The Grammaticalization of Lexical Verbs into Progressive and Future Markers in Saudi Najdi Arabic

by

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ABSTRACT

Grammaticalization is viewed as a progressive process by which words are altered over time from a lexical status to a grammatical status. Verbs with posture, motion, and volition meanings are crosslinguistically prone to grammaticalize into tense, mood, and aspect markers (TMA), making for a particularly interesting topic of study. In Arabic dialects, the active participle of posture verbs (APPVs) *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing', the motion verbs *raħ* 'he went', and the *b*-imperfective are commonly referred to as instances of grammaticalization. Yet, there is very limited research that supports this argument. APPVs are sometimes regarded as grammaticalized *auxiliaries* or *Aktionsart* markers, while *raħ* and the *b*-imperfective are both viewed as future tense markers. There is, however, evidence from Saudi Najdi Arabic (SNA) that challenges these findings.

This dissertation describes the grammaticalization process of the APPVs, the motion verbs *raħ*, and the *b*-imperfective in SNA. It also proposes a new precise syntactic analysis for the three elements and their sources of grammaticalization, using two approaches. First, to account for the evaluation of the three elements' grammaticalization in SNA, I focus on four universal grammaticalization principles and mechanisms: namely, desemanticization, extension, decategorialization, and erosion. I follow Hopper and Traugott's (2003) Cline theory to provide a description of the reanalysis stages. To account for the syntactic analysis for these elements and their sources of grammaticalization, I use the Cartography Program.

The data examined reveal that SNA is most grammatically related to other Arabic dialects and not Modern Standard Arabic (MSA), allowing me to trace the grammaticalization process of the APPVs, the *b*-imperfective, and the motion verb *rah* from their original function as lexical verbs to TMA markers of progressivity or futurity. I show that the APPVs have undergone semantic extension, semantic bleaching, and decategorialization, but not phonological reduction (erosion). Syntactically, the findings indicate that the future irrealis *b*-imperfective occupies the head of MP, the prospective future *raħ* occupies the head of ProspP, and the APPVs in pseudocoordination constructions have two syntactic structures: (i) progressive aspect markers in the head of ProgP and (ii) light verbs base-generated in the head of *v*P.

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ABBREVIATIONS

1P	First person	NP	Noun Phrase
2P	Second person	TP	Tense Phrase
3P	Third person	APPV	Active Participle of Posture Verb
ACC	Accusative	VP	Verb Phrase
CA	Classical Arabic	T	Tense
F	Feminine	SVC	Subject Verb Complement
FUT	Future	VSC	Verb Subject Complement
HAB	Habituality	SVO	Subject Verb Object
IMD	Immediacy	VSO	Verb Subject Object
IMPF	Imperfective	PROSP	Prospective
IND	Indicative	EPP	Extended Projection Principle
INT	Intentionality	CA	Classical Arabic
M	Masculine	MP	Mood Phrase
MSA	Modern Standard Arabic	CP	Complementizer Phrase
Ø	Empty suffix	IP	Inflection Phrase
PASS	Passive	ASP	Aspect
PERF	Perfective	EF	Edge Feature
ϕ-Features	Phi features	DP	Determiner Phrase
PL	Plural	PP	Prepositional Phrase
PROG	Progressive	M	Mood
PF	Phonological Form	LF	Logical Form

SG	Singular	SNA	Saudi Najdi Arabic
TMA	Tense, mood, and aspect	?	Odd sentence
*	Ungrammatical sentence	NEG	Negative
ProspP	Prospective Phrase	NEU	Neutral
ADV	Adverb	ASPP	Aspect Phrase
TOP	Topic	TOPP	Topic Phrase
NOM	Nominative	ACC	Accusative
		PRON	Pronominal Copula

CHAPTER 1

INTRODUCTION

1.1 Background

This dissertation examines the grammaticalization of active participle posture verbs (APPVs) (*jaalis* or *qaaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective, which is derived from the volition verb *baɣa* 'he wanted', in Saudi Najdi Arabic (hereafter SNA). Crosslinguistically, posture verbs/static location expressions (*sit*, *lie*, *stand*), motion verbs (*go*), and verbs of volition (*want*, *desire*) tend to grammaticalize into tense, aspect, and mood (TMA) markers (Bybee et al., 1994; Heine & Kuteva, 2002; Hopper & Traugott, 2003; Newman, 2002).

