman in her twenties, while he was fixing his son's car on the side of the road...'

    Sentences (26) and (27) illustrate Ranginwala's observation regarding an s-stem inflected $k \bar{a} n a+$ a p-stem inflected main verb, in which he observes: "[i]t causes the respective action being stated as more "habitual" or "continuous"" (2013, p. 64). Sentence (26) most likely conveys a habitual, which Comrie defines as "describ[ing] a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period" (1976, pp. 27-28). In that sentence, the string of attacks by al-Qā ida on the security centers is a characteristic of that time period, as opposed to a progressive reading of a single attack event: one that "highlight[s] the pre-culmination portion of an event representation" (Michaelis, 2011, p. 1359) or one that is "in the course of development" (Binnick, 2006, p. 249). Sentence (27) really illustrates the incremental advancement of a single stabbing event to the point with which it allows an overlap with another event, fixing the car. Hence, an s-stem $k \bar{a} n a+$ a p-stem lexical verb produce a complex predicate that conveys an underspecified internal view into a situation that is seen as dynamic, and that
    occurred prior to S. I say underspecified because this state could be habitual (as one possible reading of (26) above), or it could be progressive, as in (27).

    As is expected, these constructions can be embedded within other constructions. For example, the mood particle $r$ ربّما rubba-mā is used to convey potentiality or doubt concerning a proposition. It can attach itself to this function of the auxiliary to form examples such at the one below, from the data:

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    28. p
    ور وأى مر اقبون أنّ اقتراح حاكم قدهار ربّما كان يهدف إلى احتواء غضب سكّان الأقاليم الجنوبية بعد الغارة على كاكر اكاي 
    wa-ra'\overline{a} murāqibūn 'anna qtirāha ḥakimi qandahār
    and-believe.s-stem observer.AP SUB. suggestion governor Q.
    rubba-m\overline{a} kāna yahdifu 'ila```

