

# Event Phrase and the Syntax of TMA verbs

IN KUWAITI ARABIC

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#### ABSTRACT

This thesis investigates the syntax of various verbs in Kuwaiti Arabic which realise functional heads encoding Tense, Aspect and Modality, in addition to being used as lexical verbs. It investigates some fundamental issues such as the markedness of the perfective and imperfective verbal forms with respect to Tense and Aspect, and, the aspectual and temporal properties of the active participle form, which is generally considered a nominal category. This study incorporates the Event Phrase hypothesis building on Cowper (1999), Borer (2005), Ramchand (2008) and Travis (2010) and inspired from event-semantics (e.g. Davidson 1967, Higginbotham 1985 and Parsons 1990). EventP is a functional projection in the syntax of the clause that relates to the eventive argument (the Davidsonian argument). However, the details of how this phrase functions syntactically have not been precisely described, especially for Arabic. This research aims to clarify the functions of EventP based on data from KA.

I argue that the EventP is a key ingredient in the syntactic representation of the clause structure. It relates to the distinction between eventive and non-eventive predicates, or the Individual-level and Stage-level predicates. Furthermore, I argue that analysing sentences in Arabic as eventive or non-eventive can account for a number of puzzling phenomena in the behaviour of verbal and non-verbal predicates. Some of these phenomena include: the null present tense copula; the mixed nominal and verbal behaviours of the active participle; the derivational gap with verbs such as yi/bah 'resemble' and yigrab 'relate to'; the varying temporal and aspectual readings of the imperfective depending on the verb class. An example of this is that the Achievement verbs resist the present tense and the progressive reading. I present an analysis of EventP that can account for these phenomena. Furthermore, I argue that analysing the predicates as eventive or non-eventive (following Adger and Ramchand 2003) allows for a more consistent generalisation of the functions of the TMA verbs discussed in this thesis, namely the auxiliary verb kaan 'be.PAST', the inceptive verb gaam 'get up.INITIATE ' and the durative verb gasad 'sit.CONTINUE'. I show that it is possible to generalise over the functions of TMA verbs in relation to eventive sentences regardless of whether they have verbal or non-verbal predicates.

### DEDICATION

"And of his signs is the creation of the heavens and the earth and **the diversity of your** languages and your colours. Indeed in that are signs for those of knowledge." (Sahih International: 30:22)

> To my mother, who taught me to look for the signs in everything! And to my father, who led me by example.

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### LIST OF ABBREVIATIONS

### Abbreviations

AP	Active Participle
AspP	Aspect Phrase
СР	Complementizer Phrase
DA	Deverbal Agentive
DP	Determiner Phrase
EA	Egyptian Arabic
ET	Event time
EventP	Event Phrase
НА	Hijazi Arabic
IL	Individual-Level
INFL	Inflection
InitP	Initiation Phrase
IP	Inflection Phrase
LF	Logical Form
ModP	Modal Phrase
MoodP	Mood Phrase
NegP	Negation Phrase
NP	Noun Phrase
PA	Palestinian Arabic
PF	Phonological Form
PP	Prepositional Phrase
ProcP	Process Phrase
ResP	Result Phrase
RT	Reference time
SA	Standard Arabic
SL	Stage-Level
SVC	Serial verb construction
ТМА	Tense, Mood and Aspect
ТР	Tense Phrase
UT	Utterance time
vP/VP	Verb Phrase

## Glossing

1,2 and 3	Person
ACC	Accusative
AP	Active Participle
AST	Assertion
AUX	Auxiliary
CF	Counter Factual
CN	Consecutive
COMP	Complementizer
COND	Conditional
CONJ	Conjunction
D	Dual
DUR	Durative aspect
DEF	Definite
F	Feminine
FUT	Future
GEN	Genitive
IMPR	Imperative
INC	Inceptive aspect
М	Masculine
MP	Imperfective
NEG	Negation
NOM	Nominative
NPI	Negative Polarity Item
NUN	Nunation
Р	Plural
PF	Perfective
PRG	Progressive
PST	Past
REF	reflexive
S	Singular
SJN	Subjunctive

# TABLE OF CONTENTS

Chapter 1. Introduction	1
1.1 Overview:	1
1.2 Data: Kuwaiti Arabic	
1.3 Thesis Outline:	4
Chapter 2. TMA in the Structure of Arabic Clause	7
2.1 Tense in Arabic Clause:	8
2.1.1 Tense in Verbal and Non-verbal Clauses in Arabic	
2.1.2 Complex Tense Constructions in Arabic	
2.2 Aspect and Aspectual Notions:	
2.2.1 Viewpoint Aspect	
2.2.2 Aktionsart (Lexical Aspect)	
2.2.3 A Case in between	
2.3 Modality, Modals and Mood	
2.3.1 Syntactic Representation of Modality	
2.3.2 Modal Senses of Past and Future Tense Morphemes	
2.4 A Preliminary Clause Structure for Arabic	
Chapter 3. Perfective and Imperfective between Tense and Aspect	44
3.1 Description of the Perfective/Imperfective Verbal Forms	
3.1.1 The Verbal Paradigm Between Kuwaiti Arabic and Standard Arabic	
3.1.2 (Im)Perfective Contexts and Functions	
3.2 Between Tense and Aspect	
3.2.1 Relative Tense and Aspect	
3.2.2 Boundedness and Telicity	
3.2.3 The Asymmetry of the Verbal System in Arabic	
3.3 A Preliminary Analysis for the Function of the Perfective/Imperfective	
3.3.1 The Interaction of Viewpoint Aspect and Aktionsart in KA Verbs	
3.3.2 The Interaction of Viewpoint Aspect and T2/T1	
3.4 Summary and Conclusion:	
Chapter 4. Eventive and non-eventive verbal predicates in KA	73
4.1 Events and Eventive Predicates	
4.1.1 The Event Argument (e) in Formal Semantics	
4.1.2 The Event Argument and Syntax	
4.1.3 The Eventive Feature and Event Head	
4.2 Eventivity in Arabic	
4.2.1 Morphological Tests	
4.2.2 Grammatical Tests	
4.3 The Syntax of EventP with Verbal Predicates	
4.3.1 The Existentially Bound Event	
4.3.2 The Non-Existentially Bound Event	

98
100
103
106
108
109
114
117
119
119
126
128
132
134
134
135
138
141
141
143
149
150
153
153
159
167
169

# LIST OF FIGURES AND TABLES

Figure 1: Reichenbach's modal for the Tense system	8
Figure 2: Dowty's classification for situations	28

Table 1: Vendler's aspectual classification for verb types (1967)
Table 2: Verbal binyans modified from Mccarthy (1981: 385)
Table 3: Verbal binyans modified from Mccarthy (1981: 385)
Table 4: The two verbal paradigms in Kuwaiti Arabic
Table 5: Verb classes based on Process and Telicity features    67
Table 6: The representation of Aktionsart features of event types.    68
Table 7: The interaction between viewpoint Aspect and temporal reference
Table 8: Morphological tests with the event and state types in KA.       85
Table 9: Event types and the grammatical tests for eventivity.
Table 10: The eventive AP aspectual properties based on event types       106
Table 11: The differences between <i>gaam/gasad</i> in lexical and functional readings

#### **Chapter 1. Introduction**

#### 1.1 Overview:

In syntactic theory, a clause is fundamentally structured into three hierarchical domains: VP, TP and CP (Pollock 1989, Chomsky 1995; Rizzi 1997; Platzack 2000; Ouhalla and Shlonsky 2002). The V-domain concerns the thematic structure of the predicate/argument relations. The V-domain is dominated by a functional or grammatical layer IP/TP. The IP or inflectional layer concerns features related to the predicate such as Tense, Aspect, mood and Modality. This layer is usually concerned with licensing the verb arguments by case checking or assignment (Pollock 1989, Ouhalla and Shlonsky 2002). And finally, the CP layer concerns clause-typing information and linking the content of the clause to the discourse (Rizzi 1997; Platzack 2000). Incorporating advances in the syntax-semantics interface, Ramchand and Svenonius (2014) propose that the three domains parallel information related to three semantic primitives: the event (e), the situation (s) and the proposition (p). Information related to events is usually expressed within the VP domain, information related to situations is expressed within the CP domain.

In this research, I am mainly interested in the interaction between the VP layer and the IP layer in the clause structure of Arabic. Despite the fact that these two layers appear to be distinct structurally and probably conceptually, they are difficult to distinguish practically especially in the case of Arabic. This difficulty manifests itself in three ways: first, many of the IP features are expressed by inflectional morphemes on the verb which may be part of the verbal morphological template. Second, there is no apparent consensus on whether the difference between the perfective verbal form and the imperfective marks Tense alone, Aspect alone, Tense and Aspect, or neither (Bahloul 2008). Third, some of the functional heads that appear within the IP domain in Arabic bear subject agreement which can have implications for the clause structure as to whether they give rise to a biclausal structure or a monoclausal structure (Ouhalla and Shlonsky 2002). An example of this is the past tense auxiliary *kaan* 'be'. The verb *kaan* can show subject agreement. The agreement can be with the subject of the thematic verb, but in some cases, it may be with the topic of the clause:

(1)					
a.	kaan.t	Hind	t.darris	Talal	
	be.PV.3SF	[FEMALE NAME]	3SF.MP.teach	[MALE NAME]	
	'Hind used to	teach Talal'			
b.	kaan	Talal	t.darrs-ah	Hind	
	be.PV.3SM	[MALE NAME]	3SF.MP.teach-him	[FEMALE NAME]	
'Talal used to be taught by Hind'					

(1)

Does this example indicate a biclausal structure or a monoclausal structure? The answer would have implications for the clause structure of Arabic, a question which I address in this thesis.

Furthermore, the boundary between the V-domain and the T-domain is a subject of debate. The VP concerns the projection of the predicate and its arguments. Most researchers consider this layer to consist of a verbal shell containing two verbal projections: little v and big V following Larson (1987; 1990). The next projection above vP which marks the start of the IP domain is usually assumed to be AspP in Arabic (Fassi Fehri 1993; Benmamoun 2000; Soltan 2007 amongst others). Recent developments propose other functional heads between vP and AspP. For example, Megerdoomian (2008) suggests that there is a functional projection above little v concerned with the Object Agreement inflections on the verb called AgrOP. Ouhalla (1991) suggests that Voice is the head marking the boundary between vP and IP. And Travis (2010) indicates that EventP is a functional projection on the border between the two domains. Identifying which functional heads represent the boundary between the thematic layer and the functional layer is necessary especially when describing aspectual verbs such as gaam 'stood up' and gasad 'sat' in KA. These verbs appear to be a special class of verbs since they may be considered part of the thematic structure or part of the grammatical layer. These verbs present a challenge for the boundary distinction. I argue in this thesis that describing the functions of aspectual verbs such as gaam and gasad can shed light on the nature of the interaction between vP and IP domains.

Another issue of interest is the dependency of the Inflectional projection on a verbal category of the thematic layer VP. Arabic has non-verbal sentences containing non-verbal predicates. Do these sentences get a similar clause structure consisting of a vP projection and an IP projection? Or do these sentences have an IP without a VP? This question was the subject of inquiry for Benmamoun (1999; 2000; 2008). He argues that non-verbal sentences contain only a TP without a VP. His proposal suggests that the inflectional layer does not depend on a verbal category. His proposal differs from the widely assumed null verbal copula in non-verbal constructions (advocated in Bakir 1980 and Fassi Fehri 1993). I examine these proposals in light of some new arguments and data unaccounted for in these two approaches.

This thesis investigates the relation between the IP and the VP in light of a new and unconsidered functional category in the clause structure of Arabic, namely, the EventP. I adopt the Event Phrase hypothesis (Cowper 1990; Borer 2005; Ramchand 2008; Travis 2010) inspired from event-semantics (Davidson 1967, Higginbotham 1985 and Parsons 1990). EventP is a functional projection in the syntax of the clause that relates to the eventive argument (the Davidsonian argument). However, the details of how this phrase functions syntactically have not been precisely described, especially for Arabic. This research aims to clarify the functions of EventP based on data from KA. I argue that the EventP is a key ingredient in the syntactic representation of the clause structure that relates to the semantic distinction between eventive and non-eventive predicates, or the so-called Individual-level and Stage-level predicates. Furthermore, it represents the boundary or edge of the vP phase as suggested by Travis. I propose that depending on the feature of EventP it can allow the projection of functional categories such as Tense, Aspect and Mood which host features related to the semantics of eventive predicates.

Furthermore, I argue that incorporating the EventP into the clause structure can present a consistent account for some puzzling phenomena in Arabic. These phenomena include: the behaviour of verbal and non-verbal predicates in relation to TMA; the mixed nominal and verbal behaviour of the active participle; the derivational gap with verbs such as *yi/bah* 'resemble' and *yigrab* 'relate to'. Besides, it can account for the varying temporal and aspectual readings of the imperfective depending on the verb class. An example of this is the Achievement verb's resistance of the present tense and the progressive readings.

I also argue that analysing the predicates as eventive or non-eventive (following Adger and Ramchand 2003) allows for a more consistent generalisation of the functions of the TMA verbs discussed in this thesis: the auxiliary verb *kaan* 'be.PAST', the inceptive verb *gaam* 'get up.INITIATE ' and the durative verb *gasad* 'sit.CONTINUE'. I show that it is possible to generalise over the functions of TMA verbs as componenets of an eventive sentence regarless of whether the sentence has a verbal or non-verbal predicate.

#### 1.2 Data: Kuwaiti Arabic.

Kuwaiti Arabic represents the Arabic dialect spoken in urban Kuwait. According to Al-Bahri (2014), there are two main spoken varieties in Kuwait: Urban (Hadari) and Bedouin. The Bedouin and Urban dialects show closeness to Najdi Arabic and Bahraini Arabic (Holes 2006) especially concerning their syntax. Of concern to this thesis are the verbal inflections and the

functions of the perfective and imperfective verbs in relation to TMA. Ouhalla and Shlonsky (2003:5-6) build on data from Aljenaie (2001) and note that for the IP domain, Kuwaiti Arabic imperfective is unmarked for habitual preverb in root present tense clauses, on a par with Standard Arabic and different from other Arabic dialects. In other words, the imperfective in root clauses may indicate progressive or generic readings depending on information from the context and not from inflectional morphemes on the verb contrary to the case with other Arabic dialects. Another relevant similarity is that Kuwaiti Arabic utilises a similar inventory of aspectual verbs to indicate inception, duration, termination which are similar to SA, and to other Arabic dialects (Brustad 2000). For this reason, it is possible to generalise some of the findings concerning the properties of the inflectional projection and Tense, Aspect and Modality from SA and other Arabic dialects to KA and vice versa. In fact, I make such generalisations in the discussion; however, I clearly indicate in the discussion where these generalisations cannot be extended to KA. In relation to the data, most of the data collected depend on the researcher's linguistic knowledge of KA as a native speaker. However, in some instances that show different levels of acceptability, other native speaker of KA were consulted for their grammaticality judgements.

#### **1.3 Thesis Outline:**

Chapter 2 presents a theoretical background concerned with TMA categories. It presents a definition for Tense, Aspect and Mood and Modality in the semantic literature followed by proposals for mapping these features onto the syntactic structure in general and in Arabic clause structure specifically. The chapter is divided into four main sections. Section 2.1 is concerned with Tense and discusses whether Arabic verbs mark absolute tense or relative tense. Section 2.2 concerns the notion of Aspect and discusses the two types of aspects proposed in the literature: lexical and viewpoint Aspect. Furthermore, it presents the case of aspectual verbs *gaam* and *gaGad* as a special class of verbs that can be analysed as markers of lexical Aspect and/or viewpoint Aspect. The third section 2.3 discusses the notion of Modality focusing mainly on the close relation between Tense morphemes and modal functions. Finally, section 2.4 presents a preliminary clause structure for KA revised considering the definitions adopted in this thesis.

Chapter 3 focuses on the markedness of the perfective and imperfective verbs for inflectional features, especially Tense and aspect. Section 3.1 describes the morphosyntactic features of the verbal forms and the contexts where the perfective and imperfective verbs are

used in KA. Section 3.2 focuses on a theoretical issue related to the analysis of the perfective and imperfective verbs as marked for Tense, Aspect, both or none. I suggest that the overlap and lack of consensus is a result of lack of disagreement on the functions of viewpoint Aspect and relative tense. There is a clear overlap in the semantic and syntactic literature between the functions of viewpoint Aspect and relative tense as represented by the perfect verbal form in English. The details of this theoretical problem and its implications on the analysis of the temporal properties of the verbal forms are discussed in 3.2. The third section 3.3 presents a genuine analysis of the interaction between lexical Aspect and viewpoint Aspect in KA verbs on the one hand, and the interaction between viewpoint Aspect and Tense on the other. This analysis shows that the perfective verb is marked for Tense and Aspect while the imperfective is a default verbal form. Furthermore, I show that viewpoint Aspect is affected by the Aktionsart properties of the verb contra the claim made by Fassi Fehri (2012). Also, the analysis shows that there is a clear asymmetry between the two verbal forms deeper than Tense and Aspect distinctions. I show in Chapter 4 that the verbs in KA are also asymmetrical with respect to how they encode eventuality.

Chapter 4 concerns definitions of the notions event, eventive predicates and eventuality. It presents the core theoretical contribution of the thesis. It argues that the asymmetry between the perfective and imperfective forms relates to a difference in their representation of the event as either referring to a particular or to a universal. There are two fundamental theories of events in semantics: Events as particulars and Events as universals (see Pianesi and Varzi 2000). I argue that imperfective verbs encode events as universals since they naturally refer to generic events. On the other hand, perfective verbs encode events as particulars, since they require that the event is existentially bound and not generic. Furthermore, I show that it is possible to extend this referential difference (partciulars vs. universals) to all predicates. Therefore, it is possible to classify predicates as either eventive (with existential reference, i.e. to a particular) or non-eventive (with non-existential reference, i.e. to a particular). In doing so, it becomes clear that the TMA functions are relevant to eventive predicates rather than non-eventive predicate in the syntax of KA. Further pieces of evidence are presented in the discussion of the functions of *kaan* and verbs *gaam* and *gaSad* in the remainder of the thesis.

Chapter 5 describes the functions of *kaan* in KA. Section 5.2 argues that the semantic meaning of *kaan* is equivalent to the verb 'BECOME' and not the verb 'BE' hence it is not a stative verb, contrary to (Mughazy 2005 amogst others). Section 5.3 discusses the copula verb and the non-verbal sentences in KA. I argue that *kaan* functions as an eventiviser: it can turn

a non-eventive predicate into an eventive one. This analysis considers the TMA categories to be dependent on eventive predicates. In this section I show that non-verbal sentences do not constitute a homogeneous class since they can consist of eventive and non-eventive predicates. Therefore, no generalisation can be made over all non-verbal sentences contrary to some of the claims made by Benmamoun (1999; 2000; 2008) about non-verbal sentences in Arabic. Section 5.4 provides a description of *kaan*'s functions in a unifying framework. The different functions of *kaan* in clause are underlyingly related by the need to realise the predicates' eventive feature (see 5.5).

Chapter 6 describes the verbs *gaam* and *gaSad* in KA. These verbs represent a special case since they can be analysed as encoding lexical and/or viewpoint Aspect. I present a genuine analysis for these verbs in relation to EventP. I propose that they are light verbs originating within the boundaries of EventP. In other words, they represent one single event with the following verb, contrary to Ouali and Bukhari (2016) who suggest that these verbs are event-external or are merged above the thematic layer of the clause. I motivate my analysis building on Ramchands's (2008) analysis of the functional projections within the Event Phrase or vP (see 6.3.2). Furthermore, I show that the active participle *gaaSid* (which is assumed to be the progressive marker in KA) cannot be analysed as event-internal. However, I propose that it spells out the functions of EventP directly to realise the predicate's eventive feature. In addition, I show that the active participle *gaaSid* has a modal function, namely, to assert the existentiality of the event, which I explain in 6.5.2.2. The thesis concludes with a general summary and suggestions for further research.

#### **Chapter 2. TMA in the Structure of Arabic Clause**

TMA stands for Tense, Aspect and Mood/Modality. These are functional categories that are usually marked on the verb. They represent what is called the IP or the inflectional categories with each category functioning as a head of its own phrase (Pollock 1989, Belletti 1994, Chosmky 1995). This chapter surveys some literature on the semantics and syntax of these categories followed by the literature on Arabic specifically. It shows which definitions of tense and aspect adopted and how they can be used to motivate the clause structure presented in the end of the chapter for KA.

The first section (2.1) examines the following questions: what are the functions of Tense and how is it mapped on the clause structure? Are Tense functions necessarily dependent on the verbal projection or can they be carried by categories other than the verb? The answers to these questions have implications on the analysis of the clause structure of Arabic. Furthermore, it has implications for the analysis of verb *kaan's* functions considering that this verb is sometimes analysed as a full lexical embedding verb and in other cases, it is analysed as an auxiliary element supporting a tense feature related to the main verb's functional projection. This implication is introduced in section 2.1.2 but discussed in depth in Chapter 5.

Section 2.2 discusses the notions of Aspect. Aspect is usually classified into two main types: lexical Aspect and grammatical Aspect. Lexical Aspect concerns the lexical features of verbs and verbal predicates based on which they can be classified into different verb/situation types mostly known as Vendler's verb types. Grammatical Aspect concerns notions such as perfective, imperfective and perfect that are closely related to the verbal forms. In addition, notions such as inception, duration, and cessation are usually classified as grammatical aspect. I investigate whether the notion of Aspect (especially grammatical Aspect) can be distinguished from Tense in Arabic. Furthermore, I show that aspectual verbs in KA such as *gaam* and *gaSad* represent a special class of verbs. They lay on the boundary between lexical and grammatical and grammatical. Another challenge to these aspectual types is the event vs. state distinctions. It is problematic since the difference between a state and an event may be related to lexical Aspect properties or to grammatical Aspect properties which I discuss in 2.2.2.

Section 2.3 concerns the notion of mood and Modality. I discuss some literature focusing on how modal notions are mapped in syntax. I focus mainly on Epistemic modality and the interaction between Tense and Modality. This interaction is relevant for the description of *kaan's* function as a counterfactual marker, and for the functions of the active participle form *gaaSid* in KA which are discussed in more depth in Chapter 6. Finally, section 2.4 presents a preliminary clause structure of Arabic which I suggest can show the position of each functional category and its relation to the verb. In this structure, I introduce the EventP which I argue has a crucial role in the structure. However, I explain EventP's function clearly later in Chapter 4.

#### 2.1 Tense in Arabic Clause:

Temporal reference is expressed in different ways both within a language and crosslinguistically. For instance, it is expressed either through temporal adverbs such as *now*, *tomorrow*, *a year ago*...etc., temporal auxiliaries such as *was* in English or *kaan* in Arabic, verbal forms or verbal affixes such as the past tense morpheme *-ed* in English *He played*, or the present tense morpheme *-s* in *He plays*, and in particles such as *when* in English or its equivalent *lamma* in Arabic.

In the study of the semantics and logic of Tense, Reichenbach's (1947) model has remained influential. The Reichenbachian Tense model consists of three times related on the timeline: 1- The utterance time (UT), which refers to the time of the utterance, 2- The Event time (ET), which is the time denoted by the event or situation, and 3- The reference time (RT), which relates ET to UT, as indicated in figure 1. There are three possibilities that can be used to order RT and UT or RT and ET: precede, follow, or coincide, resulting in the following configuration on the timeline (Figure 1 adopted from Verkuyl 2007):

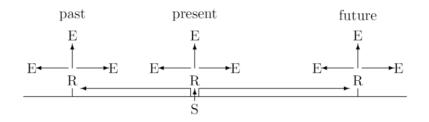


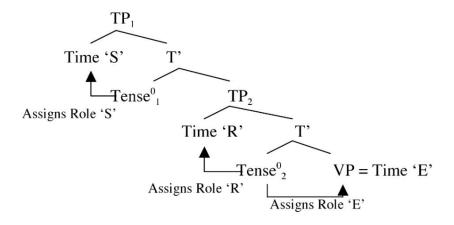
Figure 1: Reichenbach's modal for the Tense system

For example, a complex Tense such as the past perfect (*had written*), is analysed in this system as consisting of two relations, one between E and R in which E precedes R (E < R), and one

between R and S in which R precedes S (R< S) hence the following configuration (E<R<S). A simple tense such as the simple past (*wrote*), on the other hand, is analysed as consisting of one simultaneous/coincidence relation between E and R (E=R) and one precedence relation between R and S (R<S) creating the following configuration: (E=R<S).

In theories on Tense developed within the minimalist program, the time notions UT, RT and ET are mapped onto the clause structure by two functional Tense projections: T1 and T2. T1 is a high functional projection that instantiates the relation between UT and RT, while T2 is a lower functional projection that instantiates the relation between RT and ET<sup>1</sup> (Zagona 1990; Stowell 1993; Giorgi and Pianesi 1997). The following syntactic tree shows the temporal argument structure as developed in Zagona (2007):

(1)



The lower T in this phrase structure is a functional head which takes the time of event ET encoded within VP as its complement (internal argument) and RT as its specifier (external argument). This in turn feeds into the higher T phrase structure, where the higher Tense head takes the time denoted by the TP phrase as its complement (internal argument) and the UT as its specifier (external argument). I interpret the function of the higher T, which instantiates the relation between UT and RT, to represent what Comrie (1985) calls absolute tense. Absolute tense is "a tense which includes as part of its meaning the present moment as deictic centre" (Comrie 1985: 36). The deictic centre is usually related to the speaker and speech time. On the other hand, T2, which relates RT and ET, represents Comrie's relative tense. Relative tense "refers to a tense which does not include as part of its meaning the present moment as deictic centre" (*ibid*).

<sup>&</sup>lt;sup>1</sup> The head instantiating the relation between ET and RT is considered Aspect in some proposals that I discuss in 2.2.

Here, two important questions arise with regards to the projection of T1 and T2 in the clause structure of different languages; do both Tense heads project in the clause universally? And, which one could be related to the verbal system? According to Comrie (1967; 1985), languages differ in their verbal systems and in terms of which tenses they encode in the verb. Comrie suggests that for Arabic, the verbal forms encode relative tense while absolute tense is inferred from other factors in the clause. I follow this line of thinking, and contend that in Arabic, T2 is the function related directly to verbs, while T1 can be supported by auxiliaries or other functional elements in the structure such as negation particles or even complementizers. Nevertheless, I propose that this system is **asymmetrical** on two levels: a) it is asymmetrical in terms of the perfective and the imperfective verbs; only the perfective is marked for the function of T2, b) it is asymmetrical between the present and past tense features, as argued by Benmamoun (1999); only the past tense requires a verbal feature. This proposal is developed in section 2.1.1.1

In the literature on Arabic Tense, there are several issues that have provided the field with continuous debates. Two of these issues are examined in this thesis since the verb kaan - which is the focus of this thesis – is of central significance in this regard. The first issue concerns the following question: is Tense part of the verbal projection and must it be licensed by a verbal category in all finite clauses in Arabic? This question has implications for the analysis of non-verbal clauses in Arabic, which show present tense referentiality; do they have a null or deleted present tense copula *ykuun* as claimed by Bakir (1980) and Fassi Fehri (1993) or is there no need to posit a verbal projection at all, as argued by Benmamoun (1999; 2000; 2013). The second issue relates to the way the two Tense heads T1 and T2 are mapped to the clause structure in Arabic; are these two heads part of two clauses (biclausal construction), or do they both project in a monoclausal construction? A quick survey of the relatively small literature on the syntax of complex Tense constructions in Arabic shows that there is no consensus on this matter. There are proposals for a biclausal construction such as those by Fassi Fehri (1993) and Oulai and Fortin (2005), a monoclausal construction such as those by Fassi Fehri (2004; 2012) and Bjorkman (2011), and a monoclausal construction with recursion of AspP such as that by Al-Aqarbeh and Al-Sarayreh (2017). All these different options have different implications for the analysis of the clause structure and most importantly for the analysis of kaan's position and functions in these constructions, since it is the dominant past auxiliary verb in Arabic. In section 2.1.1 the issue of the non-verbal clause and the relation between Tense and the verbal projection is addressed, while the issue of the complex Tense construction and the mapping of T1 and T2 in Arabic is addressed in section 2.1.2.

#### 2.1.1 Tense in Verbal and Non-verbal Clauses in Arabic

An independent present tense sentence may consist overtly of just a subject and a non-verbal predicate (Benmamoun 2008). The non-verbal predicate may be either a noun phrase (2)-a, an adjective phrase (3)-a or a prepositional phrase (4)-a. Each non-verbal predicate may be used in a past tense sentence with an overt past tense copula as shown in (2)-b,(3)-b and (4)-b. And when it refers to future tense it must have both the future tense marker (which is considered a modal in Arabic, see section 2.3.2) and the imperfective form of the copula *ykuun* (examples are based on Kuwait Arabic, but this also applies to Standard Arabic):

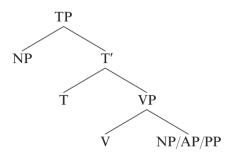
(2)

(2)						
a.	Azzam	muha	ndis			[Present]
	Azzam	engine	eer.MS			
	'Azzam is aı	n enginee	er'			
b.	Azzam	kaan		muhai	ndis	[Past]
	Azzam	be.PF.	3sm	engine	eer.MS	
	'Azzam was	an engir	neer'			
c.	Azzam	raaħ	ykuur	1	muhandis	[Future]
	Azzam	FUT	3sm.m	IP.be	engineer.MS	
	'Azzam will	be an er	ngineer'			
(3)	)					
a.	el-bait	kbeer				[Present]
	DEF-house	big.M	S			
	'The house i	s big'				
b.	kaan	el-bai	t	kbeer		[Past]
	be.PF.3SM	DEF-h	ouse	big.MS	S	
	'The house v	vas big'				
c.	raaħ ykuu	In	el-bait	t	kbeer	[Future]
	FUT 3SM.	MP.be	DEF-h	ouse	big.MS	
	'The house will be big'					
(4)	)					
a.	el-?wlaad	fi-issi	rdaab			[Present]
	DEF-boys	in-DEI	F.basem	ent		
	'The boys are in the basement'					

b.	el-?wlaad	kaan.u	1	fi-isser	rdaab	[Past]
	DEF-boys	be.PF.3	be.PF.3MP		in-DEF.basement	
	'The boys we	re in the	n the basement'			
c.	el-?wlaad	raaħ	ykuun	un	fi-isserdaab	[Future]
	DEF-boys	FUT	3MP.M	P.be	in-DEF.basement	
'The boys were in the basement'						

It has been widely assumed that the structure of present tense non-verbal predicates must be parallel to the structure of their past tense counterparts, i.e. they both necessarily include a verbal category. This verbal category is supported by an overt copula in the past and future tenses but displays a null copula in the present tense sentences (Bakir 1980, Fassi Fehri 1993). The following structure (5) shows this generally assumed structure for the present and past copula constructions:

(5)



Structure (5) shows a verbal projection VP with a head V that hosts the copula BE which can be overtly realised as (*kaan/ykuun*) or it can be null. Nevertheless, this view has been challenged by Benmamoun (1999, 2000, 2008 and 2013). He argues that the idea that there is a null verbal copula in the present tense sentences is based on conceptual grounds rather than empirical evidence. There are no compelling empirical arguments that demonstrate that a verb should be posited in those sentences, other than the assumed correlation or dependency between Tense and the verbal category. Benmamoun (2008) states that this dependency is based on three things: 1) The observation that Tense is morphologically dependent on the verb in a wide range of languages, 2) The hypothesis that Tense is structurally specified for a verbal feature (Chomsky 1995), or 3) That Tense is an extended projection of the verb phrase (Grimshaw 1991). Based on the behaviour of non-verbal sentences in Arabic and Hebrew (and other languages discussed in Benmamoun (2008), Benmamoun argues that the presence of Tense as a functional projection should not require the presence of a verbal category or verbal projection as a universal rule. He argues that there are significant problems with proposing a verbal category in order to host a null verbal copula because this proposal does not account for the following observations: The sentences containing an overt copula have different syntactic behaviours than those without an overt copula, especially in relation to negation and case assignment in Arabic.

For example, negation in Moroccan Arabic (and a few other Arabic varieties such as Egyptian Arabic and Jordanian Arabic) consists of two morphemes that can combine with the verb in the form of a prefix ma- and a suffix -f, or they can stand as one morpheme ma-f when they don't combine with a verb. Benmamoun (*ibid*) notes that in the simple present non-verbal sentence the predicate may or may not merge with the negation morpheme as follows:

(6)

a.	Omar	ma-∫	mSallim	
	Omar	NEG	teacher	
	'Omar is not a	a teacher'		
b.	Omar	<b>ma</b> -mʕallim <b>-∫</b>		
	Omar	NEG-teacher-N	VEG	
	'Omar is not a teacher'			(Benmamoun 2000:45)

On the other hand, in the case of the overt copula *kaan*, the predicate cannot merge with negation, i.e. *kaan* blocks the movement of the predicate to negation as shown in the following example:

1	7	)
J	1	J

a.	Omar	<b>ma</b> -kaan- <b>∫</b>	mSallim			
	Omar	NEG-be.PF.3SM-NEG	teacher			
	'Omar wasn't a teacher'					
b.	* Omar	kaan				
	Omar	NEG-teacher-NEG	be.pf.3sm			
	τ. 1.1	· · · · · · · · · · · · · · · · · · ·				

Intended meaning: 'Omar wasn't a teacher'

Benmamoun argues that since the presence of an overt copula blocks merger of the predicate with negation, then it is reasonable to conclude that a null copula, which syntactically projects as a verbal projection, should be able to similarly block the merger between the predicate and negation in the present tense construction, which is not the case. He concludes that an analysis that does not contain a verbal projection at all in the present tense construction can straightforwardly account for this behaviour, since there is no intervening head blocking the predicate *m3allim* from merging with negation. Following the same logic, he argues that both an overt and a null copula should be able to assign accusative case to the predicate. This is, in fact, the behaviour of the overt past copula *kaan*, which always assigns accusative case to the predicate (8), whereas with the null copula, the predicate has nominative case (9). The examples are taken from Standard Arabic since it has an overt case system:

(8)

a.	Talal-u	kaana	muhandis- <b>an</b>
	Talal-NOM	be.PF.3SM	engineer-ACC
	'Talal was an	engineer'	
b.	kaana	al-bait-u	kabir- <b>an</b>
	be.PF.3SM	DEF-house-NOM	big-ACC
	'The house w	as big'	
(9)	)		
a.	Talal-u	muh	andis- <b>un</b>
	Talal-NOM	engi	neer-NOM
	'Talal is an er	ngineer'	
b.	al-bait-u	kabi	r- <b>un</b>
	DEF-house-N	OM big-2	NOM
	'The house is	big'	

Nevertheless, an overt imperfective copula *yakuun* can assign accusative case in the future tense sentences:

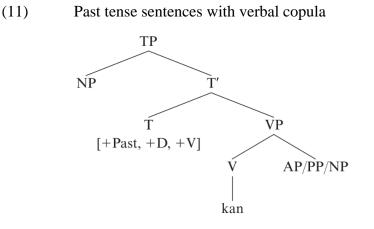
(10)

c.	Talal-u	<b>sa</b> -yakuunu	muhandis- <b>an</b>	
	Talal-NOM	FUT-3SM.MP.be	engineer-ACC	
	'Talal will be an engi	neer'		
d.	<b>sa</b> -yakuunu	al-bait-u	kabir- <b>an</b>	
	FUT-3SM.MP.be	DEF-house-NO	M big-ACC	
	'The house will be bi	g'		

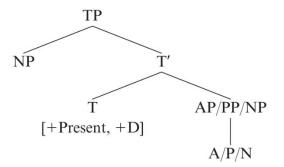
Benmamoun argues that since the overt *yakuun* can assign accusative case, then it is expected that it should be able to assign accusative case even if it was null. Of course, one may argue that blocking the merger with the negative morpheme, or accusative case assignment are

strongly dependent on overt morphology but at the same time, do not eliminate the idea of a covert head. Apparently, Benmamoun's arguments depend on the view that functional heads must be supported by overt morphology, otherwise, there is no reason to think they are part of the structure.

If Benmamoun's argument that there is no verbal projection in non-verbal sentences is supported, it follows that the dependency between Tense and the verbal projection must be released, and Tense must be checked by a category other than the verb. In fact, he proposes that the present tense in Arabic and in Hebrew can be checked by a nominal feature [+D] instead of a verbal feature [+V] contra the case in English or French, which was suggested to be an obligatory requirement for Tense (Chomsky 1995). Furthermore, Benmamoun argues for an asymmetry between the past tense and the present tense in that only the past tense is necessarily specified for a verbal feature. He proposes the following structure for the non-verbal present tense constructions, compared to the past tense sentences:



(12) Present tense sentences without verbal copula



#### 2.1.1.1 Tense and Verbs or Tense and Events, Preliminary Proposal

In this thesis, I adopt Benmamoun's view that the present tense sentence doesn't need to be supported by a verbal category, but I disagree with his objection on the dependency between the verb and tense. There is a dependency between the verb and Tense, but this dependency is not with the Tense head that specifies absolute tense (T1), rather it is with the Tense head which orders the event's time with the RT (T2). Benmamoun's analysis of non-verbal present tense construction necessarily indicates that the Tense head he is referring to must be parallel to T1 above (the absolute tense head). Nevertheless, Girmshaw's and Chomsky's hypothesis of the relation between Tense and the verb may remain valid for Arabic if taken in relation to T2. In other words, there is a dependency between the verb and the Tense head which takes ET as one of its arguments. On the other hand, T1 in Arabic, especially present tense, does not need to be specified for a verbal category as concluded by Benmamoun.

Therefore, I propose that there are two TPs that may project in finite sentences depending on whether the predicate has an event variable (e) and not on whether it has a verbal or non-verbal predicate (the definition of an event variable and its relation to the structure is presented in Chapter 4). When the sentence has an event variable it requires the projection of a Tense head that can order the event's time in relation to a reference time and this head must be distinct from the Tense head which orders RT in relation to UT.

In addition, I argue that the classification of predicates in terms of verbal and nonverbal is not sufficient to account for several overlapping phenomena in Arabic, which can be resolved if these predicates are classified as eventive or non-eventive predicates instead. The first observation relates to the behaviour of the non-verbal participle predicates in Arabic. There is a tendency amongst researchers of Arabic to consider the active participle a nonverbal category despite some verbal behaviours, with less agreement on whether it should be classified as a nominal or adjectival form (Brustad 2000; Mughazy 2005). An active participle predicate constitutes a special case amongst non-verbal constructions since it behaves differently from other non-verbal predicates with respect to the copula verb visibility discussed above in examples (2)-(4). An active participle predicate can have a temporal reference other than the present tense when it is used in the non-verbal present tense sentence as shown in the examples in (13):

(13)

a.	Ana	msaafir	(alheen/ baat fir/ *?ams/ min ?ams)
	Ι	AP.travelling	(now/ tomorrow/ *yesterday/ since yesterday)
	'I am travelling now/tomorrow'		[Present, Future]
	'I am travelling since yesterday'		[Perfect]

b.	Amira	∫aarba	il- Sas <sup>s</sup> iir	(alheen/ baat fir/ ?ams)
	Amira	AP.drinking	DEF-juice	(now/ tomorrow/ yesterday)
	'Amira drank the juice now/yesterday'		yesterday'	[Present, Past]
	'Amira is drinking the juice tomorrow'		[Future]	

Example (13)-a shows that the participle may have both future and present tense reference without the need of an overt imperfective copula *ykuun* or the future modal marker *raa7*, contra the case with other non-verbal predicates. In addition, example (13)-b shows that all three temporal interpretations are possible with certain types of active participles without the need for either the past verbal copula or the future one, as opposed to examples in (2)-(4) where it is ungrammatical to delete the copula.

Fassi Fehri (1993:153) points out that this special behaviour of the active participle must be related to its lexical aspectual properties, especially in the case of process participles. The observation that active participles have aspectual properties that can affect temporal reference indicates a similarity between them and verbs. I take the divergence of the behaviour of the participle predicate in relation to Tense from other non-verbal predicates to imply a deeper structural difference which relates to an event variable available in the structure of active participles. The existence of an event variable with participles is the key ingredient that provides them with aspectual and temporal properties similarly to verbs (I pursue this idea further in Chapter 3-4).

The second observation relates to the behaviour of a class of verbs in relation to Tense. I show in Chapter 4 that the class of Individual-level state verbs in Arabic behave differently from other verbs in Arabic. These Individual-level state verbs do not have the eventive properties found in other verbs, such as derivation in the perfective form, compatibility with the progressive and derivation in the active participle. I suggest that this difference relates directly to the lack of an event variable. Consequently, I argue that these verbs do not project T2 since T2 relates to the event time and these verbs do not involve an event argument, therefore, T2 is not needed. T1 on the other hand, I suggest, is not dependent on a verbal category since it projects in all sentences, verbal and non-verbal in Arabic. Separating tense into two types, T1 an T2, allows for a more systematic generalisation in the behaviour of verbs in Arabic. Not all verbs in Arabic are eventive therefore, not all verbs can project T2. On the other hand, T1 is part of any sentence, verbal or non-verbal. This shows that the generalisation that tense is dependent on verbs is not as consistent with all verb, and that there should be a clear distinction between the relation between Tense and verbs established in T2 which relies

on the eventivity of the verb, and the relation between tense and utterance time established in T1 which is available with all sentences in Arabic.

In the following section, I discuss another theoretical problem related to the analysis of complex Tense constructions in Arabic. The idea that there are two Tense heads projecting in the sentence to account for an ET is not hugely controversial, as discussed above. Yet, their mapping onto either a monoclausal construction or a biclausal construction is an open debate. In the literature on Arabic, there are proposals for a biclausal structure where each clause hosts one Tense head (Fassi Fehri 1993; Oulai and Fortin 2005). More recent views adopt a monoclausal structure that can project two Tense heads within the boundaries of one clause (Fassi Fehri 2012; Al-Aqarbeh and Al-Sarayreh 2017). The details of these proposals and their theoretical bases are discussed below.

#### 2.1.2 Complex Tense Constructions in Arabic

Simple tenses such as simple past and simple present can be inferred from the verb alone as in the following examples:

(14)

a. Talal rakað<sup>°</sup>
Talal ran'
b. Talal ran'
Jalal yarkið<sup>°</sup>
Talal 3SM.MP.runs
'Talal is running'
'Talal runs'

The future tense, on the other hand, is argued to be a modal tense in Arabic marked by a modal particle or morpheme (Fassi Fehri 1993; Benmamoun 1999; Bahloul 2008 amongst others), such as future *sa-* and *sawfa* in SA, modal *raaħ* and *b-* in KA (or by other future markers in other Arabic dialects):

(15)

a. **sa**-yarkuð<sup>s</sup>u Talal-u [SA] FUT-3SM.MP.runs Talal 'Talal will run' b. raaħ/b-yarkið<sup>s</sup> Talal
FUT-3SM.MP.runs Talal
'Talal will run'

Complex tenses such as past perfect and past progressive may be expressed periphrastically and hence require two heads, usually the verb and an auxiliary as in the following examples:

[KA]

(16)

(17)

a.	Talal	kaan	yarkið <sup>ç</sup>		[Past progressive]
	Talal	be.PF.3SM	3SM.MP.runs		
	'Talal was rur	nning'			
		_		•• ו	
b.	Talal	kaan	gid	rikað <sup>r</sup>	[Past perfect]
b.	Talal Talal	kaan be.PF.3SM	gid AST	<b>rikað</b> ran.PF.3SM	[Past perfect]

The future perfect and the future in the past are also periphrastic temporal constructions:

(-	.,				
a.	Talal	raaħ	ykuun	rikað <sup>ç</sup>	[Future perfect]
	Talal	FUT	3SM.MP.be	ran.PF.3SM	
	'Talal	will have ran'			
b.	Talal	kaan	raaħ	yarkið <sup>ç</sup>	[Future in the past]
	Talal	be.pf.3sm	FUT	3SM.MP.run	

In the literature, two structures have been proposed to account for complex Tense constructions in Arabic which include the auxiliary verb *kaan/ykuun* and the main verb: 1) a monoclausal structure and 2) a biclausal structure. The main characteristic of the biclausal structure is the existence of a TP projection and a VP projection for both the auxiliary verb and the thematic verb. The structure in (18) is an example presented by Fassi Fehri (1993) and the structure in (19) is presented by Oulai and Fortin (2005). In these structures, the auxiliary *kaan* selects/embed a TP/IP. On the other hand, for monoclausal structures, there are two proposed analyses. The first is presented by Fassi Fehri (2012), proposing a clause that has only one VP preceded by two Tense projections, as shown in (20). The second analysis is proposed by Al-Aqarbeh and Al-Sarayreh (2017) who suggest a monoclausal construction

where *kaan* has its own verbal projection but selects/embeds an AspP which includes the thematic verb instead of a TP, as shown in (21).

- (18) A biclausal complex Tense construction (two IPs and VPs)  $\begin{bmatrix} IP & [VP BE & [IP & [VP...main verb] \end{bmatrix}$
- (19) A biclausal Complex Tense construction (two TPs, AspPs and VPs) [TP [AspP [VP **BE** [TP [AspP [VP ...main verb]
- (20) A monoclausal complex Tense construction (two TPs and one VP) [TP1 **BE** [TP2 [AspP [VP...
- (21) A monoclausal Complex Tense construction (one TP and two AspPs)  $\begin{bmatrix} TP & [AspP & [vP ] BE & [vP & [AspP & [vP[vP ] ... ]] \end{bmatrix}$

Interestingly, the difference between these proposals stems from their treatment of two problematic issues: 1) the disagreement in the classification of kaan/ykuun as either an auxiliary head or an auxiliary verb, and 2) the disagreement on the specification of the clause length and boundaries. With regards to the first issue, when *kaan* is classified as an auxiliary head it is analysed as a morpheme which realises a Tense function and does not project its own thematic verbal projection, as shown in the structures by Fassi Fehri (2003;2012) and Bjorkman (2011) amongst others. On the other hand, when kaan is classified as an auxiliary 'verb', it is analysed as projecting its own 'thematic' verbal projection distinct from the main verb's projection, and hence *kaan* behaves like a lexical verb which can embed another lexical verb. The latter is the view evident in Fassi Fehri (1993), Oulai and Fortin (2005), and even in Al-Aqarbeh & Al-Sarayreh (2017) even though they consider their structure monoclausal, as shown in (21). It is very common to get this disagreement in the analysis of lexical verbs cross-linguistically. A similar case is found with English auxiliaries such as *have* for example. This verb is used both as a lexical verb to mean possession or as a functional verb to realise Perfect Aspect or even causation. Some treatments distinguish between the two types while others take both to be derivationally related. This point will be discussed in more depth in section (5.4.1.1) in comparison to the analysis of *kaan* in Arabic.