Newman (2002), Heine (2003), and Bybee et al. (1994) observed that verbs such as *sit*, *stand*, and *lie* are likely to grammaticalize into auxiliaries or progressive markers. According to Newman, the use of posture verbs to express the location or spatial configuration can sometimes be regarded as metaphorical extensions of posture. This comes as a direct result of a shift from a more lexical to a more grammatical use. For instance, the Manam (Austronesian language) posture verb *soaʔi* 'sit' sometimes functions like a lexical verb and sometimes functions like a progressive aspect marker (Newman, 2002). Motion verbs such as *go* and *come* are main sources for futurity (Heine, 2003). According to Miller (2007), the English *be going to* originally had only a directional meaning, as in *Mona is going to the mall*. In this meaning, the sentence communicates to the listener that *Mona* is in motion toward a GOAL (the mall). Though

the usage of *be going to* is still present in English, it has grammaticalized to a prospective future marker, as in *Sara is going to go the mall*.

Heine (2003), Bybee et al. (1994), and Heine et al. (1991) noted that volition verbs such as *want, desire,* and *wish* tend to grammaticalize into future makers crosslinguistically. For example, the future *-ta* in Swahili (Bantu) historically derives from the lexical verb *taka* 'want' (see Heine & Kuteva, 2002, p. 378).

Linguists have suggested that the motivation for the semantic-pragmatic change of lexical items can be attributed to metaphorization and metonymization mechanisms (Traugott & Dasher, 2002). For example, metaphorization involves a connection between the more concrete domain of space, as in *Mona is going to the mall* (where she is traversing space in order to be at the mall), to the more abstract domain of time, as in *Mona is going to ask the waiter* (in which she will do something in the future). Metonymization, on the other hand, is a cognitive process in which connections between entities are established through contiguity and association within a conceptual domain. Additionally, grammaticalized items are commonly subject to four universal principles: namely, desemanticization, extension, decategorialization, and erosion. The process of grammaticalization is believed to involve these principles and mechanisms (Bybee et al., 1994; Hopper, 1991, 1996; Hopper & Traugott, 2003).

In Arabic vernacular dialects, APPVs, the motion verb *raħ* 'he went', and the *b*-imperfective are viewed as instances of grammaticalization (Camilleri & Sadler, 2017; Jarad, 2013, 2014, 2015; Ouali & Al Bukhari, 2016; Owens, 2018; Persson, 2008; Al Zahrani, 2015). According to Camilleri and Sadler (2017), posture verbs such as *jaalis* or

qaʕaɪd ‘sitting’ and *gayem* ‘standing’ have grammaticalized into copulas in Tunisian, Emirati, Kuwaiti, Hijazi, Maltese, and Libyan Arabic. Jarad (2015) suggested that the APPV *yālis* ‘sitting’ in Emirati Arabic has grammaticalized into an “auxiliary-like” verb. Additionally, Al Zahrani (2015) argued that the posture verbs *gaʔad* and *Jalis* ‘he sat’ in Hijazi Arabic are inner aspect markers, as discussed in Chapter 2.

The future *b*-imperfective as in *byuktub elwaʤib* ‘he will write the assignment’ is another instance of grammaticalization in Syrian and Gulf Arabic. According to Cowell (2005), Persson (2008), and Owens (2018), the *b*-imperfective is usually prefixed to an imperfective verb and sometimes functions as an indicative mood, progressive or habitual aspect marker in Cairene, Levantine, and Gulf Arabic. However, it is mainly used as a future tense marker in Syrian, Omani, and Gulf Arabic (Brockett, 1985; Jarad 2013).