With regards to the second issue, it depends on the adopted definition of the clause, the number of Tense and Aspect heads allowed in one clause, and the restrictions on recursion within the boundareies of one clause; if recursion of structures or heads is possible within the boundaries of one clause, then a monoclausal approach is adopted such as the structures in (20) and (21); otherwise, a biclausal approach is taken such as the structures in (18) and (19).

There appears to be a difficulty in analysing *kaan* as either a functional auxiliary head or an auxiliary verb. This difficulty relates to the fact that *kaan/ykuun* behave like lexical verbs in term of inflectional morphology. For example, *kaan* shows finite verb morphology and subject agreement similarly to lexical verbs. Nevertheless, *kaan* in some of these complex Tense constructions can show agreement with something other than the subject of the thematic verb, as shown in example (22):

(22)

a.	Hind	kaan.t	<b>t.</b> darris	Talal
	[FEMALE NAM	1E] be.PF <b>.3sF</b>	3sf.MP.teach	[MALE NAME]
	'Hind was tea	ching Talal'		
b.	Talal	kaan.t	t.darrisa-h	Hind
	[MALE NAME]	] be.PF.3SF	3SF.MP.teach-	him [FEMALE NAME]
	'Talal, Hind w	vas teaching him'		
c.	kaan	Talal	t.darrisa-h	Hind
	be.PF.3SM	[MALE NAME]	3SF.MP.teach-	him [FEMALE NAME]
	'Talal, Hind w	vas teaching him'		

In example (22) the thematic verb agrees with the feminine subject, so does the verb *kaan* in (22)a-b. On the other hand, in (22)-c verb *kaan* shows agreement with the masculine topic, which is also the object of the thematic verb. The biclausal advocates consider that *kaan* agrees with a different subject than the thematic verb's subject, hence there are two subjects which means there must be two clauses. Nevertheless, from the monoclausal perspective, *kaan* does not agree with a subject but with a topic. In addition, this topic must be one of the thematic verb's arguments, which is raised to a topic position. In a sense, *kaan* functions like a raising verb in that it cannot introduce its own external argument nor assign it a theta role, as is characteristic of lexical verbs, hence it can be analysed as part of one and the same clause.

Another argument for biclausality of complex Tense construction relates to the availability of two locations for negation. In previous views on IP it was assumed that there was only one position for negation in each clause, and that two negations with complex tenses (one before the auxiliary verb and the main verb, and another where negation is between the auxiliary verb and the main verb) indicates two clauses (Fassi Fehri 1993). Nevertheless, recent work on negation in Arabic shows that a clause can contain two negation heads; one is a verbal negation and the other a sentential negation (Benmamoun 2000; Alqassas 2015). In addition, recent proposals from the cartographic approach to clause structure suggest that

negation may have more than two possible locations in a clause, or even four positions (Cinque 1999: 120), which means that negation should not be taken as a strong argument for clausal boundaries

In this thesis, I follow the monoclausal view for complex and simple tenses in Arabic, in which two tense heads can project within one clause boundary, T1 and T2. Each Tense head performs the functions of ordering two temporal arguments distinct from each other, where T1 orders UT and RT while T2 orders RT and ET. A monoclausal approach, unlike the biclausal approach, allows for recursion of functional heads such as tense heads and aspect heads with only one main verbal projection instead of two. In this approach, a verb like *kaan* is considered a morpheme which spells out one or more functional heads not thematic ones. It is considered a default verb which the grammar resorts to when a certain functional meaning cannot be indicated by the thematic verb directly, hence a default verbal form is used. In other words, it mainly supports any stranded features that cannot be supported by the thematic verb or by the predicate, following in this view Bjorkman's (2011) theory of auxiliary insertion. Furthermore, I show (in Chapter 5) that *kaan* is mostly inserted in the structure to support an eventive feature related to the predicate. However, when the predicate is eventive it necessarily performs the functions of T1, i.e. order RT in relation to UT. This analysis is explained in Chapter 5.

#### 2.2 Aspect and Aspectual Notions:

Aspect is concerned with the "different ways of viewing the internal temporal constituency of a situation" (Comrie 1976:3). The internal temporal constituency of a situation depends on the interaction of the internal or inherent temporal features of events and the choice of grammatical forms to encode these temporal features. For example, events are said to inherently encode temporal information such as whether they happen abruptly or gradually, whether they have a natural termination point or telos, and whether they cause a change of state because of their culmination. These inherent features are reported by different scholars as lexical Aspect, Aktionsart, or actionality aspects. Another layer of aspectual information is conveyed through the choice of grammatical elements or categories to encode the event. For example, the difference between (23) and (24) is considered aspectual in nature and not related to Tense:

- (23) Sara **wrote** a dissertation in 2009
  - a. It was completed in September.
  - b. #I think she is still working on it.
  - c. #she never finished it, for she died in September of that year.
- (24) Sara **was writing** a dissertation in 2009
  - a. It was completed in September
  - b. I think she is still working on it
  - c. She never finished it, for she died in September of that year.

(Examples from De Swart 2012: 752-753)

Both sentences (23) and (24) locate the event in the past, in 2009. Yet, in (23) the event is expressed as a completed event, hence it is not possible to resume the sentence with an expression that contradicts that it was completed, as shown by the infelicity of (23). On the other hand, in (24) the same event is expressed using a progressive, which highlights the fact that the event was ongoing in the past without any reference to its completion. Hence, sentences (24) are felicitous; the event of *thesis writing* could have been completed in the past or not. This difference between (23) and (24) is known as viewpoint Aspect or grammatical Aspect. Furthermore, the lexical and grammatical aspects are perceived to be layered in the clause structure, where the grammatical Aspect is perceived as a high functional head acting on the lexically encoded aspects to create compositional aspectual meanings which coerce the layered lexical notions (Binnik 2005).

There are several different proposals on how aspectual notions could be captured in the clause structure depending on how their functions are defined. In this section, I address some problematic issues within the domain of Aspect that have direct implications for my analysis of KA TMA verbs. These issues concern the following questions: 1) what is the exact function of the perfective/imperfective Aspect and do these aspects occupy a functional position in the clause structure that is distinct from Tense?, 2) how are events and states differentiated in terms of lexical and grammatical Aspect; is the distinction between these two types specified lexically or grammatically? , and 3) how can the class of aspectual verbs that encode aspectual notions lexically – such as *begin, continue, finish* …etc. – in their root be classified in relation to the dichotomy of lexical and functional Aspect?

In section 2.2.1, I present the definition of viewpoint Aspect adopted in this thesis in comparison to competing definitions in the literature. I propose that Aspect is considered a functional category reflected in the grammar as projecting its distinct functional projection

separate from that of relative tense, contra Klein (1994; 2014) and Demirdache & Uribe-Extebarria (2007; 2014).

In section 2.2.2, I discuss some definitions of lexical Aspect and how it is used to classify verbs and/or situation. There are two competing classifications for verbs: a) the quadripartite of events into Activities, Achievements, Accomplishments, and States (Vendler 1967), and b) the tripartite classification into either: States, Events, and Processes (Dowty 1979), or States, Processes, and Transitions (Pustejovsky 1991). Of interest is how States are classified and distinguished from events, and whether this distinction could be reflected in the clause structure in the syntax. I present two views from the literature on how the difference between states and events could be captured in syntax. Both views suggest that the difference relates to the Event Phrase/phase. The first is presented in Travis (2010) who suggests that EventP hosts the features related to the distinction between states and events. The second is Ramchand (2008) who suggests that states and events have different predicates types. I present an introduction to these two views in (2.2.2) but continue the discussion further in Chapter 4.

Section 2.2.3 concerns the class of aspectual verbs. They encode aspectual notions such as initiation, continuation/durativity, or cessation/termination. They constitute a challenging set of verbs since they encode these meanings lexically and grammatically. The challenge lies in how these verbs are mapped to the clause structure.

### 2.2.1 Viewpoint Aspect

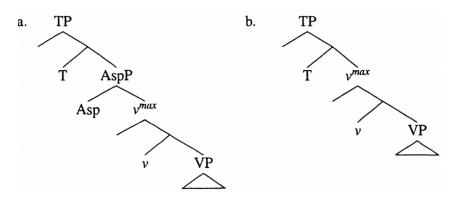
The difference between the perfective and imperfective is described in terms of the speaker's 'viewpoint' on the situation. Perfective Aspect contrasts with imperfective and denotes a situation viewed in its **entirety** without regard to its internal temporal constituency (Comrie 1976). In other words, perfective Aspect "includes the beginning and the end of the event within an external temporal frame specified by tense" (Zagona 2012: 354). Imperfective Aspect, on the other hand, excludes the event's boundaries from that reference temporal frame and views the internal constituency of the event from within (Smith 1997). The distinction between the perfective and imperfective is usually marked in the verbal system. Languages that have verbal Tense and aspect, such as French, Spanish and Russian, usually mark a binary split in their verbal system between the perfective and imperfective Aspect. On the other hand, some languages, such as English, mark a perfect/non-perfect distinction in their verbal system

(De Swart 2012: 761). The Perfect Aspect/Tense<sup>2</sup> refers to a past situation with relevance to the present, or moment of speech. On the other hand, the perfective does not necessarily indicate any relevance to the moment of speech. The distinction between perfective and perfect are discussed in more depth in 3.2.1.

There is a clear disagreement in the field on the interpretation of Aspect's function, which in turn is reflected in its syntactic representation. For example, Aspect is interpreted as a spatiotemporal ordering predicate similarly to Tense. This view is defended in Demirdache & Uribe-Etxebarria (2007) who argue that tenses, Aspects and time adverbs uniformly express spatiotemporal relations – precedence, subsequence or inclusion – between time intervals. Consequently, within this view, the function of relating ET to RT is the function of Aspect and not relative tense since Tense necessarily includes UT as one of its arguments, following the proposals in Klein (1994).

Cowper (1999), on the other hand, argues that Aspect – especially perfective and imperfective Aspect - is an operator on events that can project either a 'point' or 'interval' representative of the event, which in turn can be ordered by the Tense heads. In this view, Aspect is a head above vP and below TP. Aspect has one of two values: either a [point] or an [interval] feature. Cowper suggests that AspP should be renamed EventP since Aspect operates on events only and cannot operate on states. The following structure captures the function proposed in Cowper (1999) for Aspect, which she suggests is the functional head that distinguishes an Event from a State, as shown in (25):

# (25) Eventive (a) and non-eventive (b) structures (Cowper 1999: 221)



 $<sup>^{2}</sup>$  There is disagreement on the analysis of the Perfect in the literature regarding whether it represents a tense function or an aspect function. This disagreement has implications on the analysis of the perfective/imperfective verb functions in Arabic which I discuss in more depth in Chapter 3.

I follow Cowper's (1999) view on Aspect, which I show in Chapter 3 to be more capable of accounting for the data from Arabic than the temporal ordering function for aspect suggested by Demirdache & Uribe-Etxebarria. Nevertheless, I disagree with Cowper regarding labelling this head EventP instead of AspP. I show in Chapter 4 that there is a need for separating EventP from AspP since each head has its unique function in the system. I, therefore, follow Travis (2010) clause structure which consists of TP>AspP>EventP. Cowper suggests that the distinction between states and events is a grammatical distinction departing from the mainstream view which adopts an Aktionsart distinction between states and events. I show in Chapter 4 that Cowper's proposal can be married with the main stream view because I provide evidence from KA to show that the distinction between states and events can be encoded both on the lexical level and the grammatical level. In the following section, I discuss the lexical distinction between states and events. The grammatical distinction is postponed to Chapter 4.

### 2.2.2 Aktionsart (Lexical Aspect)

Lexical Aspect concerns inherent aspectual features within the verb or verb phrase that are used to classify situations into types (Smith 1997). Situations unfold in time, and it is possible to describe situations in terms of their temporal properties such as: 1) Whether the event is static or dynamic; some events are considered dynamic, such as *run* or *grow* while others are described as static such as *love* and *think* since they do not encode any movement in space. 2) Whether these dynamic eventualities happen abruptly or gradually; for example, an exploding event happens in a matter of seconds or even a split second, while building something usually takes a much longer duration which may span beyond days. 3) Whether events have a natural termination point or not; for example, an event of breaking something terminates when the state of being broken is achieved, and the event of breaking cannot logically continue, i.e. you cannot break what is broken, while on the other hand, an event of running can continue as long as subject desires or is capable of, unless they are running a race with a necessarily specified termination point. 4) Whether the termination of the event results in a change of state or not; for example, the event of destroying a house results in a change evident in the state of the house after being destroyed.

Based on the inventory of lexical aspectual features used, different classifications of situations are proposed. For example, Vendler (1967) classifies verbs into: Activities, Accomplishments, Achievements and State depending on their indication of two features: [±

	- Process	+ Process
- Definite	State	Activity
+ Definite	Achievement	Accomplishment

Process] and  $[\pm$  Definite] as shown in Table 1. He focuses on the telicity of the event and its durativity properties:

Table 1: Vendler's aspectual classification for verb types (1967)

The feature [+Definite] is related to telicity: whether the situation has a natural termination point, a telos. The feature [+Process] relates to durativity: whether the situation expresses a durative event or one that is punctual, or represents a moment on the time line. As shown in Table 1, States such as *know* and Activities such as *run* qualify as atelic situations [-Definite] as they describe unbound situations without an inherent endpoint. In contrast, Achievements such as *find* and Accomplishments such as *read a book* are telic [+Definite] as they describe bound situations with inherent endpoints. In terms of their interpretation on the time axis, States and Achievements are true moments since they do not encode a Process [-Process], whereas Activities and Accomplishments require an interval in their interpretation because they necessarily imply a development over time [+Process] (Travis 2010).

There are two main tests used to identify the value of the [Definite] and [Process] features. The first test relies on the complementary distribution between frame adverbial (*in x time*) and durative adverbial (*for x time*) with telic/atelic situations. A frame adverbial (*in x time*) is compatible with definite predicates but not so with indefinite predicates. The definiteness of the predicates is identified from both the verb and the definiteness of its complement. For example, the event of eating an indefinite number of apples is naturally an atelic situation, hence it is compatible with a durative adverbial but not with a frame adverbial as in (26). On the other hand, when the event of eating one apple or a specified number of apples is described, the situation described is then telic, and hence compatible with frame adverbials (27).

- (26) Atelic situation indefinite object
  - a. He ate apples for 3 hours
  - b. #He ate apples in 3 hours

(27) Telic situation – definite object

- a. #He ate 2 apples for 3 hours
- b. He ate 2 apples in 3 hours

The second test used for English verbs to identify whether the situation has a [+Process] feature is the acceptability of the progressive marker '-*ing*'. States and Achievements in English resist the progressive such as '*#he is hating his brother*' or '*#he is finding the pen*', which indicates they lack a Process feature, contra Activities and Accomplishments that accept the progressive easily, for example, '*he is running*' or '*he is eating an apple*'. Despite some counterarguments against these tests, the classification of situation types into Activities, Accomplishments, Achievements and States is still widely adopted (Filip 2012).

Another aspectual feature used to classify situations is presented in Dowty (1979). Dowty rearranges situation types into three aspectual classes in relation to the notion of change of state. Situations either indicate change or lack of change. In this case, a State is distinguished from other classes since it has no indication of change at all. Then, situations that do indicate change are split into two types: a) situations that denote indefinite change, and these are parallel to Vendler's Activity class. And b) situations that denote definite change, and these parallel Vendler's Accomplishment and Achievement classes. State predicates, in Dowty's approach, serve as the basic element from which non-state predicates are formed or derived into predicates that indicate a definite or indefinite change of state.

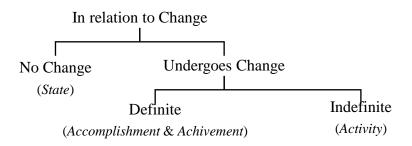


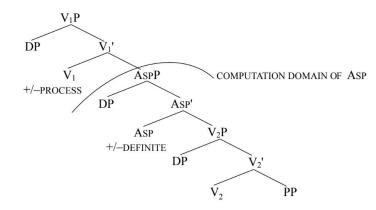
Figure 2: Dowty's classification for situations.

Following developments from the field of semantics, especially work on eventsemantics (Davidson 1967), a distinction could be made between states and the different types of situations: Activities, Achievements, and Accomplishments, in terms of an event argument (*e*) that is absent in states but encoded in events. I adopt the Davidsonian intuition that events are significantly different from states and that this difference must be captured in the syntax, which I develop in more depth in Chapter 4. In the following section, I present a brief introduction to two proposals on how Aktionsart could be calculated from the clause structure and how these different situation classes could be represented in the syntax, especially in relation to the difference between states and events. I briefly introduce two proposals in the following section: Travis's (1991; 2010) Inner Aspect projection, and Ramchand's (2008) Event structure.

### 2.2.2.1 Aktionsart and Syntactic Structure:

Travis (1991) argues for a functional projection between vP and VP to host moved objects and some functional morphology found in a few languages below v, which has been known since then as Inner Aspect. Travis (2010) argues that Aktionsart, especially telicity, could be calculated from information carried in Inner Aspect and v (which she calls V<sub>1</sub>). More specifically she argues that "V<sub>1</sub> carries information related to [ $\pm$ Process] and I-Asp carries the information related to [ $\pm$ Definite]" (*ibid*: 10). Travis proposes the following structure for the verb shell vP containing Inner Aspect showing where the features [Definite] and [Process] are calculated (v is equivalent to V<sub>1</sub> in the structure).

(28) Event Spine (Travis, 2010: 10)



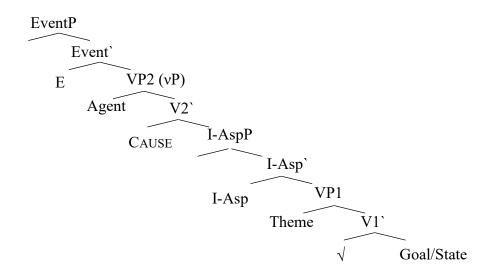
It is apparent from this structure that the definite feature is calculated in I-Asp from the information related to  $V_2$  and its complement. This leaves the Process feature to be calculated in relation to  $V_1(v)$ .

Furthermore, within this framework, the vP is the complement of an Event Phrase. EventP projects with all events and can hold information that distinguishes states from events. In fact, Travis discusses two possibilities for how states are distinguished from events. Either the event head carries a valued event feature which is positive with events but negative with states, or a State could be represented as projecting only  $V_2$  and lacking  $V_1$  contra events which project both  $V_1$  and  $V_2$  obligatorily (Travis 2010: 118). I argue in Chapter 4 that both possibilities are available in Arabic; the first option separates events lexically. I show from

Arabic data that there are lexical states and there are grammatical states, which are distinguished from one another by their grammatical behaviour.

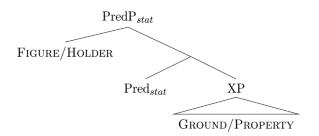
The following structure from Travis represents the Event projection and shows the positions for the thematic roles: Agent, Theme, Goal/State.

(29) The Event Phrase (Travis 2010: 117)



Another view of argument structure is presented in Ramchand (2008) and developed further in (2015). Within this framework, a primary distinction is made between states and events. States and Events are different types of predicates. States are represented as a static predicate type that relates two arguments of distinct aspectual roles (or thematic roles)<sup>3</sup>. The subject of the state predicate is the holder of the state, while the complement of the static predicate denotes the property described of the subject. The roles FIGURE and GROUND are the arguments of static predicates as shown below:

### (30) Static Property Predication (Ramchand 2008: 21)

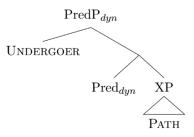


An Event, on the other hand, is a different predicate type. It is a dynamic predicate constructing a relation between the UNDERGOER of this dynamic event with a Path it

<sup>&</sup>lt;sup>3</sup> Aspectual roles replace the traditional theta role labels. They are event oriented and are structurally licensed such as TRIGGER, CAUSER, UNDERGOER, FIGURE...etc. (Ramchand 2008)

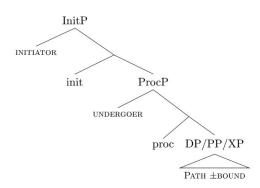
undergoes as a result of the event unfolding. The arguments of a dynamic predicate have different thematic/aspectual roles than the static predicate. The dynamic predicate relates the roles UNDERGOER and PATH, as shown below:

(31) Dynamic Property Predication (Ramchand 2008: 21)



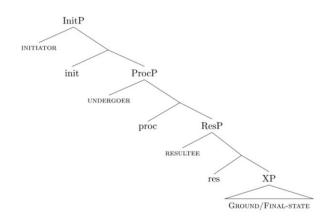
The simplest event must contain information regarding the dynamic property which sets events apart from states. In addition, it may encode information about the initiation of the dynamic event, whether it was intentionally initiated by its subject or caused by some other force. Furthermore, the event can encode information regarding whether the Process described resulted in motion through a specified Path or a change of state which encodes the culmination of the event, its telos. Therefore, Ramchand (2008) argues that events can be decomposed into three cognitively motivated sub-events represented in three hierarchic projections: a) Init(iation) event projection, b) Proc(ess) event projection, and c) Res(ult) event projection. Each projection introduces its unique subject. InitP introduces the CAUSER or INITIATOR of the event. ProcP is the key component of every dynamic event and introduces the UNDERGOER role. And finally, ResP introduces the HOLDER or the Resultant State and specifies the endpoint for the event. Accordingly, Activities can encode information about the initiator of the event, the Process, and an unbound Path, such as 'he runs miles'. As soon as a bound Path is added the Activity may be interpreted as an Accomplishments, such as 'he ran a mile'. Both Activities and Accomplishments are represented in the structure in (32). The difference is in the boundedness of the DP complement of ProcP.

(32) Activities (Path – bound) and Accomplishments (Path + bound) (Ramchand 2008: 23)



Furthermore, Accomplishments, such as '*he hammered the nail flat*' can express a change of state, so can Achievements, such as '*he destroyed the castle*', which results in a change of state to the castle. Both situations are represented in the structure in (33):

# (33) Caused-Result Accomplishments and Achievements (Ramchand 2008: 22)



It is worthy of mention here that Ramchand's account of the difference between states and events doesn't seem to be consistent. At the beginning of her discussion (in Ramchand 2008:21) she argues that States are a different predicate type than dynamic predicates relating different aspectual roles. However, later in the book she suggests that stative verbs project the sub-event initP which cannot select for a ProcP but some other rhematic material (DP/AP/PP) (2008:155). In this case, the difference between stative and eventive verbs relate to initP and its complement. I take this inconsistency to indicate that Ramchand realises that there are two types of states: stative predicates and stative verbs, which I discuss in more depth in Chapter 4.

The two proposals have some similarities and some differences. They are similar, first, with respect to the projection responsible for telicity. In Travis (2010), the telicity parameter is calculated in Inner Aspect projection, which dominates  $VP_2$ . It depends on the definiteness of  $V_2$ 's complement; if it is definite, the situation is telic, while if it is indefinite, the situation

is atelic. In Ramchand, telicity is related to the complement of ProcP, when the complement is a bound Path or a ResP the situation is telic, otherwise it is atelic. Second, the information related to the Process property of the event is related to  $V_1$  in Travis (the higher verbal projection), and in Ramchand, it is also related to ProcP. Third, for both approaches, information related to an Agent or an Initiator occupies the highest position in the structure. Both proposals conclude that there are functional projections within the lexical domain. In fact, Ramchand's proposal suggests that the lexical domain is all functional, since it can be divided into specific functional projections cutting across all event types<sup>4</sup>.

Interestingly, the deconstruction of events into three sub-events InitP, ProcP and ResP parallels the aspectual notions encoded in a class of verbs described as the aspectual verbs. These verbs encode the notions of initiation, continuation, and cessation/termination lexically, and always appear to be part of a serial verb construction of some sort. However, these aspectual verbs are usually analysed as representing functional heads above the thematic domain of the main predicate. Ramchand's analysis allows for another option for the position of aspectual verbs, i.e. within the Event Phrase. I adopt this view in analysing aspectual verbs *gaam* and *gaGad* in KA. This view accounts more elegantly for the behaviours of these verbs in KA and justifies how they grammaticalized from serial verbs to light verbs in KA as introduced in the following section.

## 2.2.3 A Case in between

Some aspectual notions such as inception, continuation and cessation may be expressed lexically and/or functionally. These notions are expressed lexically in verbs such as *begin*, *continue* and *finish*, or they may be marked by functional heads distinct from the main verb. For example, in KA the beginning of an event can be indicated by an inherently inceptive verb such as *bida* 'begin', or by a grammaticalized verb that performs the same function, which is *gaam. gaam* etymologically means '*got up*' but in these examples it is a functional element which indicates the notion of initiation as in the following example:

<sup>&</sup>lt;sup>4</sup> Ramchand argues that an event minimally has a ProcP and may optionally project an InitP or a ResP depending on the semantics of the verb.

(34)

a.	Bashayer	bida.t	t.aktib	er-risala
	Bashayer	began.PF.3SF	3SF.MP.write	DEF-letter
	'Bashayer beg	an to write the	letter'	
b.	Bashayer	gaam.t	t.aktib	er-risala
	Bashayer	INC.PF.3SF	3SF.MP.write	DEF-letter
	'Bashayer star	ted writing the	letter'	

Furthermore, the verb necessarily takes a complement 'event', whether the event is encoded nominally or verbally. For example, *bida* 'began' in (35) takes either a nominal complement (35)-a or a verbal complement (35)-b. The difference is not straightforwardly translated into English, but just as there are two possible forms of complements for *bida* 'began' in Arabic, there are two possible complements for *began* in English as shown in (36).

(35)

a.	Hind	bida.t	id-dirasa	[Nominal complement]
	Hind	began.PF.3SF	DEF-studying.N	
	Literal	lly: 'Hind begar	the studying'	
b.	Hind	bida.t	t.adris	[Verbal complement]
	Hind	began.PF.3SF	3SF.MP.study	
	'Hind	began studying	,	
(36	5)			

a. She began **studying** [Gerund]

b. She began to study [Infinitive]

Perlmutter (1968; 1970) argues for two different types of *begin* in English, evident from their different syntactic behaviours. He concludes that *begin* has properties of raising verbs and of control verbs. Fukuda (2007) builds on the work of Perlmutter which shows that aspectual verbs can be followed either by an infinitive or a gerund. He argues that those followed by an infinitive occupy a high Aspect head position – higher than VoiceP which he parallels with vP – while those followed by a gerund are in a low Aspect head position – lower than VoiceP/vP. Furthermore, he suggests that all aspectual verbs can be considered functional heads, and their syntax differs depending on their structural position, within vP or above it.

I suggest that Fukuda's conclusion about the functionality of these aspectual verbs may have its place in the event structure proposed by Ramchand. As discussed above, Ramchand proposes that a dynamic event may be composed of three sub-events: InitP, ProcP, and ResP. The InitP projection encodes the semantics of initiation or inception similarly to that encoded lexically in the verb *begin*. Furthermore, the aspectual notion of duration or continuation may be interpreted as parallel to the ProcP projection since it encodes information relevant to building the durative part of an event; this information is conveyed lexically in verbs such as *continue*, *resume*...etc. Finally, the ResP projection encodes information related to the end point of an event, its termination, which can pralallel the information encoded in lexical verbs such as finish, end ...etc. In fact, Ramchand (2008) brings evidence from serial verb constructions in languages such as Hindi and Bengali to show that there is a possibility that her sub-event projections be spelled out on different verbal heads rather than on one single verbal head. The following example from Bengali indicates completive Aspect:

(37) [Bengali]

a.	ami	amța	kheye	phellam
	I-NOM	mango-CLASS	eaten-NONFINITE	throw-PAST/1ST
	'I ate up the m	nango'		
b.	ami	amța	khelam	
	I- NOM	mango- CLASS	eaten-PAST/1ST	
	'I ate the man	go'	(Ramo	chand 2008: 156)

I take this to indicate that there is a position for aspectual verbs within the boundary of vP, or EventP. I use this proposal to account for the behaviour of aspectual verbs *gaam* and *gaSad* in KA in Chapter 6.

## 2.3 Modality, Modals and Mood

Modality could be defined as the grammatical representation of the speaker's attitude or opinion of either a proposition P, or the relation between a predicate p and its subject within a proposition; "whether he believes P/p certainly or potentially holds" (Butler 2003: 969). Thus, Modality introduces a comparison between an actual world of discourse and another hypothetical world in which the speaker judges the likelihood of this hypothetical world to correspond to the actual world (Al-Zahrani 2013). Palmer (2001) gives a similar definition of Modality and typologically classifies it into two main types: propositional Modality (P) and event Modality (p). Each main class is then divided into subclasses. He divides propositional Modality is an expression of the speaker's judgement about the factual status of the proposition. For