The grammaticalization of the motion verb *raħ* ‘he went’ into a future marker has been examined in Lebanese and Moroccan Arabic (Ouali & Al Bukhari, 2016) and in Syrian Arabic (Jarad, 2014). Ouali and Al Bukhari (2016) suggested that the future *raħ* is a light verb, while Jarad (2014) viewed *raħ* as a prospective future aspect marker.

As I show in Chapter 2 and throughout the dissertation, some of these analyses lack solid data or evidence to support their arguments. I argue that these analyses do not work for SNA.

1.2 Overview of the problem

Although many linguists have completed outstanding work in the discussion of the grammaticalization of the APPVs (*jaalis* or *qaʕaɪd* ‘sitting’ and *gayem* ‘standing’), the motion verb *raħ* ‘he went’, and the *b*-imperfective, they do not address the question

of how these three grammaticalization elements developed into TMA markers in SNA. Most findings on the grammaticalization of these three elements do not explain their reanalysis or stages of development.

Another problem is that majority of the data in the literature does not entirely involve or explore in detail the aspectual classification or interpretation of the imperfective verbs that are adjacent to the grammaticalized versions of the aforementioned three elements (functional categories) in Arabic or more importantly in SNA. This is important because by investigating the classification and features of the lexical verbs (imperfective verbs), it can help us decide which types of verb class can coexist with grammaticalized functional categories, as discussed in Chapter 3. Moreover, sentences that involve these grammaticalized markers [grammaticalized element + imperfective verbs] are rarely tested in SNA (or in other Arabic dialects) when it comes to valency-changing rules. Diagnosing these grammaticalized contexts is important because it allows us to determine what is a real grammatical marker vs. a lexical marker.

Moreover, previous syntactic representations of APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective do not always hold up well, especially in SNA. For instance, APPVs are sometimes viewed as grammaticalized auxiliaries or copulas, which they are not in SNA. Moreover, perfective posture verbs, such as *jelis/gaʔed* 'he sat' and *qam* 'he stood' are commonly confused with the grammaticalized APPVs and are sometimes viewed as progressive aspect markers. In fact, evidence shows that perfective posture verbs cannot function as progressive markers in SNA or in other Arabic varieties.

There are different views about the grammatical functions of the future *b*-imperfective. For instance, according to some, the *b*-imperfective can generally function as a mood, as a progressive, and as a future tense marker in Arabic (Brockett, 1985; Cowell, 2005; Jarad 2013; Persson, 2008). However, in SNA, this morpheme has only a future (mood) interpretation and never occurs as a progressive marker. Additionally, there is debate over the origins of the *b*-imperfective in Arabic. For instance, some researchers claim that the *b*-imperfective evolved from lexical verbs such as *bada* 'begin', *biwuddi* 'I want', or *yabɣa* 'he wants'. Although all examined sources lead to volitional meanings, it is hard to decide which proposal is correct, since there is no historical or morphological background or description of the reanalysis of the b-imperfective in Arabic or SNA. There is strong morphological evidence that the *b*-imperfective in SNA must have grammaticalized from one volitional source, as discussed in Chapter 4.

There is also debate about the grammatical and syntactic function of the grammaticalized future motion verb *raħ.* As noted above, Ouali and Al Bukhari (2016) regarded *raħ* as a grammaticalized light verb, while Jarad (2014) viewed it as a prospective future marker. These researchers do not address the different forms of *raħ* in Arabic. For instance, *raħ* can occur in three forms: namely, a) as the perfective and imperfective motion verb *raħ,* b) as the active participle verb *rayħ*, and c) as the prospective future particle *raħ*. Usually, these forms are conflated in the literature. For instance, Jarad (2014) considered *raħ* and *rayħ* as grammaticalized future markers in Syrian Arabic, which they are not, as I show in this dissertation. Another problem is some

researchers equate the future *raħ* to the future *b*-imperfective in terms of semantic interpretations; *raħ* and the *b*-imperfective are identical according to them. In fact, there is evidence that SNA *raħ* and the *b*-imperfective are not the same. As I show in Chapter 3, *raħ* is used for planned future decisions and the *b*-imperfective is used for sudden future decisions.

1.3 Purpose of study

This dissertation has three primary goals. The first is to thoroughly evaluate three common instances of grammaticalization in SNA: namely, the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective. Fundamentally, it answers the question of how these elements were reanalyzed as functional categories in SNA. The second is to interrogate the aspectual classification and verb phrase features of the three elements when they are followed by imperfective verb forms in SNA. This is important because it shows that these verbs are sensitive to the lexical aspect of their following verbs. The third is to propose a precise syntactic hierarchy for the three above forms. As I show in Chapter 2, there are some misinterpretations of the syntactic hierarchy of the three elements.

1.4 Researched Language

The language examined in this dissertation is primarily SNA. SNA is one of the major Modern Standard Arabic (MSA) dialects spoken in the Kingdom of Saudi Arabia (Altamimi, 2015). There are nearly 10,000,000 total registered speakers in the Arab world and approximately 8,000,000 live in Saudi Arabia (Ethnologue, 2020). SNA is commonly used in the spoken media in Saudi Arabia and throughout the country,

particularly in the desert region (Ethnologue, 2020). According to Ingham (1994), SNA is regarded by its speakers as a prestigious dialect because it has maintained most of MSA's linguistic features. There are four subdialects of SNA: Central Najdi, which is spoken mainly in the capital city of Riyadh and its surroundings; the Qassimi dialect, which is spoken mainly in Qassim, northern Riyadh city; Badawi Najdi, which is spoken by the tribes of the Najdi region of Saudi Arabia; and Southern Najdi, which is spoken in the southern areas of the Najdi region (see Altamimi, 2015; Ethnologue, 2020). This dissertation, however, focuses on the Central Najdi dialect, which is referred to as SNA throughout this dissertation.

1.5 Theoretical Frameworks

In order to understand the grammaticalization of APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective into functional elements in SNA, I focus on four universal grammaticalization principles and mechanisms in evaluating the aforementioned three forms: namely, desemanticization, extension, decategorialization, and erosion. In describing the stages for the reanalysis of the three elements, I follow Hopper and Traugott's (2003) Cline theory. These frameworks are often used to describe the grammaticalization and development of grammatical forms in a wide spectrum of languages (Bybee et al., 1994; Heine, 2003; Heine & Kuteva, 2005; Hopper & Traugott, 2003), as discussed in detail in Chapter 2. Finally, in providing a syntactic analysis for the above elements, I use Cinque's (1999) and Cinque and Rizzi's (2016) Cartography Program. This approach assigns each

functional category (particles, determiners, prepositions, auxiliaries, etc.) a precise position in the hierarchy. The Cartography Program is described in detail in Chapter 7.

1.6 Scope of Study

The main goal of this dissertation is to discuss the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective in terms of two frameworks: namely, grammaticalization and the Cartography Program. The general assumption in this work is that these forms in SNA behave in much the same way as their English counterparts.

In this dissertation, I present a literature review that looks at the major concepts of grammaticalization, its principles, and its mechanisms, present background information on TMA markers, and discuss related work on other Arabic dialects. The primary concentration of the literature on Arabic is limited to three main criteria: the TMA these verbs have grammaticalized into and the possible explanation for that process, the hypotheses proposed for the changes, and whether the authors discussed the grammaticalized verbs in terms of syntax and what their position was argued to be in the syntax, if they did. The background of the theatrical framework for the syntactic analysis is addressed separately in Chapter 7, with the syntactic analysis of the APPVs, the motion verb *raħ*, and the *b*-imperfective.

Following the literature review, I examine and provide new data collected from SNA native speakers. Using the data, I assess the similarities and differences between SNA and other Arabic dialects. But more importantly, I explore how SNA marks imperfective aspect and future tense, demonstrating how the new aspectual and tense

markers function (e.g., as auxiliaries, modals, aspect, or tense) in SNA. Next, I discuss how the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'went', and the *b*-imperfective are interpreted semantically and pragmatically. Additionally, I analyze how Vendler's (1967) basic classification, Croft's (2012) aspectual categorizations, and Smith's (1997) verb phrase features apply to the grammaticalized APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective in SNA.