example: 'Kate *may* be at home now' means: It is possible that Kate is at home now; the speaker expresses their judgement of the status of the proposition as being a possibility. Evidential Modality is an indication of the type of evidence a speaker has for the factual status of the proposition. For example: Central Pomo, one of the seven Pomoan languages spoken in Northern California, has an evidential mood system that indicates the different types of evidence a speaker has for his proposition:

```
(38)
č<sup>h</sup> éemul-ya
rain fell-VIS
'it rained' (I saw it) (Palmer 2001: 6)
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In example (38), *ya* 'I saw it' is an evidential mood marker, indicating the type of evidence the speaker has for the proposition, which in this case is visual evidence.

The second main type of Modality – event Modality, or p – is divided into deontic Modality and dynamic Modality (Palmer 2001:9), with each type having two main subcategories. Deontic Modality relates to what is permissible or obligatory on the basis of an external source of authority. This source – in some cases – is the speaker himself. For example, 'you may go now' is a directive sentence that expresses the speaker's permission for the subject to leave. The speaker here is the body of authority, and the example expresses permissive Modality. The second subtype is Obligative Modality. An example of this type is: 'John *must* leave now', in which the subject, i.e. John is obliged to leave to certain moral or social circumstances. Dynamic Modality, on the other hand, relates to what is possible or necessary on the basis of the event's subject. It relates to his ability or willingness to perform the event. This type is also called circumstantial Modality. It consists of two subtypes: Abilitive and volition (Palmer 2001: 76). In the sentence 'Jack *can* play football extremely well', can signals Jack's ability. This expression is an example of an Abilitive Modality type. On the other hand, the sentence 'I suppose Jack will teach me Spanish if I ask him' is an expression of Jack's willingness. This is known as volition Modality. The combination of deontic and dynamic modalities is also referred to as root modalities and this term is used in the description of English modals by Coates (1983).

English expresses the previous modalities through modals. Nevertheless, just like the semantics of temporal reference, Modality is a large semantic domain which can be expressed through different linguistic means across languages and within one language. For example, in Arabic, different types of Modality can be expressed by different linguistic categories. They

can be expressed explicitly by lexical verbs, adverbs or nouns, or implicitly by certain Tense expressions, by negation with the passive voice or even by interrogative constructions, as illustrated in the following examples.

(39)	Verbs:		
Esam	y.igdar	y.saafir	baat∫ir
Esam	3SM.MP. <b>can</b>	3SM.MP.travel	tomorrow
'Esam	a can travel tomorrow'.		
[Dyna	mic- Ability]		

(40) <u>Adverbs:</u>

?akiid	Maye	t.saafir	baat∫ir
Surely	Maye	3SM.MP.travel	tomorrow
'Surely, Maye	e travels	tomorrow'.	
[Epistemic- N	lecessity	/]	

(41) <u>Noun Phrase:</u>

Azzam	widd-ah	y.saafir	l-il-kwayt
Azzam	desire-his	3SM.MP.travel	to-DEF-Kuwait
'It is Azzam's	s wish to travel	to Kuwait'.	
[Deontic- Vol	lition]		

# (42) <u>Implicitly by Tense morphemes:</u>

a.	tʃaan	gil.t	li-i	inni-k	msaaafir
	AUX.CF	said.PF.2SM	to-me	that-you	traveling.AP.M
	'You should have	told me that yo	ou were	travelling'	
	[Counterf actual]				

b. laa y.kuun Hind t.it<sup>c</sup>la3 w maa t.guul l-ii
NEG 3SM.MP.be Hind 3FS.MP.leave and NEG 3FS.MP.says to-1S
Literally '(let it) not be (the case) that Hind goes out without telling me!' and implies that 'Hind should not leave without telling me'
[Deontic (im)possibility] and [Counterfactuality]

c. Maye b-t.saafir l-il-dirasah ?ðaa ?inqabla.t
Maye FUT-3FS.MP.travel for-DEF-studying if got-accepted.PF.3FS
'Maye would travel for her studies if she got accepted'
[Deontic Volition]

(43) <u>By Negation and Passive Voice:</u>
ha-al-maay maa y.infirib
this-DEF-water NEG 3MS.MP.drunk.PASS
Literally: 'This water is not drunk' i.e. not drinkable = 'this water cannot be drunk'
[Dynamic - Ability]

(44)	By Interrogative Constructio	<u>ns:</u>
ſloon	t.isma\$	kalam-hum?
how	2MS.MP.listen	talk-their?
Literal	lly: 'How (could) you listen to	their-talk?' = 'How could you have obeyed them?'
[Episte	emic - Evaluative]	

In addition, Standard Arabic has a mood system which is believed to mark modalities such as subjunctive, jussive and deontic. Mood is the verbal inflection of the category of Modality which is marked on the verb. Hence, mood is a narrow notion within the larger domain of Modality. Since mood markers are not available in KA or in other Arabic dialects, I will not discuss mood markers any further.

What concerns me within the domain of Modality is the interaction between modal categories – especially Epistemic modality – and other functional heads such as the two proposed Tense heads (T1 and T2) and Aspect. For example, Modality interacts with Tense, especially as shown in example (42) above with the counterfactual *kaan*. In KA *tfaan*, which is an allomorph of *kaan*, is used in counterfactual constructions. Example (42) would not be understood to indicate counterfactuality in KA unless *kaan* is substituted by *tfaan*, because *kaan* in KA is reserved for past tense referentiality functions (see 5.4.3). I believe this distinction is particular to Kuwaiti Arabic, since other Arabic dialects, such as Hijazi Arabic (Al-Zahrani 2013) and Palestinian Arabic (Karawani 2013) use *kaan* for both functions: past reference and counterfactuality. Future tense also has a clear relation to modal function. In fact, many researchers consider the future tense a modal category. For example, the verb *will* has both intentional and volitional modal semantics and is the predominant future tense

marker in English. In KA, the verbs *raa7* 'went/FUT' and *b*- 'FUT' are markers of futurity and posteriority. The verb *raa7* is a motion verb that literally means 'gone', while *b*- is an affix believed to be grammaticalized from the verb 'want' *abi* in KA, and to have undergone phonological reduction (Al-Najjar 1984). Both morphemes mark future tense. The relation between future tense markers, futurity, posteriority, and volition is underlyingly linked by grammaticalization processes which lead to restructuring from the modal uses to the future tense uses (Heine 1993; Roberts and Rousou 2003; Ouhalla 2014).

The following section discusses some proposals of how the semantic notion of Modality may be mapped to clause structure, followed by the structural relation between tense and modality.

## 2.3.1 Syntactic Representation of Modality

Within work on the syntax of modals, modals are believed to be part of the IP domain. Ouhalla (1991) argues that modals are a part of a significant functional category (ModP), and they project from the lexicon as heads of ModP. Considering that modals can be divided semantically into at least two groups, Brennan (1993; 1997), Cinque (1999), Butler (2003), Hacquard (2006), Racy (2008), amongst others, argue for more than one ModP in the structure. Bernnan (1993; 1997) argues that English modals can take either a proposition (S-modals) or a predicate (VP-modals) as their complement, and that the former has scope over the latter in the structure. Epistemic modals take the entire proposition as their complement, therefore they merge higher than TP, while non-Epistemic modals merge lower than TP since they take properties as their complements. Cinque (1999) specifies eleven distinct modal projections in the clause spine, starting from the highest to the lowest they are as follows:

- (45) Cinque's (1999) and (2000) classification of mood heads
  - (a) Mod Speech Act > Mod Evaluative > Mod Evidential > Mod Epistemic ...
  - (b) ... Mod  $_{\text{Irrealis}} > \text{Mod}_{\text{necessity}} > \text{Mod}_{\text{Possibility}} > \dots \text{Mod}_{\text{Volition}} \dots$
  - (c) ... Mod Obligation > Mod Ability > Mod Permissive...

I grouped them into three clusters (a), (b), and (c) based on their order in relation to the three Tense heads suggested in Cinque (1999). He suggests that past tense has its unique T(Past) position, higher than T(Future). The cluster of Mod heads in (a) are all found above T(Past). Furthermore, he suggests that there is another Tense head, which he labels T(Anterior) that encodes the relation between RT and ET, and hence corresponds to my T2 projection. Interestingly, the cluster of Mod projections in (b) are found between T(Past/Future) and T(Anterior). Finally, the last cluster of Mod's in (c) are found below T(Anterior) but above Voice. The structure in (45) is rewritten to include these Tense heads and Voice:

- (46) Cinque's (1999) and (2000) classification of mood heads in relation to Ts
  - (a) Mod Speech Act > Mod Evaluative > Mod Evidential > Mod Epistemic > T Past >T Future
  - (b) Mod Irrealis > Mod necessity > Mod Possibility > ... Mod Volition ... > T Anterior
  - (c) ... Mod  $_{Obligation} > Mod _{Ability} > Mod _{Permissive}... Voice> ...$

Looking closely at the semantic notions of these Mod projections, it appears that the cluster in (a) represents the propositional modalities: Epistemic, evidential, evaluative and speech act. The cluster in (b) represents the deontic modalities related to possibility or necessity of the situation based on facts related to the whole situation. Finally, the modal semantics in (c) represent the dynamic Modality notions, such as ability and permission, related to the properties of the subject or object, i.e. related to the event. I suggest that the first cluster of modalities relate to propositions; the second cluster of modals relate to situations; the last cluster related to events.

### 2.3.2 Modal Senses of Past and Future Tense Morphemes

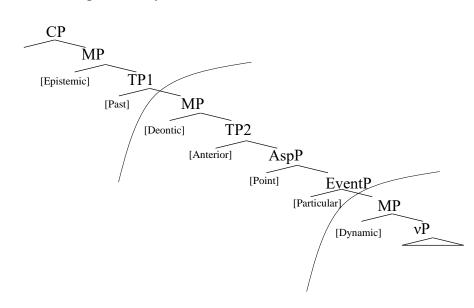
Many researchers since Abusch (1985) have considered the future to be a complex Tense composed of two parts: a true Tense head (either past or present) and an abstract modal head (labelled wollP) that contributes a modal force yielding posteriority (Wurmbrand 2013: 13). English *will* is analysed as a fusion between present tense in T and *woll*, the abstract modal head in wollP. Inversely, *would* is the result of fission between past tense and *woll*. Others, such as Racy (2008) adopt a similar approach but argue that the modal has volition semantics. She argues that for English *will* the verb starts off as a volitional modal head below Tense following the cartographic structure suggested by Cinque (1999), but then fuses with the future tense head above it. The future tense marker hence must start its derivation from a lower modal head and then become fused or incorporated with Tense valuing the future tense head. Past tense morphemes can have modal meanings as well. For example, the Arabic past tense morpheme *kaan* can express counterfactuality in Arabic (Karawani and Zeijlstra 2013; Al-Zahrani 2013). Karawani and Ziljistra build on Iatridou's (2000) idea that past tense morphology presupposes Non-Actual Verdicatliy; either it shifts from the actual time of the utterance to

another time (past), or it shifts from the actual world to another hypothetical world. In this approach, past tense morphemes are mark modal meanings. Specifically, the past tense morpheme starts in T and then merges with Epistemic modality creating counterfactuality. This relation between *kaan* and counterfactuality is investigated in more depth in Chapter 5.

The following section presents a preliminary sketch of the structure adopted in this thesis considering the functional categories discussed above, i.e. Tense, Aspect and Modality.

### 2.4 A Preliminary Clause Structure for Arabic

The clause structure is divided into three domains: the CP, the IP/TP and the VP. The main concern in this thesis is the inflectional domain IP of the Arabic clause structure. Given the discussion above, I propose the following structure:



(47) A preliminary clause structure for KA

The three domains represent my interpretation of Ramchand's (2014) dissection of the clause into an event domain, a situation domain and a proposition domain. The event domain includes the vP. The vP includes the VP shell discussed above in section 2.2.2.1 and can be replaced by Travis's VP1>AspP>VP2, but I use vP for abbreviation. This layer represents what is called the event description layer; it presents the components of the event without any indication of how it unfolds in time. In order to add the information related to how the event unfolds in time the second layer is used. Ramchand calls the second layer the situation layer. I propose that this layer depends on the value of EventP. If the EventP is positively eventive then the next layer is needed. To the contrary, when EventP does not have a positive eventive feature then the IP layer is not necessary. In a sense the EventP is on the boundary between the verbal predicate and the inflectional projection. I advance this argument in Chapter 4 and Chapter 5 with more details.

The functional heads in this layer (IP) modify some of the event's properties in order to project the event or situate it in a world and time. Starting from the first projection above EventP, we have AspP which hosts viewpoint Aspect that operates on the event and projects either a point or interval from the event in order for T2 to locate with respect to RT. It is worthy of mention here that AspP is assumed to host other aspectual heads such as inceptive, durative, progressive, terminative and also habitual Aspect in the literature (e.g. Cinque 1999, Benmamoun 2000 and Travis 2010). However, I suggest that AspP hosts only the features related to viewpoint Aspect [+Point]. I propose that the aspectual heads encoding inception, durativity, termination are in fact event-internal heads that start their derivation below EventP. However, I argue that the habitual reading is not achieved in Arabic by an overt habitual aspect head, but that it is achieved through the combination of a covert generic operator and an eventive predicate in one clause following in this sense Hallman's (2015) analysis for the habitual reading of the imperfective in Arabic. I discuss this issue in more depth in Chapter 6.

Above AspP is TP2, which hosts the anteriority temporal ordering feature [+Anterior], which locates ET anterior to the RT. The counterpart of anteriority is coincidence or simultaneity, which I argue that it is unmarked in Arabic. Therefore, only the perfective verb is marked for T2 and hence must realise the feature in T2 in order to be spelled out. The imperfective on the other hand represents the absence of anteriority, which is coincidence and simultaneity. Furthermore, I argue in the following chapter that the imperfective is the default verbal form and does not need to move to neither EventP, AspP nor TP2 to be spelled out. To the contrary, the perfective can only be spelled out by realising the features of all these functional heads up to TP2.

Furthermore, I propose that TP1 is a category on the boundary of the predicate-related categories and the sentence-related categories. TP1 may be specified as [+Past] or [-Past] if the predicate is eventive, otherwise it would be  $[\emptyset]$ . The null TP1 is usually a generic present tense (see Chapter 4). Furthermore, realising the value of TP1 can be achieved by elements other than the verb directly. Therefore, I argue in Chapter 3 and Chapter 4 that function of T1 is separate and distinct from the functions of T2 in the structure of Arabic; the projection of T2 depends on the predicate being eventive while T1 can be supported by elements other than the verb.

Above T1 there is another MP which hosts Epistemic modality, and also counterfactual Modality or other propositional modalities such as evaluative and evidential. The functions of this head are relevant for the analysis of the modal functions of *kaan* discussed in Chapter 5.

Before presenting a description of how the TMA system works in KA, it is important to discuss where the perfective/imperfective verbs stand in relation to this structure. I proposed that only the perfective moves or realises the features of EventP, AspP and T2 while the imperfective does not have any realise any of these functional heads in this system. The imperfective is just the default verbal form as argued by Benmamoun (1999). Nevertheless, in order to support this position, a discussion of the different proposals regarding the perfective/imperfect must be considered. Therefore, the following chapter presents a description of the functions of the perfective/imperfective verbal forms considering the contexts they appear in. Furthermore, it describes their functions in relation to Tense and aspect notions specifically. In addition, I show that defining viewpoint Aspect in terms of boundedness is not sufficient to account for the functions of the perfective and imperfective verbal forms in KA.

# **Chapter 3. Perfective and Imperfective between Tense and Aspect**

In Arabic, there are three main verbal forms: 1) perfective form, also referred to as perfect, past or suffixal form; 2) imperfective form, also called the imperfect, non-past or prefixal form; 3) imperative form. There is no bare verbal form in Arabic: all verbs must inflect to realise subject agreement consisting of person, gender and number. The imperative form is exclusively used in imperative clauses. However, the perfective and the imperfective are used in different clauses. There is a fourth form that is sometimes classified as a verbal form: the active participle (AP henceforth). The AP can show both verbal and nominal/adjectival behaviour, depending on the context, and appears to interact with Tense and aspect. It is the form which can convey the aspectual reading usually conveyed by the English Perfect<sup>5</sup>. This chapter focuses mainly on describing the perfective/imperfective verbal forms and shows how these verbal categories are related to notions of Tense and aspect.

The chapter unfolds as follows. The first section (3.1) describes the perfective and imperfective verbal forms morphologically and shows the contexts in which they are used with data from KA and SA when necessary. Section 3.2 discusses a complexity raised due to the overlap between the functions of viewpoint Aspect and relative tense. This complexity is reflected in the clear disagreement amongst researcher on whether the Arabic verbs indicate a Tense or Aspect functions. It manifests clearly in the variety of labels used for the two verbal forms. For example: the choice of the label (im)perfective is used by those who argue that the verbal forms have an Aspect function such as Wright (1896), Al-Najjar (1984) and Brustad (2000) amongst others. Alternatively, the labels (im)perfect<sup>6</sup> and (non-)past are preferred by those who argue for a Tense function such as Comrie (1985), Fassi Fehri (1993; 2012), Bahloul (2008) and others. I show that the seemingly contradicting analyses stem from the lack of agreement in the literature on what should be considered a Tense function and how it can be distinguished from viewpoint Aspect. To resolve this complexity, I propose that any function involving temporal ordering of the temporal predicates ET/RT/UT in relation to each other should be considered Tense, be it relative or absolute tense. Aspect, on the other hand, should be limited to the function of selecting/projecting either a point or an interval representative of the event as ET which can then be temporally ordered by a Tense head.

<sup>&</sup>lt;sup>5</sup> I discuss the AP's relation to Tense and Aspect in Chapter 4 in light of the distinctions made between events/states and eventives/statives.

<sup>&</sup>lt;sup>6</sup> The term Perfect is sometimes considered an Aspect notion and sometimes a Tense notion. I discuss the details of this problematic label in section 3.2.1.

In section 3.3 I show that analysing viewpoint Aspect as the function of selecting a point or interval of the event (following Cowper 1999) instead of the common view of Aspect as indicating (non-)culmination or boundedness presented by Smith (1997) can account for the continuative reading found with some but not all perfective verbs, especially Activity and state verbs. I show that viewpoint Aspect depends on the interaction between the verb's form (perfective/imperfective) and the event's Aktionsart properties. In this respect, I argue contra Fassi Fehri (2012:3) who claims that the imperfective/perfective viewpoints are not sensitive to the event's Aktionsart properties. I argue to the contrary, that there is a level of transparency and interaction between the Aktionsart features of the event and viewpoint Aspect and Tense in Arabic.

I conclude the chapter with a representation of the clause structure showing the marked Tense and Aspect features in Arabic. I show that the perfective form can be spelled out when T2 has a [+Anterior] feature and Asp has a [+Point] feature. The imperfective, on the other hand, originates lower in the structure and does not mark Tense nor Aspect functions. I represent the imperfective within vP and below EventP.

#### 3.1 Description of the Perfective/Imperfective Verbal Forms

Before engaging in the description of the verbal system, I have to note here that my choice of perfective/imperfective labels does not indicate a pre-judgement of the correctness of the aspectual view; in fact, I argue that the perfective is marked for Aspect and Tense, but the imperfective is neither Tense nor Aspect marked. In addition, I reject the label perfect/imperfect, because I take the label perfect to refer to the function that denotes a state resulting from a prior action that is concurrent and relevant to the speech context (Comrie 1976). The perfect is a 'complex' function since it refers to both an 'action' part of the event and the resultant 'state' of that action, making it difficult to categorise as either Tense or Aspect related (Kinberg 1992). In addition, this function is represented in Arabic through the AP form more commonly than in the perfective verb (Comrie 1967; Kinberg 1992; Brustad 2000; Eaden and Persson 2013), and as such I reserve the term perfect to refer to that specific function discussed in more depth in 3.2.1. In the following subsections, I present a morphological description of the verbs in SA compared to KA and focus on the differences between the two main verbal forms, the perfective and imperfective, followed by the contexts in which they are used. I show throughout the description section the main arguments supporting the asymmetry view, which I adopt and argue for in this thesis.

# 3.1.1 The Verbal Paradigm Between Kuwaiti Arabic and Standard Arabic

In Standard Arabic, the verb system consists of fifteen binyans<sup>7</sup> for trilateral roots and four binyans for quadrilateral roots, each having a perfective and imperfective form (Mccarthy 1981: 385). Furthermore, each binyan has an AP form as shown in the following table taken from Mccarthy (1981:385). Table 2 below shows the different binyans with a trilateral  $k_t_b$  verb, and a quadrilateral  $d_h_r_j$  verb.

Binyan	Active perfective	Active imperfective	Active participle
	Triliter	ral Roots <b>k-t-b</b>	
Ι	katab	a.ktub	ka <b>a</b> t <b>i</b> b
II	ka <b>tt</b> ab	<b>u.</b> katt <b>i</b> b	mu-kattib
III	ka <b>a</b> tab	<b>u.</b> kaat <b>i</b> b	<b>mu-</b> kaatib
IV	<b>?a.</b> ktab	<b>u.</b> ?a.kt <b>i</b> b	mu-?a.ktib
V	ta.kattab	<b>a.</b> ta.kattab	mu-ta.kattib
VI	ta.kaatab	<b>a.</b> ta.kaatab	<b>mu</b> -ta.kaatib
VII	n.katab	<b>a</b> .n.kat <b>i</b> b	mu-n.katib
VIII	k <b>ta</b> tab	<b>a.</b> ktat <b>i</b> b	mu-ktatib
IX	ktaba <b>b</b>	<b>a.</b> ktab <b>i</b> b	mu-ktabib
Х	<b>sta.</b> ktab	<b>a.</b> sta.kt <b>i</b> b	mu-staktib
XI	kta <b>a</b> ba <b>b</b>	<b>a</b> .ktaab <b>i</b> b	mu-ktaabib
XII	kta <b>wt</b> ab	<b>a.</b> ktawt <b>i</b> b	mu-ktawtib
XIII	kta <b>ww</b> ab	<b>a.</b> ktaww <b>i</b> b	mu-ktawwib
XIV	kta <b>n</b> bab	<b>a.</b> ktanb <b>i</b> b	mu-ktanbib
XV	ktanba <b>y</b>	<b>a.</b> ktanb <b>i</b> y	mu-ktanbiy
	Quadrite	ral Roots <b>d-h-r-j</b>	
QI	dahr <b>a</b> j	<b>a.</b> dahr <b>i</b> j	<b>mu-</b> dahrij
QII	<b>ta</b> dahraj	<b>a.</b> tadajraj	mu-tadahrij
QIII	dha <b>n</b> raj	<b>a.</b> dhanraj	mu-dhanrij
QIV	dharj <b>aj</b>	<b>a.</b> dharj <b>i</b> j	<b>mu-</b> dharjij

Table 2: Verbal binyans modified from Mccarthy (1981: 385).

Each binyan marks different aspectual and semantic properties such as transitive, causative, anti-causative, inchoative, exaggerative, reciprocal etc. that are sensitive to event structure; the predicate and its arguments. Specifying which functions each binyan encodes is a complex task and is beyond the scope of this research. Nevertheless, all these binyans have a perfective and imperfective version. Tha availability of both these forms for all binyans indicates that the inflections related to either the perfective or the imperfective forms must be related to a functional category that operates over the argument structure domain i.e. above vP.

Looking closely at the perfective column and the imperfective column, the difference between these two forms appears in a change in the last vowel of the perfective from -a into -i in most binyans in addition to an added prefix a- or u- with the imperfective counterparts.

<sup>&</sup>lt;sup>7</sup> Binyan is a Hebrew term which refers to a word template consisting of consonants and vowels which constitute the verbal forms.

It has been argued that the affixes that are affected by this change represent the Tense or Aspect inflectional morphemes (McCarthy 1981; Bahloul 2008). Furthermore, the AP shares the same stem with the imperfective but has a different prefix *mu*- instead of *a*- or *u*- as shown in the Table  $2^8$ . The close similarity between the template of the imperfective and the AP is taken by Benmamoun (1999) as evidence that the imperfective form is a default verbal form that acts as the basic stem from which other verbal forms are derived, especially the AP form.

A stronger argument for the asymmetry between these forms relates to the placement of the person agreement in each form. Fassi Fehri (2012) argues that the person inflection is always prefixed with the imperfective but suffixed with the perfective. The gender and number inflections, on the other hand, may vary with the imperfective as they can be suffixed or prefixed. Looking at the first binyan in the active voice as an example, Table 3 shows the person, gender, and number agreement inflectional paradigm for verbs in SA. The verb is inflected for subject agreement, and the agreement morphemes are either prefixed or suffixed but never **infixed** in the verbal form.

		Perfective (perfective)		Imperfective (imperfective)				
		Number			Number	Number		
Person	Gender	Single	Dual	Plural	Single	Dual	Plural	
3rd	М	Katab. <b>a</b>	Katab. <b>aa</b>	Katab. <b>uu</b>	Ya.ktub.u	Ya.ktub.aan	Ya.ktub.uun	
	F	Katab. <b>at</b>	Katab. <b>ataa</b>	Katab. <b>na</b>	Ta.ktub.u	Ta.ktub.aan	Ta.ktub.na	
2nd	М	Katab. <b>ta</b>	Katab. <b>tumaa</b>	Katab. <b>tum</b>	Ta.ktub.u	Ta.ktub.aan	Ta.ktub.uun	
	F	Katab. <b>ti</b>		Katab. <b>tu</b>	Ta.ktub.iin		Ta.ktub.na	
1st	-	Katab. <b>tu</b>	-	Katab. <b>naa</b>	2a.ktub.u	-	Na.ktub.u	

Table 3: Verbal binyans modified from Mccarthy (1981: 385).

KA verbs are also inflected for subject agreement and the agreement morphemes follow the same placement as the verbs in SA, except that KA does not have a dual number, and it does not distinguish between the feminine or masculine gender in plural form (see Table 4). KA, also, has a different vocalic melody than SA; the vowels between the consonantal roots are different from SA (Al-Bahri 2014)

<sup>&</sup>lt;sup>8</sup> The first binyan (I) appears as an irregular case compared to the other binyanims.

		Perfective (perfective)		Imperfective (imperfective)			
		Number			Number		
Person	Gender	Single	Dual	Plural	Single	Dual	Plural
3rd	М	Kətab	-	əktəb.aw	Ya.ktib	-	Ya.ktib.uun
	F	əktab. <b>at</b>	-		Ta.ktib	-	
2nd	М	Kətab. <b>t</b>	-	Kətab. <b>taw</b>	Ta.ktib	-	Ta.ktib.uun
	F	Kətab. <b>tai</b>	-		Ta.ktib		
1st	-	Kətab. <b>t</b>	-	Kətab. <b>naa</b>	2a.ktib	-	Na.ktib

Table 4: The two verbal paradigms in Kuwaiti Arabic

Benmamoun (1999) argues that since the perfective's agreement inflections are suffixed while the imperfective's are prefixed, the verbal stem of the perfective must be in a position higher than the position where the verb-subject agreement is checked. If the subject is merged in or above vP, the perfective stem must move higher than vP. In fact, Benmamoun specifically notes that the perfective must move to T to check a verbal feature of the past tense, so the perfective must move as high as the TP. The imperfective, on the other hand, does not. The placement of the person agreement is taken to indicate that there is an asymmetry in the position of the perfective/imperfective in relation to the position where the subject – external argument – is merged. The question remains; to which functional position (TP or AspP) does the perfective raise considering that there is disagreement in the literature as to whether the perfective is marked for Tense or Aspect specifically? In the following section, I present the typical contexts for the perfective and the imperfective in Arabic, in order to identify whether these forms are inherently related to Tense or Aspect function, both or none.

## 3.1.2 (Im)Perfective Contexts and Functions

The description in this section starts with the perfective form and its meanings/functions when used in: a) simple matrix clause, b) embedded context, c) conditionals and counterfactuals, and d) generic clauses. It is then followed by the uses of the imperfective form in a) simple clauses, b) embedded contexts, and c) conditionals. I follow the organisation presented in Bahloul (2008) in order to show where I clearly disagree with his description and why.

### 3.1.2.1 The Perfective's Contexts

# A) In Matrix Clauses

Firstly, the perfective is used in temporal and atemporal contexts. When the perfective is used in a simple matrix clause with deictic temporal reference it indicates simple past or may show present perfect readings:

(1)

a.	t <sup>s</sup> aaħ	xaalid	(qabl	shway /	/ #alħeen / *ba	at∫ir)
	fell.pf.3sm	khalid	(minute	es ago /	/#now/*tome	orrow)
	'Khalid fell m	unities ago'				
a.	?ana	JiS.t		(#qabl s	shway / alħee	n / *baat∫ir)
	Ι	hungered.PF.1	S	(minutes	s ago / now	/ *tomorrow)
	Literally: 'I hu	ingered' meaning	ng 'I am	n hungry	now'	
b.	sibaħ	al-walad	b-il-ma	ısbaħ		(?ams/ *alħeen)
	swam.pf.3sm	DEF-boy	in-DEF-	swimmi	ng pool	(yesterday/ *now)
	'The boys swa	im in the swimi	ming po	ol yester	day'	

These examples are used to argue that the perfective doesn't always indicate past tense even when it is used in a simple matrix clause. Specifically, Fassi Fehri (2012:17) claims that the verb *jiSt* ''hungered' indicates present perfect tense, which suggests that the perfective form doesn't always locate the event prior to the RT or UT. I disagree with this conclusion and argue (furthermore in 3.3) that the present perfect reading is implied from the Aktionsart features related to the event and not from the perfective viewpoint. The event *jiSt* is built on a Stage-level state which involves a triggering event causing a change from a state of not being hungry to a state of being hungry. The perfective form picks up this point of transition and then locates it prior to RT/UT. The fact that the state of being hungry overlaps the UT is an implication of the perfective Stage-level event and not a direct function of the perfective viewpoint. The perfective picks up the transitional 'point' regardless of the information related to the state. In fact, when the 'state of being hungry' must be focused or asserted a stative adjectival form is used instead as in the following example:

- (2) ana jouSan.a
  - I ADJ.hungry.SF
  - 'I am hungry'

This adjectival participle form asserts the state itself without including the transition point from the state prior to being hungry to the state of being hungry. In this view, I follow Kinberg (1992) who highlights the importance of distinguishing between the form's meaning and the implications related to that meaning, especially in relation to his work on APs in Arabic, which I discuss in 4.4. In section 3.3 I present an analysis of perfective viewpoint and show how it interacts with different event types. Nevertheless, I argue that the function of the perfective viewpoint operator is one and the same with all event types, it projects one point of the event.

# B) Embedded Context

Secondly, the perfective form shows up in embedded clauses. When the embedding verb has past tense reference, the perfective gives a shifted past reading, past of the past:

(3) simast	?inna	xaalid	∫ara	sayara
heard.PF.1s	COMP	Khalid-nom	bought.PF.3SM	car
'I heard that H	Khalid bought a	ı car'		

Both events in (3) are in the past, but the buying event is prior to the hearing. The perfective in the matrix locates the event prior to UT, while the perfective in the embedded clause locates the event prior to RT which is specified or controlled by the matrix verb, hence creating the past of the past reading.

In addition, when the perfective is embedded under an auxiliary verb *kaan/ykuun* 'be' the event becomes anterior to the RT. RT is specified in the clause by the adverbial, and ordered in relation to UT by *kaan*, hence the perfective cannot be calculated in relation to UT directly:

- (4)
- a. kaan (gid) fara khalid is-sayara qabla la y.nazl.oon si§ir-ha be.PF.3SM (AST) bought.PF.3SM khalid DEF-car before NEG 3P.MP.lower price-it 'Khalid had bought the car before they lowered its price'
- b. gabl la t.abdi il-ijaza b-akuun s<sup>c</sup>allaħ.t is-sayara
  before NEG 3SF.MP.start DEF-holiday FUT-1S.MP.be fixed.PF.1S DEF-car
  'Before the holiday starts I will have fixed the car'

In both examples, the auxiliary verb has deictic tense reference (past in (4)-a and future in (4)b), while the perfective indicates anteriority to a reference time clarified by the adverbial clause. In (4)-a both the events of buying the car and lowering its price happened in the past despite one event is in the perfective and the other is in the imperfective form. The perfective indicates that the event of 'buying the car' is anterior to the imperfective event of 'lowering its price'. Similarly, in (4)-b both events 'fixing the car' and 'starting the holidays' will happen in the future, yet fixing the car will be anterior to the start of the holiday. The auxiliary specifies the deictic reference, while the perfective and imperfective events are located in relation to each other. In both instances the perfective verb allows its event to be anterior to RT.

# C) With Conditionals

Thirdly, the perfective is used in temporal and atemporal conditionals with different semantics. In temporal conditionals, Comrie (1976) argues that the perfective's main function is anteriority. The perfective event is anterior to the imperfective event. Nevertheless, I find that the ordering of the events in relation to each other is achieved by the conditional particle and not by the verbal form. The conditional event is always prior to the consequent event regardless of the events form, be it perfective or imperfective, as indicated in example (5)-b which is grammatical in SA:

(5)

a.	?a.jee?u-ka		?iða	iħmarra	il-bus <sup>s</sup> ru	[SA]		
	1S.MP.come-you		when	ripen.PF.3SM	DEF-unripe-dates			
	ʻI shal	l come to you v	when th	e unripe dates r	ipen (shall ripen).'			
					(Example from Co	omrie 1976:79)		
b.	?iða	iħmarra	il-bus <sup>q</sup>	ru	Ji?tu-ka	[SA]		
	when ripen.PF.3SM		the-un	the-unripe-dates came.PF.1S-you				
	'When the unripe dates ripen, I will come to you'							

Example (5)-b, shows that both events can be encoded in the perfective, and still the conditional event precedes the consequent event. Therefore, in conditionals with  $2i\partial a$ , the perfective is not performing any ordering function. Instead, the choice of verbal form performs another function; the perfective indicates high possibility or likelihood of the event, while the imperfective indicates low possibility or less likelihood of the conditional event as shown in the contrast between (6)-a-b:

(6)

- a. ?zoor-ich ?itha radd.at bint-i min landan
  3SF.MP.visit-you when cameback.PF.3SF daughter-my from London
  'I will visit you when my daughter comes back from London'
- b. ?zoor-ich ?itha t.ridd bint-i min landan
  3SF.MP.visit-you when 3SF.MP.cameback daughter-my from London
  'I will visit you if my daughter comes back from London'

In (6)-a, using the perfective for the conditional event indicates a high possibility for the daughter to come back from London. In contrast, using the imperfective conveys less possibility. The translation to English shows a difference in the choice of the conditional particle, in (6)-a the clause is best translated using *when*, while in (6)-b it is best translated using *if*. I suggest that the conditional particle controls the Tense projections, and blocks the event from receiving Tense interpretations. In this case, the perfective and imperfective appear to have a modal related function only, instead of a Tense-related function. Other conditionals do not control Tense referentiality such as the counterfactual conditional *law* in KA:

(7)

a.	law	∫ <b>aaf-</b> ik	(t∫aan)	ðbaħ-ik	[Perfective]				
	if	saw.PF.3SM-you	(CONJ)	kill.PF.3SM-you					
	'If he had seen you he would have killed you'								
b.	law	<b>y.∫uuf-</b> ik	y.ð	<b>biħ-</b> ik	[Imperfective]				
	if	3SM.MP.see-you	3sm	<b>A.MP.kill</b> -you					
	'If he sees you he will kill you'								

Using the perfective in (7)-a indicates that the construction was a high possibility of the past, and it is the opposite of the current facts, i.e. counterfactual. The perfective, in this case, has both past tense reference and the modal high possibility function. Comparing that to the imperfective in (7)-b, the imperfective sets the conditional time to start from UT and project to the future. In addition, it doesn't have the counterfactual reading found in (7)-a.

I focus here on the fact that the perfective's Tense feature may have different interpretations depending on the contexts it is used in, and whether the sentence captures a realis or irrealis situation. When the deictic tense reference is controlled by the conditional particle the anteriority function of the perfective is suppressed because the anteriority is controlled by the order of the events in the conditional construction; the anterior event is the conditional event. In other conditionals which do not control the deictic Tense reference, the event itself may have temporal referentiality directly.

I suggest that the temporal conditional represent a special case and it is beyond the scope of this research to provide detailed accounts for the relation between temporal complementizers and the Tense/Aspect properties of the verbal form.

D) In Generic Clauses

Finally, the perfective can be used in generic constructions, as pointed out in Bahloul (2008: 57):

(8) men jadda wajada, wa men zarasa hassada
whoever strive.PF.3SM find.PF.3SM and whoever cultivate.PF.3SM harvest.PF.3SM
'Whoever works hard succeeds, and whoever cultivates harvests'

Bahloul claims that this example shows that the perfective verbal form indicates genericity and stativity similarly to imperfective verbs. I disagree with this claim since this example does not show that the perfective form is generic but that it can be compatible with generic readings. Furthermore, the source of genericity in the mentioned example is encoded in the overt *wh*operator *men* 'whoever' which functions as a generic quantifier. I will show that the perfective form on its own cannot indicate generic readings without the use of some overt generic operator contrary to the imperfective verbal form. I argue in Chapter 4 that this relates to the perfective predominantly marking an event/eventive, contrary to the imperfective which is not marked as an eventive, so it can thus allow both eventive and stative/generic readings. This difference between the perfective and imperfective in allowing generic meanings is another significant argument for the asymmetry between the forms.

3.1.2.2 The Imperfective's Contexts

### A) In Matrix Clauses

The imperfective form shows a wider distribution; it can stand alone in finite simple matrix clauses with either an eventive present progressive or a generic reading; as shown in (9). These different readings are disambiguated by the adverbs that confirm whether the event is an individual instance (9)-a, or a generic referring to a property (9)-b or a habitual characteristic (9)-c:

a. Khaalid vi.lSab kurat-qadam (alheen) [Present Progressive] Khalid 3SM.MP.play football (now) 'Khalid is playing football now' yi.l**Sab** b. Talal Kurat-qadam (b-imtiyaaz) [Generic] Talal 3SM.MP.plays football (with-excellence) 'Talal plays football excellently' c. Talal yi.lSab Kurat-qadam (kill isbuu\$) [Generic-Habitual] Talal 3SM.MP.play football (every week) 'Talal plays football every week'

(9)

Without an adverbial, these sentences are ambiguous. Using the deictic temporal adverb now forces the present reading, hence the event of 'playing' indicates one specific and current event that the subject is engaged in during UT, giving the progressive reading. In (9)-b the imperfective *yal3ab* 'play' is modified by a manner PP 'with great skill' forcing the generic reading, which turns the predicate into a characterising state of the Subject. The adverbial *kil marra* 'everyday' forces the habitual reading, which also turns the event into a habitual reoccurrence that characterises the subject, hence the event is read off as a stative (For arguments regarding the stative classification of habitual situations see Chapter 4, following Cowper (1999) and Arche (2014)). The same verbs can get a habitual reading when modified by a habitual or iterative adverb such as 'every day'. Without the specific adverbials that refer to present tense, or habituality or attributive characteristics, the imperfective form may be ambiguous between all these readings.

Adding to this complexity, the imperfective, even when used with deictic adverbs, does not always encode present tense; in some cases, it may only have prospective future as shown in the following example:

(10) Talal y.oos<sup>c</sup>al (bSd shway /#?alaana)
Talal 3SM.MP.arrives-IND (in few minutes /#now)
Lit: 'Talal arrives (in a few minutes / #now)'
'He will arrive in a few minutes /now'

Despite its being possible to use the adverb *now*, it cannot have a present tense reference because the event of arriving has not happened at UT yet. This property of some verbs is strongly related to their Aktionsart features, which I discuss in 3.3. This behaviour indicates

that the imperfective is not inherently marked for continuous present tense, or utterance time. Further support comes from the behaviour of the imperfective in matrix clauses when preceded by a modal or negation marker, which affects the temporal reference of the clause. For example, the future tense, as mentioned earlier, is usually marked by a modal. *Sawfa* and *sa*- are future tense markers in Standard Arabic. Similarly, in KA *b*- and *raa7* are future tense markers. The verb after these modal markers can only be in the imperfective form. Using the perfective is ungrammatical, as shown in the following examples:

(11)

- a.sawfaya.drus-u/ \*darasa[SA]FUT3SM.MP.study-IND/ \*studied.PF.3SM'He will study'
- b. b-ya.dris / \*b-daras [KA]
  FUT-3SM.MP.study / \* FUT-studies.PF.3SM
  'He will study'

The argument in these examples is that the perfective verb is incompatible with the future tense markers. This supports the fact that the perfective has a temporal function. However, as argued throughout the thesis this function relates necessarily to T2 which orders the event time ET anterior to the reference time RT. The perfective verb can realise past tense although not directly. I suggest that the perfective verb gets a past reading when RT is simultaneous to UT (since the perfective orders ET before RT but not RT before UT). I do not propose that the perfective can make RT=UT, rather that there is some other factor which makes both RT and UT indicate the same temporal point. This coincidence of RT with UT is blocked when there is element controlling the order between RT and UT like auxiliary kaan/ykuun for example, or the use of some temporal particle. I suggest that the ungrammaticality of using the perfective verbal form directly with future modals sawfa/b- could be related to a contradiction between the effect of the perfective which orders ET before RT and then the modal's function which locates RT after UT. The result of this combination could be an overlap between ET and UT points. This effect is removed or corrected when an auxiliary verb ykuun is used in the construction, which assures that the ET does not overlap UT such as shown in the following examples:

(12)

a.	sawfa	*(yakuunu)	darasa	[SA]		
	FUT	ЗSM.MP.be	studied.PF.3SM			
	'He will have studied	,				
b.	<b>b-</b> ykuun	daras		[KA]		
	FUT-3SM.MP.be	studies.PF.3SM				
	'He will have studied'					

The imperfective, on the other hand, does not have a marked temporal ordering function; it simply refers to an interval of the event which can overlap any reference point. Therefore, I consider that the imperfective does not force a temporal reading.

Another piece of evidence comes from the imperfective's behaviour with negation in SA. The negation morpheme carries the temporal reference function instead of the verb. The default negation is *la*, which is compatible with the present tense and the generic sentences, as shown (13)-a. When the sentence indicates past tense, the negation *lam* is used (13)-b, and when future tense is required, the negation *lan* is used (13)-c. In all these contexts the verb must be in the imperfective form:

(13)

a.	la	ya.drus-u	[Present & Generic]				
	NEG	3SM.MP.study-IND					
	'He <b>doesn't</b> s	tudy'					
b.	lam	ya.drus	[Past]				
	NEG	3SM.MP.study					
	'He did not st	tudy every'					
c.	lan	ya.drus-a	[Future]				
	NEG	3SM.MP.study-SJN					
	'He will not study every day'						

The situation is slightly different for KA since the negation markers *lam* and *lan* are not used in KA. Instead, the tense referentiality is achieved through the verb for the past or through the future marker for the future reference, in these parallel construction from KA:

(14)								
a.	ma		y. <b>adris</b>	[Generic]				
	NEG		3SM. <b>MP</b> .study					
	'He d	oesn't st	udy'					
b.	mu	gaaʕid	y.adris	[Present progressive]				
	NEG	PRG	3SM.MP.study					
	'He is	not stud	lying'					
c.	ma		daras	[Past]				
	NEG		study. <b>PF</b> .3SM					
	'He <b>did not</b> study every'							
d.	ma	raaħ	ya.dris	[Future]				
	NEG	FUT	3SM.MP.study					
	'He w	<b>ill</b> not st	udy every day'					

Comparing (13)-c to (14)-c it is clear that in KA to encode a negated past event a perfective form must be used instead of an imperfective form as in SA. This could be related to a strong temporal feature in negation markers in SA, which are absent in the negation markers in KA. Benmamoun (1999) uses these data to argue that the imperfective does not have any Tense-related features, therefore, other elements in the clause can be used to specify the Tense of the clause, whether its past, present or future. Furthermore, he takes this behaviour to indicate that the imperfective is the form that shows up when Tense is carried by any other head above the verb, i.e. when the verb is blocked from moving to T by an intervening head such as negation or modals.

E) In Embedded Clauses

Other contexts where the imperfective must be used are the circumstantial clause as in (14)-a, and subordinate clauses headed by *?an* in SA (14)-b. In KA the subordinate marker is absent (15)-c:

(15)

a.	xaraja	ya.d <sup>s</sup> l	hak-u		[SA – circumstantial]
	Left.PF.3SM	3sm.n	1P.laugł	1-IND	
	'He left laughing'				
b.	y.uriid-u		?an	y.alʕab-a	[SA- subordination]
	3SM.MP.want-	-IND	SUB	3sm.mp.play-sjn	
	'He wants to	play'			

The circumstantial clause clarifies the manner in which the matrix event takes place, therefore it must coincide with the matrix event. The imperfective form permits this function since it can overlap the point specified by the perfective matrix event. The imperfective in (15) b-c coincides with the reference encoded by the wishing event, i.e. it is simultaneous to the future/modal reference projected by the matrix event.

## B) In conditional clauses

Finally, the imperfective is also used in conditionals, similarly to the perfective, as shown in example (5)-(6) above. In SA both the conditional and the consequent events can be in the imperfective when using the conditional marker 2in. However, in KA, using the conditional marker 2in requires using the perfective verbal form instead, or an imperfective consequent event with future marker b-, as shown in (16)-b:

(16)

a.	?in		ta.drus	ta.nja	ta.njaħ		
	COND		2SM.MP.study	2sm.n	2SM.MP.succeed		
	'If you study you will succeed'						
b.	?in	daras.t	nijal	n.t	/b-t.injaħ	[KA]	
	COND studied.PF.2SM succeeded.PF.		f.2sm	/ FUT-2SM.MP.suco	ceed		
	'If you	you study you will succeed'					

The difference between SA and KA could be related to the features of the conditional marker. I assume that *?in* in SA can be used with generic sentences, hence it allows the imperfective form which is compatible with generic events. KA's use of *?in* does not allow generic reference, but requires reference to a specific instance of studying, hence the perfective is used. I assume that the difference between a generic conditional and an eventive conditional is reflected in the choice of the verbal form: the perfective for the specific event, and the imperfective for the generic event.

## 3.1.2.3 Summary and Conclusion

I conclude from the behaviour of the perfective that it is restricted to contexts that indicate an anterior temporal order of ET to RT. An exception, however, is noticed in the constructions involving temporal conditionals; the temporal ordering function is controlled by the conditional. It may appear that the anterior feature is not relevant since the construction dictates the order, but it is for that exact reason that the perfective can be used in this construction because its requirement to realise an anterior feature can be satisfied.

The imperfective, on the other hand, does not indicate anteriority in the temporal constructions; it usually indicates simultaneity with whichever temporal point is specified in the construction. It can also show posteriority, especially with Achievement type events. This suggests that the imperfective is not marked for present or progressive which means that it may not be marked for specific Tense or Aspect functions but represents the absence of the marked anterior feature. Furthermore, in conditional constructions, it favours a generic reference and does not refer to a specific or particular instantiation of the event.

Based on the previous observations, I conclude that the perfective is the marked member of this opposition. It must refer to an individual, specific or particular event in all cases, hence I consider it a marked eventive form, which I define in Chapter 4. Furthermore, in temporal constructions, it always projects the event as a point and this point must be located anterior to the RT specified in the clause. The imperfective, consequently, is the unmarked member of this opposition; it may be eventive or stative, it can refer to a specific individual existential event or to a generic situation. Furthermore, it usually represents an interval of the event that may overlap the RT/UT, but this interval may be part of the internal structure of the dynamic event, depending on the interplay between viewpoint Aspect and Aktionsart which I discuss in depth in section 3.3.

The view I present is relatively new compared to the previous accounts of the perfective/imperfective. In the following section, I discuss these accounts to show that the lack of agreement on the functions of Aspect and Relative Tense fuels the debate and complicates the analyses presented in the literature.

#### **3.2 Between Tense and Aspect**

Identifying whether the functions related to the verbal form are Tense or Aspect related is a complex issue. The complexity relates to two theoretical reasons. The first reason is the overlap in the literature between the functions of relative Tense and aspect. Relative tense relates to the function which orders ET in relation to RT. This function is categorised as Tense in some approaches but as Aspect in others which I discuss in 3.2.1. The second reason is the definition of viewpoint Aspect in terms of boundedness. The notion of boundedness – related

to viewpoint Aspect – can easily overlap the notion of telicity – relatd to Lexical Aspect. Despite the efforts to distinguish these two notions especially in the works of Smith (1997), the tests proposed to distinguish boundedness appear to be sensitive to the telicity feature as well in the case of Arabic verbs. The details of this argument are presented in 3.2.2.

I propose that the way to go is to consider any function related to temporal ordering of ET/RT/UT a Tense notion, and that Aspect should be analysed in terms of either projecting/selecting a point or interval representative of the event as suggested by Cowper (1999). This distinction I claim exceeds the current overlap between the funcitons of viewpoint aspect as a marker of boundedness and the boundedness related to telicity. Furthermore, I show later in 3.3 that defining viewpoint Aspect as an operator which selects a point or not from the event can account for the different aspectual readings relating to the Aktionsart of the event itself.

### 3.2.1 Relative Tense and Aspect

It is clear by now that the verbal inflection in Arabic does not encode deictic absolute tense. Furthermore, there is a consensus that the perfective specifically marks anteriority in all its uses. However, researchers disagree on whether this anteriority is a Tense function or an Aspect function. Comrie (1985), Benmamoun (1999), Fassi Fehri (2012) amongst other consider anteriority a Tense function hence they analyse the perfective as marking a Tense feature. On the other hand, Eisele (1990), Bahloul (2008) and Al-Aqarbeh and Al-Sarayreh (2017) amongst other advocates of the Aspect view consider anteriority an Aspect function hence they analyse the perfective as marking hence they analyse the perfective as marking hence they analyse the perfective as Market function hence they analyse the perfective as marking Aspect not Tense.

Despite that there are many attempts to distinguish the function of relative tense from viewpoint Aspect, the two notions appear to intersect or overlap to a degree that some consider them to be the same thing. For example, Bohnemeyer (2014:918) points out the difference as follows:

"Viewpoint Aspect constrains event descriptions such that they are interpreted from a particular temporal reference time during which they are ongoing, completed, or in a pre-or post-state. Relative tenses, in turn, constrain the **time interval** which the described eventuality occurs in terms of its temporal order with respect to a reference time" Bohnemeyer (2014:918).

The two definitions appear to be very similar. In fact, Bohnemeyer (2014:918) points out that these two categories are semantically so similar that the question arises whether and in what way they differ from one another. Klein (1994) considers the two notions to be one and the same. I suggest that this issue is related to the way the perfect is analysed in English; the term perfect is simultaneously used in the literature to refer to two functions. The first function is that of ordering ET in relation to RT as indicated in Reichenbach's analysis of Tense. The English Perfect occurs in past perfect, present perfect, and future perfect tenses and functions to orders ET anterior to RT in all these tenses. Nevertheless, the term perfect is also used to refer to a complex aspectual function relating a current state to a previous event. Klein (1994) argues that the English Perfect marks both functions simultaneously hence the two notions appear to be the same. However, Bohnemeyer (2014) argues that the English Perfect is a synthetic form which performs two functions simultaneously; evidence from other languages show that these functions can be separated on analytical constructions. Furthermore, he argues that there is a past of the past for English which should not be confused with past perfect. He gives the following example taken from Comrie (1976) to illustrate the difference between perfect-in-the-Past and the anaphoric Past-in-the-Past interpretation of the pluperfect:

- (17) Bill has arrived at six o'clock. I arrived at six sharp, and he was already half done with his meal, so he must have got there a lot earlier.
- (18) Bill has arrived at six o'clock and had left again at seven. The inspector did not get there until eight (Comrie 1976:56).

The events in example (17)-(18) are represented in the past perfect in English. Yet, in the first example, what is being asserted by the perfective is that *bill was there before six* which is the RT, and the event has direct relevance to that RT since it overlaps with it. On the contrary, in (18) *Bill's arriving* event started at six and ended at seven and has no direct relevance to the RT which is the time of the inspector arriving at eight. Therefore, the event of arriving is located prior to the event of the inspector getting there which is also in the past. The complication arises because English represents both functions by the past perfect form. Other languages separate these two functions (see Bohnemeyer, 2014 for examples for pure perfect and pure anterior morphemes in other languages).

Furthermore, relative tense does not involve only locating ET anterior to RT but also locating ET posterior to RT. Therefore, I suggest that any function involving temporal ordering should be called Tense. Perfect is a complex function composed of two functions: temporally ordering ET anterior to RT (a relative tense function) and allowing a resultant state to overlap RT/UT. Consequently, Aspect should not be analysed as involving any temporal ordering functions contrary to the approach advocated by Klein (1994). This distinction will prove to be more fruitful for the analysis of the functions of the verb in Arabic as I show in 3.3.

In the following section, I discuss the common definition of viewpoint Aspect and show that it too involves an overlap with lexical Aspect which makes distinguishing between the two notions difficult in practice. As a result, I present an alternative analysis for viewpoint Aspect following Cowper (1999) as discussed below.

# 3.2.2 Boundedness and Telicity

Smith (1997) distinguishes viewpoint Aspect from situation Aspect (Aktionsart) and defines the former in terms of boundedness and the latter in terms of telicity. Telicity relates to whether the event has a natural endpoint by which it cannot be extended, and the event must naturally terminate. For example, an Achievement verb such as to find something has a natural end point; the event ends as soon as you find the object. Similarly, an Accomplishment such as to eat one apple, naturally terminates as soon as you consume the apple and the event cannot go any further. An atelic event such as an Activity of playing is comparatively longer and does not have a natural endpoint, the subject controls the event and controls when to terminate it. Telicity in this sense concerns when an event naturally ends or terminates. On the other hand, viewpoint Aspect concerns termination of a different sort. It concerns what part of the event the speaker decides to show and how. Smith argues that the perfective viewpoint presents a situation as a whole while the imperfective viewpoint shows an internal stage of the event. The span of the perfective includes the initial and final endpoints of the situation while the imperfective excludes the initial and endpoints of the situation. Furthermore, the perfective is incompatible with an assertion that the event continued while the imperfective is compatible. She argues that the incompatibility of the perfective with an assertion that the event continued is taken to indicate that the event is bound. So, boundedness relates to the incompatibility of the perfective with continuation, while telicity relates to the availability of a natural endpoint given the semantic properties of the event.

Despite that these notions seem to be distinct theoretically, in practice they are sometimes hard to distinguish. In fact, Smith suggests some tests for boundedness which I show that in the case of Arabic, they turned out to be sensitive to telicity instead. For example, Al-Aqarbeh and Al-Sarayreh (2017) argue that the perfective form in Arabic marks all events as bound based on the following tests adopted from Smith (1997): the incompatibility of the

perfective with an assertion for continuation: 1) using the conjunction *wa ma-zaal* 'and still is'; and 2) the negative termination conjunction *wa laakin lam yukmil* 'but he did not continue/complete', as shown in the following examples:

(19)

- a. aħamad-u ya.rsumu lawħatan [wa mazaala ya.rsumu-ha]
  Ahmad-NOM 3SM.MP.draw picture-ACC [and still 3SM.MP.draw-it]
  'Ahmad is drawing the picture and he is still drawing.'
- b. # aħamad-u rasam.a lawħatan [wa mazaala ya.rsumu-ha]
  Ahmad-NOM draw.PF.3SM picture-ACC [and still 3SM.MP.draw-it]
  'Ahmad drew the picture and he is still drawing.'
- (20)
- a. aħamad-u ya.rsumu lawħatan [wa lakin lam yu.kmil]
  Ahmad-NOM 3SM.MP.draw picture-ACC [and but NEG.PST 3SM.MP.complete]
  'Ahmad is drawing the picture, but he hasn't finished yet.'
- b. # aħamad-u rasam.a lawħatan [wa lakin lam yu.kmil]
  Ahmad-NOM draw.PF.3SM picture-ACC [and but NEG.PST 3SM.MP.complete]
  'Ahmad drew the picture, but he hasn't finished yet.'

(Al-Aqarbeh & Al-Sarayreh 2017:71)

According to Al-Aqarbeh & Al-Sarayreh, these examples show that aspectual boundedness is inherent; that the imperfective always encodes an unbound event, hence allows adjunction with *wa ma-zaal* 'and still is' and *wa laakin lam yukmil* 'but hasn't finished' which emphasizes the unboundedness of the event. Conversely, the perfective necessarily encodes bound events, hence renders the sentences infelicitous when modified by these phrases.

However, a close examination of these examples shows that the incompatibility of the perfective verb with *ma-zaal* 'and still' is not caused by the perfective viewpoint, but by the fact that the perfective event is an Accomplishment predicate *rasama* 'drew' which , with the definite object, gives a telic reading. When the same tests are used with an atelic predicate the grammaticality judgement changes. For example, with an Activity predicate that does not specify a telic point since it does not have a measuring object, like the verb 'run' *rakað<sup>s</sup>a* in the example below, using the conjunction *wa ma-zaal* is felicitous:

rakað <sup>c</sup> .a	xalid-un,	[wa	ma-zaala	ya.rkuð <sup>s</sup> hu].		
ran.PF.3SM	Khalid-NOM	[and	still	3SM.MP.run]		
'Khalid ran (since the morning) and he is still running'						

In this example, the modification with *wa ma-zaal* is acceptable even when the verb is in the perfective form. The event continued in the adjunct phrase is perceived as one and the same event described by the perfective form in the matrix clause. So, the perfective viewpoint in Arabic appears to be compatible with an assertion for continuation especially when the event is atelic. Consequently, it appears that the assertion of continuation test used by Al-Aqarbeh & Al-Sarayreh for Arabic tests telicity rather than perfectivity since some events encoded in the perfective form allow assertion of continuation as seen in (21).

Further pieces of evidence that these conjunctions are sensitive to the telicity of the whole predicate rather than to the perfective verb is shown in example (22). The verb *rasama* 'draw' is considered an Accomplishment in example (19)-b and is claimed to be bound and does not allow extension with *wa ma-zaal*. However, in (22)-b when the same verb is used with a different object that is indefinite – which renders the situation atelic – the assertion of continuation is felicitous with a perfective verb:

(22)

(21)

a.	# aħamad-u	rasam.a	lawħat-an	[wa mazaala	ya.rsumu-ha		
	Ahmad-NOM	draw.PF.3SM	picture-ACC	[and still	3SM.MP.draw-it]		
	'Ahmad drew the picture and he is still drawing.'						
b.	aħamad-u	rasam.a	lawħaat-in	[wa mazaala	ya.rsumu]		
	Ahmad- NOM	draw.PF.3SM	pictures-ACC	[and still	3SM.MP.draw]		
	'Ahmad drew pictures and he is still drawing (more).'						

The examples in (22) show that the incompatibility of the continuation assertion is not sensitive to the perfective verb alone but to the whole predicate, i.e. the verb and its object and their telic features. Therefore, these tests should not be used as indicators of perfectivity but as tests for telicity. Verbs encoded in the perfective form in Arabic may or may not be telic and may or may not allow an assertion for continuation. This calls for either finding more appropriate tests for the perfective viewpoint or adopting a different analysis for viewpoint Aspect altogether. I propose to adopt another analysis which is more compatible with the data from Arabic as I show in 3.3. The analysis is adopted from Cowper (1999) who suggests that

64

the perfective Aspect selects a point from the event and allows Tense to locate it in relation to RT/UT. While the imperfective selects an interval from the event and allows it to overlap RT/UT. I propose that for Arabic, the perfective viewpoint aspect selects a point from the event; however, the imperfective represents the absence of such a selection which I elaborate in 3.3.

In the following section, I present more arguments for the asymmetry between the perfective and imperfective forms and show that the imperfective is a default verbal form unspecified for tense or viewpoint aspect.

### 3.2.3 The Asymmetry of the Verbal System in Arabic

The asymmetry in the behaviour of the perfective and imperfective with regards to marking Tense and Aspect was pointed out in Comrie (1976; 1981) and also in Fassi Fehri (1993). They point out that the perfective form shows Tense and aspect function while the imperfective form shows only Aspect functions. However, Benmamoun (1999; 2000) argues that the asymmetry is even deeper. He argues that the imperfective rather represents a purely default morphological norm of the verb. His argument is partially based on the properties of the past and present tense morphemes and partially on the verbal behaviour of the imperfective. I have mentioned many of his arguments in different places in this chapter and in Chapter 1. I will summarise them here again.

First, in relation to Tense, he argues that the past tense is a morpheme that must be valued by a verbal category, hence it must be supported by a perfective verbal form, whether it is the main thematic verb or a verbal auxiliary. On the other hand, the present tense is an abstract morpheme that is not specified for a verbal feature and can be checked by a nominal feature instead. This indicates that the present tense has different requirements than the past tense in Arabic.

Second, in relation to the imperfective form, he argues that the imperfective stem is the input to some word formation processes; the vocalic melodies of nominals and locatives clearly indicate that they are derived from the imperfective by affixation, as shown in Table 2 above. Furthermore, the imperative is also formed from the indicative stem of the imperfective. Both Ratcliffe (1997) and Benmamoun (1999) argue that the imperfective is the input for the formation of other verbal forms<sup>9</sup>. Furthermore, the syntax of the perfective is

<sup>&</sup>lt;sup>9</sup> This position is contra McCarthy (1993), who suggests that the perfective is the input for the derivation.

different than the syntax of the imperfective in relation to default word order in idioms and the location of the person agreement inflections which I have mentioned in 3.1.1. All these differences lead Benmamoun to conclude that the imperfective is a default verbal form; however, he proposes that the imperfective is marked for aspect functions al least.

I agree with Benmamoun, that the imperfective must be treated differently than the perfective, not just in relation to Tense, but in relation to its location in the derivation as well. Contrary to Benmamoun, I conclude from the above that the imperfective is the verbal form spelled out within the lexical domain (without moving to AspP) whereas the perfective is spelled out after movement to the functional domain of the clause. Further evidence is presented in Chapter 4 in relation to the behaviour of Individual-level states and viewpoint Aspect.

In the following section, I present my analysis of viewpoint Aspect (following Cowper's point and interval distinctions) and show how it interacts with the lexical Aspect of the event on the one hand, and with Tense on the other.

## 3.3 A Preliminary Analysis for the Function of the Perfective/Imperfective

I propose that the perfective form is marked for a viewpoint Aspect function. The perfective selects a point from the event in order for the Tense operator to locate it with respect to the other time arguments RT/UT. The imperfective, on the other hand, is unmarked for an Aspect function. However, it allows the event to overlap RT/UT if the event has a Process component such as with an Activity and an Accomplishment which results in a progressive reading. In the case of a punctual event that does not have a Process component, such as an Achievement, the imperfective allows a posterior reading for the event instead of a progressive one. State verbs do not allow a progressive reading either because they do not involve a Process feature; States are homogeneous and do not incur dynamic change over time which is what a Process indicates. Of course, all imperfective events can have a habitual and generic reading. However, in this section, I deal with the non-generic non-habitual readings, namely the eventive readings (those that involve reference to a specific particular event). I postpone discussing the relation between the imperfective and the habitual/generic readings for Chapter 4.

## 3.3.1 The Interaction of Viewpoint Aspect and Aktionsart in KA Verbs

Perfective viewpoint Aspect concerns the function of selecting an interval or a point of the event and allowing the tense head either to locate the point anterior to RT or otherwise allowing it to overlap RT. In order to make it clear how the perfective interacts with the Aktionsart features of event types, I will use illustrations. The figures in Table 6 show my representation of the event types based on two Aktionsart features: [±Process] and [±Telic] as shown below:

	- Process	+ Process
- Telic	State	Activity
+ Telic	Achievement	Accomplishment

Table 5: Verb classes based on Process and Telicity features

This is the same table as (Table 1) of Vendler's classification. However, I change Definite to Telic.

Each event is represented with a cylindrical middle part. This cylindrical middle represents the internal stage of the event which can be a dynamic process or a homogeneous state. The dynamic process is coloured in a gradient colour, while the state has a solid colour. Telic events are represented with a coloured circle at the right bound of the cylinder. Atelic events lack this circle or have a transparent one. Looking at Table 6 below, Accomplishments are represented by a gradient process and a coloured telic end. Activities are represented by a opaque circle indicating atelicity. Achievements are represented with an opaque middle since they are [-Process] and a coloured telic end. Finally, states are represented with a solid coloured middle section.

I distinguish two types of states, Stage-level states and Individual-level states. Individual states are attributive and hold of the subject inherently. Stage-level states, on the other hand, do not represent a permanent characteristic of the individual, they are usually triggered by some dynamic event either internally or externally and can cease to hold. Therefore, I represent Stage-level states with an extra initial bound circle, to indicate that these states are triggered and to distinguish them from Individual-level states. I explain the difference between the two states in more depth in Chapter 4.

Event Type	Perfective viewpoint	Imperfective viewpoint	Examples
Accomplishment	Telic point	Telic	yakil tufaħa 'eat an apple' yarkið <sup>°</sup> keelo 'run one kilo'
Activity	Any point	Atelic	yarkið <sup>s</sup> – 'run' yisbaħ – 'swim'
Achievement	Telic point	process	<i>yos<sup>s</sup>al</i> – 'arrive' <i>yfooz</i> – 'win'
Stage-level State	initial point	start state	<i>yxaaf</i> – 'fear' <i>y{arif</i> - 'know'
Individual-level State		state	<i>yi/bah</i> – 'looks like' <i>yigrab</i> – 'relates to'

Table 6: The representation of Aktionsart features of event types.

The perfective viewpoint projects a point of the event. Looking at the representation of Accomplishments and Achievements in the perfective viewpoint, they appear the same; both events when represented in the perfective project the telic point of the event. On the other hand, Activities do not have a telic point but can still be represented in the perfective. The perfective viewpoint somehow creates a 'temporary' end point for the event, but this endpoint may be extended if necessary. Statives, on the other hand, are different: Stage-level states can be represented in the perfective viewpoint; however, what the perfective viewpoint selects is not a point within the stative middle, but the point representing the event which triggered the state. Individual-level states, on the other hand, cannot be represented in the perfective viewpoint in Arabic (examples are given in Chapter 4). I suggest that they cannot be formed in the perfective because unlike Stage-level states they do not involve a triggering event or mark a transition point from when the subject does not have the state to when he does.

In the following section, I show how these viewpoints interact with RT/UT in specific instances. I focus on the progressive reading of the imperfective for the time being, and the generic and habitual are discussed later in Chapter 4.

## 3.3.2 The Interaction of Viewpoint Aspect and T2/T1

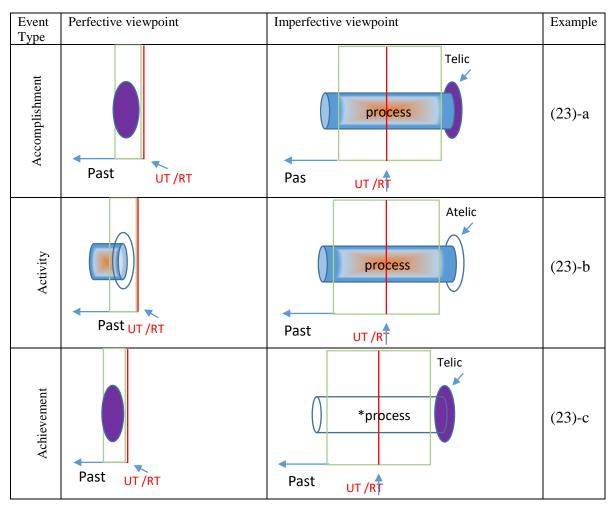
I represent the imperfective as a square frame that facilitates for the event to overlap the RT/UT as shown in Table 7. When the event represented in the imperfective verbal form has a [+Process] feature this allows the process part of the event to overlap RT/UT creating the present progressive reading. Examples (23)-a and (23)-b have a present progressive reading:

(23)

a.	Azzam (gaasi	d) <sup>10</sup>	yakil	ittufaħah	(now)	[Accomplishment]
	Azzam (PRG)		3SM.MP.eat	DEF-apple	(now)	
	'Azzam <b>is eat</b>	ing the	apple now'			
b.	Azzam (gaasi	d)	yarkið <sup>ç</sup>	(now)		[Activity]
	Azzam (PRG)		3SM.MP.run	(now)		
	'Azzam <b>is rur</b>	nning'				
c.	Azzam (gaasi	d)	yoos <sup>c</sup> al	(now)		[Achievement]
	Azzam (PRG)		3SM.MP.arrive	(now)		
	'Azzam is arri	iving no	w' (*Present te	ense - Future/po	osterior)	
d.	Azzam	was <sup>c</sup> al		(now)		
	Azzam	arrived	l.pf.3sg	(now)		
	'Azzam arrive	ed now'	(Present tense	- *Future/poste	rior)	

With Achievements, the imperfective frame contains an opaque [-Process] part overlapping RT/UT, while the only marked part of the event – the telic point – is located to the right of the frame forcing a future reading. The progressive and imperfective can be used with Achievements but they cannot have a present progressive reference. The only possible reference is the future caused by the fact that the Achievements' telic point is located posterior to RT/UT. It is possible to imagine that the process related to the Achievement event *arrive* takes place in the present moment but the exact punctual point of arriving does not overlap

<sup>&</sup>lt;sup>10</sup> The 'progressive' marker *gaafid* is optional in KA. I describe its functions in 6.5.2.



RT/UT. When it does cross over RT/UT it must be represented in the perfective form as in (23) because it becomes located anterior to RT/UT.

Table 7: The interaction between viewpoint Aspect and temporal reference.

When the perfective form is used, the perfective viewpoint picks up a point form the event and allows it to be located anterior to RT by the T2 (relative tense operator). The marked telic point in an Achievement and an Accomplishment is naturally selected by the perfective and located anterior to RT/UT. With Activities, which lack a telic end, the perfective must pick any point and locate it anterior to RT/UT. The difference in the telicity features (dis)allows the continuation of the event after it is represented in the perfective viewpoint. Telic events such as *eat an apple* or *arrive* cannot be modified by the conjunction *wa ma-zaal* discussed in section 3.2.2 above. The atelic Activity, on the other hand, may easily be extended because the perfective viewpoint creates a temporary endpoint which does not force the termination reading found with telic events:

(24)

a.	Azzam ?akal	it-tufa	ħah	#(wa n	naazaal	yakil-h	a)	[+Telic]
	Azzam ate.PF.3SM	DEF-ap	ople	(and s	still	Зѕм.м	P.eat-it)	
	Intended meaning: 'A	Azzam a	te the ap	ple (an	d he is	still eat	ing it)'	
b.	Azzam wis <sup>s</sup> al			(*wa n	naazaal	yos <sup>s</sup> al)		[+Telic]
	Azzam arrived.PF.3s	М		(and st	ill	3sm.m	P.arrive	)
	Intended meaning: 'A	Azzam a	rrived (a	nd he i	s still a	rriving)	,	
c.	Azzam sibaħ	(min	is <sup>ç</sup> s <sup>ç</sup> ibħ	)	wa ma	azaal	yisbaħ	[-Telic]
	Azzam swam. PF.3SM	M (from	the morn	ing)	and sti	11	3sm.m	P.swim

'Azzam swam (since the morning) and he is still swimming'

### **3.4 Summary and Conclusion:**

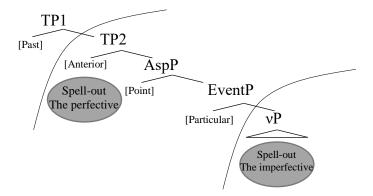
I have shown that the perfective form has a specific marked Tense and Aspect functions contrary to the imperfective. The perfective's viewpoint Aspect function is to select a 'point' from the event (representative of the event), and its Tense function is to locate that point (ET) 'anterior' to (RT). In many cases, the anterior feature of the perfective verb can also satisfy the requirements for the past tense since the past tense involves locating the event anterior to UT. This is possible when there is no other element in the structure that blocks the verb's movement to T1 such as in the case of the temporal complementizer  $2i\partial a$  discussed in examples (5)-(6) in section 3.1.2 above.

On the other hand, the imperfective form is not marked for Tense because it does not indicate present tense consistently nor does it always force simultaneity of the event with RT. The progressive reading depends on whether the event has a [+Process] features which allows it to overlap RT/UT. Furthermore, the imperfective can convey *posteriority* of ET to RT/UT in the case of Achievements. This indicates that this form that I have been calling the imperfective form does not even have an imperfective viewpoint Aspect function; according to Cowper's analysis of viewpoint Aspect, the imperfective should mark an interval. However, the Arabic 'imperfective' verbal form is incapable of doing that as shown with Achievement verbs. This is why the 'imperfective' form should be considered a more abstract verbal form that is not even marked for a specific viewpoint Aspect function. In other words, it represents a default verbal form.

In addition, the imperfective form is usually ambiguous between a progressive (which I refer to as the eventive), a habitual and a generic. It may also represent stative and eventive predicates. The perfective, on the other hand, can only be eventive (which I explain in Chapter 4) and always indicates anteriority with some reference point and selects a point from the event. Therefore, I propose that the perfective can only be spelled out if the structure contains a [+Point] viewpoint Aspect feature and a [+Anterior] Tense feature. When the structure does not contain both feature the perfective form cannot be used and the imperfective form appears instead. Furthermore, I suggest that the imperfective form is spelled out in the vP domain of the structure. The following structure is a preliminary proposal that I develop more in Chapter 4.

(25)

The features of the perfective and imperfective in the clause structure



In Chapter 4 I discuss another layer of asymmetry between the perfective and the imperfective. The two forms are asymmetrical in relation to EventP. I propose in 4.1.3 that EventP hosts a feature related to marking an existentially bound event. A predicate which refers to an existentially bound event and not a universally bound event will be labelled an eventive predicate. In Chapter 4 I show that the perfective form can only be derived when the event is existentially bound. Consequently, an existentially bound event may be spatiotemporally located hence can have a specific Tense and Aspect features. On the other hand, the imperfective is inherently generic and indicates a universally bound event. It may be turned into an existentially bound event when EventP has a positive event feature. The details of this distinction and its relation to the structure of Arabic is discussed in the following chapter.

# Chapter 4. Eventive and non-eventive verbal predicates in KA

Verbal predicates can be classified based on their lexical Aktionsart properties as discussed in many works including Vendler (1967), Verkuyl (1972), Dowty (1979), and Pustejovsky (1991), amongst others. In addition, predicates are distinguished on the sentential level in relation to whether they are eventive or not (Adger and Ramchand 2003), or whether they are Individual-level predicates or Stage-level predicate (Carlson 1977a; Kratzer 1995). These distinctions are relevanst in the grammar since each predicate type shows specific syntactic behaviours that set it apart from the other. For example, temporal and spatial modifiers appear with Stage-level predicates and not with Individual-level predicates (Kratzer 1995). Furthermore, the phenomena of *there*-insertion discussed in Milsark (1974) as shown in example (1) are linked to the distinction between Stage-level predicate and Individual-level predicate:

- (1)
- a. There are firemen available
- b. \*There are firemen altruistic

*Being available* is considered a Stage-level predicate while *being altruistic* is an Individuallevel predicate. The difference between the two predicates is reflected in the ungrammaticality of *there*-insertion with Individual-level predicates. There are many other grammatical phenomena that have been linked to the distinction between predicate types. Many researchers have shown that there is a relation between the 'Aktionsart' properties of predicates determined on the vP level and the properties of predication on the sentential level. For example, Davidson (1967) shows that action sentences – those that include action verbs – behave differently from stative or non-action sentences (including stative verbs) in relation to spatiotemporal modification. He analyses the difference in relation to a hidden event argument available in the action sentence but absent in the stative sentence. However, in Neo-Davidsonian work, the properties of the so-called action sentences were shown to be available with stative verbs as well; stative verbs can appear in sentences with temporal and spatial modification (Higginbotham 1985; Parsons 1991). Others, however, continue to show that there is a relation between the eventive reading of the sentence and the type of verbal predicate it contains based on the predicate's lexical properties (e.g. Cowper 1999 and Katz 2000).

In this chapter, I discuss how the grammar of Arabic deals with the difference between states and events in verbal predicates and whether this distinction is also relevant for the eventive reading on the sentential level. I argue that the perfective verbal form marks an eventive predicate that must have reference to a particular existentially bound event. I propose that this markedness can be interpreted as an inherent eventive feature of the perfective verbal form. On the other hand, the imperfective verbal form indicates the lack of such existential reference since it can refer to generic events, especially when there are no indications in the sentence that the event encoded in the imperfective is existential. I propose that the imperfective verbal form can be analysed as lacking an eventive feature, or does not refer to an existential event, unless such reference is indicated in the sentence via elements other than the verb such as adverbs or auxiliaries. Furthermore, I argue that not all verbs or verbal predicates are eventive or encode an event; some verbs can only indicate properties such as inherent stative verbs.

In relation to syntactic representation, I adopt Travis' (2010) EventP hypothesis in order to account for the difference between the behaviours of the perfective and the imperfective verbs and to account for eventive and non-eventive predicates. Travis argues that EventP is on the boundaries between L-syntax and S-syntax (the lexical and functional domain of the clause, adopting Hale and Keyser's (1993) terminology) and it hosts information related to the edge of the vP phase. I propose that the Event head in Arabic hosts an eventive feature hat can be represented as [±Particular]; an eventive predicate has a [+Particular] feature which indicates that it is existential; a non-eventive predicate is [-Particular] hence cannot be existentially bound. Furthermore, I propose that for Arabic, the [+Particular] feature must be supported by morphological elements. One possibility is the perfective verbal form, which I argue that spells out the eventive feature regardless of whether the perfective verb encodes an Activity, Accomplishments, Achievement or State. On the other hand, an imperfective verbal form cannot spell out the eventive feature in EventP, hence it requires the aid of some other morpheme; i.e. a progressive morpheme, or some other verb in the perfective form such as auxiliary kaan or aspectual verbs gaam or gasad (which I show in the description of these functional verbs in Chapter 5 and Chapter 6). In this chapter, I show that the perfective/imperfective forms in Arabic are sensitive to the eventive/non-eventive distinctions. Furthermore, I show that AspP and TP2 are also dependent on the feature of the Event head. In other words, these functional categories project when the EventP is eventive.

The chapter is organised as follows: Section 4.1 discusses some theoretical background relating to the event/state distinction within verbs and its relation to the eventive/non-eventive distinction of predicates. Section 4.2 presents the event/state distinction and the tests of eventivity suggested in Eisele (1990; 1992) for Egyptian Arabic

and developed in Mughazy (2005). I apply these tests to data from KA. Section 4.3 presents my analysis of the perfective/imperfective distinction in relation to the EventP hypothesis developed in this chapter. Section 4.4 extends the analysis to the AP in KA. The chapter concludes with a summary in section 4.5.

# 4.1 Events and Eventive Predicates

There are two main theories of how events can be described or defined: Events as universals; as things that can "reoccur or happen at different places and times" or and Events as particulars; as "things that happen at a specific place and time" (Pianesi and Varzi 2000:5). Montague's (1969) treatment of events is based on considering events as properties of moments or intervals of time. An event refers to a generic representation and not a particular one. Davidson's treatment of events represents the inverse of the first theory. It considered Events as particulars; each event has a spatiotemporal boundary and represents a particular unique event which is not identical to any other. The definition of Event, therefore, depends on the theory adopted, either an event is a universal property or a particular entity. I adopt the Davidsonian approach in defining Events as particulars since I show that it conveniently accounts for the data in KA. However, I show later (in section 4.3) that the perfective/imperfective opposition can be interpreted using the first theory as well. Specifically, events in the morphological perfective form in Arabic inherently refer to particulars. On the other hand, events in the morphological imperfective form in Arabic inherently refer to universals. Evidence to support this claim are given later in the discussion. For the time being, I discuss some of the proposals made in Davidson's work and his event argument hypothesis. Followed by the implications of his theory in relation to the semanticssyntax interface.

## 4.1.1 The Event Argument (e) in Formal Semantics

Davidson (1967) argues that 'events' are spatiotemporal things; they are concrete particulars with a location in space and time. The substance of Davison's work is that a verb must have, in addition to its regular arguments (subject, object...etc.), an **implicit** event argument, which is **existentially** modified. The modifiers in example (2) are added conjunctively as predicates of the event argument (Landman 2000:1). The sentence in (2)-a has the formal semantic representation in (2)-b:

(2)

- a. Jones buttered the toast slowly in the bathroom with a knife.
- b.  $\exists e [BUTTER (e, j, t) \land SLOWLY (e) \land IN (e, b) \land WITH (e, k)].$

The event variable (e) is a hidden argument of the verb *butter* in addition to j (John) and t (toast). The modifiers *slowly*, *in* and *with* are also predicated of the event argument (e). Davidson suggests that all action sentences have the event argument, which is not present in stative sentences, and its absence explains why stative sentences do not allow particular time and space modifiers. Davidsons' treatment of the event argument is based on the sentential level, i.e. action sentences have the event argument while stative sentences don't. He, therefore, does not specify whether or not the (e) argument is available with every verbal predicate.

The Neo-Davidsonian research, especially works by Higginbotham (1985) and Parsons (1990), show that the properties of the non-stative action sentences extend to sentences including stative verbs. They argue that deciding whether the sentence is eventive or not should not rely on whether the verb is classified as an event or state. As discussed in 2.2.2 verbs or verb phrases are classified into types based on their Aktionsart (lexical Aspect) into: Activities, Accomplishments, Achievements and States. Or, they are classified into Events, Processes, States for example. The Aktionsartan distinction of verbs into events and states, they argue, does not necessarily parallel the stative/non-stative behaviour described in Davidson's work. Rather, Parsons (1990) argues that existentially bound events and states alike can show the properties of an event argument. On the other hand, a generic event or state cannot show the properties of an event argument. The difference between an eventive sentence and a stative sentence, therefore, is not determined by the lexical aspectual properties of verbal predicates but by whether the event is existentially bound or universally bound. However, the difference between a state and event seems to matter and the Neo-Davidsonian work seems to respect this difference by representing an existentially bound state by an (s) variable parallel to the existentially bound event variable (e) as shown below:

(3)

a. Brutus is clever

b.  $\exists s [s \text{ is a state of being clever & Subj } (s, Brutus)]$ 

c. Brutus has a dog

d. ∃ *s* [*s* is a having & Subj (*s*, Brutus) & Obj (*s*, a dog)] (Parsons 1990; 186)

However, the generalisation that states, like events, can have a DA is not unanimously accepted by researchers (e.g. Kratzer 1995, Katz 2000 and Maienborn 2005). Kratzer (1995) distinguishes between two types of states: Stage-level states and Individual-level states. She argues that states that are said to allow an eventive reading should be distinguished as SL states. These SL states behave similarly to other dynamic event predicates. It has been noted that the syntax exploits the difference between SL predicates and IL predicates. For example, several grammatical phenomena have been shown to be sensitive to the distinction between SL and IL predicates such as *there*-insertion, bare plurals, and the absolute construction, as shown in the following examples:

(4)

- a. There- insertion sentences (Milsark, 1974):
  - There are firemen available
  - \*There are firemen altruistic
- b. Bare plurals (Carlson, 1977b),
  - Firemen are available (there are available ones)
  - Firemen are altruistic (# there are altruistic ones)
- c. Absolute construction (Stump, 1985)
  - Standing on a chair, John can touch the ceiling (If he stands...he touches...)
  - Having usually long arms, John can touch the ceiling
     # (if he has long arms ... he touches...)

### (Kratzer 1995: 125)

Being *altruistic* or having *long arms* are typically Individual-level states, while being *available* or *standing on a chair* are Stage-level states. Carlson (1977b) considers that IL predicates and SL predicates are semantically distinct since they relate to two different entities. IL predicates relate to properties of Individuals, and Individuals may be either a Kind such as *pots* or an object such as *my red pot*. SL predicates relate to properties of Stages, and a Stage is a spatiotemporal part of an Individual (Kratzer 1995:126). Kratzer argues that the difference between IL predicates and SL predicates must be related to the syntax, since some predicates can have SL properties in some constructions but have IL properties in other contexts. For example:

(5)

a. Manon is dancing on the lawn[dancing (Manon, 1) & on-the-lawn (1)]

- b. Manon is dancing this morning[dancing (Manon, 1) & this-morning (1)]
- c. Manon is a dancer Dancer (Manon) (Kratzer 1995:128)

*Is dancing* is an SL predicate, therefore it can be modified by spatiotemporal modifiers such as (5)-a and (5)-b. The modifier takes the event as its argument. *Is a dancer*, however, is an IL predicate. It lacks a Davidsonian argument and therefore cannot be spatiotemporally modified, for example:

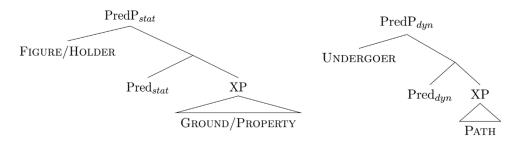
(6) ?? Manon is a dancer this morning/ on the lawn

Kratzer argues that when the predicate is modified by spatiotemporal modifiers it has turned into an SL predicate and is no longer an IL predicate.

It is clear then that the treatment of the event argument within formal semantics depends on the sentence level and not on the Aktionsart properties of verbal predicates alone. Furthermore, predicates of different categories can have an event argument; verbs, adjectives, or nominals. My main concern in this thesis is verbal predicates; specifically, the following questions; do all verbal predicates project an event argument? Do verbs classified as state verbs project an event argument as well? And, if so how is this event argument captured in the syntax? The following section discusses some proposals presented in the literature.

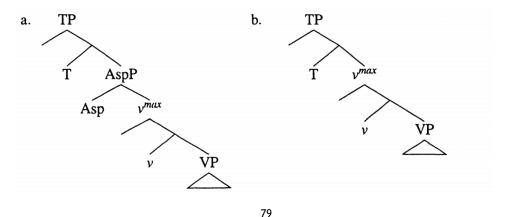
# 4.1.2 The Event Argument and Syntax

In syntax, there are at least two different approaches to capture the difference between stative and eventive predicates in the syntactic structure (introduced in 2.2.2.1). The first approach is based on perceiving the two as different predicate types linking two arguments with distinct thematic roles. For example, Ramchand (2007; 2008) proposes that a static predicate links a Figure/Holder of a property to that Ground/Property. An eventive predicate must link an Undergoer of the event with a Path in which the event unfolds shown in the difference between structure a and b in (7). (7) The static predicate vs. dynamic predicate (Ramchand 2008)



The two predicates differ based on whether a property is assigned to a holder or not. Ramchand implies that an inherently Individual-level state would typically not be represented through a verbal category (Ramchand 2007:480). Verbal categories would usually represent eventive predicates of the dynamic eventive type. I will argue in section 4.2 against Ramchand's generalisation for verbs. I will show that there is a set of inherently IL states that are represented in the verbal form in KA and in SA but do not refer to events. Furthermore, Ramchands account does not show how a dynamic event such as *play* which should be represented as a dynamic predicate can be used to indicate a generic or property reading such as *He plays football* when used in characterising sentences. Does that mean that a verb like play can be inserted in a static predicate structure, or that there is another head responsible for producing the generic reading? It seems from Ramchand's analysis that she considers all events: Activities, Accomplishments and Achievements dynamic predicates. And eventivity is determined by including a dynamic predicate.

The second approach considers an aspectual/functional head to be responsible for the grammatical difference between eventive and non-eventive sentences. An example of this approach is presented in Cowper (1999) and Travis (2010). Cowper suggests that an Aspect head in English projects with events when they have an eventive reading but does not project with generic events or stative constructions as shown in (8). This aspectual head is later labelled Event head.



(8) Eventive structure (a) and Stative structure (b)

Representing eventivity as an aspectual head can account for the generic and habitual readings of dynamic verbs in addition to their particular readings. In both cases, the vP includes information about the lexical aspectual properties of the dynamic/stative verb and EventP only projects when the event encoded in the verb is existentially bound.

However, it seems that Cowper assumes, inline with Davidson, that all stative verbs are not eventive since they do not pass the tests of eventivity in English. Two popular tests she applies are the perception verb test and the *wh*-cleft construction test. In English, the perception verb can take a bare verbal complement without the intervention of *that*-complementizer when the verbal complement represents an individual event that is included in the perceptual main event (Parsons 1990:17). Another test for eventivity in English is the *wh*-cleft construction test. A wh-cleft construction can be made from an eventive predicate but not from a non-eventive one. The examples below outline these tests with a state verb like *weighed* and an event verb like *drop*:

# (9) Alana dropped the book yesterday

- a. I saw Alana drop the book yesterday
- b. What happened yesterday was Alana dropped the book
- c. What Alana did yesterday was drop the book
- (10) The book **weighed** twice as much as the video
  - a. \*I saw the book weigh twice as much as the video
  - b. \*What happened yesterday was the book weighed twice as much as the video
  - c. \*What the book did was weigh twice as much as the video

(Examples from Cowper, 1999: 209)

Cowper claims that the canonical event verb *drop* can pass the eventive sentences tests, while the state verb *weigh* cannot. It is worth noting that in (10)-a the sentence is felicitous under the reading that *I witnessed someone weigh them on a scale*; In this case, the verb *weigh* appears to be ambiguous between describing the Agent as *being engaged in the event of weighing* or describing the object *being weighed*. I suppose Cowper was referring to the latter *weighing*, the attributive one. Nevertheless, tests of eventivity should not be determined based on whether the lexical verb type is a state or event. Parsons (1990) shows that states can also pass the perceptual test: (11)

- a. Mary saw John naked
- b. Mary saw that John was (is) naked.

(Parsons 1990; 193)

The perception event can take the state of John being naked as its direct complement. Therefore, not all states are non-eventive. I distinguish between states that can be used in eventive sentence and states (verbs) that cannot following Kratzer (1995) who argues that a state which can show up in an eventive sentence is a Stage-level state and Stage-level predicates allow eventive readings. On the other hand, states that show up in a non-eventive sentence is an Individual-level state.

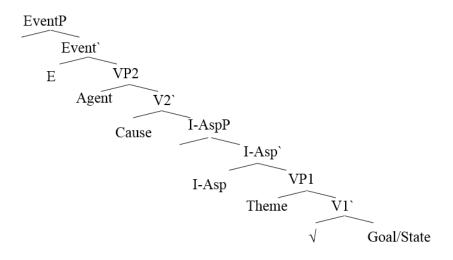
Travis (2010) builds on the same analysis for eventive predicates as projecting an Event Phrase. Specifically, she argues that an EventP is a functional projection responsible for the distinction between eventive and non-eventive predicates. It hosts the hidden Davidsonian argument and allows event modifiers to be attached to the structure as adjuncts to EventP. Furthermore, Travis suggests that the difference between event verbs and state verbs can be represented syntactically. Event verbs are represented as verbal shells including both VP and little vP, while state verbs can be represented as projecting only one verbal projection, VP.

I adopt Travis's analysis for eventive and non-eventive predicates and events and state verbs for KA. Specifically, I show that this analysis can account for the difference between eventive and non-eventive predicates especially in relation to the perfective/imperfective forms, and in relation to the behaviour of a set of inherently IL state verbs in KA. The details of these data are presented in 4.3. In the following section, I discuss the EventP hypothesis from Travis (2010).

## 4.1.3 The Eventive Feature and Event Head

Travis (2010) argues that the Event head Theta-binds an event variable in the sense of Higginbotham (1985) and therefore allows for spatiotemporal modifiers of the event to be adjoined to EventP. Furthermore, Travis suggests that EventP is the boundary between L-syntax and S-syntax or is the edge of the vP phase as shown in the following structure:

### (12) Travis (2010) EventP structure



Travis, however, does not elaborate on the features of E. She explains that E is an event related category which hosts the event variable and allows the event to discharge thetaroles. Cowper (1999; 2005), on the other hand, proposes that the function of the Event can be represented in terms of an Event feature. She suggests that the feature can simply be called [Event]. I adopt the view that the event head hosts a semantic feature related to events and their syntactic representation. However, I prefer another label for this function other than Event since this term overlaps with the semantic event and the different classifications of event types in the literature. Therefore, I propose that since the properties of the so-called eventive sentence depend on whether the event/state is a particular or generic event, or that the event is existential or universal/generic, I suggest that the feature should be called [+Particular]; An eventive sentence has a [+Particular] event which is existentially bound; A non-eventive sentence has a [-Particular] event since it is universally bound (in the loose sense of universality which includes generic and characterising sentence), or that it indicates anything other than a particular event.

Furthermore, in the syntax, the existential binding quantifier is considered to be covert and does not require morphological support since it is related to all events inherently. In other words, events – theoretically – represent particulars that are always existentially bound (Davidson 1967). Consequently, in order to represent a generic non-particular event, a generic operator must be introduced in the syntax (Carlson 1977b). Carlson claims that the generic operator GEN is usually covert but may be overt in habitual characterising sentences (represented as the habitual aspectual head).