After establishing the description of aspectual marking system (the new aspectual and tense marking system) in SNA, I provide a description of the grammaticalization process of the APPVs, the motion verb *raħ*, and the *b*-imperfective. Additionally, I propose a reanalysis of the morphosyntax and morphology of the three cases above. In doing so, I depend on the four universal principles of grammaticalization: namely, desemanticization, extension, decategorialization, and erosion. Next, I propose a description of the different stages of grammaticalization for the reanalysis of the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'went', and the *b*-imperfective.

Finally, I address the syntactic representation for the above three grammaticalized forms. In doing so, I adapt Cinque's (1999) and Cinque and Rizzi's (2016) Cartography Program. Additionally, I draw a syntactic comparison between the three grammaticalized forms and their main sources of grammaticalization.

1.7 Limitations

Examination of APPVs (*jaalis* or *qaʕaɪd* ‘sitting’ and *gayem* ‘standing’), the motion verb *raħ* ‘he went’, and the *b*-imperfective are restricted to the frameworks of grammaticalization and morphosyntactic analysis. Further, this dissertation does not address the historical evolution of the three elements or sociolinguistic theories such as language contact. The focus of this dissertation is SNA, and the majority of the dissertation’s scope is limited to this dialect of Arabic; however, there are some occasions where it is necessary to draw a comparison between SNA, MSA, other Arabic dialects, and other languages such as English in terms of the interpretation of TMA markers.

1.8 Significance of Study

The APPVs, the motion verb *raħ* ‘he went’, and the *b*-imperfective are interesting subjects to examine as each one can carry multiple interpretations that depend on the context they are used in. These interpretations have sometimes been the cause of confusion among linguists. Therefore, it is imperative to clarify these confusions and examine these instances very carefully. Additionally, very few studies have described or investigated the grammaticalization process of the above three forms. For instance, some studies never addressed or discussed their reanalysis process or described their syntactic representation; this is especially true for SNA. Therefore, it is important to have a straightforward explanation of their semantic-pragmatic changes and morphosyntactic functions as lexical verbs vs. functional elements.

1.9 Data

The data is introduced in Chapter 3, which I gathered from SNA native speakers during personal encounters. These encounters included face-to-face meetings, online communication (Twitter, WhatsApp, Facebook, and Zoom), and recording sessions. The data was scrutinized in terms of the grammatical properties and TMA interpretation of the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective. The data is examined syntactically and is also used throughout the dissertation in order to support the findings and provide an understanding of the grammaticalization and reanalysis process of the three forms.

1.10 Organization of the Dissertation

The dissertation is organized as follows. In Chapter 2, I provide a review of the major theoretical approaches (e.g., terminologies, processes, and mechanisms of grammaticalization) and general background information about TMA and highlight some important variation between SNA and other Arabic varieties (Emirati, Syrian, Kuwaiti, etc.) in terms of the uses of the APPVs, the motion verb *raħ*, and the *b*-imperative. In Chapter 3, I provide data collected from SNA native speakers and explore three cases of grammaticalization of TMA markers: namely, the APPVs, the motion verb *raħ* 'he went', and the *b*-imperfective. In Chapters 4-6, I provide a description of the grammaticalization process of the three aforementioned elements and the different stages of grammaticalization for the reanalysis of each grammatical marker. In Chapter 7, I provide a description of the theoretical syntactic framework and a morphosyntactic analysis for

the three grammatical markers in SNA. Chapter 8 concludes with summaries, recommendations, and contributions of the dissertation.

CHAPTER 2

THE GRAMMATICALIZATION CONCEPTUAL FRAMEWORK: THE REANALYSIS OF LEXICAL VERBS

Grammaticalization has played an important role in the evolution of grammatical categories in the languages of the world and has been a central focus for many linguists (e.g., Bybee, Perkins, & Pagliuca, 1994; Heine et al., 1991; Hopper & Traugott 2003; Lehmann 2015). Linguists have identified common pathways of grammaticalization in which future time and progressive aspect markers are created crosslinguistically in interestingly regular ways. These pathways include three types of lexical verbs: posture verbs (*sit, lie,* and *stand*), motion verbs (*come* and *go*), and volition verbs (*want*). This raises a number of questions on how tense, mood, and aspect are also delineated from one language to another.