I propose in 4.3 that with verbal predicates in Arabic, verbs represented in the perfective form are particulars and verbs represented in the imperfective form are

universals/generics by default. However, a particular event represented in the perfective can be embedded in a non-eventive sentence with generic reference if it was marked using a generic complementizer, i.e. by adding a generic operator. Similarly, an event represented in the imperfective can be embedded in an eventive sentence if it was marked. Markers with the imperfective verb support the [+Particular] feature of the event head. The details of this proposal and the analysis of the perfective/imperfective will be explained in 4.3, after engaging with the literature on Arabic events and eventive predicates.

The following section discusses how the difference between states and events has been addressed in the literature on Arabic. It surveys the few literatures on the eventive and noneventive distinction and tests used in Arabic to argue for the event argument.

# 4.2 Eventivity in Arabic

The literature on Arabic focuses mainly on the verbal distinction between states and events in relation to lexical aspectual properties, i.e. Aktionsart (e.g. Cowell 1964, Eisele 1999, Mitchell & Hasan 1994 and Mughazy 2005). Few references do consider the eventive/non-eventive distinction on the sentential level for Arabic verbal predicates. Eisele (1990) applies and proposes some tests for eventivity on data from Egyptian Arabic. He shows that non-eventive sentences have stative verbs (lexically stative verbs). In addition, the eventive behaviour is found with dynamic events. In other words, his approach is similar to Davidson's original proposal. Mughazy (2005) reviews the morphological and grammatical tests discussed in Eisele (1990) and argues that it is not an accurate generalisation that lexically stative verbs do not pass the eventivity tests. Specifically, he argues that states should be grouped into IL and SL states in relation to these tests (As suggest by Kratzer for English). I present these tests in relation to data from KA.<sup>11</sup>

### 4.2.1 Morphological Tests

The first test discussed in Mughazy (2005) following Eisele (1990) is the compatibility of eventives with the progressive morpheme *bi*-. Eisele argues that when a state verb takes the marker *bi*- in EA, it obtains a true-present and habitual reading, but not a progressive reading, unlike events which can obtain the progressive reading. Nevertheless, Mughazy notes that not

<sup>&</sup>lt;sup>11</sup> Although much significant work in this area is on Egyptian Arabic, many of these tests extend to Kuwaiti Arabic and probably to standard Arabic alike. I point out in the discussion if and when the tests do not extend to KA.

all states allow the *bi*- marker. There is a class of state verbs that appear to resist the use of the *bi*- morpheme. Mughazy notes that these verbs have attributive properties, i.e. they refer to inherent properties of the subject. IL states are inherently attributive and are true of the subject irrespective of time or place, and these are the verbs that resist the *bi*- morpheme. The rest of the state verbs can be considered Stage-level predicates since they can represent a temporary stage of the individual which either has a specified starting point or an ending point. The following examples show that a state verb such as *yxaaf* 'fear' when used with *bi*-imperfective receives a habitual reading, while a state verb such as *yi/bah* 'resemble' is ungrammatical with *bi*-:

(13	3)				[SL State]		
a.	Ahmao	l <b>bi-</b> y.xaaf	min	Ali			
	Ahmee	PRG/HAB-fear.3SM	of	Ali			
	'Ahmed fears Ali' (habitually)						
b.					[IL State]		
	Ali ( <b>*bi-</b> )yi.∫bah		umar-	i∫iriif			
	Ali	(*PRG/HAB-)3SM.resemble	Omar	Elshirif			
	'Ali resembles Omar Elshirif' (Example 12b from Mughazy 2005: 147)						

The same pattern extends to IL state verbs in KA. In KA, the progressive morpheme *gaaSid*, cannot be used grammatically with IL states but can be used with SL states. The latter does not have a progressive reading, but rather a habitual or continuous reading only:

(14	4)						[SL State]		
a.	Ahma	d	gaaSid	y.xaaf	min	Ali			
	Ahme	d	PRG/HAB	fear.3SM	of	Ali			
	'Ahmed fears Ali' (habitually)								
b.							[IL State]		
	Ali	(*gaasid)		yi. ∫bah		umar-i∫iriif			
	Ali	(*PRC	G/HAB)	3SM.resembl	e	Omar Elshirif	Ĩ		
	'Ali resembles Omar Elshirif'								

The second test is derivation as an AP. Mughazy notes that some state verbs cannot be derived into AP forms, contrary to events. For example, it is not possible to derive an AP from the verb *yigrab* 'relate' (kin relation) into the participle \**gaarib* 'relating' (disregarding the English translation which is felicitous). Nevertheless, state verbs like y*frf* 'knows' and events like *yajlis* 'sit' can be formed into an AP '*faarif*' 'knowing/know' and *jaalis* 'sitting' respectively. Mughazy suggests that *yigrab* is an 'inherently' IL state verb whereas *yfrf* is a SL state verb and hence it aligns with dynamic event verbs.

The third test is derivation in the perfective form. According to Eisele, states cannot be formed in the perfective form in Arabic, while events can. Again, Mughazy notes that there are state verbs that can easily be formed in the perfective while others cannot. The verbs that cannot be formed in the perfective appear to be from the IL state verbs. For example, *yi/bah* 'resemble' and *yigrab* 'relates to' cannot be derived in the perfective form \**fabah* 'resembled' nor '*garab*' 'related to' respectively. Conversely, SL states like *yxaaf* 'fear' or *y*\$*rf* 'know' can be formed in the perfective as *xaaf* 'feared' and *faraf* 'knew'.

Table 8 summarises the findings of the three morphological tests suggested in Eisele (1990) and developed in Mughazy (2005) for Arabic verbs.

	Imperfective	W/ gaasid	Perfective	Active participle
Activity	yisbaħ swim	Progressive	sibaħ swam	saabiħ swim.AP.MS
Accomplishment	yarsim draw	Progressive	risam drew	raasim draw.AP.SM
Achievement	yilga find	Habitual	liga found	laagi find.AP.SM
SL state	yikrah hate	Habitual	karah hated	kaarih hate.AP.SM
IL state	yi∫bah resemble	N/A	N/A	N/A

Table 8: Morphological tests with the event and state types in KA.

It is clear from these three 'morphological' tests that inherently IL state verbs stand out from the rest of the verbal predicates. Mughazy suggests that this difference is semantic. SL states are descriptions of potentially recurrent states and are usually linked to an event that causes or helps bring this state into existence. For this reason, SL states have been referred to as 'resultant-states' in some literature (Al-Najjar 1984; Eisele 1999; Brustad 2000). IL states, on the other hand, do not indicate recurrence and hold of the subject for longer periods of time which may span an individual's lifetime.

I adopt Mughazy's distinction between IL state verbs and SL state verbs and interpret the difference in relation to reference to change of state. An SL state must contain a reference to an event or transitional point marking the change from a state a to state b. An inherently IL state verb does not contain such a meaning. I propose that this difference between IL and other verb types can be represented in the syntax through the projection of one verbal phrase VP for IL state verbs but a verbal shell vP for the rest of the verbs (see section 4.3.2).

## 4.2.2 Grammatical Tests

Eisele (1991) applies two tests to distinguish eventives from statives, following Parsons's (1990) tests for eventivity. The first test is the complement of perception verbs and the second is the circumstantial clause construction. Here again, Mughazy (2005) notes that these tests not only set events apart from states but can show different results between SL and IL states. However, I applied these tests to the three dynamic event types (Activities, Accomplishments and Achievements) in addition to the two state verbs (SL and IL) and the tests showed that there are three sets of behaviours, not just two. First, Activity and Accomplishment verbs are easily used in circumstantial and perception constructions. Second, IL states are ungrammatical as direct complements of perception or in circumstantial clause construction. These two behaviours are predicted. However, the third is not: Achievements and SL states align in their behaviour; they can be used in these eventive constructions only when formed in the AP and not in the imperfective form. If we accept that these constructions are valid tests for eventivity, and since the active participle form of Achievements and SL states are grammatical in these constructions, then the AP must include an EventP as well. The following subsection discusses the two grammatical tests proposed in Eisele and Mughazy.

## 4.2.2.1 The Perception Complement Test

As indicated in section 4.1.2, perception verbs can take an eventive predicate as a direct complement without the need for the complementizer *that* in English. The test in English requires that the verbal complement of the perception verb be a bare verbal form, for example, *Mary saw Brutus stab Caesar*. The situation in Arabic is slightly different since because there is no bare verbal form, the verbal complement must be in either the imperfective form or the perfective. Eisele and Mughazy apply this test to the imperfective verbal form only since the imperfective allows for the simultaneity between the seeing and the embedded event. I apply this to examples from KA with similar findings.

The verb *faaf* 'saw' can take a verbal complement without the complementizer when the event is specified or can be spatiotemporally modified, i.e. when the verbal predicate has an event argument DA (14) a-b. With an IL state verb, the sentence becomes ungrammatical unless a complementizer is used (15) a-b.

(1:	5)						[Eventive]
a.	∫if.t	Ahmed	y.il <b>Sa</b> b		b-il-ħa	deeqa	
	saw.PF.1s	Ahmed	3SM.MP.play		in-DEF	-garden	
	'I saw Ahmed	l playing in the	garden'				
b.	∫if.t ?inr	na Ahmed	y.il <b>Sa</b> b	b-il-ħa	deeqa	(minye	er isti?than)
	saw.PF.1s COM	AP Ahmed	3SM.MP.play	in-DEF	-garden	(witho	ut permission)
	'I saw that Ah	med plays in the	ne garden (with	out per	mission	)'	
(1	5)						[IL state verb]
a.	*∫if.t	Ahmed	y.iʃbah		ubu-uł	ı	
	saw.PF.1s	Ahmed	3SM.MP.looks	-like	father-	his	
	*'I saw Ahme	d looking like	his father'				
b.	∫if.t	?inna	Ahmed	y.i∫bał	1		ubu-uh
	saw.PF.1s	COMP	Ahmed	3sm.m	P.looks-	like	father-his
	'I saw that Ahmed looks like his father'						

Nevertheless, the situation is not so simple. This test is not applicable to all types of events, especially when the embedded event is encoded in the imperfective form, as shown in the following examples:

(17)

a.	∫if.t	Ahmed	y.il <b>fab</b>	b-il-ħadeeqa
	saw.PF.1s	Ahmed	3SM.MP.play	in-DEF-garden
	'I saw Ahmed	play in the gar	den'	[Activity]
	'I saw Ahmed	playing in the		
b.	∫if.t	Ahmed	y.akil	it-tuffaħa
	saw.PF.1s	Ahmed	3SM.MP.eat	DEF-apple
	'I saw Ahmed	eat the apple'		[Accomplishment]
	'I saw Ahmed	eating the appl	le'	
c.	??∫if.t	Ahmed	y.os <sup>c</sup> al	b-sayyart-ah
	saw.PF.1s	Ahmed	3SM.MP.arrive	in-car-his
	'I saw Ahmed	arrive in his ca	ar'	[Achievement]
	#'I saw Ahme	d arriving in hi	s car'	

d.	?? ∫if.t	Ahmed	y.xaaf	min in-namla
	saw.PF.1s	Ahmed	3SM.MP.fear	of DEF-ant
	'I saw Ahmed	fear the ant'		[SL state]
	*'I saw Ahme	nt'		

If the intended purpose of using the imperfective is to indicate simultaneity with the seeing event, then the constructions are only felicitous with the Activities and Accomplishment verbs. However, with an Achievement verb, the simultaneity reading cannot be obtained through the use of the imperfective form because the imperfective Achievement does not easily allow a progressive reading since Achievements lack a Process feature as discussed in Chapter 3. Using the imperfective form with Achievements forces a habitual or generic reading of the event and these are infelicitous as direct complements of perception verbs since they are not eventive. Similarly, the SL state *fear* cannot be used in the imperfective form to indicate simultaneity with the seeing event. Using the imperfective with SL states can only allow a habitual or generic reading. Furthermore, this test should be used with care since the verb see can be ambiguous between the physical perceptual seeing – by one's eyes –and the evidential or Epistemic seeing that takes a propositional complement. In SA the two can be identified by the use of the complementizer `anna 'that'. However, the use of the complementizer is not obligatory for these propositional complements in KA; the complementizer may be omitted. Therefore, the construction is ambiguous between the perceptual seeing and the evidential seeing in KA, which makes it difficult to tell whether the construction is infelicitous or not.

Nevertheless, it is possible to make a particular existential Achievement and SL state a direct complement of a physical perception seeing event. This is achieved by using the AP form instead of the imperfective form with these verbs, as shown in the following examples. In fact, it is possible to use the active participle with all event types except IL states (it is not possible to derive the AP form with IL state verbs, as shown in 4.2.1):

(18)

a. ? ſif.t Ahmed laa ſab b-il-ħadeeqa
saw.PF.1S Ahmed Play.AP.SM in-DEF-garden (just now)
\*'I saw Ahmed playing in the garden' [Activity]
'I saw Ahmed having played in the garden'

b.	?∫if.t	Ahmed	maakil	it-tuffa	ıћа		
	Saw.PF.1s	Ahmed	eat.AP.SM	DEF-ap	ple		
	*'I saw Ahme	d eating the app	ple'		[Accon	nplishm	ent]
	'I saw Ahmed	having eaten the	he apple'				
c.	∫if.t	Ahmed	waas <sup>c</sup> il		b-sayy	art-ah	li-ddawam
	saw.PF.1s	Ahmed	arrive.AP.SM		in-car-	his	to-work
	'I saw Ahmed	arriving in his	car to work'		[Achie	vement]	
	'I saw Ahmed	having arrived	in his car to w	ork'			
d.	∫if.t	Ahmed	xaayif	min in	-namla	b-il-ħa	deeqa
	saw.PF.1s	Ahmed	fear.AP.SM	of DEF	-ant	in-DEF	-garden
	'I saw Ahmed	fearing the ant	in the garden'		[SL sta	te]	
	*'I saw Ahmed having feared the ant in the garden'.						

Using the AP creates an existentially bound state from the SL verb and the Achievement verb and allows this state to be simultaneous with the seeing event. In this case a particular existentially bound state can be the complement of a perception event.

Interestingly, all verb types (Activities, Achievements, Accomplishments and SL states) can be the direct complement of perception verbs when they are formed in the perfective verbal form:

(19)

a.	?∫if.t	Ahmed	laSab		b-il-ħadeeqa		
	saw.PF.1s	Ahmed	played.PF.3SM	Л	in-DEF-garden	ı (just now)	
	'I saw Ahmed	l play in the gar	den'		[Activi	ity]	
b.	?∫if.t	Ahmed	akal	it-tuffa	aħa		
	Saw.PF.1s	Ahmed	ate.PF.3SM	DEF-ap	ople		
	'I saw Ahmed	l eat the apple'	[Accomplishment]				
c.	∫if.t	Ahmed	wis <sup>c</sup> al		b-sayyart-ah	li-ddawam	
	saw.PF.1s	Ahmed	arrived.PF.3s	М	in-car-his	to-work	
	'I saw Ahmed	l arrive in his ca		[Achievement]			
d.	∫if.t	Ahmed	xaaf	min	in-namla	b-il-ħadeeqa	
	saw.PF.1s	Ahmed	feared.PF.3SM	1 of	DEF-ant	in-DEF-garden	
	'I saw Ahmed fear the ant in the garden'				[SL state]		

The translation of example (19)d is not ok in English; however, it may be exchanged with an adjective such as afraid and it would be ok as follows: 'I saw Ahmed afraid from the ant in the garden'. I take the acceptability of a perfective verb as a complement of perception verb to indicate that in Arabic, the perfective form has a strong [+Particular] eventive feature which overrides the event's aspectual properties and allows any event type represented in the perfective form to have an existential eventive reference. The exception for this is an inherently IL state verb like yiʃbah 'resemble' as shown in Table 7 which cannot be derived in the perfective form. I present an account for this behaviour in 4.3.

# 4.2.2.2 The Circumstantial Clause Test

The circumstantial test was suggested in Eisele (1990) as a valid test for eventivity in Arabic. The test is based on the idea that the circumstantial clause in Arabic cannot be a characterising, generic or an IL sentence. It must be an eventive construction, one which refers to a particular event/state and its time must overlap the matrix event's time. In Arabic, the circumstantial clause is typically headed by a conjunctive wa followed by a pronoun (which can be omitted in KA) and then by an imperfective verb or a derived participle. The perfective verbal form is excluded from circumstantial constructions since it encodes a point in time which cannot overlap the matrix event's time. Considering that the circumstantial construction is not valid with generic or IL predicates, any grammatical instance naturally indicates that clause is eventive. So what constructions are grammatical as circumstantial clauses in Arabic? Examples (20) show that both an imperfective and a participle are possible in a circumstantial clause since these forms allow the simultaneity required for the circumstantial construction. Simultaneity is achieved by either an imperfective denoting a progressive interval, or a state derived by an AP. The examples show that for Activity and Accomplishment both the imperfective and AP are possible. However, the imperfective gives the progressive reading that the event was in process – while the AP indicates that the state resultant from the event overlaps with the matrix event. The imperfective again is not possible with Achievements and SL states but the AP is. IL states are completely ungrammatical as circumstantial clauses.

(20)

a. daxalAli (wu.hu)y.shb/saahibwild-ah wara-hentered.PF.3SMAli (and.he)3SM.MP.drag /drag.AP.SMson-hisbehind-himImperfective:'Ali entered dragging his son behind him'[Activity]Active participle'Ali Entered having dragged his son behind him'

b.	daxal	Ali	(wu.hu	)	y.akil		/maak	il	ittufaaħah
	entered.PF.3SM	1 Ali	(and.he	e)	3sm.mi	P.eat	/eat.AP	.SM	DEF-apple
	Imperfective:	'Ali ent	ered eat	ing the	apple'			[Accon	nplishment]
	Active partici	ple: 'Al	i entered	l having	g eaten 1	the appl	e'		
c.	daxal	Ali	(wuhu)	)	* y.ilg	a / laag	i		miftaħ-ah
	entered.PF.3SM	1 Ali	(as he)		3sm.mi	P.finds /	found.	AP.SM	key-his
	Active particip	ple: 'Al	i entered	l having	g found	his keys	s'	[Achie	vement]
d.	daxal	Ali	(wu.hu	) * yxa	af / xaa	yf		min	ubuu-h
	entered.PF.3SM	1 Ali	(as.he)	3sm.mi	P.fears/	fear.AP.S	SM	of	father-his
	Active particip	ple: Lite	erally: 'A	Ali ente	red fear	ing his	father'		
	'Ali entered a	s he wa	s frighte	ened fro	m his fa	ather'		[Stage-	-Level state]
e.	*daxal	Sale.na	a Ali	(wu.h	u)	yi. ∫bal	h		ubuu-h
	entered.PF.3SM	1 at.us	Ali	(as.he)	)	3SM.MI	P.looks-	like	father-hi
	*'Ali entered	looking	like his	father'				[Indivi	dual-level state]

The findings with the two discussed grammatical tests with each verb type are summarised in Table 9:

	Test types Perception complement test and Circumstantial clause test				
<	Activity	imperfective (progressive) / active participle (perfect)			
erb	Accomplishment	imperfective (progressive) / active participle (perfect)			
Ę.	Achievement	Only in active participle (perfect)			
'pe	SL state	Only in active participle (Continuous)			
	IL state	None			

Table 9: Event types and the grammatical tests for eventivity.

It is clear that the IL state verbs cannot be used as complements of perception verbs without the complementizer *?inna* 'that'. In addition, IL states cannot be used in circumstantial clause constructions. I argue that this behaviour can be accounted for if IL states cannot project an EventP in their syntax.

In the following section, I present my analysis of EventP and its relation to the eventive/non-eventive distinction from one side, and its relation to the events/state verbs distinction on the other. I also show how the EventP hypothesis can account for the perfective/imperfective verbal forms in Arabic. I argue that the perfective/imperfective forms represent the Particular/Generic types of events. In other words, events formed in the perfective are particulars and mark an existentially bound event. Events in the imperfective

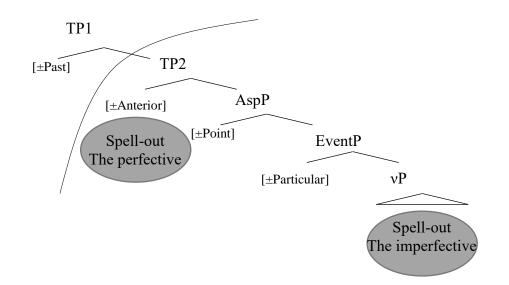
are universals or generics by default and can be the source of the generic operator. The grammar can provide the means to change an inherently generic imperfective into a particular event or a particular perfective event into a generic one. The details of this are discussed below.

### 4.3 The Syntax of EventP with Verbal Predicates

I have established so far that the properties of eventive predicates differ from non-eventive predicates especially that the former are existentially bound while latter are not so (they are universally bound in the loose sense which includes generic readings and characterising sentences). I have also discussed some proposals in the literature on how the difference between these two predicates can be mapped onto syntax. In this regard, I adopt the EventP hypothesis (Travis 2010). In this section, I show how I propose this functional category functions in the syntax of Arabic verbal predicates and how it interacts with the temporal and aspectual properties of events. The discussion is presented in two sections. Section 4.3.1 discusses the functions of EventP and its interaction with the verb in an eventive construction. The second section (4.3.2) discusses the functions of EventP in a non-eventive construction. Within the non-eventive construction, I discuss the habitual reading which I propose is a special case of the generic construction since it requires an eventive feature in EventP.

The analysis develops on the structure presented in (3.4) which shows the position where I argue the perfective/imperfective verbs are spelled out in the clause structure given temporal and aspectual properties discussed in Chapter 3 repeated here for convenience:

(21)



I argued that the perfective verbal form is used or spelled out when the construction involves a positive [+Anterior] Tense feature, a positive [+Point] viewpoint Aspect feature, and a positive [+Particular] eventive feature. The imperfective form, on the other hand, can be spelled out when neither three are positive, i.e. it becomes the default form used in the construction when the requirements of the perfective form are not met.

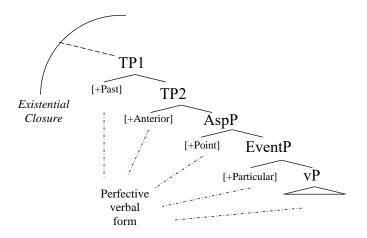
Another important ingredient of this model is the binding operator of the event variable which provides existential closure or generic reference. These operators can be covert (indicated through discourse context) or overt in the form of quantifiers, adverbs or particles within the sentence (see Borer 2005). I propose here that in the absence of any adverbs or overt operators, the perfective verb always receives existential closure, while the imperfective verb indicates genericity; in this case the binding operators are covert but indicated by default, i.e. a covert existential binding operator with the perfective and a covert generic binding operator with the imperfective. In the literature, the position of the covert operator is debatable. For example, Borer (2005:289) discusses two different proposals put forth regarding the domain of existential closure of the event; Either this is achieved in the VP domain (following Diesing 1992) or in the c-command domain of the VP (following Benedicto 1997), where she suggests is in a position higher than TP. As for the generic operator, on the other hand, Carlson (1977a; 2012) suggests that the imperfective is the source of the generic operator which is argued to be covert, and located in a position higher than TP. Since I am mainly concerned with the IP domain of the verb in Arabic clause structure, I do not attempt to discuss in detail the exact position of the binding operators since this requires further investigation which scopes beyond the capacity of this thesis. In the meanwhile, I follow the spirit of Borer and Carlson's proposals that these operators are covert and can be represented as functional heads c-commanding the VP domain and located above TP. Therefore, in the remaining discussion, I do not indicate the structural position of the operators but I contend with indicating that the context is eventive, hence provides existential closure, or that it is non-existential, hence involving a covert generic operator.

### 4.3.1 The Existentially Bound Event

I propose that an existentially bound event has a [+Particular] feature in the Event head in EventP. The perfective form spells out this function since it inherently refers to a particular event in almost all its uses in KA as discussed in 3.1.2.1. Consequently, the perfective verbal form should be specified for tense and aspect, and only when the aspect is [+Point] and the

tense in T2 is [+Anterior] is the perfective verbal form spelled out as indicated in the following structure.

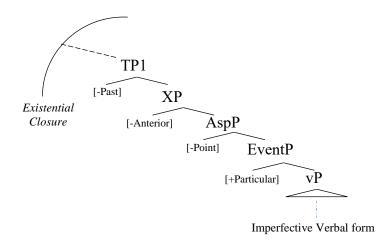
(22) The Eventive (Perfective form)



The dotted lines represent the range of heads and the features that can be spelled out by the perfective verbal form. The model of syntactic derivation followed in this thesis is adopted from Ramchand (2008). The syntactic structure specifies functional features, while the lexicon provides some semantic features related to the root of the words derived. In such a model, the meaning of the word is a combination of the semantics of the root and the syntactic structure it is derived from. Furthermore, morphological exponents realise or spell out features of syntactic heads within the construction. The mechanism could be viewed as either the syntactic heads move (head to head movement) and then they are spelled out as a morphological word, or the morphological exponent 'spans' a sequence of heads that it spells out (Svenonius 2012). Either way, features are realised through the morphological exponent (this mechanism is elaborated furthermore in chapters 4, 5 and 6).

Worthy of mention here is that an existential event does not always have to be [+Anterior] tense or [+Point] aspect. It is possible to have an existential event which is progressive and indicates simultaneity with UT hence is [-Anterior] and [-Point] but [+Particular]. In this case, I argue that the imperfective verbal form is used as indicated in the following construction:

(23) The Eventive (Imperfective form)



There is one important issue in relation to the imperfective verbal form. I have claimed that the imperfective form does realise the [+Particular] eventive feature since it does not refer to particular instances of events but inherently refers to generic ones. In this case, the [+Particular] feature related to the eventive predicate requires another morphological element that can realise this function other than the imperfective verb. I suggest that other inflectional morphemes such as the aspectual or temporal auxiliaries or an adverb which can indicate an existential reference can realise this feature. I argue in Chapter 6 that the progressive *gaaSid* and the aspectual verbs *gaam* and *gaSad* and auxiliary *kaan* may perform this function. The details of their derivation will be explained in each relevant chapter (see section 5.4.1 for *kaan*, 6.4 for *gaam*, and 6.5.2.2 for *gaaSid*).

As for the tense and aspect interpretations with an eventive imperfective verb, I have explained in chapter 3 that the temporal and aspectual reading of the event depends mainly on the internal aspectual feature of the imperfective verb, especially on whether it involves a process feature as in Activities or Accomplishments or it does not involve a process feature as in Achievements. In some way, the tense and aspect readings, despite not being marked morphologically since they are indicated as [-Anterior] and [-Point] can still have temporal and aspectual interpretations. The opposite of anteriority as I explained in chapter 3 is simultaneity (when the event has a process) or posteriority (when it is an Achievement), and the opposite of aspectual viewpoint [-Point] is an interval, i.e. the process interval (See sections 3.3.1 and 3.3.2).

### 4.3.2 The Non-Existentially Bound Event

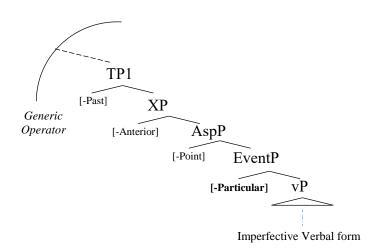
I propose that a generically bound event (non-existential) is typically represented by an imperfective verbal form as is widely claimed in the literature following Comrie (1976). Furthermore, Manninen (2001) and Carlson (2012) argue that the imperfective verbal form is the source of the covert generic operator proposed in Carlson (1977a) which suggests that the imperfective form inherently refers to universally bound events. This is borne out in Arabic especially in constructions which have an imperfective verb without any inflectional material or adverbs that indicate a [+Particular] eventive feature (or specify a telic predicate) as in the following examples:

(24)

a.	Talal	y.ilʕab	kura	
	Talal	ЗSM.MP.play	foot-ball	
	'Talal plays fo	ootball' (Gener	ically)	
b.	Talal	y.fuuz	bi-l-sibaaqat	
	Talal	3SM.MP.win	in-DEF-races	
	'Talal wins at races' (Generically)			

In these cases, the imperfective verb is interpreted generically since there is no indication in the sentence or the context that the sentence should be anchored to some existential point. I propose that in such construction the Event head is [-Particular]:

(25) The generic (Imperfective form)



I align with Carlson that the source of the generic operator is the imperfective verbal form since it refers to events in their generality. It could be argued that the generic operator is

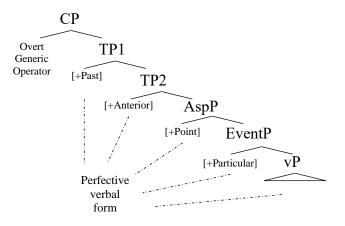
located in the CP projection. I propose that in such cases the Event feature is [-Particular]. Furthermore, since the Event feature is not positive, both Aspect and Tense can only be unmarked. One could argue that they do not project when the EventP hosts a non-eventive feature. In this case, the default tense would be the generic present tense.

With respect to the perfective verbal form, it may show up in a generic sentence as discussed in example (8) in section 3.1.2.1 repeated here for convenience:

(26)

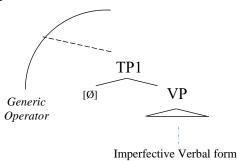
menjaddawajada,wa menzarafaħasfadawhoever strive.PF.3SMfind.PF.3SMand whoevercultivate.PF.3SMharvest.PF.3SM'Whoever works hard succeeds, and whoever cultivates harvests'

However, I suggest that the source of genericity is caused by the particle *men* 'whoever' which can coerce the predicate from being existentially bound to generically bound by pluralising its reference. In other words, the perfective form still has a [+Particular] eventive reading on the vP level or phase, but it has been coerced into a generic reading on the CP level as indicated in the following tree:



In relation to the class of inherently IL state verbs that have been shown to resist formation in the perfective and AP such as verbs *yishbah* 'resemble' and *yigrab* 'relate to' discussed in section 4.2 above, the behaviour of these verbs can be accounted for if we propose that they cannot project an EventP at all. An EventP hosts [+Particular] eventive feature and allows for the coercion of a generic event to be represented as a particular event either by derivation into the perfective form or the AP form, or by adding aspectual morphemes such as the Egyptian *bi*- or KA *gaaSid*. However, I have shown that all these options are prohibited with these verbs which suggest that there is no justification for an EventP with them. Therefore, I propose that the following construction can account for this phenomenon:

(27) The inherently generic/IL state verb



In this structure, I represent these verbs as including one VP projection and lacking a little vP. I suggest that since they lack vP they consequently cannot project EventP. And since they cannot project EventP then they consequently do not have AspP nor T2 features. The null T1 is considered a generic present tense (as opposed to the existential continuous present tense).

Finally, there is the second type of generic sentences which are the habitual sentences. These represent a special case since they can allow spatiotemporal modification for the event, yet they do not pass the eventivity tests on the sentential level. In the following subsection, I present some background to the habitual operator and argue that my analysis of EventP can also account for the habitual readings.

### 4.3.3 The Habitual Reading

The habitual reading involves referring to a generalisation over a recurring event (Carlson 2012). Bertinetto and Lenci (2012:852) define the habitual as "an iteration of an event, such that the resulting habit is regarded as a characterising property". In other words, the habitual involves the repetition of the same event in a number of different situations. Arche (2014) suggests that the semantics of the habitual involve a generic operator which operates over 'completed' perfective events, hence the syntax of the habitual construction must include reference to both a generic habitual operator (usually an aspectual head) and perfective Aspect. I come to a similar conclusion as Arche, however, I suggest that the generic operator in Arabic can be covert (not an aspectual head) since it is available with every perfective verbal form, and that the perfective component of the habitual meaning relates to the eventive feature, which may be supported by a special morpheme usually dubbed the habitual aspect.

In other words, I propose that the habitual reading in Arabic results from the interaction of the inherent generic reference found with imperfective verbs and the [+Particular] feature in the sentence it occurs in. This interaction happens in every sentence

which has these two components. Therefore, the habitual reading is usually ambiguous with an eventive existential reading when the sentence involves an imperfective verb. This ambiguity is attested in different Arabic dialects such as KA, Egyptian Arabic, Jordanian Arabic, Moroccan Arabic and Iraqi Arabic. This is clear in the overlap between the progressive reading and the habitual reading related to what is either described as a progressive marker in that dialect or a habitual marker. For example, the so-called progressive marker in KA (*gaafid*) does not block the habitual reading:

- (28) Talal gaaSid yadris b-il-bait Talal PRG 3SM.MP.study in-DEF-house
  - Talal is studying in the house (NOW- eventive)
  - Talal keeps studying in the house (Habitually)

In Iraqi Arabic, a marker *da*- usually prefixed to the imperfective is usually described as a progressive, however, it also allows habitual readings (Abu-Haidar 2006:1/229, the glossing is mine)

(29) da-y.etħammil.oon ihaanaat il-Siraqiyeen
[PRG-3PM.MP.endure humiliations DEF-Iraqi.P]
'The Iraqis are putting up with humiliation' (Baghdadi Arabic)

More evidence can be shown from other dialects with regards to the overlap between a progressive and habitual reading<sup>12</sup>. I suggest that what is considered either a progressive or a habitual Aspect morpheme in Arabic, should be called an *eventive* morpheme since it shows up in the progressive construction to realise the [+Particular] eventive feature which the imperfective cannot spell out directly. In addition, it shows up in the habitual construction since, again, it realises the eventive feature [+Particular] needed to create the habitual reading. In addition, I suggest that the generic operator does not affect the vP phase, i.e. in EventP, but it functions on the sentential level. This can account for the possibility of adding temporal and spatial modifiers on the EventP level attested with habitual sentences. For example, it is possible to say: *he plays football at ten in the park every day*. The temporal and spatial adverbials modify the particular event which is being generalised into a characteristic or habitual reading on the sentential level. In other words, I argue that the there is no need to posit a habitual operator since it is, in fact, one and the same as the generic operator; however,

<sup>&</sup>lt;sup>12</sup> see Ouhalla and Shlonsky (2002: 6) for *ka-imperfective* as both a progressive and non-progressive marker in Moroccan Arabic. And, Eisele (1992) for *bi*-imperfective for Egyptial Arabic with similar overlaps.

the generic reading of imperfective – indicating properties – is obtained when the sentence contains a [-Particular] feature, while the habitual reading is obtained when the sentence contains a [+Particular] eventive feature. I discuss this further in 6.5.2.2 in relation to the functions of *gaaSid* in KA.

Finally, the distinction between the eventive and non-eventive EventP can be used to account for the behaviour of the AP in Arabic. APs show a mix of nominal and verbal properties depending on the context in which they are used. I present an analysis of APs that can account for this mixed behaviour in light of the function of EventP.

# 4.4 The Active Participle and the Event/State Distinction

The active participle in Arabic aligns formally with nominals (Kinberg 1992; Eisele 1999; Mughazy 2003; 2005; Eades & Persson 2013). It shows a number of morphological and grammatical behaviours which are characteristic of nominals such as: 1- case marking (30) ab, 2- nominal agreement morphology (gender and number but not person), 3- complement of a prepositions (30)-c, 4- construct state constructions (30) b-c, 5- definite marking (30)-a, etc. Hence, it has been considered formally a nominal form (e.g. Qafisheh 1977).

(30)

a.	Saada		al <b>-qaatil-</b> u			(SA)
	cameback.PF.	3sm	DEF-murder.	AP.SM-NOM		
	'The murdere	r came	back'			
b.	ra?aytu	∫aarib	-a	alqahwat-i	<b>jaalis</b> -a-n	(SA)
	saw.PF.1s	drink	AP.SM-ACC	DEF-coffee-GEN	sit.AP.SM-AC	C.NUN
	Lit: 'I saw the	coffee	drinker sitting	,		
c.	riħt	maʕ	laaSib-aat	el-jumbaaz		(KA)
	went.PF.1S	with	play.AP-F	DEF-gymnastics		
	'I went with the	he gym	nastics players.	···· '		

Furthermore, APs demonstrate some verbal behaviours, such as having aspectual or temporal reference, being a predicate with an eventive function and assigning accusative case to its patientive NP complement, as shown in (31):

jaa?a	kaasir <b>-a-n</b>	el-ka?s- <b>a</b>		
came.PF.3SM	break.AP.SM-ACC-NUN	DEF-cup-ACC		
'He came having broken the cup'				

It is widely accepted that the AP form is formally nominal (Holes 2004). However, some researchers have argued that it is an adjectival category (e.g. Kremers 2003, Mughazy 2004, and Al-Aqarbeh 2011). Mughazy (2005) suggests that AP is neither verbal nor nominal, but rather a special type of adjective that incorporates an ONSET event: "an event is an onset of a state if and only if the change that constitutes the event is completed at some moment t such that the state begins to obtain at t" (2005:185). This definition appears similar to the function of the perfect. For this reason, some researchers such as Al-Najjar (1984) and Brustad (2000) have considered AP the verbal perfect form in Arabic. However, I adopt the widely accepted categorisation that the AP is formally a nominal category. Nevertheless, I argue that this nominal category embeds an EventP and therefore is able to show these eventive behaviours.

Holes (2004: 149) states that "the active [participle] describes the state in which the subject of the verb from which it is derived finds itself as a result of the action or event that the verb describes". There are three points that underlie this definition: first, that the AP includes in its semantics reference to an event; second, that the Agent of this event is being described by the AP; third, that the AP describes a state related to or resultant from the event and that is true of the Agent of this event. I conclude that the AP is a nominalizing head which creates a state and this state can either function as an IL state (attributive/generic) or an SL state (eventive/existential) depending on the features of the embedded Event head. In KA the following sentence is ambiguous between the IL and SL stative readings:

(32)

(31)

ja	kaasir	el-glas	
came.PF.3SM	broken	DEF-cup	
'The cup breaker	came'		[Attributive/IL state]
'He came having broken the cup'			[Eventive/SL state]

The sentence has two readings, either that AP is the subject of the verb *Ja* 'came', or that the AP and its complement are a circumstantial phrase indicating simultaneity of the circumstantial construction with the main event. The circumstantial function represents the

eventive SL function. However, In SA these two functions can be distinguished by the case markings:

(33)

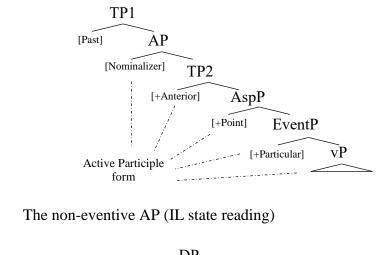
a.	jaa?a	kaasir <b>-u</b>	el-ka?s <b>-i</b>
	came.PF.3SM	break.AP.SM-NOM	DEF-cup-GEN
	'The cup breaker can	ne'	[Attributive/IL state]
b.	jaa?a	kaasir <b>-a-n</b>	el-ka?s- <b>a</b>
	came.PF.3SM	break.AP.SM-ACC-NUN	DEF-cup-ACC
	'He came having bro	[Eventive/SL state]	

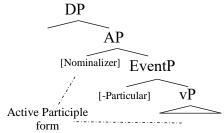
In the attributive use (33), *kaasir* has nominative case since it is the subject of the clause and forms a genitive construction (or construct state) with its complement *elka2si* 'the cup', which is assigned genitive case. The AP in this example can be translated as 'the one who broke the cup'. In the second construction the AP *kaasir* has an accusative case with nunation<sup>13</sup> and the complement of *kaasir* is assigned accusative case. The circumstantial clause/phrase headed by the AP refers to a state that is simultaneous with the matrix event. As shown in section 4.2.2, the circumstantial clause must be eventive and cannot be either generic or IL stative. Therefore, I propose that the state marked by the AP in this context must be of the SL state type.

I suggest that these two functions can be accounted for through the following structure. The AP is a nominalizing head that creates a state from an embedded EventP. When the embedded Event head has a valued [+Particular] feature, i.e. is eventive, the AP state becomes an existentially bound SL state. On the other hand, when the EventP is [-Particular] the AP state becomes a generic IL state, as shown in the following structures:

<sup>&</sup>lt;sup>13</sup> Nunation or '*tanwiin*' is a nominal suffix -n which is traditionally assumed to be an indefinite article (Schulz 2004; Ryding 2005) but has also received different analysis, such as it being a possessive marker (Fassi Fehri 2012:154), or a nominal linker (Owens 1998:216) or a D head that is employed to establish a predicational relation inside the DP (Jarrah & Zibin 2016).

(35)





In the eventive structure proposed AspP and TP2 projections are available. On theoretical grounds, I am trying to be consistent in that when the EventP is positively eventive AspP and TP2 must project. However, they are inert in the sense that their features do not affect the final reading because the AP nominalizing head creates a state true of the Agent out of the event. However, Kinberg (1992) points out that the AP has a perfective event component in addition to the state (resultant from the perfective event). Therefore, I keep AspP and T2 valued as positive [+Point] and [+Anterior]. I suggest that the AP state naturally implies a triggering or causing event located anterior to RT/UT while the AP state itself overlaps UT. I develop this idea in the following section discussing the aspectual properties of the AP in its eventive function.

#### 4.4.1 The Active Participle and Aspect/Tense

There is a debate in the literature on whether the AP has any temporal reference. Many studies (e.g. Al-Najjar 1984, Brustad 2000 and Eades and Persson 2013) have shown that the AP can have perfect (36)-a, futurate (36)-b or progressive (36)-c readings, which allows the AP to licence difference temporal adverbials without the need for an auxiliary verb, as shown in the following examples:

a.	Talal	kaasir		li-glaa	s <sup>ç</sup>	?ams
	Talal	break.AP.SM		DEF-cu	ıp	yesterday
	'Talal had broken the glass yesterday'					
b.	Talal	msaafir	-	ms <sup>ç</sup> r		baat∫ir
	Talal	travel.AP.SM		Egypt		tomorrow
	'Talal is trave	lling to Egypt t	omorrow	v'		
c.	Talal	waaqif	barra		(alħeeı	n)
	Talal	stand.AP.SM	outside		(now)	
	'Talal is standing outside now'					

(36)

However, others argue that an AP is always simultaneous to UT or any other reference point specified by the sentence and does not itself have a specific temporal feature (e.g. Holes 2004 and Mughazy 2005).

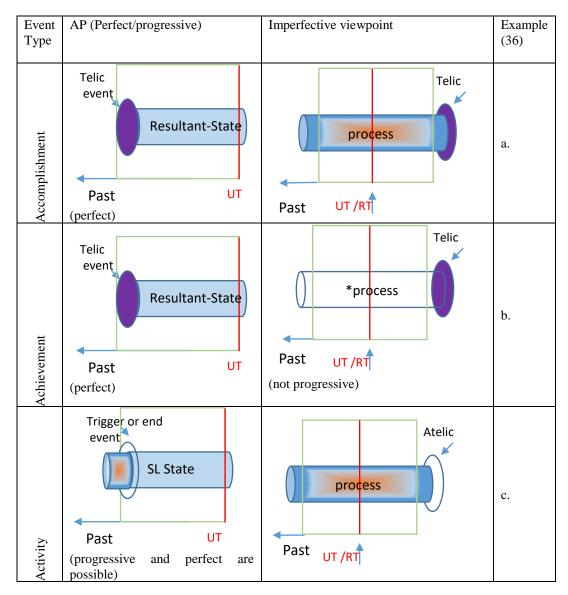
Kinberg (1992) argues that the participle in Arabic can either have imperfective Aspect functions or semi-imperfective functions. The semi-imperfective function encodes states or Activities which are bounded by a dynamic event at their beginning (retrospective) or end (prospective). The imperfective function represents the internal state as overlapping UT/RT without including any information about its boundaries. Kinberg's analysis of the participle is based on identifying two components: a present state which is bound by a past/future actualization of an event. Therefore, it combines two time references and two aspectual values. The two time references are those related to the present state and the past/future event; the aspectual values are the semi-imperfective state (the interval which is bound by one of its ends by an event) and the perfective Aspect of the event itself.

However, I distinguish between two readings of the AP; when it is used as an IL state and when it is used as a SL state. In the IL state reading, the EventP is [-Particular] and the AP becomes tenseless/aspectless. In the SL state contexts, the AP interacts with the Tense and aspect of the embedded event, allowing the perfect reading. However, as Kinberg suggests, the AP state can be bound by an event in its beginning or its end. This difference I argue relates to the Aktionsart properties of the embedded event.

I suggest that the AP (nominalizing head) creates a state representing the Agent/subject of the embedded event. This state can include reference to the triggering/causing event if it has an eventive reading; otherwise, it would be an IL state. When the event is telic, AspP picks up this telic [+Point] and it can represent the initial bound of the

AP state, in this case, the AP state can be read off as a resultant state. However, when the event is atelic, the resultant state reading is not obtained, and therefore the state appears to be a continuation of the embedded event/state.

Table 10 below depicts my proposal for the AP. The green frame represents the AP's state. The frame includes an event on the initial bound. This inclusion of an event and a relevant state is similar to the Perfect Aspect. Therefore, I agree with (Al-Najjar 1984; Brustad 2000) that the AP has a Perfect Aspect function, but this function is only available in the AP's eventive reading and not in its non-eventive reading. Accomplishments and Achievements are telic events and therefore the state represented by AP is a resultant state (36a-b). With Activities and SL state verbs that are atelic events, the state cannot be called a resultant state; it is just a relevant state, bound by a triggering event (36c-d). The AP state overlaps with UT/RT.



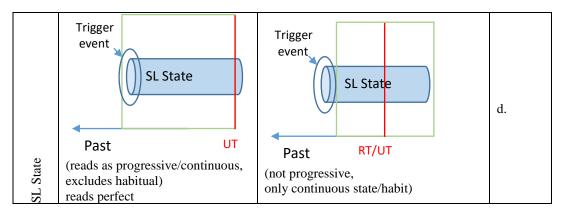


Table 10: The eventive AP aspectual properties based on event types

Comparing the imperfective viewpoint and the AP's perfect viewpoint, the difference can be summarised in two points: first, the perfect frame includes a bounding point (from a telic or atelic event) with a relevant state extending from the event to UT. The imperfective viewpoint captures only the internal structure of the event without reference to any of its boundaries. Second, the imperfective (eventive) interval overlapping UT/RT is usually the internal Process of the event; however, with the AP the interval overlapping UT/RT is not the internal Process of the event but a state following the event.

## 4.5 Summary and Conclusion

I have shown in this chapter that the perfective/imperfective verbal forms in Arabic are related to the difference between a particular event which is existentially bound and a generic event which can be universally bound. I based this analysis on the literature on events and eventive predicates discussed in seminal works such as Davidson (1967) and Montague (1969). Many researchers have shown that the syntax is sensitive to the difference between Particular/Universal events and IL/SL predicates in many ways. One of these is the relation between Tense and Aspect and spatiotemporal modification with eventive predicates. I applied some of the tests for eventivity on data from KA. The tests showed that the perfective verbal form is not. In addition, the eventivity tests showed that the AP in Arabic passes these tests indicating that it can be an eventive predicate.

Furthermore, I proposed an analysis based on the EventP hypothesis developed from (Travis, 2010). The analysis proposes that EventP hosts the eventive feature [+Particular] which sets existentially bound events apart from universally or generically bound events. Building on the discussion on Tense and Aspect functions discussed in Chapter 3, I argued

that the perfective verbal form spells out the following three features: [+Anterior] Tense, [+Point] Aspect viewpoint and [+Particular] eventive reference. Furthermore, the perfective verb can be used in a non-eventive generic sentence when the generic operator is overt, usually spelled out by a complementizer. In other words, the overt generic particle/complementizer manipulates the eventive predicate in the vP phase into a generic sentence on the CP phase. The imperfective verbal form, on the other hand, is impoverished; it does not realise features of Tense, Aspect, or particular event; it is [-Anterior], [-Point] and [-Particular]. Furthermore, the imperfective form shows up with verbs that can only indicate inherent IL states. I suggested that IL state verbs project one VP phrase contrary to other verbs that can project a verbal shell vP. Verbs which can project a vP can be involved in the eventive/non-eventive alternation of predicates. However, inherent IL states that only have one VP cannot alternate and therefore, cannot be derived in the perfective and AP forms. Inherent IL states can only show up in the imperfective form which indicates that this form is inherently generic or encodes events as universals.

Furthermore, I argued that the imperfective cannot support the [+Particular] event despite that it may show up in an eventive sentence. I claimed that the [+Particular] feature must be supported by some other morphological element other than the imperfective verb, such as the progressive marker, the habitual marker, aspectual verbs such as *gaam/gaSad* or an auxiliary such as *kaan/ykuun*. In the following chapters, I present some data to support this claim.

Finally, I argued that the habitual reading is achieved when there is an imperfective verbal form in the structure in addition to a [+Particular] feature. In other words, I have claimed that the habitual construction is usually ambiguous with the eventive construction built on the imperfective form. The two instances can be disambiguated by other elements in the structure such as adverbials or the definiteness of the object or the telicity of the event...etc. This is a claim I attempt to support with more pieces of evidence in Chapter 6 in relation to the discussion of the functions of the progressive marker *gaaSid* in KA.

# Chapter 5. Verb kaan 'BE.PF'

# 5.1 Introduction

There are different descriptions in the literature of the functions of the verb *kaan* in Arabic. In some cases, these descriptions appear to be contradictory. For example, the verb *kaan* is described as a stative verb (Mughazy 2005; Al-Aqarbeh and Al-Sarayreh 2017) and also an eventive verb (Al-Bahri 2014; Levin 2006); or *kaan* is considered by some to be a linking verb with a semantic weight (Chatar-Moumni 2011) or alternatively a functional copula element with no semantic weight (Bjorkman 2011). As for the syntactic analysis of *kaan*, different structures have been proposed depending on whether *kaan* is considered a lexical embedding verb projecting its own VP or whether it is a functional morpheme used to support some inflectional features without projecting its own VP projection (see 2.1.2 for examples). The different syntactic representations depend on the analysis of the semantics of the verb *kaan* and whether it has any significant semantic weight.