In this chapter, I explore the concept of grammaticalization, its principles, and its mechanisms. I then present background information about TMA markers. Finally, I discuss related work on other Arabic dialects.

2.1 Grammaticalization

Grammaticalization is the process by which lexical items change from lexical categories to grammatical markers. According to Lehman (2015), this is a gradual process that may or may not end with a specific "degree of grammaticality" (p. 11). In other words, this process is not defined and does not always follow a particular pattern. Hopper and Traugott (2003) defined grammaticalization as "the process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical

functions, and, once grammaticalized, continue to develop new grammatical functions" (p. VX). According to van Gelderen (2011), grammaticalization is "a process whereby lexical items lose phonological weight and semantic specificity and gain grammatical functions" (p. 5). This lexical process is ongoing and continuous, as language is ever-changing (which is the basis of grammaticalization) and it never stops happening. Therefore, grammaticalization is a forward-propelling, linguistic-altering process that causes language to evolve.

It is important to consider that this development, i.e., grammatical change, is unidirectional, progressive, diachronic in nature, and also irreversible (Haspelmath, 1999; Hopper & Traugott, 2003, pp. 99-139). Heine and Kuteva (2005) supported this view: "Grammaticalization is unidirectional: At least 90 percent of all instances of grammatical change can be assumed to be in accordance with principles of grammaticalization" (p. 108). Heine and Kuteva (2005, p. 8) claimed that it is common for motion verbs, such as *go*, to be grammaticalized into a future marker. However, there are no known instances where the future tense marker becomes a lexical item to date. Such cases are usually referred to as degrammaticalization (Heine & Kuteva, 2005).

There are many examples of grammaticalization that I utilize in my analysis. The best examples of lexical items changing into grammatical markers are verbs that are reanalyzed as auxiliaries and prepositions that are reanalyzed as complementizers. For example, the old English *wyllan* 'to want' or 'to wish' developed into the Modern English auxiliary or modal *will*, which sometimes expresses intention of futurity. Similarly, the Middle Greek verb *tʰél* 'want' as in *tʰél hína* 'I want to' was reanalyzed as

the Modern Greek future particle *thelo* (Bybee et al., 1994, pp. 254-256). Another instance of grammaticalization is the reanalysis of the English motion verb *go*, as in 'I'm going to school', into a future auxiliary marker, as in 'I'm going to go to school' (Hopper & Traugott, 2003, pp. 1-3).

Moreover, according to Heine et al. (1991), "Grammaticalization has to be conceived as a panchronic process that presents both a diachronic perspective … and a synchronic perspective" (p. 261). From a synchronic perspective, grammaticalization accounts for the existence of usage of a single form, at a given point in time, and its relative degree of grammaticalization, and assumes that dynamism in language is motivated by semantics and pragmatics (Jarad, 2013). This means that the synchronic structure of a linguistic unit can only be understood in terms of its historical development and is deeply rooted in the path of grammaticalization over time. From a diachronic perspective, grammaticalization sheds light on the evolutionary track of a given form (Jarad, 2013). Crosslinguistically, the transition from lexical to grammatical status or from somewhat grammatical to even more grammatical status follows a predictable conceptual track called a pathway, cline, channel, or chain. The semantic, morphosyntactic, and phonological changes that each lexical item undergoes during its grammaticalization are said to be unidirectional: from content word to grammatical word to clitic to inflectional affix (Hopper & Traugott, 2003, p. 7).