In this chapter, I argue that *kaan*'s semantic weight is similar to the verb *BECOME* and not *BE*. In other words, the verb *kaan* is not a stative verb but an eventive verb. Furthermore, *kaan* is inherently existential and therefore it can realise the eventive feature [+Particular] in the structure it is used in. Consequently, it can function as an 'eventiviser' especially when it is used with non-eventive predicates such as IL state verbs and IL predicates.

In this chapter I discuss the phenomena of non-verbal sentences in Arabic. The nonverbal sentences have been usually analysed as consisting of a null present tense copula *ykuun* based on the fact that it has an overt copula *kaan* when used in the past tense. I suggest that the class of non-verbal sentences do not constitute a homogeneous class with respect to their syntactic behaviour. Consequently, non-verbal sentences can be grouped into two groups: IL predicates and SL predicates. Each type behaves differently with respect to the verbal copula *kaan/ykuun*. I propose that only SL predicates (in eventive sentences) allow the copula *kaan/ykuun*. In addition, using *kaan* with IL predicates changes them into SL predicates and makes the sentence eventive.

The chapter starts with a description of some semantic features of lexical *kaan* in section 5.2 in order to distinguish the semantic weight of this verb. In section 5.3 I discuss the functions of copula *kaan/ykuun*. The discussion is basically built on the class on non-verbal sentences. I argue that not all non-verbal sentences are non-eventive and vice versa. I argue

that the semantics of Tense, Aspect and Modality are not sensitive as to whether the predicate is verbal or not but to whether the predicate is eventive or not. Furthermore, the verbs *kaan/ykuun* are used in eventive sentences to support stranded TMA features. Section 5.4 focuses on describing the functions of *kaan* in KA: temporal functions, modal functions and discourse linking functions. I show that there are two variants of *kaan* used in KA. The first *kaan* is related to supporting TMA feature (i.e. function on the vP phase), and the variant *5.4.3 tfaan* is related to Epistemic modality and discourse linking functions which I suggest are related to the CP phase. The second variant may have grammaticalized from the first but has developed its own distinct functions in the grammar of KA. Nevertheless, both variants appear to require an eventive predicate. I conclude with section 5.5.

# 5.2 kaan as a Lexical Verb

Jackendoff (2003:360) describes '*BE*' as the basic function to link two elements (X,Y). '*BE*' (X,Y) is of the ontological category State: "it is the conceptualization of a static configuration that can be localized at a point in time or throughout an interval of time". This is the core meaning of *be* in English. However, this semantic meaning is not conveyed in Arabic by either *kaan* or *ykuun*. Rather, they encode the semantics of '*BECOME*' as I will show in this section. The semantics of *BECOME* indicate an Event and not a State since it marks the meaning of 'change' from state *a* to *b*, or by contrasting state *a* to state *b*. This feature distinguishes states from events as argued in Dowty (1979).

The verb *kaan* can be used as the main predicate in the clause. It can also be formed in the perfective, imperfective, imperative and the AP forms. *kaan* shares the consonantal root  $\sqrt{KWN}$  with other words in Arabic such as the noun *kawn* 'universe', the nominal (AP) *kaa?in* 'creature or being', and the nominal *takween* 'creation'. These words share the meaning of *existence* and *being*. The semantics of any word depend not only on the semantics of the root (if there is such semantics) but also depend on the morphological form of the word and the context in which it is used (Higginbotham 1985). Therefore, I discuss each form of the lexical verb *kaan* and describe how the syntax and morphology of the form can contribute to its general meaning. The description starts with the verb *kaan* used as the main predicate in: A) the imperfective form, B) the imperative form, C) the participle form and concludes with D) the perfective form.

### A) The Imperfective Verb ykuun

The verb *ykuun* behaves like other imperfective verbs in Arabic. In an eventive construction, it receives an aspectual temporal reading. This reading is not simultaneity but posteriority or futurity, making it similar to Achievement verbs in the imperfective. As discussed in Chapter 3 Achievements do not have a present progressive reading since they represent a transitional point without reference to a Process feature. When Achievements are used in the imperfective they can get a posterior or futurate reading instead of the present progressive. The verb *ykuun* lines up with Achievements in this regard, therefore it is not possible for *ykuun* to have a present tense reference directly. An example of *ykuun* used as the main lexical verb is found in the following verse from the Holy Quran:

(1)

?ðaa	qad <sup>ç</sup> aa	?amr-an	fa-?innamaa	y.aquulu	
COND	decrees.PF.3SM	M matter-ACC	then-COMP	3SM.MP.say	
la-hu	kunn	fa- <b>y.akuunu</b>			
to-it	be.IMPR CONJ-3SM.MP.be				
'When He decrees an affair, he only says to it "be" and it is'					

(Sahih International 19:35)

In example (1), both verbs *kunn* 'be-imperative' and *ykuun* 'be-imperfective' are the only predicates in their clauses. The exact meaning of *ykuun* – which is not fully depicted in the translation – is '*comes into existence*'. I suggest that the '*come into*...' part of the meaning is related to the interaction of the imperfective viewpoint and the Aktionsart of the transitional verb *ykuun*; using the imperfective viewpoint with verbs that represent a transition gives a future reference, which is then interpreted as *BECOME*. The verb *ykuun* with its reference to a transition suggests that it does not simply mean *BE*; it is *BE* + an additional freature (F). I suggest that this feature (F) is related to the transition or change meaning. The result of the semantics of *BE* + *F* is quite similar to the meaning of verb *BECOME*. Consequently, a verb which encodes the semantics of *BECOME* is not a state; it is either a transition event (in Pustejovsky's 1991 classification) or an event causing a definite change of state (Dowty 1979). Copley and Harley (2015) argue that the semantics of *BECOME* encode force and force is necessary to change a static situation to a dynamic one. Following the same line of analysis, I suggest that verb *ykuun* is dynamic eventive hence projects a vP and an EventP.

Another piece of evidence that *ykuun* is not inherently stative (as assumed in many researchs, e.g. Mughazy 2005 and Al-Aqarbeh and Al-Sarayreh 2017) comes from the fact that it can be formed in the perfective, imperative and AP. I argued in Chapter 4 that inherent IL state verbs cannot be derived in the perfective or AP. A verb that can be formed in the perfective form or the AP necessarily projects an EventP (and has vP).

#### B) Imperative kunn

Many researchers argue that the imperative form is an agentive verbal form which should include a vP (Alcázar and Saltarelli 2014). That the verb *ykuun* can be formed in the imperative indicates that it can project a vP. Turning to the imperative verb *kunn* in example (1) above, it is used as the only verb in its clause without being modified by any other word, hence it encodes a command meaning *exist*. Using the imperative *kunn* without modification is limited to the context specified in (1). Most commonly, the verb *kunn* is modified by another word such as example (2), and the meaning would not simply be *come into existence* but *become of a certain quality or attribute*:

(2)

Kuun mu?adab Be.IMPR well-behaved 'Be well-behaved'

Comparing the use of *kunn* without modification to the use with modification indicates a semantic change or bleaching from the more specific meaning *become into the state of existence* to a more abstract meaning which is to *become into any state* specified by the modifying word. This, again, indicates a transition of change in the meaning of *kunn*.

## C) The Active Participle kaa?in

The active participle *kaa?in* is also used in some examples as the main predicate in the clause. It encodes the meanings *being*, *happening* or *existing*. As an AP form, it can refer to both the transitional point located in the past and to the state which follows that transitional point and is relevant to RT and UT:

(4)

a.	ma	huwa	kaa?in	ı		ya.xtal	if	Samma	a
	what	3sm	being.	AP.SM		3sm.m	P.differs	from.v	vhat
	ya.jib		?an		ya.ku	ın			
	3SM.MP.must COMP 3SM.MP.be								
'What is happening differs from what must be happening'									
b.	?axbara-ni	i	ir-rasu	ul-u		San	kull-i	ma	huwa
	told.PF.3SM -me DEF-prophet		ophet		about	all-GEN	what	3sm	
<b>kaa?in</b> ?ila yawm-i il-qiyam			ma-ti						
	being.AP.S	М	to	day-GE	EN	DEF-re	surrection-F.GE	N	
	'The prophet told me of all that is happening until the day of resurrection'								

In both cases, *kaa?in* has a stative reading, which is relevant to the utterance time. However, in example (4)-b there is a future reference time specified by PP 'until the day of resurrection' which extends the relevance of the AP state to that future RT surpassing UT. This aspectual behaviour of lexical *kaa?in* – that it has a Perfect Aspect reading – is similar to the behaviour of eventive existential SL state APs as discussed in Chapter 4. I argue that the closest version to a '*stative BE*' in Arabic is achieved by the active participle *kaa?in* and not the verbal forms *kaan* nor *ykuun*. However, this stative is a Stage-level state and not an Individual-level state.

# D) The Perfective Verb kaan

The verb *kaan* is also used in the Classical Arabic and in KA as a full lexical verb as shown in the example below:

(5)

ma	shaa?		Allah-u	kaan	
what	wished	d.pf.3sm	Allah-nom	be.pf.3sm	
Wa	ma	lam	y.asha?	lam	y.akun
and	what	NEG.PST	3SM.MP.wish	NEG.PST	3SM.MP.be
(33.71 )	4 11 1	• 1 1	1 1 11	1 1 1 1	1 1

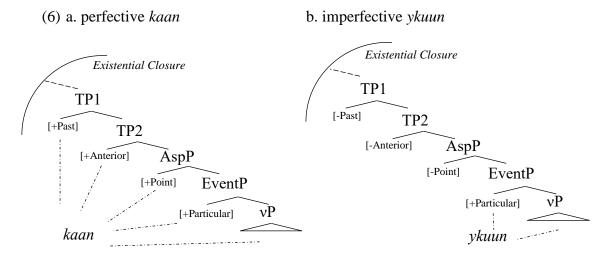
'What Allah wishes happens, and what Allah doesn't wish doesn't happen'

Verb *kaan* shares with *ykuun* and *kunn* the meaning of *existence*, which I assume is related to their shared root, but adds to it the meanings which are realised by its morphological form, i.e. the features [+Point] and [+Anterior]. Simply put, *kaan* marks a transition from one state

to another and locates the transitional point prior to UT, or it contrasts state a with state b in relation to a specified time in the past.

To sum up, the verbs *ykuun/kaan* are versions of the default verbal form in Arabic. However, these verbs do not parallel the exact semantics of verb BE in English. Each version has an additional feature which restricts the meaning of the verb. Specifically, both the imperfective and perfective versions have the meaning of specifying a transitional point or a reference point by which two states can be compared or contrasted. The comparison or contrast give the semantic reading of change hence these verbs can be read off as become/became. The difference between these two forms relates to additional aspectual/temporal features clearly marked in the perfective form.

The following structure represents my analysis of lexical *kaan* and lexical *ykuun* in the phrase structure proposed in this thesis:



Comparing the structures (a) and (b), the perfective verb *kaan* spells out all the typical features of any other verbal form. However, the imperfective *ykuun*, I claim, does not behave as typical imperfective verbs because it can realise the [+Particular] feature. I propose that imperfective *ykuun* can realise this feature based on its lexical root meaning. The meaning of  $\sqrt{KWN}$  relates to *existence* and I claim this qualifies it to have an existential reading or intails existential closure contrary to the rest of the imperfective verbs which are inherently generic. I show in the following discussion, from the behaviour of auxiliary *ykuun* that this assumption is borne out.

With respect to the the auxiliary verbs *kaan/ykuun*, I propose that these verbs can realise all or any stranded features in the structure which the main verb or predicate is not able to spell out directly (for different morphological or semantic reasons). In a sense, the grammar resorts to using auxiliary kaan in context where there stranded features which may involve

[+Past] which cannot be spelled out by the verbal form directly. Or it resorts to the version ykuun when there are no stranded tense features, but only modal or eventive. The details of these are presented in the discussion below.

# 5.3 kaan in Copula Constructions

Arabic is known to have non-verbal sentences that do not have an overt copula, as discussed in section 2.1.1. I argued that not all non-verbal sentences should be treated on a par since they show different behaviours with regards to licensing temporal adverbs. The examples in (7) should be categorised as Individual-level predicates since they have an attributive function relating a property to the subject. I propose – building on the previous discussion in Chapter 4 – that IL predicates may or may not project an EventP. And, when they project an EventP the eventive feature should be [-Particular]. The non-verbal examples in (8), however, can license different temporal references: present, past, and the future depending on the adverb. I classify these predicates as Stage-level predicate and they include spatial predicates such as (8)-c:

(7)

a.	ar-rajul-u	t <sup>s</sup> abeeb-un	(*al?aan, *	ʻ yadan, *munθu ?ams)
	DEF-man-NOM	doctor-NOM	(now, tomo	prrow, since yesterday)
	'The man is a doctor	,		
b.	ar-rajul-u	t <sup>s</sup> aweel-un	(*al?aan, *	<sup>*</sup> yadan, *munθu ?ams)
	DEF-man-NOM	tall-NOM	(now, tomo	prrow, since yesterday)
	'The man is tall'			
c.	ar-rajul-u y.u∫bi	h	?ab-i (al?aan <b>, *y</b>	adan, *munθu ?ams)
	DEF-man-NOM 3SM.M	P.look-like	father-I (now, tom	orrow, since yesterday)
	'The man resembles	my father'		
(8)	)			
a.	ar-rjul-u	mareeð <sup>s</sup> -un	(al?aan, <b>*yadan</b> , n	nunθu ?ams)
	DEF-man-NOM	sick-NOM	(now, tomorrow, s	ince yesterday)
	'The man is ill'			
	'The man has been il	l since yesterda	,,	

b. ar-rajul-u jaalis-un (al?aan, yadan, munθu ?ams)
DEF-man-NOM sit.AP.SM-NOM (now, tomorrow, since yesterday)
'The man is sitting now'
'The man will be sitting tomorrow'
'The man has been sitting since yesterday'
c. ?ahl-i fi-l-Kuwait (al?aan, yadan, munθu wiladat-i)
family-my in- DEF-Kuwait (Now, tomorrow, since I was born)

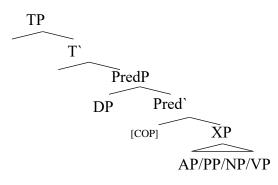
'My family is in Kuwait now'

'My family will be in Kuwait tomorrow'

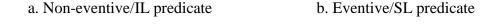
'My family have been in Kuwait since I was born'

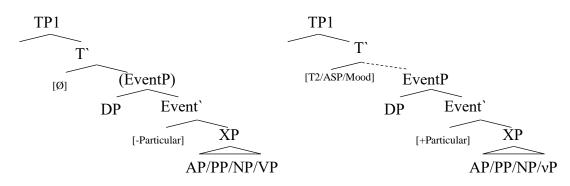
Adger and Ramchand (2003) present a unifying analysis for equative sentences and other predicative sentences. They argue that all sentences have the same underlaying predicative structure, in which predicative and equative sentences have a predicate phrase PredP that can be embedded under TP. Predicates differ in terms of their eventive feature, some predicates are eventive while others a non-eventive. I apply this analysis to predicative sentences and group them based on whether they are eventive or non-eventive; I exchange PredP with EventP for predicates which can have an eventive feature [+Particular] for SL predicates, or [-Particular] for IL predicates. In addition, I suggest that inherent IL state verbs such as *yu/bih*) have no EventP altogether. The following structures represent Adger and Ramchand's analysis compared to my analysis:

(9) Adger and Ramchand (2003) Predicative structure



### (10) The current EventP hypothesis





Furthermore, I propose that the significant consequence related to the difference between the eventive and non-eventive structures is the availability of the inflectional projection. Projections such as TP2 and AspP (and some modal meanings) are dependent on an eventive predicate. In other words, what is represented as an eventive PredP in Agder and Ramchand's analysis, I expand it to include TP2/AspP/EventP. I argue in this chapter that the presence of *kaan/ykuun* is always an indication of an eventive predicate consisting of an existentially bound particular event. Furthermore, *kaan/ykuun* are used in structures where there is a [+Particular] eventive feature that cannot be supported by the predicate. Consequently, *kaan/ykuun* do not show up in non-eventive structures.

Before providing evidence for my view, I discuss some previous analysis for the copula constructions in Arabic. A major starting point for all the previous discussions on this matter in the literature relates to the absence of the copula verb *ykuun* in *'present tense'* sentences, and its appearance in past tense sentences as shown in examples (11):

(11)

a.	ar-rajul-u	kaana	t <sup>s</sup> abeeb-an		
	DEF-man-NOM	be.pf.3sm	doctor-ACC		
	'The man was a doctor'				
b.	ar-rajul-u	(*ykuunu)	t <sup>s</sup> abeeb-an		
	DEF-man-NOM	3SM.MP.be	doctor-ACC		
	'The man is a doctor'				
c.	ar-rajul-u	kaana	t <sup>s</sup> aweel-an		
	DEF-man-NOM	be.pf.3sm	tall-ACC		
	'The man was tall'				

d.	ar-rajul-u	(*yakuunu)	6aweel-an
	DEF-man-NOM	3sm.mp.be	tall-ACC
	'The man is tall'		

The proposals can be grouped into three main proposals: the null copula hypothesis, the small clause hypothesis and the non-verbal present tense hypothesis.

### 5.3.1 Non-verbal Construction in Arabic

The first hypothesis is the null copula hypothesis advocated by Fassi Fehri (1993) amongst others. Fassi Fehri argues that all non-verbal constructions such as (7)-a or (7)-b have are underlyingly verbal. However, the verb (the copula verb) is not spelled out in these constructions when they have a present tense reference. In other words, the 'present tense' of these non-verbal constructions has a **null** present tense verbal copula. However, when these non-verbal predicates have past tense reference the copula must be spelled out as *kaan*. Furthermore, the null present tense copula is not always null but may be spelled out as *ykuun* in specific contexts: "Spell out the copula *KWN* when Mood, Aspect, and or Tense is **specified**, otherwise spell it out zero" (Fassi Fehri 1993:156). He notes that copula is spelled out when the sentence contains information related to mood, Aspect, or tense. These 'inflectional' meanings require verbal support, and therefore the copula is spelled out. Apparently, present tense alone doesn't require verbal support. Fassi Fehri's analysis is enlightening, however, he does not explain why the present tense is not considered a 'specified' Tense feature or why the present tense does not require verbal support.

The following examples are taken from Bahloul (2008b:508-509) showing contexts of *ykuun* obligatorily spelled out to support some functions other than the present tense such as aspect (12), modals (13) and moods such as (interrogatives, conditional and imperatives (14):

- (12) **Habitual** context
- a. Sadatan-ma \*(yakunu) r-rajul-u
  b. usually
  c. Sadatan-ma \*(yakunu) r-rajul-u
  c. Sadatan-ma fi d-daar-i
  c. Usually
  c. Sadatan-ma fi d-daar-i
  <lic. Sadatan-ma fi d-daar-i</li>
  c. Sadatan-ma fi d-daa
- b. lamma \*(yakunu) t<sup>f</sup>-t<sup>f</sup>aqs-u jameel-an ?akunu murtaħ-an
  when 3SM.MP.be DEF-weather beautiful-ACC 1S.MP.be relaxed-ACC
  'Whenever the weather is beautiful, I feel relaxed'

#### (13) **Modal** context

a.	. sawfa *(yakuunu)		r-rajul-u		waaqif-an	
	FUT	3SM.MP.be	DEF-man-NOM	1	standing-ACC	
	'The man will be standing up'					
b.	qad	*(yakuunu)	r-rajul-u		waaqif-an	
	may	3SM.MP.be	DEF-man-NOM	1	standing-ACC	
	'The man may be standing up'					
(14) <b>Mood</b> context						
a.	mata *	<sup>4</sup> (yakunu)	?abu-ka	fi d-daa	ar-i	
	when	3SM.MP.be	father-your	in DEF-	house-GEN	
	'When is your father at home?'					
b.	la	*(takun)	ghabiy-an			

NEG 2SM.MP.be silly 'Do not be silly!'

The examples show that the copula is obligatory when the construction has a habitual reference, modal meanings, or any of the other modalities. This, however, doesn't give a direct answer to why the non-verbal predicates in (7) a-b do not spell out the copula despite them having present tense readings; isn't the present tense a specified functional category? Two answers have been proposed for this question: 1) the present tense is not specified for a verbal feature and therefore does not requires a verbal copula (Benmamoun 1999; 2000; 2008); 2) there is no TP in these structures and they represent a small clause syntax (Mouchaweh 1986).

Benmamoun (2000) advocates the first solution and proposes that the present tense does not require verbal support since it is not specified for a verbal feature. Furthermore, he argues against the null present tense copula and against the small clause analysis. Benmamoun (2000: 39-42) presents many arguments showing that non-verbal sentences are not small clauses since they have an inflectional layer evident from the possibility of using negation, expletives, temporal references...etc. However, his arguments are based on treating all non-verbal sentences on a par, IL/non-eventive predicates and SL/eventive predicates. His examples of non-verbal sentences allowing inflectional material are usually based on either spatial predicate such as (8)-c or predicates that are derived nominals (active or passive participles for example) which I have shown to be structurally different.

The second solution is the small clause hypothesis proposed by Mouchaweh (1986) and adopted by Rapapport (1987) for Hebrew. Small clauses do not have an inflectional projection

and therefore they also do not have a TP. Non-verbal sentences appear to be similar to small clauses since they lack information relating to Tense, Mood, Aspect etc. However, this again cannot be extended to all non-verbal sentences. This may be extended to IL predicates only since IL predicates cannot allow spatiotemporal modification as argued in Chapter 4.

It is clear that these proposals overgeneralize on the behaviour of non-verbal sentences. I argue that the distinction between verbal and non-verbal predicates in Arabic is not as significant to the grammar as the distinction between predicates in terms of eventivity. Furthermore, I propose that non-eventive IL predicates can only have generic present tense which compatible with the semantics of non-eventive sentences. However, they can be given temporal referentiality other than the generic present when they are embedded under the existential verb *kaan/ykuun*. Consequently, the sentence changes into an SL predicate and does not stay an IL predicate in a non-eventive sentence.

In the following section, I describe the detailed functions of *kaan/ykuun* in the grammar of KA. Furthermore, I apply the EventP hypothesis in analysing temporal, modal and counterfactual instances of *kaan* in KA.

# 5.4 kaan in Kuwaiti Arabic:

*Kaan* is a multifunctional TMA verb, which can be used to indicate past tense, Historical present in narrative contexts, or even modal counterfactuality. The verb *ykuun* can also be used to indicate modal and aspectual meanings that are not specified for the past tense. In addition, KA has two variants of *kaan* based on changing the consonant /k/ with its affricative variant /tf/ :*kaan* and tfaan. I argue that they are not freely interchangeable; tfaan is specified for a modal function not found with *kaan* in KA. This observation has not been noted before for KA. I discuss it in more detail in section 5.4.3 below.

This section starts with a description of temporal *kaan*'s function and how it interacts with eventives and non-eventive predicates. It is followed by the function of *ykuun* in section 5.4.2. Third, a description of the functions of t/aan is presented in section 5.4.3.

# 5.4.1 Temporal kaan

I argue that *kaan's* function in the functional domain is to present lexical support for stranded features, which cannot be supported directly by the predicate. In this sense, *kaan* is an auxiliary in the definition presented in (Bjorkman 2011). Auxiliaries may be used as a recovery mechanism by the grammar to support stranded Aspect, mood, modal or Tense

features. I add to this view that *kaan* may also realise the eventive feature [+Particular]. In this regard, *kaan* may be used by the grammar when a non-eventive predicate needs to be embedded in an existential context.

First, the widely acknowledge function of *kaan* is its past tense referentiality. It is described as a past tense auxiliary in many references (e.g. Bakir 1980, Eisele 1990 and Fassi Fehri 2012). In this section, I describe *kaan's* functions with eventive and non-eventive predicates respectivly.

# 5.4.1.1 With Eventive Predicates

Verb *kaan* may embed a verbal eventive predicate encoded in the perfective, imperfective or AP form. In each case, *kaan* interacts differently with the aspectual properties of these constructions. I discuss first the interaction between *kaan* and an imperfective eventive verb followed by its interaction with the perfective eventive.

## A) <u>kaan + Imperfective</u>

(15)

Eventive imperfective verbs usually indicate present progressive readings. Adding *kaan* to the construction creates the complex past progressive tense. However, as discussed in Chapter 3, not all verb types encoded in the imperfective have a progressive reading, especially Achievement and Stage-level states. I have related this to the lack of a Process features as suggested in Vendler (1967) with these event types (see 3.3.1 for the relation between the imperfective and the verb's lexical Aspect). Consequently, *kaan* with Achievements and Stage-level states does not create a past progressive contrary to *kaan* with Activities and Accomplishments:

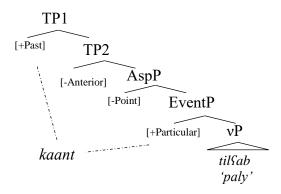
(15)									
a.	Hind	kaan.t	(gaasid)	ti.lSab	barra				
	Hind	be.PF.3SF	(PRG)	3SF.MP.play	outside				
	'Hind was playing outside'								
b.	Hind	kaan.t	(gaaisd)	t.akil	tuffaħ				
	Hind	be.PF.3SF	(PRG)	3SF.MP.eating	apples				
	'Hind was eating an apple'								
c.	Hind	kaan.t	(*gaasid)	t.os <sup>s</sup> al					
	Hind	be.PF.3SF	(*PRG)	3SF.MP.arrive					
	Intended meaning: 'Hind was arriving'								

d. Hind kaan.t (\*gaaSid) t.ikrah haa-l-eyniya
Hind be.PF.3SF (\*PRG) 3SF.MP.hate this-DEF-song
Intended meaning: 'Hind was hating this song...'

The asterisk (\*) is used here not to mean that the examples (c) and (d) are ungrammatical, but that they do not have a past progressive reading. (15) are still felicitous because they receive a habitual past reading. Note that (*gaaSid*) is used between brackets since I argued that it can realise the [+Particular] eventive feature. However, it is optional here since this feature may be realised by the existential verb *kaan* directly. Nevertheless, there is an additional meaning related to using the participle (*gaaSid*) which I discuss later in 6.5.2.2.

The following structure accounts for the past progressive reading with Activities and Accomplishments.

(16)



In this construction, the feature [+Particular] and [+Past] are stranded since they cannot be realised on the thematic verb. Therefore, the grammar resorts to using kaan since it is the default verbal form that can realise these stranded features (the choice is between the two versions kaan/ykuun, however, since only kaan may realise the [+Past] feature it is used instead in this context). In this way, the auxiliary verb *kaan* realises the [+Particular] feature and 'moves' to TP1 to support the past tense feature, which cannot be supported by the imperfective verb. *kaan* interacts with the aspectual and temporal properties of the thematic verb to create a past progressive reading, in the case of Activities and Accomplishments. As for the case of Achievements, the construction does not receive a progressive reading due to the conflict between the interpretation of the AspP/TP2 of the verb giving it a futurate reading, and the past reading of the auxiliary verb making it impossible to have a past progressive with Achievements.

#### B) <u>kaan + Perfective</u>

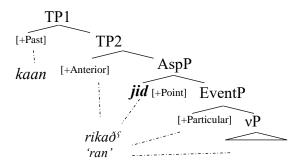
It is widely assumed that the verb *kaan* embeds a perfective verb in a complex tense construction (Fassi Fehri 1993; Ouali and Fortin 2007). However, I find it difficult to find an example in KA of *kaan* embedding a perfective without gid/jid – the KA variants of the Standard Arabic modal/perfect *qad*. Some grammaticality judgements from KA speakers show that they reject the perfective after *kaan* unless it is separated by  $gid/jid^{14}$ . They prefer using an AP instead in such constructions (18) a-b. This confirms the relation noted by many (e.g. Brustad 2000 and Bahloul 2008) that the AP and the *qad*+perfective have a perfect aspectual reading. I gloss *jid/gid* as Assertion (AST).

(17)

a.	Ali	kaan	*(jid)	laSab	ma§a-hum	
	Ali	be.PF.3SM	(AST)	play.PF.3SM	with-them	
	'Ali d	id play with the	em' or '	Ali played with	them indeed'	
b.	Ali	kaan	*(jid)	) daras	ha-d-dars	(min ?awal)
	Ali	be.PF.3SM	(AST)	studied.PF.3	SM this-DEF-le	sson (previously)
	'He st	udied this lesso	on previ	ously'		
(18	(18)					
a.	Ali	kaan		laasib	maSa-hum	
	Ali	be.PF.3SM		play.AP.SM	with-them	
b.	Ali	kaan		daaris	ha-d-dars	(min ?awal)
	Ali	be.PF.3SM		study.AP.SM	this-DEF-lesso	on (previously)

Furthermore, using *kaan* with a perfective verb is not easily accepted unless there is another event mentioned in the clause or in the context to specify a reference point other than UT. *Kaan,* in this case, would function to order the RT prior to UT while the perfective relates ET to RT. I propose that without *gid* the perfective can directly order ET in relation to UT, making the function of *kaan* redundant. The particle *gid* seems to block the perfective's movement to TP1, as shown in the following structure:

<sup>&</sup>lt;sup>14</sup> I have consulted native speaker of KA who found if unacceptable that *kaan* embeds a perfective verb directly.



Fassi Fehri (1993; 2012) notes that *qad* in SA functions as either modal or aspectual depending on its location in relation to Tense. Others such as Bahloul (2008) argue that *qad* has one function and that is of assertion, and depending on its location in the TMA projection it may assert the Perfect Aspect, or it may assert Modality. Fradkin (1980:215-216) notes that *qad* has an aspectual function such that it asserts the completion and termination of the perfective event. I adopt the latter view of *qad* for KA since I have mentioned in Chapter 3 that the perfective viewpoint doesn't entail that the event is completely terminated and cannot be extended, but only that there is a point of the event in the past (usually the telic point). I suggest that using *qad* assures that the event is represented as completely terminated. Therefore, the perfective event that is headed by *qad* cannot be extended by *wa ma-zaal* 'and he still is' regardless of whether the event is telic or atelic (I have shown in 3.3.1 that atelic events in the perfective may be extended with 'wa maa zaal'). Using the particle *jid/gid* ensures that the event cannot continue anymore:

- (20)
- a. Talal rikað<sup>ç</sup> bi-n-naadi (wa ma-zaaal y.arkið<sup>ç</sup>)
  Talal ran.PF.3SM in-DEF-club (and still is running)
  'Talal ran in the club and he is still running'
- b. Talal jid rikað<sup>ç</sup> bi-n-naadi (\*wa ma-zaal yarkið<sup>ç</sup>).
  Talal AST ran.PF.3SM in-DEF-club (and still is running)
  'Talal had run in the club (\*and he is still running)'
- c. Talal kaan jid rikað<sup>s</sup> b-n-naadi (\*wa ma-zaal yarkið<sup>s</sup>).
  Talal be.PF.3SM AST ran.PF.3SM in-DEF-club (\*and still is running)
  'Talal had been running in the club'.

Adding *kaan* to the perfectly terminated event allows for the past of the past reading. *gid* is used to assure that all parts of the perfective event can be located before the reference point.

In such constructions is appears that the perfective thematic verb cannot realise the past tense feature directly. I assume that this inability could be interpreted in two ways: either that the existence of a morphological element (*gid*) is blocking the perfective verb from realising the past tense feature, or that the construction requires there to be a reference time which is distinct from UT and from ET. In the first scenario, the grammar resorts to another default verbal verb which may realise this past tense stranded feature hence the verb *kaan* is used. In the second scenario, the verb kaan is used to assure that the reference time is kept distinct from UT, as when the perfective thematic verb is used, it locates ET prior to RT but indicates that RT = UT. However, using *kaan* assures that ET is located prior to RT by the perfective verb, and RT is prior to UT by the auxiliary verb, creating the past of the past reading.

Summing up, I have shown that auxiliary kaan is used to realise either Past tense and an eventive feature when it is used with an imperfective verb allowing the construction to have a past progressive reading, or that it realises the Past tense feature when used with a perfective verb resulting in a past of the past reading. There is a similarity between the function of kaan and English have in the sense that it can be used in the context of a past perfective/perfect reading. However, these auxiliaries do not function in the same way since each form is specified for a different feature. It is argued that English have is derived from the default verbal form  $(V^{\circ})$  in English – which is BE – that is specified for an additional feature (F) as indicated in the following representation ( $V^{\circ}+F=have$ ) (Freeze 1993; Kayne 1994; Bjorkman 2011). The exact meaning of the feature (F) is not agreed. Bjorkman (2011:132) suggests that this feature is related to the aspectual head Perf in English, where when a default verb is incorporated into that head the meaning of the combination is realised as the verbal form have instead of simple the default verbal form BE. can realise the feature of the Perf head as the verbal form have. In this sense, the verb kaan is similar to English have, in terms of being derived from a default verbal form and specified for a functional feature. In contrast, the feature I argue verb kaan is specified for is not Perfect Aspect but the combination of perfective Aspect and Anterior Tense. Perfect Aspect in Arabic is usually realised by the thematic verb directly, or by a separate morpheme such as (gid) in KA and not by the auxiliary kaan. In conclusion, both verbs kaan and have incorporate the default verb V° but differ in the specified feature which they realise in the structure they are used in. These differences may appear settle but are nevertheless distinct.

# 5.4.1.2 Temporal kaan with Non-eventive Predicates

The function of *kaan* with non-eventive predicates differs slightly from its function with eventive predicates. I have argued that in non-eventive constructions there is a relation established between the subject and the predicate that hold of the subject generically or irrespective of time. However, when *kaan* is used it changes the IL state into an SL state since it allows the attributive relation to be identified in relation to time. Lexically, *kaan* indicates a change from *non-existing* to *existing*. This can have two manifestations: either *kaan* indicates that state A *BECOMES* state B, or it indicates that in relation to UT, state B does not hold. In other words, using *kaan* does not always mean that the relation between the subject and its predicate is true in the past and does not hold in the present time, but can also indicate that the relation was established in the past without any implication of whether or not it is still valid in UT. Evidence for this comes from the use of *kaan* in the following verse from the Quran:

(21)

a.	wa	kaana	Allah-u	yafoor-an	raħeem-an
	and	be.PF.3SM	Allah-NOM	forgiving-ACC	merciful-ACC
'And Allah is ever forgiving and merciful'					

(Sahih International 4:96)

In this example *kaan* cannot mean that the predicate is true of the subject in the past and does not hold anymore in the present (this would be considered blasphemy since it indicates that these attributes do not hold of God presently!). Thus, it must also mean that the relation is still valid. In these cases, *kaan* indicates the meaning of *BECAME*, i.e. the relation between the predicate and the subject was established a long time ago. There are many examples of this function of *kaan* in the Quran.

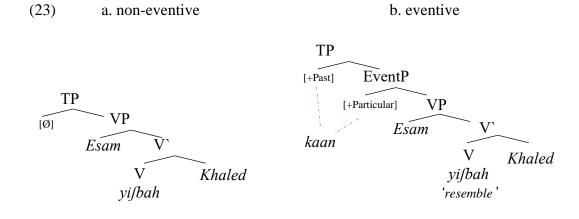
In the following example, however, *kaan* necessarily means that the relation is true of the past only:

(22)

Esam	kaan	y.i∫bah	khalid Amin		
Esam	be.pf.3sm	3sm.mp.look-like	Khalid Amin		
'Esam used to look like Khalid Amin'					

I suggest that the difference may be related to the scope of the past tense *kaan* and the properties of the subject. When *kaan* scopes over the predicate only it indicates that the predicate holds of the subject in the past tense only. However, when *kaan* scopes over the subject and the predicate together it can be ambiguous between the two readings. Furthermore, using the verb *kaan* may indicate that the subject does not exist any longer (that he is deceased). When we say someone used to look like his father, we are implying either that he no longer looks like his father or that he no longer exists. However, when *kaan* scopes over the subject in (21), Allah the creator, who is eternal, the meaning must hold of the subject eternally. Therefore, the reading of *kaan* is sensitive to scope and to the subject's properties as well. In both cases, however, *kaan* changes the relation from holding atemporally/generically, to being specified in relation to a temporal point, which means that the state has a temporal boundary making it imilar to an SL state.

The sentence in (22) has an inherently Individual-level state verb (which I described in Chapter 4). I argued that this class of verbs does not project an EventP and can be embedded directly under TP. And, TP in this case cannot be specified; it is empty (23)-a. However, in a past construction, the IL predicate is unable to realise the past tense feature, therefore, the grammar resorts to the default verbal form. In addition, the construction should be eventive and kaan realises the eventive feature as well, which gives the construction an SL predicate reading instead:



#### 5.4.2 Habitual and Modal ykuun

As indicated in section 5.3.1, *ykuun* is spelled out in habitual or modal contexts. The same applies to *ykuun* in KA.. I will discuss the modal function of *ykuun* specifically in this section.

First, the verb *ykuun* encodes an Epistemic modality feature. Specifically, it shows the speakers' judgement of the actuality of a proposition given their knowledge of current facts

that lead them to conclude that the situation must hold in the present time or in the future. In the following examples I will gloss *ykuun* as MOD:

(24)

a. Azzam ykuun gaaSid yilSab bi-l-ħadeeqa alħeen
 Azzam MOD PRG 3SM.MP.play in-DEF-garden now
 'Azzam must be playing in the garden now'

The clause does not simply mean that Azzam is currently playing in the garden, i.e. present progressive tense, but that there is a layer of Modality added to this proposition; that the speaker judges deductively from the facts around him that the Azzam must be currently in the garden. The clause, however, is not evidential since it does not imply that the speaker saw or has any direct evidence that the situation holds currently or that he is strongly committed to the truth of what he is saying. This construction, therefore, can be translated to English with the modal *must*.

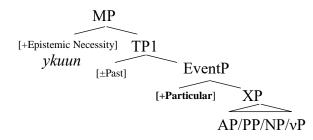
I propose that *ykuun* in such examples is not merged in TP1 but in a modal projection above TP1 (shown in (26) below). This modal head embeds any predicate type, eventive or non-eventive, perfective, imperfective, or AP.

(25)

- a. ykuun Khalid laSab ?ams (o maa gaal le-kum)
  MOD Khalid played.PF.3SM yesterday (and not say.MP.3SM to-you.P)
  'Khalid must have played yesterday and didn't tell you'
- b. ykuun Omar maaxith bint-ah ma\$-ah
  MOD Omar taken.AP.SM daughter-his with-him
  'Omar must have taken his daughter with him'
- c. ykuun Omar t<sup>c</sup>weel (b-ha-l-haala)
  MOD Omar tall (in-this-DEF-case)
  'Omar must be tall in this case'

The following structure presents *ykuun*'s position in these constructions:

(26)



Epistemic modality relates to the speaker's perspective of the situation. Therefore, Epistemic modality is considered part of the CP domain and not the TMA domain. However, I suggest that the Epistemic modality head selects an eventive predicate. The verb *ykuun* is used to realise the eventive feature (if the predicate cannot do so itself) in addition to the feature of Epistemic modality. The imperfective form *ykuun* is used instead of *kaan* because it doesn't carry Tense features contrary to *kaan*. The Tense features of *kaan* can change the modal reading and create counterfactual Modality instead of Epistemic modality. I discuss this function with counterfactual *kaan* in the following section.

## 5.4.3 tfaan as a Variant of kaan?

In KA the consonant /k/ has a fricative variant /t// which can be used interchangeably in some contexts. For example, *Kibiir* ~ t/ibiir 'big', or kef ~ t/ef 'How?' (Holes 2006: 610). In addition, *kaan* has a variant t/aan which can also be used in similar contexts depending on differences between dialects. However, I argue that despite them appearing as allomorphs of the same morpheme, they are not used in exactly the same context or for the same functions. I show that KA distinguishes between *kaan*, which is strictly used for temporal past, and t/aan, which has a modal function in addition to the temporal one. I show that *kaan* appears in contexts of true past, while t/aan appears in counterfactuals and in narratives as a consecutive clause marker. I propose in this section that Kuwaiti Arabic provides empirical evidence that *kaan* can realise eventive/perfective/anterior/past Tense features and it must be used in true past Tense constructions. Therefore, it has developed the variant t/aan, which can be used in fake past tense constructions such as counterfactuals (see Iatridou 2000 for the definition of fake past). Furthermore, t/aan is used as a Historical present marker in KA narratives.

### 5.4.3.1 Counterfactual tfaan

It is attested in many Arabic dialects that a frozen form of the verb *kaan* is used as a marker of counterfactuality (e.g. Brustad 2000 for Iraqi Arabic, Syrian Arabic, Kuwaiti Arabic, and

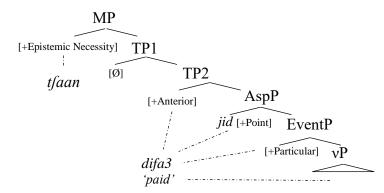
Moroccan Arabic; Al-Zahrani 2013 for Hijazi Arabic; Karawani 2014 for Palestinian Arabic). In KA the frozen form of *kaan* that is used in counterfactual constructions is exclusively the variant *tfaan*. The form does not show any subject agreement and is strictly formed in the  $3^{rd}$  person singular masculine perfective form. The following example shows a typical counterfactual context:

(27)

- A: Hind nisa.t buk-ha uo ma gdara.t t.idfaS li-ħsaab
  Hind forgot.PF.3SF wallet-her and NEG could.PF.3SF 3SF.MP.pay the-bill
  'Hind forgot her wallet and she wasn't able to pay the bill'
- B: tfaan difas.ti Sann-ah
  - CF paid.PF.2SF for-him

'You should have paid for her'

Speaker B utters the counterfactual clause to indicate two things: 1- that the counterfactual event of *paying for her* did not happen, and 2- that the speaker judges that it was necessary for it to happen. The counterfactual meaning results from the interaction of both the perfective event and the past tense morpheme. The perfective event marks a shift from the UT to a prior time, while the past tense morpheme shifts the utterance world from the actual or real world to a non-actual modal world (following Karawani and Zeijlstra 2013). In fact, Karawani and Zeijlstra argue that the past tense is formed by an inherent [Exclusion] feature in the past tense morpheme which functions in T to exclude the present moment UT from the evaluation. This feature can also be used above T (in a modal head) to exclude the current (real) world from the evaluation by referring to other counterfactual worlds. In other words, when the exclusion feature of the past tense morpheme is evaluated in relation to times, it excludes the utterance time from the evaluation time UT, resulting in a shift to either past or future tense (not the present). But when the exclusion feature is evaluated in relation to worlds, it excludes the utterance world (the actual world) from the evaluation, hence referring to a modal world. In Karawani and Zeijlstra's analysis of Palestinian Arabic (PA), they propose that kaan may either head a TP or a MoodP above TP; when it heads the MoodP it allows the past morpheme feature [Exclusion] to function on worlds, excluding the current world, which creates the counterfactual reading. In this case, the past tense morpheme has what they call fake past tense reference. I adopt a similar analysis for the counterfactual *t/aan* in KA. The counterfactual construction in example (27) has the following structure:



I propose that in KA, using the past tense morpheme in a projection above T is marked by a phonological change in the verb represented as *tfaan*. The past event itself does not move to the past tense position T1; otherwise, it would be evaluated as a true past event. I suggest as shown in the structure that the past tense head could be left empty. The embedded event is read as factual and anterior, while the morpheme *tfaan* shifts the reading into a counterfactual construction.

Counterfactual constructions require eventive predicates. They are ungrammatical with IL state verbs and predicates, as shown in the following examples:

(29)

a.	* t∫aan	khalid	yi∫bah	ubu-h		
	CF	Khalid	3SM.MP.resemble	father-him		
	Intended meaning: 'Khalid should have resembled his father'					
b.	* t∫aan	Khalid	t <sup>s</sup> weel			
	CF	khalid	tall			
	Intended meaning: 'Khalid should have been tall'					

Example (29)-a does not have a counterfactual reading. Example (29)-b, however, may be used in the counterfactual only if we add the verb *9aar* 'become' to the construction:

(30)

* t∫aan	Khalid	s <sup>s</sup> aar	t <sup>s</sup> weel			
CF	khalid	became.PF.3SM	tall			
Lit: *'Khalid should have become tall'						

I suggest that the verb  $s^{s}aar$  is added to allow the predicate to be changed into an eventive one and then  $s^{s}aar$  is able to carry the necessary anterior feature of the event required to make the counterfactual construction, while *tfaan* is used in the modal position above TP. Both verbs, *kaan* and *tfaan* must appear in eventive constructions.

### 5.4.3.2 Consecutive or Historical Present tfaan

Another function of the morpheme *tfaan* is to mark consecutive or causal conjunction on the sentential level, especially in narratives. Brustad (2000: 213) calls this function of *tfaan* the Historical present. She notes that it is commonly used in narrative especially before the verb 'say' to alert the listener to ensuing direct speech central to the narrative. It is in these cases factual not counterfactual. I gloss it in this context as CN for consecutive:

(31)

a.	marra	qaa§da		t∫aan	ydig	Sal-ay		
	once	sitting.AP.SF		CN	3SM.MP.call	at-me		
	'Once I was sitting, suddenly he called/calls me'							
b.	Sugub ma	riħ.na	t∫aan		agool	ħg	Nura	
	after that	went.PF.3P	CN		1S.MP.say	to	Nura	
	'After we we	nt, I say to Nura	a'					
c.	t∫aan	yiguul	t <sup>s</sup> alag.	t-ha				
	CN	3sm.mp.say	divorc	ed.PF.1	S-her			

'Then he says, I divorced her!'

The function of *tfaan* in these examples is related to the organisation of events or episodes in the narrative discourse. Wolfson (1982:117) proposes that shifting Tense to the Historical present marks episodic boundaries that help organise narratives into segments. Fleischman (1990:75) suggests that the Historical present is used to "report events that are vivid and exciting to enhance the dramatic effect of a story by making the addressee feel as if they were present at the time of the experience, witnessing the events as they occurred". These functions are present with *tfaan* and they are heavily used in children's narratives in KA. *tfaan* is used to mark consecutive relations between clauses, i.e. relations which are consequent and logically related. Heine and Kuteva (2004: 95) note that there are a few languages that have a copula used to mark consecutive continuity in narrative contexts. They suggest that it is related to the change from a copula to a focus function.

I suggest that *t/aan* in these contexts does not have a typical past tense function relating RT prior to UT since it does not constitute past progressive tense with the imperfective event that it embeds. The past reference is already indicated by the context of the narrative. Therefore, *t/aan* must have a different function other than the true past tense. I suggest it has

a modal function as it does not necessarily refer to an actual context, but a narrative context, where the speakers are presenting the past events from their perspective recalling events from a distant past or from memory. Or, alternatively, it has a discourse linking function connecting events on the discourse level, a function that may be represented in CP and not in TP. This is supported by the exclusive use of t an instead of the true past tense morpheme kaan in these contexts in KA.

### 5.5 Conclusion and Summary

I have argued that the semantics of verb *kaan* in Arabic are not exactly similar to the verb '*BE*' in English but to '*BECOME*'. In other words, the verb , in addition to the semantics of BE, also has an extra feature. This feature, I suggest, indicates change. This change is either from state *a* to *b* or change seen by contrasting state *a* to *b*. The change is a transition which is in of itself indicates an event (Pustejovsky 1991). Furthermore, I claim that the root  $\sqrt{KWN}$  in Arabic relates to the meanings of existence. This inherent lexical meaning allows the verb *kaan* to refer to an existential event by realising the eventive feature. Furthermore, it allows non-eventive IL predicate to be used in an eventive context. In this case, *kaan* functions as an 'eventiviser'. Horton (1995) notes that some copula verbs are truly stative while others can be dynamic or eventive since they can change the adjectival predicate into a dynamic one. The latter type is called quasi-copula. In fact, Al-Bahri (2014) classifies KA *kaan* as a quasi-copula existential verb, although he does not clarify how he reached this conclusion at all. This is exactly what I have argued for in relation to *kaan* and *ykuun*.

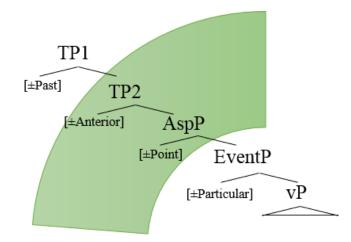
Moreover, I have argued that despite that the imperfective verbal form cannot support an eventive feature, the verb *ykuun* behaves differently from other imperfective verbs since it can realise the [+Particular] feature by reliving on its lexical semantics of its root. Consequently, the imperfective *ykuun* can be used in eventive sentences to spell out features related to Modality.

In addition, I argued that the use of the verb *kaan* with a perfective verb in an eventive sentences forces the RT to be anterior to UT creating a past of the past reading. Typically, the perfective verbal form can locate the ET anterior to UT directly. However, when *kaan* is used it indicates that ET can be located in relation to RT and *kaan* locates RT anterior to UT, otherwise, the function of *kaan* will be redundant.

Furthermore, I have shown that KA has a frozen form of the verb *kaan*, which is used for modal function or for discourse linking functions. KA differentiates between the true past

tense morpheme *kaan* and the fake past tense morpheme *tfaan*, which are each used for distinct functions in the clause. I suggested that *kaan* interacts with the predicate on the vP phase allowing it to change the predicate into an eventive one for example. However, the frozen form of *kaan* I suggest is added on the CP phase to add information related to the CP domain.

Finally, the functions of *kaan/ykuun* in KA shed light on the purpose of the TMA projection. It appears that TMA information related to the predicate are only necessary when the predicate is eventive. Therefore, I propose that when the predicate is eventive it coincides with the projection of TMA heads. To the contrary, when the predicate is IL or non-eventive the TMA projection is truncated. I show the truncated heads shaded in green in the structure below:



I suggest that the shaded area include information related to the vP phase and therefore they are dependent on the type of predicate directly.

# Chapter 6. The aspectual verbs gaam and gasad in KA

## 6.1 Introduction

The verbs *gaam* 'got up/stood up' and *gaSad* 'sat' are used both as main verbs and as functional verbs supporting another main verb in the clause. It is attested that they are used as aspectual verbs indicating inception and duration respectively when used as functional verbs in KA (Al-Najjar 1984). The following example shows how *gaam* can be ambiguous between a lexical and an aspectual reading:

(1)

Hind	gaam.t	t.rattib		kabat-ha
Hind	got up.PF.3SF	3SF.MP.organize		closet-her
т	· 1 (TT· 1		1	

- Lexical: 'Hind got up to organise her closet'
- Aspectual: 'Hind started organising her closet'

In this chapter I describe the different meanings of gaam/gaSad depending on the structures they appear in. I argue that the verbs gaam and gasad as lexical verbs have semantic and syntactic properties that facilitate their use in the grammar of KA in the way they do. For example, gaam as a main verb can be used with agentive and non-agentive subjects contrary to verb *gasad* which is restricted to agentive subjects. This difference is carried over with gaam and seen in its function as an Aspect marker used with agentive and non-agentive events contrary to gasad which is also used as an aspectual marker but remains restricted to agentive subjects. On the other hand, the AP form of the verb 'to sit' gaasid in KA when used as the main argument in the clause is not restricted to agentive subjects. I argue that the aspectual semantic features related to the AP form are responsible for this behaviour. The AP focuses on a state following an event and not on the event itself, and hence the state of sitting or being seated does not require any direct indication of the event which initiated the sitting. Furthermore, the state of sitting can be maintained not by an agentive force from an animate subject but simply by the force of gravity. I suggest that this fact related to the concept of 'being seated' allows the AP gaasid to be used with agentive and non-agentive subjects in general.

Furthermore, the meaning of *gaam/gasad* may be affected when the structure is extended, especially by adding another lexical verb. The addition of another verb/verbal

phrase to the structure may be through subordination, circumstantial adjunction or simple juxtaposition. I argue that the extension by juxtaposition can be classified as a serial verb construction in KA and from this construction, the aspectual readings of *gaSad* and *gaam* developed. The AP, on the other hand, can only have grammaticalized from the circumstantial construction as argued convincingly in Camilleri and Sadler (2017).

In this chapter, I have a number of objectives. The first objective is to display the different meanings of the verbs *gaam* and *gasad* in KA in relation to the structure and context in which they appear. The second objective is to show that *gasad* and *gaam* are used in serial verb constructions in KA. The third objective is to discuss the cases of ambiguity between *gaam/gasad* when used as serial verbs and as aspectual light verbs by presenting a number of tests in which they can be distinguished. The fourth objective is to describe the functional uses of *gaam/gasad/gaasid* in KA as aspectual markers and more, linking their functions to the EventP properties.

The chapter starts with a detailed description of the lexical instances of *gaam/gaSad* in section 6.2 covering the semantic extensions and the instances of ambiguity attested with these verbs. In Section 6.3 I present the criteria for serial verbs and light verbs and show that they apply to *gaam/gaSad*. Furthermore, in subsection 6.4 I present an analysis for serial verbs and light verbs in light of the clause structure adopted in this thesis and especially how it relates to EventP. I argue that aspectual *gaam/gaSad* as light verbs should be analysed as constructing a vP shell with the following verb (i.e. event-internal), contrary to Ouali and Bukhari (2016), who argue against a vP shell analysis. In section 6.5 I describe the different temporal and aspectual readings of functional *gaam/gaSad* and how they interact with the aspectual properties of the embedded verb in the clause. Furthermore, I show that the AP *gaaSid* differs significantly from the verbal forms *gaSad/yigSad*; I argue that *gaaSid* cannot be analysed as a light verb originating in a serial verb construction or a vP shell, nor can it be exclusively regarded as a progressive marker in KA since it has other functions in the clause discussed in 6.5.2.2.

### 6.2 Lexical Verbs gaam and gasad

The verb *gaam* can have two main lexical meanings depending on the subject: 'got up/stood up' (2)-a with an agentive subject, and 'got erected' (2)-b with a non-agentive subject.

a.	Khalid	gaam	[Agent]
	Khalid	got up.PF.3SM	
	'Khalid stood up'		
	'Khalid woke up'		
b.	el-mabnaa	gaam	[Theme]
	DEF-building	got up.PF.3SM	
	'The building got ere	cted' literally 'the building erected'	

The subject in (2)-a has an Agent role, while the subject in (2)-b has a Theme role. Example (2)-b is an unaccusative construction; the building is not the source or Agent of erection; semantically, it is the Theme; and accordingly, the lexical meaning of *gaam* changes.

Similarly, the verb *gaSad* has two meanings depending on the properties of the subject: it can mean *to sit* especially when it is used with an agentive subject, or it can mean *to stay* when it is used with both an agentive and a non-agentive subject.

(3)

(2)

a.	el-walad	r <b>alad</b> gaSad		b-il-ħadeeqa			[Agent]	
	DEF-boy	sat.PF.	3sm	SM in-DEF-garden				
	'The boy <b>sat</b> in the garden'							
b.	Syal-i	ilyoom	g\$id.a	W	b-il-bait	ma	t <sup>s</sup> laS.aw	
	kids-my	today	sat.PF.	3р	in-DEF-house	NEG	go out.PF.3P	
	'My kids <b>stayed</b> home today, they didn't go out'.							
c.	el-jant <sup>s</sup> a	gSida.t	mukar	n-ha	ma-ħad	bag-ha	[Theme]	
	DEF-bag	sat.PF.3SF	place-	it	no-one	stole.P	F.3SM-it	
	'The bag stayed/remained in its place, no one stole it'							

When the intention is to refer to the posture of sitting, only an agentive subject can be used. However, when the intention is to refer to the spatial position or containment in space both types of subjects may be used. I suggest that this difference relates to the semantics of sitting and staying in addition to the effect of the perfective verbal form used in the examples. The perfective refers to an event, the event of sitting; and the event of sitting requires an animate agentive subject to initiate the event. However, staying in a static position, and even being in a state of sitting does not require an agentive force. Rather, the only force active would be the force of gravity as indicated by (Newman 2002: ix). In other words, to remain in a static position does not require force from the subject. For this specific reason, it is possible for the

AP form of the verb *sit*, which is *gaaSid*, to be used with both animate and inanimate subjects even when it literally means *sitting*.

(4)

el-mazharia	gaa§d.a	Sala	ħiffat	it <sup>ç</sup> -t <sup>ç</sup> awla			
DEF-vase	sitting.AP.SF	on	edge	DEF-table			
'The vase is sitting on the edge of the table'							

I argued in 4.4 that the AP form in Arabic explicitly refers to a state following an event and that the event can only be referred to implicitly. In other words, being in a state of sitting does not say anything about whether the sitting *event* was initiated by the subject volitionally or the subject was being forced to sit. It simply focuses on the state itself. Therefore, since the form does not encode any conclusive information about the dynamic event it does not have to be restricted to agentive subjects.

In addition, *gasad* can be used to mean 'woke up' by metaphorical extension. It is used almost synonymously with *gaam* in that context. The difference lies in the fact that using *gasad* only implies that the subject woke up but not necessarily that he moved away from his bed. Using verb *gaam* instead would imply that the subject woke up and is moble.

(5)

a.	Talal	gaam	min	in-nuum
	Talal	got up.PF.3SM	from	DEF-sleep
	'Talal woke up	m his bed)'		
b.	Talal	gaSad	min	in-nuum
	Talal	sat.PF.3SM	from	DEF-sleep
	d)'.			

The verb *gaam* can refer to the event of *getting up*, which involves a directional extension seen clearly when used with inanimate subjects, such as the building in example (2)-b. Furthermore, it is used with the event of *waking up*, which also involves directional movement from a horizontal to a vertical position. The verb *gaSad*, on the other hand, indicates a change from movement to stability. It also includes a locational extension to indicate containment.

It is clear that the meanings of these two verbs are not limited to the physical posture of an animate subject *standing* or *sitting*. Their meanings are affected by properties of the subject or the object depending on the context. Furthermore, it is common for these verbs to be used in VV sequence, which also affects their meaning. In the following section, I discuss some semantic extensions to the meanings of *gaam* and *gasad* when they are used in a VV sequence.

### 6.2.1 Lexical gasad and gaam in VV Sequences

Verbs *gaam* and *gaSad* can be used in the clause followed by another verb, creating a VV sequence. The VV sequence can sometimes be ambiguous between three different meanings, as shown in the following example:

(6)

Ali	y.quum	y.sallim	Sala	Samm-ah
Ali	3SM.MP.get up	3SM.MP.greet	at	uncle-his

- a. Ali gets up to greet his uncle
- b. Ali gets up and greets his uncle (simultaneously)
- c. Ali gets up and greets his uncle (successively)

The relation between the two verbs can be purposive as in (6)-a; the subject stands up in order to greet his uncle. This case could be seen as subordination. The meaning in (6)-b is simultaneity of the two events, getting up and greeting. The circumstantial VP (greeting) is simultaneous to and dependent on the main event. The third case, however, indicates successive events that happen in a short interval of time and therefore they may be comprehended as one event. I argue in the remaining part of the chapter that the successive construction is a serial verb construction.

In the following subsections, I discuss each VV sequence in turn, showing their properties and requirements in order to distinguish them from the SV type. I then go on to discuss the seemingly ambiguous examples in which *gaam* and *gaGad* can have an aspectual reading and lexical reading. Specifically, I show in subsection 6.3.2 how the SV construction may be distinguished from the light verb instances.

#### 6.2.1.1 Purposive

The first VV sequence with *gaam/gaSad* constitutes a purposive construction, i.e. the second event explains why the first event happened; why the subject stood/sat. Yet, it makes no claim about whether the second event did actually happen or not.  $V_2$  in this construction must meet the following conditions: 1-  $V_2$  has an imperfective form, 2- Its time reference should be after the first verb's time and somewhere in the hypothetical future. In this construction  $V_2$  is irrealis, i.e. it is not specified whether it happened or not, and therefore it is expressed using the

imperfective form in Arabic, which can indicate non-actuality. The underlying relationship between the two verbs can be tested by adding the purposive complementizer (*Safan* 'so that').

(7)

Azzam	gaʕad	(Safan)	y.adris
Azzam	sat.PF.3SM	(to/so that)	3SM.MP.study
'Azzam sat to	study' or 'Azza	am sat so that h	e can study'

This sequence cannot be considered an SV construction since both verbs have different temporality: one is realis (happened) while the other is irrealis (intended). In SV constructions both verbs share the same Tense, Aspect and mood (Haspelmath 2016), which I elaborate on more in section 6.3.

# 6.2.1.2 Simultaneous

The second sequence consists of verbs *gaam* and *gaSad* followed by a verb in the imperfective form.  $V_2$  is simultaneous to  $V_1$  and  $V_2P$  constitutes a circumstantial clause that semantically represents the manner of  $V_1$ . In this construction the second verb must meet the following conditions: 1- be in the imperfective form, 2- be a manner verb, and 3- happen simultaneously to the posture verb, i.e. its time reference is contained in or is dependent on the Tense and aspect of the main verb. This simultaneous manner relation can be tested in Arabic by adding the circumstantial conjunction *wa* 'and' followed by a pronominal that agrees with the subject of the two verbs:

(8)

a.	Hind	gaamt	(we-hi)	t.ibtisim				
	Hind	got up.PF.3SF	(while she)	3SF.MP.smile				
	Lit: 'Hind got up (while she) smiles' = 'Hind got up smiling'							
b.	Talal	gaSad	(wu-hu)	y.midd	booz-a			
	Talal	sat.PF.3SM	(while he)	3SM.MP.turn down	lip-his			
	Lit: 'Talal sat (while he) turned-down his lips' = 'Talal sat frowning							

Therefore, the  $V_2$  in examples (8) are part of an adjunct phrase and do not constitute a SV with  $V_1$ .

#### 6.2.1.3 Successive

The third type of VV sequence includes two events that are both realis and take place successively; one event immediately follows the other. They are usually expressed without the use of a coordination marker because they share the same Tense and mood, evidenced in Arabic by their matching verbal form, i.e. a perfective followed by a perfective, or an imperfective followed by an imperfective. Using the perfective form for both events means that they both happened in the past in a closely related time interval while using the imperfective for both indicates that these are two successive events which happen in a close temporal interval habitually. Furthermore, it is also possible to have two imperative verb forms in this construction.

(9)

a.	Azzam	gaam	sallam	Sala Samm-a	[Prf+Prf]				
	Azzam	got up.PF.3SM	greeted.PF.3SM	at uncle-his					
	'Azzam got up (and) greeted his uncle'								
1.	.1.1				. <b>T C</b> 1				

- b. el-banat y.igSid.uun y.adris.oon b-hiduu? [Impf+Impf]
  DEF-girls 3P.MP.sit 3P.MP.study in-quietness
  'The girls sit (and) study quietly'
- c. guum oogaf lamma t.kallim-ni [**Impr+Impr**] get up.IMPR stand.IMPR when 2MS.MP.talk-1s 'Get up (and) stand up when you are talking to me'

As indicated in the English translation of examples in (9), these VV sequences can be covertly coordinated. In fact, it is possible to add the coordination marker *wa* as shown in (10)-a. Nevertheless, when adding the coordination marker, the construction becomes ambiguous between either coordinating two events or two clauses. This is shown by the possibility of adding two temporal adverbs in (10)-b; one for each verb:

(10)

а.	gaam	(uo)	sallam			Salee-l	num	
	got up.PF.3SM	(and)	greeted	l.pf.3sn	1	at-ther	n	
	'He got up and greeted them'							
b.	?ams	gaam		W	bSd	saaSa	sallam	Saleehum
	yesterday	got up.	pf.3sm	and	after	hour	greeted.PF.3SM	at-them

'Yesterday he got up and then he greeted them after an hour'

On the other hand, when the intention is to coordinate two events (VPs) that share the same temporal reference, there seems to be no need for an overt coordination marker in KA (possibly in other languages as well); the two events are simply juxtaposed.

Worthy of mention here is that in the successive construction the verbs *gaam* and *gaSad* must have the meanings of 'stand/get up' and 'sit' since the construction involves an agentive subject. I argue in the following section that the successive construction is a serial verb construction (SVC). Furthermore, I propose in the remainder of the chapter that the aspectual light verb readings of *gaam* and *gaSad* have developed from the SVC in KA, considering the attested ambiguity between the serial verbs readings and the light verb readings. I also present a unified analysis for the serial verbs and the light verbs in which both constructions are represented in one vP shell below EventP. However, the light verbs *gaam/gaSad* can move out of the EventP leaving the second verb in situ, while the serial verbs must move together above EventP for Tense and aspect readings. Finally, I propose that *gaaSid* should not get a light verb analysis like verbs *gaam* and *gaSad* based on the pieces of evidence I discuss in section 6.5.2.2.

#### 6.3 Serial Verbs and Light Verbs

I have shown that in the successive construction, *gaam* and *gasad* function as posture verbs and do not form a subordinate relation with the following verb and do not have an overt coordination. In this section, I argue that this successive construction can be considered an SVC. The SVC can be ambiguous with the aspectual instances of *gaam* and *gasad*; however, the two types can be distinguished.

In section 6.3.1 I present a definition of serial verbs and light verbs. Next, the criteria used to distinguish light verbs from serial verbs are applied to the VV sequences with *gaam* and *gafad* to distinguish which sequence constitutes an SVC and which one constitutes a light verb construction. The section concludes with an analysis for SVC and light verbs *gaam/gafad*.

#### 6.3.1 Serial Verbs and Light Verbs

A serial verb construction (SVC) "is a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any other sort" (Aikhenvald & Dixon 2006:1). Brown (2008) proposes the following criteria for serial verbs: 1) the two subsequent verbs should be under a single intonation

contour, 2) each verb is a full lexical verb which can head simple predicates in its own right, 3) the two verbs share at least one argument, and 4) the verbs behave as a single unit for Tense, Aspect, and polarity marking. Aikhenval & Dixon's definition of serial verbs is rather loose, and the above-mentioned criteria do not differentiate between a serial verb, light verb and auxiliary, as noted by many such as Seiss (2009). Others have proposed stricter definitions and properties for serial verbs; for example, Baker (1989) and Stewart (2001) require that serial verbs share an object, which means that both verbs should be transitive verbs. However, this criterion is problematic since many serial verbs combine transitive and intransitive verbs (Aikhenvald 1999; Crowley 2002). Others suggest that both verbs in the serial construction should be semantically heavy, i.e. they both contribute their lexical meaning, and neither is semantically light. Furthermore, serial verbs may come from an open class of verbs while light verbs are part of a closed semantic class (Seiss 2009).

Seiss (2009) argues that it is a difficult task to distinguish serial verbs from auxiliaries and light verbs without taking into consideration language-particular properties. With regards to Arabic, Altakhaineh and Zibin (2018) (henceforth A&Z) argue that the following criteria can be applied to identify an SVC in Jordanian Arabic: first, the criterion of inseparability between the two serial verbs; no coordinating conjunction, subordinating conjunction or pause is allowed between the two verbs. Furthermore, they note that even when the first verb is transitive, an object is not allowed to intervene between the two verbs:

(11)

Walid	misik	fataħ	kul	Sulab	l-bebsi
Walid	grabbed.PF.3SM	opened.PF.3SM	all	cans	DEF-pepsi
'Walid grabbe	ed and opened all	(A&Z	2018: 5	50)	

Second, the two verbs must share their subject and should share the same object when they have one. Third, in negative clauses, both verbs must share one marker of negation which cannot separate the two verbs. Fourth, both verbs must share the same Tense, Aspect, and mood categories. Finally, the two verbs must semantically represent one event<sup>15</sup>.

The last criterion is not as simple as it may seem. There are different opinions on what should and should not be considered one complex event. A&Z note that some researchers determine this in terms of clause structure: a monoclausal structure indicates a single event while a biclausal structure indicates two or more events. Other researchers determine this in

<sup>&</sup>lt;sup>15</sup> I present examples for each criterion with data from KA in section 6.3.1.

terms of cross-linguistic comparisons; when a verb can be expressed say in English by one verb 'one lexeme' and in another language by two verbs then this may be considered a complex representation of one event. Seiss (2009:503) notes that an SVC can be used to express a complex event as a single event if it is perceived by the users of the language as an event in their culture. For example, in Alamblak (discussed in (Bruce 1988)), climbing a tree in order to look for insects is a reasonable event in this culture and can be expressed using a serial verb, however, climbing a tree in order to look at the moon is not. The single event criterion is the most difficult to determine and therefore many researchers focus on the other criteria, especially those that can be determined by the grammar.

Turning to the successive VV construction discussed above in 6.2.1.3, I argued in (Alotaibi 2016) that the general SVC criteria apply to this construction. I discuss these criteria in relation to the ambiguity that is attested between the serial verb construction and the aspectual construction with *gaam* and *gasad* and showed that the SVC criteria may be used to set the two types apart. In addition to the criteria mentioned in A&Z I add two significant criteria: first, the first verb must semantically select the following verb in SVC, and second, the serial verb construction does not allow passivation. These properties are discussed in the following subsection.

### 6.3.2 Between SVC and Aspectual gaam/gasad

The SVC with *gaam/gaSad* can be ambiguous between a lexical reading of these verbs and an aspectual reading. However, the ambiguity can be resolved by considering the following elements in the structure:

- 1- Subject type: Agent or a Theme.
- 2- The semantics of the following verb.
- 3- The lexical Aspect of the following verb.
- 4- The voice of the following verb: passive or active.
- 5- The position of the negation marker, and manner adverb.

First, in the SVC (12)-a, the subject must be an animate agentive subject. Conversely, in the aspectual construction (12)-b the subject may be either an animate Agent or an inanimate Theme:

(12)

- a. Fahad / (\*el-mabna) gaam taħarak faj?a
  Fahad /(DEF-building) got up.PF.3SM moved.PF.3SM suddenly
  'Fahad got up (and) moved' vs. 'The building got up (and) moved'.
- b. Fahad/ el-mabna gaam taħarak faj?a
  Fahad/ DEF-building INC.PF.3SM moved.PF.3SM suddenly
  'Fahad/the building started moving suddenly'.

I have shown in 6.2 that lexical *gaam/gasad* as main verbs can occur with agents or themes. However, they are restricted to agentive subjects only when they are in an SVC.

Second, within the SVC the verbs *gaam/gasad* semantically selects the following verb, which is not the case with the aspectual types. The verbs *gaam/gasad* in an SVC show up with a verb that does not contradict with them in their spatial properties; otherwise, the construction becomes infelicitous:

(13) [SVC]

a.	Azzam	gaam	Sallag	il-luuħa	Sa-t <sup>s</sup> t <sup>s</sup> oofa
	Azzam	got up.PF.3SM	hung.PF.3SM	DEF-painting	on-DEF-wall
	'Azzam got uj	o (and) hung the	e painting on th	ne wall'	

- b. \*El-baibi gaam haba ?awal ma ſaaf-ni
   DEF-baby got up.PF.3SM crawled.PF.3SM first that saw.PF.3SM-me
   Intended reading: 'The baby got up (and) crawled when he first saw me'
- (14) [SVC]
- a. Talal y.igSad y.adris saSteen kil s<sup>c</sup>ibħ
  Talal 3SM.MP.sit 3SM.MP.study hour.D every morning
  'Talal sits (and) studies two hours every morning'
- b. \*Talal y.igSad y.amJi saSteen kil sSibħ
  Talal 3sm.MP.SITS 3SM.MP.walks hour.D every morning
  Intended reading: 'Talal sits (and) walks two hours every morning'

The spatial properties of *gaam* and *gaSad* contradict with the spatial properties of *haba* 'crawl' and *yamfi* 'walk' respectively, hence the ungrammaticality of the constructions in (13)-b and (14)-b. The two events *sitting* and *walking*, for example, cannot form 'one' complex event since they cannot happen simultaneously in real life. However, when the literal meaning of standing or sitting is not intended, but the functional meanings of inception and continuation are, the sentences become grammatical. Aspectual *gaam/gaSad* do not impose such a semantic

restriction on the following verb and hence any verb may follow even verbs with contradicting spatial properties:

- (15) [Aspectual]
- a. el-baibi gaam ħaba ?awal ma ∫aaf-ni INC.PF.3SM crawled.PF.3SM first saw.PF.3SM-me DEF-baby that 'The baby started crawling when he first saw me' b. Talal **y.ig** fad y.amſi saSteen kil s<sup>ç</sup>ibħ
  - Talal3SM.MP.DUR3SM.MP.walkhour.Deverymorning

'Talal keeps walking for two hours every morning'

Furthermore, not all verbs that share the same spatial boundary are allowed in the SV construction; there is another semantic restriction based on the lexical Aspect of the second verb. Activities and Accomplishments are possible in the SV construction, but not Achievements or statives.

(16) [SVC]

a.	lamma	t.∫uuf-ni	t.guun	ı	t. yann	i	l-i
	when	3SF.MP.see-me	3sf.mp	.get up	3sf.mp	.sing	for-me
	'When she see	es me, she gets ı	up (and) sings t	to me.'			[Activity]
b.	Hind	gaama.t	kala.t	it-tuffa	ħa	biduun	?isti?ð <sup>s</sup> aan.
	Hind	got up.PF.3SF	ate.PF.3SF	DEF-ap	ple	withou	permission
	'Hind got up (	and) ate the app	ole without per	mission	.'		[Accomplishment]
c.	*Esam	gaam	liga		il-mifta	iaħ	bsirSa
	Esam	got up.PF.3SM	found.PF.3SM		DEF-ke	У	quickly
	Intended readi	ng: 'Esam got u	up (and) found	the key	quickly	.'	[Achievement]
d.	*Mai	t.guum	t.iʃbah			umm-h	a
	Mai	3SF.MP.get up	3sf.mp	.resemt	ole	mother	-her
	Intended readi	ng: 'Mai got up	(and) resembl	ed her 1	nother.'		[State]

In contrast, functional *gaam* allows combinations with all verb types: Activities, Accomplishments, Achievements and States, as shown in detail in section 6.5 below.

Third, the Tense and aspect of both verbs in the SV construction must be the same; for that reason, they appear in the same verbal forms in KA. When the construction is [Perfective+Perfective], both verbs are past events viewed in their entirety, indicating a perfective aspectual meaning. And when the [Imperfective+Imperfective] form is used both verbs represent habitual events. This is not the case with the functional construction as it

145

allows the combination of the [Perfective+Imperfective] form. In addition, the temporal reference is more complex as the first verb supports a Tense function, while the second supports an Aspect function (again, the Tense and aspect functions are discussed in section 6.5. When the two verbs do not have the same form, this is a clear indication that this is not the SVC.

Fourth, *gaam* in the SVC cannot be passivized or followed by a passive verb<sup>16</sup>, although the verbs *gaam/gafad* can be passivized when they are main verbs as shown in example (17). Example (17) shows the active and passive uses of verbs *gaam/gafad*. Examples in (18) show the impossibility of valency-decreasing with the SV construction.

(17) [main verb]

a.	el-walad	gaSad	Sala		il-kirsi	[Active]	
	DEF-boy	sat.PF.3SM	on		DEF-chair		
	'The boy sat c	on the chair'					
b.	el-kirsi	ingaSad		Sal-eel	1	[Reflexive Pass.]	
	DEF-chair	sat.REF.3SM		on-it			
	Lit: 'The chain	r was sat on'					
c.	el-bint	gaam.t	min	mukan	i-ha	[Active]	
	DEF-girl	got up.PF.3SF	of	place-l	her		
	'The girl got o	off her place'					
d.	el-bent	itgawwim.at		min	mukan-ha	[Reflexive Pass.]	
	DEF-girl	got up.REF.3SI	7	of	place-her		
	'The girl was	removed off he	r place'	,			
(18	B) [SVC]						
a.	el-walad	gaSad	ketab	)	er-risalah	[Active]	
	DEF-boy	sat.PF.3SM	wrote.	pf.3sm	DEF-letter.F		
	'The boy sat (	and) wrote the	letter'				
b.	* ingaSad	?inkatba.t			er-risalah	[Reflexive Pass.]	
	sat.REF.PF.3SF	write.REF.PF.3	SF		DEF-letter		
	Intended reading: 'the letter was written (while sitting)'						

Example (18)-b shows that it is ungrammatical to passivize both verbs. This could be related to the different argument requirements from both *gaam* and the verb after it; this is an

<sup>&</sup>lt;sup>16</sup> The typical passive verbal form is only found in Standard Arabic. In colloquial Arabic, the anti-causative or reflexive form is used to indicate valency-decreasing functions instead.

indication that the two verbs share a simple argument structure, and their reflexive passive requirements are in conflict, leading to the ungrammaticality of this sentence.

On the other hand, it is grammatical to use aspectual *gaam* with the reflexive anticausative/passive verb after it:

- (19) [Aspectual]
- a. gaam infitaħ il-bab u daxal il-ħarami
   got up.PF.3SM opened.REF.PF.3SM the-door and entered.pf.3sm the-thief
   'Suddenly, the door opened and the thief came in'.
- il-baab *b.* te.xayyal lou y.guum y.infitiħ u 2SM.MP.imagine if the-door 3SM.MP.got up 3SM.MP.open and y.idxal Sal.eena il-ħarami 3SM.MP.enter on-us the-thief 'Imagine if the door suddenly opens and the thief comes in on us'. *c*. el-baab gaam y.infitiħ (asra§) The-door INC.PF.3SM 3SM.MP.REF.open (faster) # 'the door began to open (faster)'

'The door began to be opened (faster)'

Examples in (19) show that it is possible for aspectual verbs to be followed by a passive verb, contrary to the case with the SVC.

Fifth, negation with the SVC is allowed only before both verbs, and it takes scope over the two. When negation is inserted between the two verbs it appears to change the construction into two separate phrases or clauses:

(20) [SVC]

a.	Fahad <b>ma</b>	gaam	sallam	Sala	kil	il-ma§azeem
	Fahad NEG	got up.PF.3SM	greeted.PF.3SM	at	all	DEF-guests
	'Fahad did no	ot get up (and) g	reet all the guests'			
h	Fahad agam	ma	collom	Cala	1-11	il macazoom

b. Fahad gaam ma sallam Yala kil il-maYazeem
 Fahad got up.PF.3SM NEG greeted.PF.3SM at all DEF-guests
 Lit: 'Fahad got up (and not) greeted all the guests' 'Fahad got up without greeting all the guests'.

In contrast, with the aspectual types, negation can head both verbs or be inserted between them. When the negation is before both verbs it negates the whole sentence, giving a sentential negation reading. But, when negation is used between the two verbs it has scope over the second verb, only indicating the interruption of a previously initiated event.

(21) [Aspectual]

a.	Fahad <b>ma</b>	gaam	sallam	Sala	kil il-ma\$azeem
	Fahad NEG	INC.PF.3SM	greeted.PF.3SM	at	all DEF-guests
	'Fahad did no	t start greeting	all the guests'		
b.	Fahad <i>gaam</i>	ma	sallam	Sala	kil il-ma§azeem
b.	Fahad gaam Fahad INC.PF		sallam greeted.PF.3SM	Sala at	kil il-ma§azeem all DEF-guests

The example in (21)-b indicates that the greeting was ongoing until the subject interrupted it deliberately.

Sixth, in the SVC a manner adverb cannot separate the two verbs, while this separation is possible in the aspectual construction. The difference between the two constructions is shown in the translation:

(22)

а.	gaSad	kitab	il-qas <sup>s</sup> ayed	(Samdan)	
	sat.PF.3SM	wrote.PF.3SM	DEF-poems	(deliberately)	
	'He sat (and)	wrote the poem	s deliberately'		[Successive]
	'He kept writi	ng the poems d	eliberately'		[Functional]
b.	(Samdan)	gaSad	kitab	il-qas <sup>s</sup> ayed	
	(deliberately)	sat.PF.3SM	wrote.PF.3SM	DEF-poems	
	'He deliberate	ly sat (and) wro	ote the poems'		[Successive]
	'He deliberate	ly kept writing	the poems'		[Functional]
с.	gaSad	(Samdan)	kitab	il-qas <sup>s</sup> ayed	
	sat.PF.3SM	(deliberately)	wrote.PF.3M	DEF-poems	
	*'He sat delib	erately (and) w	rote the poems	,	*[Successive]
	'He kept delib	erately writing	the poems'		[Functional]

The manner adverb *deliberately* can either be clause-initial or clause-final as shown in (22) ab. However, when it is used between the two verbs as in (22)-c it can only allow the aspectual reading of *gaam*. Manner adverbs modify VPs (Bellert 1977). Therefore, in the SV construction, the manner adverb cannot separate the two verbs since they constitute one verbal phrase; the manner adverb can only precede or follow both verbs.

as main verbs, in an SVC, and as an aspectual verb in a functional construction:					
Properties	Main verbs	SVC	Functional VV		
Subject	Agents or Themes	Agents only	Agent or Theme		

The following table summarises the main differences between gaam/gaSad when used

Subject	Themes	Agents only	Agent of Theme
Selects the following verb?	-	Yes.	No
Tense and Aspect	-	Identical	not Identical
Passive?	Yes	Cannot passivize or be	Cannot passive
		followed by a passive verb	but allows a passive verb
Negation	Over	Over both verbs	Over both verbs
			& Over second verb
Manner adverb	-	Before or after both verbs	Manner adverb can be inserted
			between the two verbs.

Table 11: The differences between gaam/gasad in lexical and functional readings.

The verbs *gaam/gaSad* in the SVC have more restrictions than the aspectual ones. They constitute a complex event with the following verb and hence they must share the same Tense, Aspect, negation, manner modification and also spatial properties. I suggest in the following section that the aspectual types grammaticalized from the SVC types. Both the SVC and aspectual verbs are part of one event and therefore they both originate inside the EventP.

### 6.3.3 Light Verbs gaam/gasad

In the preceding section, I have shown how the SVC can be distinguished from the aspectual sentences containing light verbs *gaam/gaSad*. I propose here that the aspectual instances should be labelled light verbs based on the following properties typical to light verbs discussed in Seiss (2009): 1- Light verbs usually constitute a closed semantic class. In the case of *gaam* and *gaSad* they are both members of the closed semantic class of *posture* verbs. 2- They may have different Tense and aspect inflections from the main verbs. 3- They can be separated from the second verb by negation and manner adverbs. 4- They cannot be passivized but the second verb can.

These properties, however, can also be attributed to auxiliary verbs and not just to light verbs. The difference between light verbs and auxiliaries is another topic that shows no consensus in the literature. The relation between the two is usually seen in terms of grammaticalization. However, research on the grammaticalization of light verbs and auxiliaries presents different views on whether auxiliaries can be grammaticalized from main verbs directly or have to pass through a stage of being light verbs first. Butt and Geuder (2003) claim that light verbs do not develop into auxiliaries but are dead ends in the development of

verb forms. Others, however, claim that these verbs should be seen on a continuum, developing from serial verbs to light verbs to auxiliaries (Heine 1993; Anderson 2006).

A distinction between the two is more attainable from the theoretical perspective, especially in relation to syntax. Syntactically, light verbs are analysed as v category verbs (Adger 2003), while auxiliaries spell out functional heads such as Tense, Aspect and modals outside the vP shell. I adopt this criterion for light verbs and argue in the following section that light verbs are merged event-internally, i.e. below EventP. Furthermore, since both serial verbs and light verbs are event-internal, it is possible that the aspectual versions gaam/gasad developed from the lexical serial versions through semantic bleaching. In fact, Butt (2010: 54) notes that "little v is a 'curious category': it could be interpreted as either a functional or a lexical category, or a mixture of both". From a different perspective, Ramchand (2008) analyses dynamic events into a set of conceptually related sub-events which appear as functional projections within the vP as discussed in chapter 2. Interestingly, InitP projection according to Ramchand represents the sub-event encoding the properties related to the initiation on the event. I suggest that both serial gaam and light verb gaam appear to spell out the semantics related to initiation. Furthermore, Ramchand proposes that projection ProcP relates to the semantic properties representing a Process. I assume that it includes the features related to duration. The verb gasad's functions in a serial verb and a light verb construction is to mark the initiation of the event followed by part of its duration. I postpone discussing the functions of light verbs gaam and gasad until section 6.5 after I present the syntactic analysis showing the difference between SVC and light verbs in the following section.

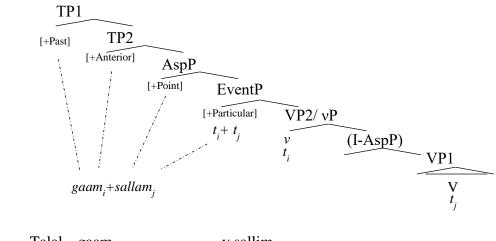
#### 6.4 A Structural Analysis for SVC and Light Verbs gaam/gaSad

I propose that the significant difference between a serial verb instance of *gaam/gaSad* and a light verb instance amounts to two things: first, the semantic weight of *gaam/gaSad*, and second, the ability of the light verb to move higher to functional heads such as AspP and TP2 crossing over EventP and leaving the lower verb in situ.

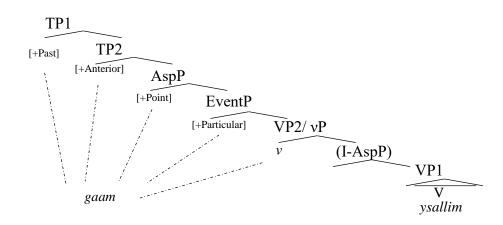
Structurally, there are two possible ways to represent an SVC: either the two verbs are juxtaposed and are on the same level, or one is structurally higher than the other. I follow Baker (1989) in that the two verbs should be represented hierarchically for many reasons (discussed in Baker 1989). Furthermore, I propose that the difference between a light verb and a serial verb construction can be captured in the syntax in relation to the movement of the higher verb 'alone' outside EventP in the light verb construction contrasted to the movement

of both verbs in the serial construction to realise Tense and aspect features. The movement of both serial verbs to realise Tense and aspect features is clear when both verbs are in the perfective form in the [perfective+perfective] instances. Example (23) is an SVC and (24) shows the structure proposed for it. Example (25) is a light verb construction and (26) shows the structure for it.

- (23)Talal gaamsallamTalal got up.PF.3SMgreated.PF.3SM'Talal got up (and) greeted'
- (24) SVC



- (25) Talal gaam y.sallim Talal got up.PF.3SM 3SM.MP.greet 'Talal started greeting'
- (26) Light Verb



In this regard, I argue for a verbal shell representation of the light verb. My position is contra Ouali and Bukhari (2016), who argue against a vP shell analysis of light verbs in Arabic. They present three arguments against a verbal shell analysis; however, these arguments are not based on empirical evidence but on theoretical grounds. For example, the

first argument they present is based on their analysis of the imperfective as necessarily moving to AspP, following Sultan (2007). They suggest that since the main verb (the lower verb) obligatorily moves to AspP above v, then this indicates that the light verb cannot be in a little v projection but must be in a position above AspP where the main verb has obligatorily moved. Their second argument relates to the position of the subject and builds on the first argument. They claim that since the subject can appear between these two verbs it must be in Spec of AspP where the main verb has moved and the light verb must be higher than AspP. The third argument is based on the position of negation markers. They argue that since there are two positions for negation with different scopes, i.e. one before both verbs and one before the lower verb, the negation in the former case must consequently be higher than AspP and the light verb must be above NegP. Their arguments, which depend on the main verb's movement to AspP, do not rule out the verbal shell hypothesis. It could be argued that the light verb moves to TP first, allowing the main verb to move to AspP. Furthermore, Ouali and Al Bukhari's analysis does not explain why the light verb should be treated as an embedding verb projecting an additional v as they demonstrate:

(27)

a.	$[_{TP} T$	[vP	Light	<b>v</b> [AspP	ASP	[vP	ν	[VP	V]]]	]]	
b.	$[_{TP} T$	[vP	Light	V [AspP	ASP	[NegP	Neg	[vP	ν	[VP	V]]]]]]
c.	[NegP	Neg	[ <sub>TP</sub> T	[vP	Light	v [AspP	ASP	[vP	ν	[VP	V]]]]]]
								(Ouali	and A	l Bukhar	i 2016: 175)

My counterargument runs as follows: first, I have shown in chapter 3 that the imperfective does not move to AspP. Therefore, the position of the light verb does not necessarily have to be above AspP and may be contained within the verbal shell under EventP. Second, the position of the subject when it appears between the two verbs can be analysed as either in spec VP, spec vP or even in Spec EventP. Finally, I propose that the light verb can move from within the EventP to AspP and TP2 for Tense and aspect feature and therefore be spelled out as a perfective form. The negation particle can be positioned between the light verb that moved to TP2 and the main verb that is in situ in the EventP. The negation that scopes above both the light verb and the main verb is a sentential negation type which may be higher than TP2. Ouali and Bukhari's analysis is complicated by the need to move the imperfective to AspP, which I have argued against in this thesis. I, therefore, conclude that the light verbs are part of the main verb's vP shell, and in fact part of one EventP.

In the final section of this chapter, I describe the functions of *gaam* and *gaSad* and show how they interact – in their different forms (perfective, imperfective, AP) - with the main verb's aspectual features to create the temporal properties of the whole event. Furthermore, I describe some other functions besides the aspectual function related to these two verbs.

## 6.5 Temporal Aspectual gaam/gasad

In this section, I both describe and analyse the temporal and aspectual functions of *gaam* and *gaSad*. First, *gaam* marks inception or initiation of an event when it is followed by an imperfective verb. In addition, it receives a discourse-related function when it is followed by a perfective verb, especially in narrative contexts. In this case, it indicates suddenness and immediacy. The verb *gaSad* marks both the inception and duration of the event when an imperfective event follows it. However, it is rarely followed by a perfective event without the use of an overt durative adverbial. In which case, I suggest that *gaSad* constitutes a biclausal construction when followed by a perfective verb. Finally, the AP *gaaSid* indicates duration without initiation. Therefore, it can appear with an agentive and a non-agentive subject and with different verb types. Furthermore, *gaaSid* does not mark a progressive Aspect as widely assumed, but rather it has an additional function related to evidentiality and Modality, which I explain in 6.5.2.2.

## 6.5.1 Functions of gaam

The light verb reading is possible when the second verb is imperfective. There are of course instances of *gaam/gaSad* followed by a perfective verb, but I propose that this pattern has a different structure than the light verb structure. The verbs *gaam/gaSad*, when followed by a perfective verb, are analysed as externally merged above the predicate level; i.e. above the domain of the Event Phrase and its functional projection consisting of AspP and TP2. In this case, they are not part of the predicate but are used for discourse-related functions on the sentential level as I show in 6.5.1.2.

I argue that light verb *gaam* is used within eventive predicates. It cannot manipulate an IL predicate into an SL predicate which indicates that it originates predicate-internally or event-internally. Furthermore, following Ramchand (2008) events may be composed of subevents such as an initiation event (initP), a process event (ProcP) and a result (ResP) (see 2.2.2.1 for more details). The verb *gaam* clearly marks the initiation event. However, an initiation can be a natural component of the semantics of any verbs, and here the use of *gaam* to mark initiation may be redundant. However, *gaam* does not only mark initiation but also includes information about force and volition (shown clearly with verbs that can indicate initiation by themselves). In addition, using *gaam* allows a complex aspectual reading in which only the initiation point of the event can be located in the past while the rest of the event is unfolding, creating a kind of past progressive. This aspectual reading cannot be achieved with the main verb alone.

#### 6.5.1.1 Inceptive gaam

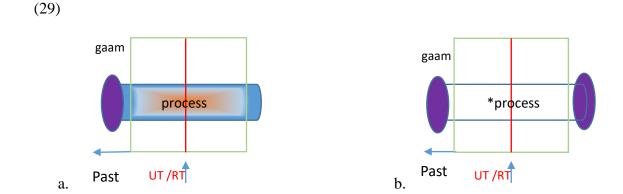
Light verb *gaam* marks the initiation of an event. Using the light verb construction allows the event to be represented synthetically by two verbs: the light verb and the lower verb so that it can express a complex aspectual meaning. The construction allows only the initial point of the event to be located anterior to UT, which consequently indicates that the rest of the event naturally overlaps UT creating a past continuous reading. When the event naturally has a Process feature (depending on the properties of the second verb) it can easily overlap UT and create the past progressive reading with only the initial point of the event indicated by *gaam* located in the past.

However, the past progressive reading is not possible when the lower verb is an Achievement because Achievements do not allow a progressive reading:

(28)

- a. Talal gaamy.ilSabb-il-kura(taw)[Activity]Talal INC.PF.3SM3SM.MP.playwith-DEF-ball(just now)'Talal started playing with the ball (just now) or (habitually/generically)'
- b. Esam gaam y.aakil yada-ah bil-fiyada (taw) [Accomplishment]
  Esam INC.PF.3SM 3SM.MP.eat lunch-his in-DEF-clinic (just now)
  'Esam started eating his lunch in the clinic (just now) or (habitually/generically)'
- c. Hind gaam.t t.os<sup>s</sup>al il-madrisa (mbat∫ir)/(\*taw) [Achievement]
  Hind INC.PF.3SF 3SF.MP.get to DEF-school (early)/(just now)
  'Hind started getting to school early'

The calculation of the past progressive readings fails because *gaam* locates a point prior to UT/RT while the Achievement in the imperfective can only locate the Achievement event at a point after UT/RT, with nothing filling the space between the two, as I demonstrate in the diagram below:



The figure (29)-a shows that the verb *gaam* marks a point located in the past while the Activity event allows its lexical Process feature to overlap UT/RT. The diagram (29)-b shows that with Achievements there is nothing that can overlap UT/RT, which causes the aspectual calculation to fail. However, the sentence with an Achievement is nevertheless felicitous since the construction allows the habitual reading. In addition, *gaam* may indicate that the subject has acquired the new property of 'arriving early to school'.

Interestingly, using *gaam* with Individual-level states like *yi/bah*, is not felicitous. Instead, the verb  $s^{c}aar$  'become' should be used with IL states.

(30)

a.	Azzam	gaam/??s <sup>s</sup> aar	y.insaa		[SL state]
	Azzam	INC.PF.3SM/became.PF.3SM	3SM.MP.forget		
	-'Azzam start	ed forgetting (things)'			
b.	Azzam	?? gaam/s <sup>s</sup> aar	y.i∫bah	ubu-h	[IL state]
	Azzam	INC.PF.3SM/became.PF.3SM	3SM.MP.resembl	e father-him	
-'Azzam started resembling his father'					

I suggest that *s*<sup>*c*</sup>*aar* is more felicitous with IL state *yi/bah* because it can change the IL state into an eventive predicate. To the contrary, *gaam* always shows up with eventive predicates and it cannot change an IL to an SL predicate. This supports my view that *gaam* originates within an eventive predicate since it can only show up with eventive predicates.

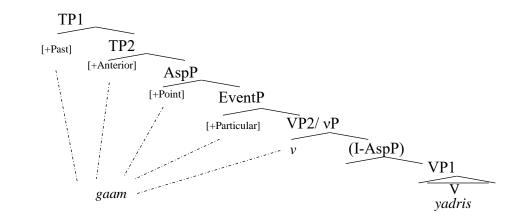
The imperfective *yguum* can also have a future reference when used in the imperfective behaving similarly to Achievement verbs encoded in the imperfective. This indicates that *yguum* is an Achievement verb hence when used in simple present contexts it allows a futurate or posterior reading characterising of Achievement verbs in KA:

(31)

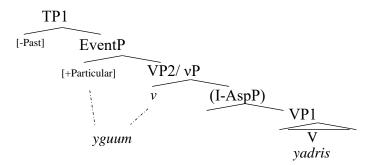
Alheen/baatsir	y.guum	y.bees	is-sayara		
Now/tomorrow	3SM.MP.gets up	3SM.MP.sells	DEF-car		
'Now he starts selling the car'					
'Tomorrow he will start selling the car'					

I propose the following analysis for the light verbs *gaam/yguum* as represented in the following structures (32) and (33) respectively. These structures show that only the higher verb – the light verb – moves above EventP to realise the Tense and aspect features of the complex event.

(32) gaam yadris 'started habitually studying'



#### (33) *yguum yadris* 'habitually starts studying'



I suggest that *yguum*, similarly to *ykuun* have an inherent eventive feature. This may be an accident of grammaticalization or related to the semantics of the lexical verb in which it lexically refers to some existential property.

Finally, using *gaam* to indicate the initiation of an event may seem redundant in some cases. Ramchand (2008) argues that many verbs can express initiation lexically, so using *gaam* with such verbs would only be redundant. However, marking initiation is not the only meaning for *gaam*. Al-Najjar (1984: 71-72) argues that *gaam* although used to mark

inchoative Aspect similar to the verb *bida* 'begin', it does not just mark the actual inception of the event, but also refers to the preparatory stage immediately before the inception. I take this to be parallel to force or volitional features. The verb *gaam* then encodes information related to the volition and force by which the event was initiated. There is also another type of inception that cannot be indicated using the main event alone but can only be clear when using an inceptive verb. This function is discussed in Cinque (2006). Cinque (2006:70) argues that there are two positions for inceptive Aspect: one is below voice and one above voice. The position below voice marks the inception of an event from its natural starting point. While the inception above voice can be used to mark the inception from any given point of the event. However, this distinction in meaning between the two types of inception is subtle. I suggest it can only be clearly distinguished when using negation. As indicated earlier in example (21)-b – repeated here as (34) for convenience – inceptive *gaam* may be followed by a negated event:

(34) Fahad gaam ma sallam Sala kil il-maSazeem
Fahad got up.PF.3SM NEG greeted.PF.3SM at all DEF-guests
Lit: 'Fahad got up (and not) greeted all the guests' 'Fahad got up without greeting all the guests'.

The verb *gaam* still marks inception; however, it marks the inception of a negative event. This structure reads as follows: there was an event of greeting which was taking place (or which was intended to take place) then the subject 'started' not greeting everyone, i.e. he stopped a continuous event marking the start of its opposite. I suggest that example (34) indicates the second type of inception noted by Cinque, i.e. inception from any given point of the event, not necessarily from its natural starting point. Furthermore, this type of inception involves a reading where an ongoing event is interrupted. This is an extra level of meaning that can be expressed using inceptive *gaam* which rules out redundancy.

# 6.5.1.2Suddenness Marker in Narratives

The second function of *gaam* is to indicate suddenness and immediacy. This function is clear when both verbs *gaam* and the lower verb are in the perfective form. This construction is used mainly in a narrative context, as noted by Brustad (2000). She describes *gaam*'s function as a narrative contouring verb: "to give contour to the narrative as a whole, by drawing the attention of the listener to the next in a series of foregrounded events" (Brustad 2000:192). Furthermore, she notes that the most common verb across the four dialects (Moroccan,

Egyptian, Syrian and Kuwaiti) to indicate suddenness and surprise has the lexical meaning of *get up* or *stand up*; in Kuwaiti it is *gaam*.

(35)

- a. gaam.t Suad gala.t a. St<sup>c</sup>ee-t∫ il-miya wa-rbiSiin got up.PF.3SF Suad said.PF.3SF 1S.MP.give-you DEF-hundred and-forty 'Suad up and said, I'll give you the hundred and forty' (Brustad 2000: 195)
- b. gaam Talal laSab b-il-kura
  got up.PF.3SM Talal played PF.3SM with-DEF-ball
  'Immediately/suddenly, Talal played with the ball'

Using the verb *gaam* in the perfective followed by a perfective verb recalls a similar function discussion in Chapter 5 for the verb *kaan* as a Historical present marker. The verb *gaam* in these constructions appears to link the sentence to a previous context, which allows the suddenness meaning. I suggest that in this case, *gaam* is not the regular light verb that is basegenerated in the EventP and moved to AspP and TP2. Rather, it is 'externally' merged higher in the structure, probably in TP or CP, which allows it to interact with the deictic time and shift it to a narrative time. A piece of evidence that can support this view is the behaviour of negation in such constructions. In (36) suddenness *gaam* cannot be preceded with a negation marker:

(36)

- a. (\*ma) gaam Azzam kisar li-glass
  (\*NEG) got up.PF.3SM Azzam broke.PF.3SM DEF-cup
  Intended meaning: 'not so suddenly did Azzam break the cup'
  b. gaam Azzam ma xash li-fluus, fa-inbaag.t
- got up.PF.3SM Azzam NEG hid.PF.3SM DEF-money, so-stolen.PAS.PF.3SF 'And then Azzam didn't hide the money, so it was stolen'

The negation *ma* is allowed after *gaam* before the perfective verb. However, I suggest that in this case, negation has a wide scope reading, i.e. a sentential negation and does not negate the predicate alone. This suggests that *gaam* may be merged in a position above sentential negation, somewhere in CP. This function of *gaam* is not consistent with the light verb proposal for the inchoative reading discussed above. However, I assumed it represents an instance of grammaticalization from light verb aspectual *gaam* to a discourse-related function.

#### 6.5.2 Functions of gasad

The posture verb *gasad* 'sat' is used to indicate durativity when associated with the lexical verb. Al-Najjar (1984) classifies this verb as a durative aspectual verb. Durativity includes progressive events and continuous states. I argue that this verb, when used as a light verb, is restricted to durative events and carries information related to intention/volition and force related to the initiation of the event. Similarly, to the verb *gaam*, the verb *gasad /yigsad* carry information related to the initiation and duration of the event and therefore must originate event-internally, i.e. within EventP. However, the AP form of the verb 'sit' *gaasid* 'sitting/seated' shows less restriction in its contexts compared to verbal *gasad /yigsad*.

In KA *gaasid* is described as a progressive Aspect marker. If progressivity involves coercing the aspectual properties of an event to allow it to overlap UT, then *gaasid* does not function as a progressive marker in that sense as I show in 6.5.2.2. I propose that *gaasid's* functions should be interpreted in relation to the eventive feature. *gaasid* realises the [+Particular] eventive feature indicating that the event is existential. Furthermore, it asserts that there is a duration of time in which the event necessarily happens; that the speaker's assertion acts as evidence that the event is existential and actual. The function of the speaker's assertion is related to the properties of the eventive AP form as argued in (Al-malahmeh 2013) and discussed in 6.5.2.2.

Furthermore, I discuss a significant difference between the use of the verbal forms gaSad/yigSad and the use of the AP: the verbal forms gaSad/yigSad refer to the start of the event in addition to part of its duration (as noted in Al-Najjar 1984:48), while the AP form does not include the event's initial point and hence does not refer to the triggering event. It simply refers to the fact that part of the event can be conceived as overlapping UT. I take this difference to suggest that verbs gaSad/yigSad may be analysed as merged event-internally and can move to higher functional heads, while the participle form gaaSid is merged event-externally, or at least not in vP. I present an analysis of gaaSid's function as an existential marker in the sense that it can realise an eventive feature [+Particular] or assert that the event is existential not otherwise in section 6.5.2.2.

# 6.5.2.1 Verbal gasad /yigsad

The verb *gasad* can be used with any verb situation type but with different restrictions in each case. First, with Activities and Accomplishments that have a Process feature it indicates that

the process was initiated and took place during an interval located in the past, which gives a reading similar to past progressive.

(37)

a.	Talal	gaʕad	yilSab	b-il-kura	[Activity]		
	Talal	dur.pf.3sm	ЗSM.MP.play	with-DEF-ball			
	'Talal	kept playing w	ith the ball'				
b.	Esam	gaʕad	y.aakil	it-tufaħah	[Accomplishment]		
	Esam	dur.pf.3sm	3SM.MP.eat	DEF-apple			
	'Esam kept eating the apple'						

This construction may appear to be similar to another past progressive construction in Arabic expressed using the auxiliary verb *kaan* followed by the AP *gaaSid* and then the verb, as in (38). This may be true, but I suggest that there is a difference related to the volitional feature or the trigger role (agentive properties). The construction (38) does not refer to a trigger role, while the construction in (37) does. This could be tested by the passive formation in KA. Example (39)-b shows that a passive verb is not compatible with verb *gaSad*, while on the other hand, it is compatible with *gaaSid*:

(38)

	Esam kaan	gaaSid	y.aakil	it-tufaħah	
	Esam be.PF	.3SM sitting.AP.MS	3SM.MP.eat	DEF-apple	
	'Esam was e	ating the apple'			
(39	9)				
a.	*t-tufaħa	gaʕad	tinwikil		
	DEF-apple	sat.PF.3SM	3SF.MP.REF.eaten		
	Intended read	ling: 'the apple kept be	eing eaten'		
b.	t-tufaħa	gaaSid	tinwikil		
	DEF-apple	sitting.AP.MS	3SF.MP.REF.eaten		
	'The apple is being eaten'				

The incompatibility of the *gasad* with passivization suggests that it carried information related to the agent and the passive construction demotes this information, hence the contrasting functions and the ungrammaticality of the construction. This effect is not seen when *gaasid* is used in (39) which suggests that *gaasid* does not carry information related to the agent as with verbal *gasad*.

With Achievements, the situation is slightly different. As shown previously, the Achievement verb does not refer to a Process and hence is not compatible with progressive readings. However, *gasad* can be used with Achievements but needs the assistance of a durative adverbial. This would allow the Achievement to be interpreted as a repeated action or iterated (Al-Najjar 1984: 50). I assume that the durative adverbial compensates for the Process feature lacking in the Achievement, and therefore allows for the use of *gasad*, which requires this Process feature:

(40)

- a.ha-n-nadigaSadsit -sneenyfuuzbi-d-dawriDEM-DEF-clubsat.PF.3SMsix-years3SM.MP.winin-DEF -league'This club kept winning the league for six years'
- b. baas<sup>c</sup>-na gaSad t<sup>c</sup>uul s-saif yit?axar Sn-mawSid-ah
  bus-our sat.PF.3SM all summer 3SM.MP.be late of-schedule-his
  'Our bus kept being late in his schedule all summer long'

A similar requirement seems to be necessary for Stage-level states. SL states may be used with gaGad if there is a durative adverbial included in the construction. Al-Najjar presents the following examples showing the use of gaGad with a stative verb yhib 'love' once without a durative adverbial (41)-a and once with (41)-b. She notes that the grammaticality judgement of the construction improves when there is an adverbial as in (41)-b. In fact, she notes that the speakers do not accept the construction without the overt adverbial:

(41)

a.	* Ali	gaʕad	y.ħib	Mona		
	Ali	sat.pf.3sm	3SM.MP.love	Mona		
	Intended reading: 'Ali continued to love Mona'					
b.	Ali	gaʕad	y.ħib	Mona	leen	maat
	Ali	sat.pf.3SM	3SM.MP.love	Mona	until	died.PF.3SM
	'Ali continued to love Mona until he died'				(Al-N	ajjar 1984: 48-49)

However, she notes that this is not acceptable with states that do not change in time or that cannot change abruptly over time:

(42)

a.	* gaSad .t	a.Sarf-ah	leen	safar.t		
	sat.PF.1s	1S.MP.know-him	until	travel.PF.1s		
	'I continued to know him until I travelled (left)'					
b.	* gaSad	y.ifham-ni	leen	maat		
	sat.PF.3SM	3SM.MP.know-me	until	died.PF.3SM		
	'He continued to know me until he died'					

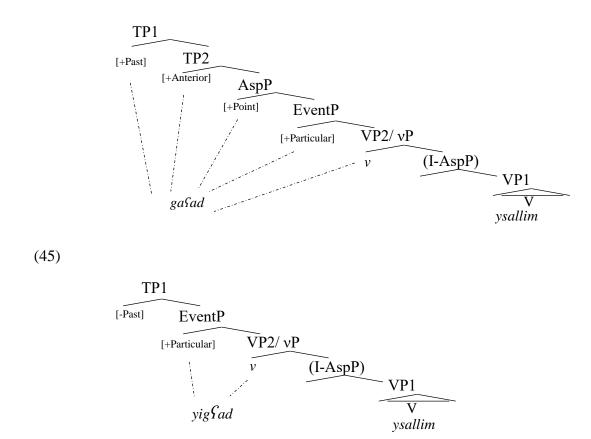
I suggest that the difference in grammaticality between the stative verbs in examples (41) and (42) may not be related to how fast the state can change over time but must be related to some other factor. I suggest that the difference between 'to love' in (41) and 'to know' or 'to understand' in (42) is related to volition and intention. The verb *to love* – although a Stage-level state – may involve a conscious volitional decision controlled by the subject, while the second pair of states do not. The sensitivity of *gaGad* to information such as volition and intention suggest that they have functions usually connected to little v (Folli and Harley 2005; Copley and Harley 2015) which suggests that they must originate event-internally.

Using the imperfective form of *yigSad* allows a future reading or else a habitual reading of the construction. Verb *yigSad* hence behaves similarly to Achievement verbs in their behaviour with Tense and aspect.

(43)

a.	Hind	t.gʕad	t.ħinn	itha	ma	∫ara.t	∫ay
	Hind	3SF.MP.sit	3SF.MP.whines	COND	NEG	bought.PF.3SF	thing
	'Hind will keep whining if she doesn't buy anything'						

I propose the following structures to account for the functions of perfective gaSad (44) and imperfective yigSad (46) in KA. Both verbs originate event-internally and realise the EventP [+Particular] feature. The perfective gaSad moves up the tree to realise Tense and Aspect feature.



Finally, *gaSad* may be used followed by a perfective verb. In this case, *gaSad* would specify that there was a continuous interval of time within which the perfective event took place. However, the perfective event must be repeated within the interval specified by the verb *gaSad*. It is not repeated habitually, but iteratively. This could be achieved by using a plural object that can allow the interpretation of repeated action within the past interval. The construction would not be felicitous without a source of repetition in the structure:

(46)

a.	Ali	gaʕad	bina	masjid			
	Ali	sat.PF.3SM	built.PF.3SM	mosque			
	'Ali stayed (and) built a mosque'						
b.	Ali	gaʕad	sintain	bina	masjid		
	Ali	sat.PF.3SM	year.D	built.pf.3sm	mosque		
	'Ali stayed two years (and) built a mosque'						

c.	Ali	gaʕad	sintain	bina	fi-hom	arbaS	misajid
	Ali	sat.pf.3sm	year.D	built.pf.3sm	in-them	four	mosques
	'Ali stayed two years (in which) he built four mosques'						

Nevertheless, I do not think that this construction represents a light verb use of *ga*{*ad*, but rather a lexical instance. The verb *ga*{*ad* has a lexical meaning that is *to stay* or *remain*, and the building event appears to modify the staying event. This suggests that *ga*{*ad*, although used as a light verb, cannot be used beyond the predicate layer or the vP phase in the way *gaam* can be. The verb *gaam* can be used in narratives followed by a perfective to indicate the meaning of immediacy. The verb *ga*{*ad*, on the other hand, does not have a similar discourse-related function. This also indicates that the verb *ga*{*ad* has not developed into an auxiliary. Nevertheless, the AP form *gaa*{*id* shows more behaviours that indicate it has grammaticalized into an auxiliary and also into a spatial copula, as discussed in the following section.

# 6.5.2.2 Participle gaasid

The active participle *gaaid* or its synonym *jaalis* 'sitting/seated' is described as a progressive marker in a number of Colloquial Arabic grammars (e.g. for KA Al-Najjar 1984, for EA Eisele 1990, for MA Brustad 2000 and for Tunisian Arabic Saddour 2009). Some researchers such as Al-Zahrani (2016) analyse *gaaid* as an aspectual head that has lexical content and is located above vP. He follows the standard assumption in semantics that the progressive is an operator that applies to propositions (Montague 1969) and that a proposition in syntactic representation is equivalent to vP (Hallman 2015). In this section, I argue that the functions of *gaaid* are better analysed in terms of realising the eventive feature of the predicate and not as a progressive Aspect head as widely assumed.

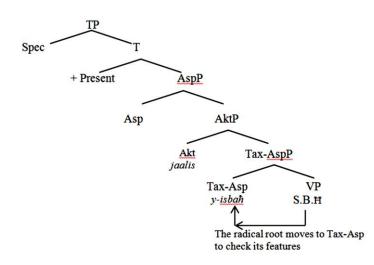
The AP form *gaaSid* lexically and explicitly refers to the *state of being seated* and only implicitly to the *initiation of the event of sitting*. This difference – a result of the AP form – allows *gaaSid* to be used with animate and inanimate subjects alike:

(47)

a.	el-walad	gaaSid	bi-l-bait				
	DEF-boy	sitting.AP.MS	in-DEF-house				
	'The boy is sitting in the house'						
b.	el-wis <sup>c</sup> ax	gaaSid	mukan-ah				
	DEF-dirt	sitting.AP.MS	place-his				
'The dirt is sitting in its place'							

Camilleri and Sadler (2017) argue that this is a case of semantic bleaching. However, I think that there is no need to invoke semantic bleaching considering that the AP form *gaaSid* does not explicitly encode any Agent-related properties since it only implicitly refers to the sitting event. Furthermore, I take this difference to indicate that *gaaSid* does not create a complex event with the following verb as is the case with *gaSad/yigSad* which suggests that it must be merged event-externally.

Most analyses consider *gaaSid* an aspectual head merged in AspP. For example, Al-Zahrani (2016) argues that *gaaSid* in Hijazi Arabic originates in a functional head labelled (Akt)ionsart that is located above the event domain, which he labels as Tax-Asp as shown in the following structure:



(48)

In addition, Al-Zahrani claims that the verbal perfective and imperfective forms gasad /yigsad are derived by the movement of the AP gaasid (or the root  $\sqrt{GsD}$ , it is not clear) from the head Akt to T. Contrary to his analysis, I have argued that gasad /yigsad in KA (and probably in HA) start off their derivation from inside the EventP. Nevertheless, the AP gaasid is above vP.

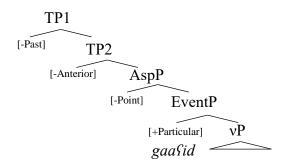
Data from Arabic shows that *gaaSid* does not force a progressive reading especially not with Achievement and SL states, in other words, it does coerce the events aspectuality. The progressivity as I have argued in 3.3.1 depends on the event's lexical Aspect: whether or not it has a Process. Achievements and SL states do not have a Process feature and therefore even when used with *gaaSid* cannot have progressive aspectual reading:

(49)

a.	Azzam gaaSid	yakil	ittufaħah	(now)	[Accomplishment]	
	Azzam PRG	3SM.MP.eat	DEF-apple	(now)		
	'Azzam is eating the	apple now'				
b.	Azzam gaaSid	yarkið <sup>ç</sup>	(now)		[Activity]	
	Azzam PRG	3SM.MP.run	(now)			
	'Azzam is running'					
c.	Azzam gaasid	yoos <sup>c</sup> al	(now)		[Achievement]	
	Azzam PRG	3SM.MP.arrive	(now)			
	'Azzam is arriving now' (*Present tense - posterior)					
d.	# Azzam gaa\$id	yikrah	ha-l-keeka		[SL state]	
	Azzam PRG	3SM.MP.hate	this-cake			
	'Azzam is hating this cake'					

Nevertheless, the sentences appear to be comprehendible with *gaasid*. I suggest that *gaasid* has another function; asserting or realising the eventivity feature [+Particular]. Furthermore, as an AP form it may have an additional semantic feature related to evidentiality. Al-malahmeh (2013) argues in his thesis that AP forms encode 'indirect-evidence' of the actuality of the event. I interpret this to mean that the AP form (in its eventive function) asserts the existentially bound event. Al-malahmeh suggests that it indicates the speaker's assertion that the event took place. He proposes that this is a modal feature. I, therefore, propose that *gaasid* is merged in EventP to realise the [+Particular] eventive feature asserting that it is existentially bound but may then move to realise a Modality feature related to the speaker's judgement. I propose the following structure for *gaasid* with an imperfective verb:

(50)



Finally, I should state that using *gaaSid* does not block the sentence from receiving a generic reading, however, the generic reading must be habituality:

a.	Ali	gaaʕid	yoos <sup>ç</sup> al	mbat∫ir	kil-yoom
	Ali	sitting.AP.MS	3SM.MP.arrive	early	every-day
	'Ali is arriving early every day'				

It is not attested that an event can be expressed as a progressive and as a habitual simultaneously. Even if that was possible, the habitual operator takes scope over the progressive and not vice versa. However, I suggest that the meaning of example 51 is that there is an assertion regarding the habituality of the event. In this case, it could be argued that *gaaSid* must scope over the habitual operator. This is only possible if *gaaSid* moves to a sentential position. I suggest that this position may be above TP in the CP or in a functional projection related to Epistemic modality.

## 6.6 Summary and Conclusion

(51)

This chapter provided a description for the meanings of *gaam* and *gaSad* when they are used as lexical verbs. It compared their meanings when they are the main verbs and when they are in extended structures containing other VPs. I have shown that there are three possible extensions to the constructions with *gaam* and *gaSad* that affect their meanings. One of these I have argued should be considered a serial verb construction (SVC). The criteria for serial verbs apply to the instances containing *gaam/gaSad* followed by another verb of the same form in the successive construction. I have added two more criteria which were not discussed previously in the literature for SVC: 1- the first verb semantically selects the second verb, and 2- the serial verb construction does not allow passivization of both verbs.

Furthermore, the chapter discussed the difference between SVC and light. I have argued that aspectual *gaam/gaSad* are light verbs that may have grammaticalized from the SVC type. In addition, I argued that light verbs *gaam/gaSad* are part of the EventP and can be analysed as little v. I have argued against Ouali and Bukhari (2016) who suggest that these light verbs do not constitute a verbal shell with the following event. A number of tests were presented to assert that these verbs are in fact constitute one EventP. An exceptional case would be the functions of *gaam* as a marker of suddenness in narratives, and *gaSad* when followed by a perfective verb. In the former case, *gaam* may be externally merged in CP and in the latter, *gaSad* may be a full embedding verb and the constructions would be a biclausal construction.

Finally, I argued that the so-called progressive marker in KA is not a progressive head in the sense that it does not coerce the aspectual properties of the event in order to allow it to overlap UT. *gaaSid* simply indicates that the event is existential. It may also indicate the speaker's assertion that the event is unfolding in time, that there is evidence that it is so. This is called indirect evidentiality.

## Conclusion

I have shown in this thesis that incorporating the EventP into the clause structure is able to account for the conceptual and semantic differences between an event encoded in the perfective, and an event encoded in the imperfective. Previous accounts claim that the asymmetry between the perfective and imperfective verbal forms in Arabic are related to either past and non-past Tense contrasts, viewpoint Aspect contrasts or a combination of both. However, in this thesis, I have shown that the asymmetry extends beyond Tense or Aspect contrasts; it is related to a more profound conceptual difference related to the nature of events. I have argued that the perfective form is an eventive form, used to encode events which are perceived as particulars and are existentially bound. Imperfective verbs, on the other hand, can be considered the infinitival default verbal form of the verbal system in Arabic. They do not inherently mark a specified Tense or Aspect function. Their unmarkedness for Tense or Aspect functions is related to the fact that the imperfective form encodes an event as a universal with generic reference. Generic events do not conceptually involve spatiotemporal boundaries; therefore, they do not require tense and aspect specifications.

This conclusion, in turn, allowed for a more elaborate analysis of the functions of EventP in the syntactic structure (clause structure) than previous accounts. The thesis shows that EventP's feature relates to the difference between a particular and a generic event, with the particular event being the marked notion in the grammar. Also, EventP projects with eventive predicates regardless of the predicate's category, i.e. verbal or nominal.

Furthermore, I have argued that the projection of TMA categories is sensitive to the eventive/non-eventive distinction between predicates rather than being related to all verbal predicates. I have shown that there are verbal and non-verbal sentences that do not have specified tense reference (other than the default generic present); these include Individual-level predicates and inherent Individual-level state verb. On the other hand, there are verbal and non-verbal sentences with specified temporal and aspectual interpretations; such as those including an active participle predicate or other denominal forms. I argued that the active participle, which is formally nominal, is underlyingly eventive; therefore, it can be spatiotemporally and existentially bound. Consequently, it was possible to generalise that the dependency between TMA and the verbal category does not hold of Arabic clauses; the projection of the TMA layer depends on the feature of EventP.

Another consequence of the EventP hypothesis relates to the functions of the verb *kaan*. I have argued that *kaan* in KA functions as an eventiviser capable of realising an eventive feature in the sentence and may appear to coerce a non-eventive predicate into an eventive one. I argued that this function is inherent to *kaan* since it semantically encodes the meaning of the verb *BECOME* which is eventive, and is inherently existential. I proposed that this function underlay its appearance in copula sentences and as an auxiliary verb and to some extent its discourse-related functions in KA.

The EventP's function was further clarified in light of the analysis presented for the aspectual verbs *gaam* and *gasad* and the AP *gaasid*. I have shown that *gaam* and *gasad's* aspectual functions are firmly related to the primitive semantic components of the event phase proposed in Ramchand (2008). Aspectual *gaam* and *gasad* indicate inception and duration respectively, in addition to volitionality and force. Consequently, I motivated their analysis as light verbs which are base-generated event-internally. Furthermore, I argued that their light verb functions might have grammaticalized from their use in serial verb constructions. The structural closeness between the light verb construction and the SVC may have triggered the reanalysis from latter to the former since in both cases they are below EventP.

I have argued, conversely, that AP *gaaSid* originates event-externally. Furthermore, I presented an analysis of *gaaSid* as an eventive marker instead of a progressive marker. Progressivity in Arabic depends on the lexical aspect of the verb type when used in existential context. Using *gaaSid* does not always incur a progressive reading but it usually asserts that there is some existential reference to the event given the speaker's assertion as evidence. This analysis is a somewhat novel analysis for the progressive marker *gaaSid* in Arabic. However, it is still in its preliminary stage and requires further theoretical grounding.

In the syntactic analysis presented in this thesis, the following feature combinations were found (excluding *kaan/ykuun's* functions):

- a. [+Anterior] T2/ [+Point] Asp/ [+Particular] Event = Perfective verbal form
- b. [+Anterior] T2/ [+Point] Asp/ [+Particular] Event = gaam + imperfective verb (the initial point of the event is in the past while the process is unfolding in the present).
- c. [-Anterior] T2/ [-Point] Asp/ [+Particular] Event = (gaa fid) + imperfective
- d. [-Anterior] T2/ [-Point] Asp/ [-Particular] Event = imperfective verbal form

It appears that both T2 and Asp are either positive or negative. When both are positive a perfective verbal form is used, either the thematic verb is spelled out in the perfective, or the aspectual verb *gaam* is spelled out in the perfective. When both are negative, the imperfective verbal form is used. Furthermore, in order to indicate that the imperfective verb refers to a particular event instead of the default generic reference inherent to the imperfective, the sentence requires some element which specifies existential references, this is achieved either by using (*gaaSid*) or by some other element which anchors the sentences time or location to an existential point. This may be achieved by using an adverb such as *now* amongst other ways.

It could be argued that for Arabic, both Asp and T2 can be compressed into one functional head since both appear to be either marked or unmarked. However, I prefer to separate these two heads since I proposed that they perform different functions, Asp specifies or highlights a point of the event, while T2 locates this point (which represents ET) in relation to RT. These two functions could be realised by separate morphological elements cross-linguistically, or even in Arabic. However, a clearer picture would only be achieved after a thorough investigation of the inventory of aspectual verbs and markers in Arabic which could reveal more interesting combinations.

This thesis touched on several issues related to EventP that have not been discussed in depth due to the word limit and limitations of time. I state here some of these issues that require further research. First, I have claimed that there is an ambiguity between the progressive and the habitual readings in Arabic, and that the habitual is distinguished from the progressive by a covert generic operator. However, I have not shown how and when this operator functions other than through depending on contextual clues. There may be other languages that can show an overt version of the generic operator functioning on the sententiallevelto provide the habitual reading, if so, then this claim may be supported by impirical evidence. Second, the nature of the existential and generic operators and the rules that condition their use on the sentential level. Again, this topic requires rexamining the enventory of complementizers and particles in Arabic in order to identify whether they represent generic or existential operators; a topic which I assume will reveal interesting findings. Third, the relation between eventivity and genericity in relation to the active and passive voices. Fassi Fehri (2012) shows that genericity may be expressed through the passive voice in Arabic. Does this suggest that passive voice predicates are not eventive? A question which is worth investigating inlight of the discussions presented here. Finally, there remains much work to be done investigating the far-reaching empirical consequences of the EventP hypothesis, for Arabic and cross-linguistically.

## References

Abusch, D. 1985. 'On verbs and time'. Doctoral Dissertations, University of Massachusetts.

- Adger, D. 2003. Core Syntax: A Minimalist Approach. Oxford: Oxford University Press.
- Aikhenvald, A. 1999. 'Serial Constructions and verb compounding: evidence from Tariana (North Arawak)'. *Studies in Language*, 23: 469–498.
- Aikhenvald, A.Y., and R. Dixon (eds). 2006. *Serial Verb Constructions: A Cross-linguistic Typology*. Explorations in Linguistic Typology 2. Oxford: Oxford University Press.
- Al-Aqarbeh, R. N. 2011. 'Finiteness in Jordanian Arabic: a semantic and morphosyntactic approach'. Doctoral Dissertation, University of Kansas.
- Al-Aqarbeh, R. N., & A. Al-Sarayreh. 2017. 'The clause structure of periphrastic tense sentences in standard Arabic'. *Lingua*, 185: 67-80.
- Al-Bahri, K.W. 2014. 'A grammar of Hadari Arabic: a contrastive-typological perspective'. Doctoral dissertation, University of Sussex.
- Al-Horais, N. 2006. 'Arabic verbless sentences: is there a null VP?'. *Pragmalinguistica*, 14: 101-116.
- Al-Horais, N. 2012. 'On the universality of auxiliary verbs'. *Journal of Universal Language*, 13(1): 7-30.
- Al-Malahmeh, M. A. 2013. 'The interaction of indirect evidentiality, temporality and epistemic modality in Jordanian Arabic: the case of deverbal agentives'. Doctoral dissertation, University of Kansas.
- Al-Najjar, B. 1984. 'The syntax and semantics of verbal aspect in Kuwaiti Arabic'. Unpublished PhD dissertation, University of Utah.
- Al-Zahrani, M. 2013. 'Morphosyntactic and semantic properties of Hijazi Arabic modals' Unpublished PhD Thesis, School of Languages and Comp Cultural Studies, The University of Queensland.
- Al-Zahrani, M. 2016. 'Aktionsarten: projection and subcategorization'. *The International Journal of Arabic Linguistics*, 2(1): 46–69.
- Alcázar, A. and M. Saltarelli. 2014. *The Syntax of Imperatives*. UK: Cambridge University Press.
- Aljenaie, K. 2001. 'The emergence of tense and agreement in Kuwaiti Arabic children'. Doctoral dissertation, University of Reading.
- Alotaibi, B. 2016. 'Multi-functional verbs gaam & gasad in Kuwaiti Arabic: between serialization and auxilation'. Paper presented at the 2nd Arabic Linguistics Forum Coneference, May, York.
- Alqassas, A. 2015. 'Negation, tense and NPIs in Jordanian Arabic'. *Lingua: International Review of General Linguistics*, 156: 101-128.
- Alrashed, M. A. 2012. 'Argument structure in Arabic: lexicon or syntax?' Doctoral Dissertation, Arizona State University.
- Altakhaineh, A.R.M. and A. Zibin. 2018. 'Verb + verb compound and serial verb construction in Jordanian Arabic JA and English'. *Lingua*, 201: 45-56.

Anderson, G.D. 2006. Auxiliary Verb Constructions. Oxford: Oxford University Press.

- Aoun, J. E., L. Choueiri and E. Benmamoun. 2010. *The Syntax of Arabic*. UK: Cambridge University Press.
- Arche, M.J. 2006. 'Individuals in time: tense, aspect and the individual/stage distinction'. *Linguistik aktuell*, 94. Philadelphia: J. Benjamins.
- Arche, M.J. 2014. 'The construction of viewpoint aspect: the imperfective revisited'. *Natural Language & Linguistic Theory*, 32(3): 791-831.
- Arche, M. J., A. Fábregas and R. Marín. 2014. 'Argument structure and aspect in adjectives and participles: where are we?'. *Lingua*, 149: 95–117.
- Bahloul, M. 2006. 'Copula'. Encyclopedia of Arabic Language and Linguistics, 1: 506-511.
- Bahloul, M. 2008. Structure and Function of the Arabic Verb. London: Routledge.
- Baker, M. 1980. 'Aspects of clause structure in Arabic'. Unpublished PhD Dissertation, Indiana University, Bloomington.
- Baker, M. 1989. 'Object sharing and projection in serial verb constructions'. *Linguistic Inquiry*, 20: 513–553.
- Barbiers, S. and R. Sybesma. 2004. 'On the different behaviour of auxiliaries'. *Lingua*, 114(4): 389-398.
- Bellert, I. 1977. 'On semantic and distributional properties of sentential adverbs'. *Linguistic Inquiry*, 8(2): 337-351.
- Belletti, A. 1994. 'Verb positions: evidence from Italian'. In D. Lightfoot and N. Hornstein (eds) *Verb Movement*. Cambridge, UK: Cambridge University Press. 19-40.
- Benedicto, E. 1997. 'The syntax and semantics of non-canonical NP positions'. Doctoral Dissertation, University of Massachusetts.
- Benmamoun, E. 1999. 'Arabic morphology: the central role of the imperfective'. *Lingua*, 108: 175–201
- Benmamoun, E. 2000. *The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects*. Oxford University Press.
- Benmamoun, E. 2008. 'Clause structure and the syntax of verbless sentences'. In: R. Freidin, C.P. Otero and M.L. Zubizarreta (eds). *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-RogerVergnaud*. Cambridge: MIT Press. 105-132.
- Benmamoun, E. and L. Choueiri. 2013. 'The syntax of Arabic from a generative perspective'. In J. Owens (ed.). *The Oxford Handbook of Arabic*. New York: Oxford University Press. 115-164.
- Benmamoun, E. and K. Al Asbahi. 2014. 'Negation and the subject position in Sanani Arabic'. In F. Karen and R. Khamis-Dakwar (eds). *Perspectives on Arabic Linguistics XXV* Amsterdam: John Benjamins. 25: 75-90.
- Bertinetto, P. M. and A. Lenci. 2012. 'Habituality, pluractionality and imperfectivity'. In R.I. Binnick (ed.). *The Oxford Handbook of Tense and Aspect*. 852-880.
- Binnick, R.I. 2005. 'The markers of habitual aspect in English'. *Journal of English Linguistics*. 33(4): 339–369
- Binnick, R. I. (ed). 2012. The Oxford Handbook of Tense and Aspect. Oxford University Press.
- Bjorkman, B.A.M. 2011. 'BE-ing default: the morphosyntax of auxiliaries'. Doctoral dissertation, MIT.

- Bohnemeyer, J. 2014. 'Aspect vs. relative tense: the case reopened'. *Natural Language and Linguistic Theory*, 32(3): 917-954
- Boneh, N. and E. Doron. 2008. 'Habituality and the habitual aspect'. *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect*, 110: 321-348.
- Borer, H. 2005. *Structuring Sense: Volume II: The Normal Course of Events*. Oxford University Press on Demand
- Borer, H. 2013. Structuring Sense: Volume III: Taking Form. Oxford University Press.
- Bowern, C. 2008. 'The diachrony of complex predicates'. Diachronica, 25(2), 161-185.
- Brustad, K. 2000. *The Syntax of Spoken Arabic: A Comparative Study of Moroccan, Egyptian, Syrian, and Kuwaiti Dialects*. Georgetown University Press.
- Butt, M. 2010. 'The light verb jungle: still hacking away'. In: M. Amberber, B. Baker and M. Harvey (eds). Complex Predicates: Cross-linguistic Perspectives on Event Structure. Cambridge University Press. 48-78.
- Butt, M. and W. Geuder. 2003. 'Light verbs in Urdu and grammaticalization'. In R. Eckardt,
  K. Von Heusinger and C. Schwarze (eds). Words in Time: Diachronic Semantics from Different Points of View. Berlin: Mouton de Gruyter.295–349
- Camilleri, M. and L. Sadler. 2017. 'Posture verbs and Aspect: a view from vernacular Arabic'. In: *Proceedings of the LFG '17 Conference*, July, Konstanz.
- Carlson, G. 1977a. 'Reference to kinds in English'. Doctoral Dissertation, University of Massachusetts at Amherst. New York: Garland Press.
- Carlson, G. 1977b. 'A unified analysis of the English bare plural'. *Linguistics and Philosophy*, 1(3): 413-457.
- Carlson, G. 2012. 'Habitual and generic aspect'. In I.R. Binnick (ed.). *The Oxford Handbook* of *Tense and Aspect*. Oxford: Oxford University Press. 823–851
- Carter, M. G. 2004. Sibawayhi. IB Tauris.
- Chatar-Moumni, N. 2011. 'The verb kaan 'be' in Moroccan Arabic'. Perspectives on Arabic Linguistics: Papers from the Annual Symposia on Arabic Linguistics, 22: 167-186.
- Chomsky, N. 1995. The Minimalist Program. MIT press.
- Chomsky, N., 2008. 'On phases'. In: R. Freidin, C.P. Otero and M.L. Zubizarreta (Eds). Foundational Issues in Linguistic Theory: Essays in Honor of Jean-RogerVergnaud. Cambridge: MIT Press. 133–166
- Cinque, G. 1997. Adverbs and Functional Heads: A Cross-linguistic Perspective. University of Venice Working Papers in Linguistics, 7: 1–269
- Cinque, G. 1998. 'Restructuring" and the order of aspectual and root modal heads'. *Working Papers in Linguistics*, 8(1): 113-140.
- Cinque, G. 1999. Adverbs and Functional Heads: A Cross-linguistic Perspective. Oxford University Press.
- Cinque, G. 2006. *Restructuring and Functional Heads: The Cartography of Syntactic Structures*, 4. Oxford University Press.
- Comrie, B. 1976. *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge university press.
- Comrie, B. 1985. Tense. Cambridge University Press

- Comrie, B. 1991. 'On the importance of Arabic for general linguistic theory'. *Perspectives on Arabic Linguistics*. 3–30
- Copley, B. and H. Harley. 2015. 'A force-theoretic framework for event structure'. *Linguistics and Philosophy*, 38(2): 103-158.
- Cowper, E. 1999. 'Grammatical aspect in English'. The Linguistic Review, 16(3): 205-226.
- Cowper, E. 2005. 'The geometry of interpretable features: Infl in English and Spanish'. *Language*, 81(1): 10-46.
- Crowley, Terry. 2002. Serial Verbs in Oceanic. Oxford: Oxford University Press.
- Culicover, P. W., and R. Jackendoff. 2005. *Simpler Syntax*. Oxford University Press on Demand.
- Davidson, D. (1967). 'The logical form of action sentences'. In: N. Rescher (ed.). *The Logic* of Decision and Action. Pittsburgh, PA: University Pittsburgh Press. 81-95.
- Demirdache, H. and M. Uribe-Etxebarria. 2007. 'The syntax of time arguments'. *Lingua*, 117(2): 330-366.
- Demirdache, H. and M. Uribe-Etxebarria. 2014. 'Aspect and temporal anaphora'. *Natural Language and Linguistic Theory*, 32 (3): 855-895.
- Diesing, M. 1992. Indefinites. Cambridge, MA: MIT Press.
- Dowty, D.R. 1979. Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTO. Reidel.
- Eades, D. and M. Persson. 2013. 'Aktionsart, word form and context: on the use of the active participle in gulf arabic dialects'. *Journal of Semitic Studies*, 58(2): 343-367.
- Eisele, J.C. 1990. 'Time, reference, tense, and formal aspect in Cairene Arabic'. *Perspectives* on Arabic Linguistics I. 173–214.
- Eisele, J.C. 1992. 'Cariene Arabic auxiliaries and the category AUX'. *Perspectives on Arabic Linguistics IV, Papers from the Annual Symposium on Arabic Linguistics*. 4: 143.
- Eisele, J.C. 1999. Arabic Verbs in Time: Tense and Aspect in Cairene Arabic. Otto Harrassowitz Verlag.
- Eisele, J.C. 2006. 'Aspect'. Encyclopedia of Arabic Language and Linguistics, 1:195-201.
- Embick, D. and R. Noyer. 2007. 'Distributed morphology and the syntax/morphology interface'. *The Oxford Handbook of Linguistic Interfaces*. 289-324.
- Essegbey, J. 2004. 'Auxiliaries in serialising languages: on COME and GO verbs in Sranan and Ewe'. *Lingua*, 114(4): 473-494.
- Fassi Fehri, A. 1993. 'Issues in the Structure of Arabic Clauses and Words'. *Studies in Natural Language and Linguistic Theory*. Dordrecht ; Boston: Kluwer Academic
- Fassi Fehri, A. 2012. Key Features and Parameters in Arabic Grammar. John Benjamins Publishing.
- Filip, H. 2012. 'Lexical Aspect'. *The Oxford Handbook of Tense and Aspect*. Oxford University Press.
- Firanescu, D., 2006. 'Modal Verbs'. Encyclopedia of Arabic Language and Linguistics, 3:233-238.

- Fischer, W. 1997. 'Classical Arabic'. In R. Hetzron (ed.). *The Semitic Languages*. London: Routledge. 187–219.
- Fischer, W. 2002. A Grammar of Classical Arabic. Yale University Press.
- Fleisch, H. 1957. 'Etudes Sur le Verbe Arabe'. *Mélanges Louis Massignon*. Damascus: Institut Français de Damas. 2: 153–81.
- Foley, W. 2010. 'Events and serial verb constructions'. In: M. Amberber, B. Baker and M. Harvey, (eds). Complex Predicates: Cross-linguistic Perspectives on Event Structure. Cambridge University Press. 79-109.
- Folli, R. and H. Harley. 2005. 'Flavors of v'. In: Aspectual inquiries. Dordrecht : Springer. 95-120.
- Fradkin, R.A. 1985. 'Markedness theory and the verb system of Russian and Arabic: aspect, tense, and mood'. Unpublished thesis, Indiana University.
- Freeze, R. 1992. 'Existentials and other locatives'. Language (68): 553-595.
- Fukuda, S. 2008. 'Aspectual verbs and the aspect phrase hypothesis'. San Diego Linguistic Papers, 3: 11-31.
- Giorgi, A. and F. Pianesi. 1997. *Tense and Aspect: From Semantics to Morphosyntax*. Oxford University Press.
- Grimshaw, J. 1990. Argument Structure. The MIT Press.
- Guéron, J. 2007. 'On tense and aspect'. *Lingua*, 117(2): 367-391.
- Guéron, J. 2008. 'On the difference between telicity and perfectivity'. *Lingua*, 118(11): 1816-1840.
- Hale, K. and S.J. Keyser. 1993. 'On argument structure and the lexical expression of syntactic relations'. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*.MIT press. 53-110.
- Hale, K. and S.J. Keyser. 2002. *Prolegomenon to a theory of argument structure*, 39. MIT press.
- Hallman, P. 2015. 'The Arabic imperfective'. *Brill's Journal of Afroasiatic Languages and Linguistics*, 7(1): 103-131.
- Haspelmath, M. 2016. 'The serial verb construction: comparative concept and cross-linguistic generalizations'. *Language and Linguistics*, 17(3): 291-319.
- Heine, B. 1993. *Auxiliaries: Cognitive Forces and Grammaticalization*. Oxford University Press.
- Heine, B. 1997. Cognitive Foundations of Grammar. Oxford University Press.
- Higginbotham, J. 1985. 'On semantics'. *Linguistic inquiry*, 16(4): 547-593.
- Higginbotham, J. 2000. On Events in Linguistic Semantics, 49. Oxford: Oxford University Press.
- Higginbotham, J. 2005. 'Event positions: suppression and emergence'. *Theoretical Linguistics*, 31(3): 349-358.
- Higginbotham, J. and G. Ramchand. 1997. 'The stage-level/individual-level distinction and the mapping hypothesis'. Oxford University Working Papers in Linguistics, Philology and Phonetics, 2: 55-83.
- Holes, C. 1990. Gulf Arabic. Psychology Press.

- Holes, C. 2004. *Modern Arabic: Structures, Functions, and Varieties*. Georgetown University Press.
- Holes, C. 2006. 'Kuwaiti Arabic'. *Encyclopedia of Arabic Language and Linguistics*, 2: 608-620.
- Hoyt, F. 2006. 'Predicate'. Encyclopedia of Arabic Language and Linguistics, 3: 683-689.
- Hussein, L. 1990. 'Serial verbs in colloquial arabic'. In B. D. Joseph and A. M. Zwicky (eds). When Verbs Collide: Paper Presented at the 1990 Ohio State Mini-Conference on Serial Verbs. Columbus, OH: The Ohio State University Press. 340–354.
- Iatridou, S. 2000. 'The grammatical ingredients of counterfactuality'. *Linguistic Inquiry* 31: 231–270.
- Ingham, B. 1994. Najdi Arabic: Central Arabian. John Benjamins Publishing.
- Ippolito, M. 2004. 'Imperfect modality'. In J. Guèron and J. Lecarme (eds). *The Syntax of Time*. Cambridge, MA: MIT Press. 359–387.
- Jackendoff, R. 1997. The Architecture of the Language Faculty. MIT Press.
- Jarrah, M. and A. Zibin. 2016. 'Syntactic investigation of nunation in Haili Arabic'. SKY Journal of Linguistics, 29: 39-62.
- Kayne, R. S. 1993. 'Toward a modular theory of auxiliary selection'. Studia Linguistica (47): 3–31.
- Kinberg, N. 1992. 'Semi-imperfectives and imperfectives: a case study of aspect and tense in Arabic participal clauses'. *Lingua*, 86(4): 301-330.
- Klein, W. 1994. Time in Language. Psychology Press.
- Klein, W. 2009. 'How time is encoded'. *The Expression of Time*, 3(1): 1-43.
- Klein, W. 2014. 'Is aspect time-relational? Commentary on the paper by Jürgen Bohnemeyer'. *Natural Language and Linguistic Theory*, 32 (3): 955-971.
- Klein, W., & Li, P. (eds). 2009. The Expression of Time (Vol. 3). Walter de Gruyter.
- Karawani, H. and H. Zeijlstra. 2013. 'The semantic contribution of the past morpheme in Palestinian counterfactuals'. *Journal of Portuguese Linguistics*, 12(1): 105–119.
- Karawani, H. 2014. *The Real, the Fake, and the Fake Fake: In Counterfactual Conditionals, Crosslinguistically*, Utrecht: LOT
- Katz, G. 2000. 'Anti neo-Davidsonianism: against a Davidsonian semantics for state sentences'. *Events as Grammatical Objects*. 393-416.
- Kratzer, A. 1995. 'Stage-level and individual-level predicates'. The Generic Book. 125-175.
- Kremers, J.M. 2003. The Arabic Noun Phrase: A Minimalist Approach. Utrecht: LOT.
- Kuteva, T. 2001. *Auxiliation: An Enquiry into the Nature of Grammaticalization*. Oxford University Press on Demand
- Landman, F. 2000. *Events and Plurality: The Jerusalem Lectures*, 76. Springer Science & Business Media.
- Langer, M. 2006. 'Concessive clause'. *Encyclopedia of Arabic Language and Linguistics*. 1: 465-467.
- Larson, R. 1987. 'On the double object construction'. *Linguistic Inquiry* 19:33-91.

- Larson, R. 1990. 'Double objects revisited: a reply to Jackendoff'. *Linguistic Inquiry* 21:589-632.
- Levin, A. 2006. 'Kana wa-axawatuha'. *Encyclopedia of Arabic Language and Linguistics*. 2: 546-552.
- Manninen, S. 2001. 'A minimalist analysis of stage level and individual level predicates'. The Department of English in Lund: Working Papers in Linguistics. 1-18.
- Maienborn, C. and A. Wöllstein (eds). 2005. *Event Arguments: Foundations and Applications*. Walter de Gruyter.
- Maienborn, C. 2005. 'On the limits of the Davidsonian approach: the case of copula sentences'. *Theoretical Linguistics*, 31(3): 275-316.
- McCarthy, J.J. 1981. 'A prosodic theory of nonconcatenative morphology'. *Linguistic Inquiry*, 12(3): 373-418.
- Megerdoomian, K. 2008. 'Parallel nominal and verbal projections'. In: R. Freidin, C.P, Otero and M.L. Zubizarreta (Eds.). *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-RogerVergnaud*. Cambridge: MIT Press. 73–104.
- Montague, R. 1969. 'On the nature of certain philosophical entities'. In *The Monist* 53: 159-194. Reprinted in Montague, R. 1974. *Formal Philosophy*, R. Thomason (ed.) New Haven: Yale University Press. 149-187.
- Mouchaweh, L. 1986. 'De la Syntaxe des Petites Propositions'. PhD dissertation, University of Paris VIII.
- Mitchell, T.F. and S. Hasan. 1994. *Modality, Mood, and Aspect in Spoken Arabic: With Special Reference to Egypt and the Levant.* London: Routledge
- Milsark, G.L. 1974. 'Existential sentences in English'. Doctoral dissertation, Massachusetts Institute of Technology.
- Mughazy, M. 2005. 'Rethinking lexical aspect in Egyptian Arabic'. In: Perspectives on Arabic Linguistics XVII-XVIII: Papers from the Seventeenth and Eighteenth Annual Symposia on Arabic Linguistics. Oklahoma: John Benjamins. 133-172.
- Newman, J. (ed). 2002. The Linguistics of Sitting, Standing and Lying. John Benjamins Publishing
- Newman, J. and T. Yamaguchi. 2002. 'Action and state interpretations of 'sit' in Japanese and English'. *The Linguistics of Sitting, Standing, and Lying*. 43-59.
- Newman, J. 2009. 'English posture verbs: an experientially grounded approach'. *Annual Review of Cognitive Linguistics*, 7(1): 30-57.
- Ouali, H. and C. Fortin. 2007. 'The syntax of complex tense in Moroccan Arabic'. In: *Perspectives on Arabic Linguistics XIX: Papers from the Nineteenth Annual Symposium on Arabic Linguistics*. John Benjamins Publishing. 175-187.
- Ouali, H. and J. AlBukhari. 2016. 'The syntax of motion light verbs in Jordanian and Moroccan Arabic'. In: *Perspectives On Arabic Linguistics XXVIII: Papers from the Annual Symposium on Arabic Linguistics*. John Benjamins Publishing. 28: 173-192.
- Ouhalla, J. 1991. Functional Categories and Parametric Variation. London: Routledge.
- Ouhalla, J. 1995. The Structure and Logical Form of Negative Sentences. 1–22.
- Ouhalla, J. and U. Shlonsky (eds). 2002. *Themes in Arabic and Hebrew Syntax*. Springer Science & Business Media.

- Ouhalla, J. 2014. 'The development of future participles and future tense markers from motion predicates'. In R. Khamis-Dakwar and K. Froud (eds). *Perspectives on Arabic Linguistics XXV*. Amsterdam: John Benjamins. 25: 9–28.
- Owens, J. 1998. 'Case and proto-Arabic, part II'. Bulletin of the School of Oriental and African Studies, 61(2): 215-227.
- Parsons, T. 1990. Events in the Semantics of English. Cambridge, Ma: MIT Press.
- Pesetsky, D. and E. Torrego. 2007. 'The syntax of valuation and the interpretability of Features'. *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*. 262-294.
- Pianesi, F. and A.C. Varzi. 2000. 'Events and event talk'. In J. Higginbotham, F. Pianesi and A. C. Varzi (eds). *Speaking of Events*. Oxford University Press. 3-47.
- Platzack, C. 2000. 'Multiple interfaces'. In: U. Nikanne and E. van der Zee (eds). Cognitive Interfaces: Constraints on Linking Cognitive Information. Oxford: Oxford University Press. 21–53.
- Plungian, V. 2005. 'Irrealis and modality in Russian and in typological perspective'. In B. Hansen and P. Karlik (eds). *Modality in Slavonic Languages: New Perspectives*. Mnchen: Sagner Verlag. 135–146.
- Pollock, J. 1989. 'Verb movement, universal grammar, and the structure of IP'. *Linguistic Inquiry* 20:365-424.
- Pustejovsky, J. 1991. 'The syntax of event structure'. Cognition, 4: 47-81.
- Qafisheh, H.A. 1977. A Short Reference Grammar of Gulf Arabic. Tuscon: University of Arizona Press
- Ramchand, G. 2007. 'Events in syntax: modification and predication'. *Language and Linguistics Compass*, 1(5): 476-497.
- Ramchand, G. 2008. Verb Meaning and the Lexicon: A First Phase Syntax. Cambridge University Press.
- Ramchand, G. and P. Svenonius. 2014. 'Deriving the functional hierarchy'. *Language Sciences*, 46: 152-174.
- Rapapport, T. 1987. 'Copula, nominal and small Clauses'. PhD dissertation, Massachusetts Institute of Technology.
- Ratcliffe, R. 1998. The 'Broken' Plural Problem in Arabic and Comparative Semitic: Allomorphy and Analogy in Non-concatenative Morphology, Amsterdam: John Benjamins.
- Rizzi, L. 1997. 'The fine structure of the left periphery'. In *Elements of grammar*. Dordrecht: Springer. 281-337.
- Rizzi, L. and G. Cinque. 2016. 'Functional categories and syntactic theory'. *Annual Review* of Linguistics, 2: 139-163.
- Roberts, I. and A. Roussou. 2003. *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge University Press.
- Ryding, K.C. 2005. A Reference Grammar of Modern Standard Arabic. Cambridge University Press.

- Saddour, I. 2009. 'The expression of progressivity in Tunisian Arabic: a study of progressive markers in oral retellings of simultaneous situations'. *Revue de Sémantique et Pragmatique*, 25: 265-280.
- Schulz, E. 2004. A Student Grammar of Modern Standard Arabic. Cambridge University Press.
- Seiss, M. 2009. 'On the difference between auxiliaries, serial verbs and light verbs'. In: M. Butt and T.H. King (eds). *Proceedings of the LFG09 Conference*. CSLI Publications. 501-519.
- Shlonsky, U. 1997. Clause Structure and Word Order in Hebrew and Arabic: An Essay in Comparative Semitic Syntax. Oxford University Press.
- Smith, C.S. 1997. The Parameter of Aspect. 2nd ed. Dordrecht; London: Kluwer Academic.
- Soltan, U. 2007. 'On formal feature licensing in minimalism: aspects of standard Arabic morphosyntax'. Doctoral Dissertation, University of Maryland.
- Stewart, O. 2001. The Serial Verb Construction Parameter. New York/London: Garland.
- Stowell, T. 1995. 'The phrase structure of tense'. *Phrase Structure and the Lexicon*. Springer, Dordrecht. 277-291.
- Stowell, T. 2007. 'The syntactic expression of tense'. Lingua, 117(2): 437-463.
- Stowell, T. 2012. 'Syntax'. In R. I. Binnick (ed.). *The Oxford Handbook of Tense and Aspect*. Oxford University Press. 184–211.
- Svenonius, P. 2012. Spanning (Ms). University of Tromsø, Available at ling.auf.net/lingBuzz/001501.
- Tamly, L. 2000. Toward a Cognitive Semantics. MIT Press
- Travis, L. 2010. Inner Aspect. Springer.
- Vendler, Z. 1967. 'Facts and events'. Linguistics in philosophy. 122–146.
- Verkuyl, H.J. 1972. 'On the compositional nature of the aspects'. *Foundations of Language, Supplementary Series*. Reidel, Dordrecht
- Verkuyl, H.J. 1996. A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure. Cambridge University Press.
- Verkuyl, H.J. 2008. Binary Tense. CSLI Publications Stanford.
- Verkuyl, H.J. 2012. 'Compositionality'. In R. I. Binnick (ed.). *The Oxford Handbook of Tense and Aspect*. Oxford University Press. 563-585.
- Versteegh, K. 2003. 'Some remarks on verbal serialization in Arabic dialects'. *Cahiers de Linguistique d'INALCO*, 5: 59–69.
- Versteegh, K. 2014. The Arabic Language. Edinburgh University Press.
- Wright, W. 1896. Grammar of the Arabic Language. Cambridge: Cambridge University Press
- Zagona, K. 1990. 'Times as temporal argument structure'. Manuscript, University of Washington, Seattle.
- Zagona, K. 2007. 'Some effects of aspect on tense construal'. Lingua, 117 (2): 464–502.
- Zagona, K. 2012. 'Tense and aspect'. The Handbook of Hispanic Linguistics, 69: 355-372.
- Zwicky, A. 1990. 'What are we talking about when we talk about serial verbs?'. In B. D. Joseph and A. M. Zwicky (eds). *When Verbs Collide: Paper Presented at the 1990 Ohio*

State Mini-Conference on Serial Verbs. Columbus, OH: The Ohio State University Press. 1-13.