Over the course of one decade, research highlighted generalizations related to the grammaticalization of TMA markers (Heine, 2003). These generalizations can be

detected crosslinguistically (see Heine, 2003, pp. 594-595; Heine & Kuteva, 2002). The observed generalizations are as follows:

1. Imperfective markers and present tense are commonly derived from progressive markers.
2. Perfect (anterior) aspect markers tend to be derived from resultative or completive markers.
3. Modality of epistemic meanings may also be expressed by means of past and future tense markers.
4. Epistemic markers of modality are commonly derived from deontic (agent-oriented) markers of modality.
5. Progressives are frequently derived from location schemas (*X is at Y*), companion schemas (*X is with Y*), and actions (*X does Y*).
6. The main sources for future tenses are volition schemas (*X wants Y*) and motion schemas (*X goes to/comes to Y*).
7. Markers that are completive are frequently derived from verbs meaning 'finish'.
8. Verbs meaning 'turn' or 'return' commonly develop into iterative aspect markers.

The instances of grammaticalization shown in 1-4 involve an existing grammatical category (e.g., progressive) that serves as the source for another grammatical category (e.g., imperfective or present tense). The remaining observed instances involve lexical material (e.g., verbs meaning 'return' or 'finish') developing into a TMA marker.

Hopper and Traugott (2003, p. 101) argued that semantic generality plays an important role in the grammaticalization of a lexical item. According to them, when a highly semantically specified lexical item has a limited distribution, grammaticalization cannot take place as a result of this limited distribution. However, when a lexical item loses its semantic content, the lexical item becomes less restricted in its usage. In other words, it becomes functionally enriched, which happens when metaphor is involved; Traugott and Dasher (2002) proposed this as one of the mechanisms of semantic change.

Traugott and Dasher (2002, pp. 27-34) proposed two major mechanisms that motivate semantic-pragmatic change: metaphorization and metonymization. According to them, metaphorization is an analogical principle, used by speakers to express a concept in an abstract domain by means of a concept from a concrete domain. For instance, the basic idea is that the change takes place from the more concrete domain of space, as in *Mona is going to the mall*, to the more abstract domain of time, as in *Mona is going to ask the waiter*.

Metonymization, on the other hand, involves a cognitive process in which connections between entities are established through contiguity and association within a conceptual domain. According to Wischer (2006, p. 131), metonymical inferences are often involved in the grammaticalization process. Consider the sentence, *Mona is going to the mall*. The verb *go* is employed in its lexical meaning, followed by an adverbial complement that functions as an prepositional phrase, and a motion in progress with a local direction is expressed. In *Mona is going to ask the waiter*, the specific syntactic structure creates an important or critical context that permits pragmatic inference on the

basis of the metonymical relationship (see Diewald, 2002, p. 109). In other words, the syntactic structure of the sentence *Mona is going to ask the waiter* leaves out a reference to the destination of the motion and, instead, refers to the intentional action to be carried out of this destination (*ask the waiter*). In similar usages, speakers attempt to generalize this inference by using *going to* to convey a more general future meaning, even when the original reading is available.

Additionally, the reanalysis of *be going to* is clearer when the use of *be going to* as an auxiliary is analogically extended to contexts where the main lexical meaning is no longer possible, as in *It is going to be a snowy season*. In this case, the pronoun *it* is a dummy pronoun and, as a result, does not refer to an agent of intentional movement. In sum, both metaphoric and metonymic processes trigger inviting inferences; that is, speakers invite inferences that are either related in meaning or in some way related with non-cancellable meanings of the utterances that bear inferences. For instance, the modal verb *will* is derived from *wyllan* in old English, which denoted ‘to desire’, ‘to wish’, or ‘to want’. The commonly used *wyllan* lost its meaning of ‘desire’ or ‘want’ and assumed the meaning of ‘willingness’, and, from there, ‘futurity’. As a result, the future meaning of *will* was inferred from a futurity meaning and, therefore, generalized from the meaning of ‘desire’ to the English future tense marker (Bybee et al., 1994, pp. 254-256).

Once a lexical item splits into two usages, the lexical form keeps its full phonetic form, while the grammaticalized item undergoes phonetic reduction caused by an increase in the frequency of use (see Bybee, 2003, 2007). Consequently, *going to* as a prospective aspect was, over time, phonetically reduced to *gonna* in the process of

grammaticalization (Millar, 2007). However, according to Heine and Kuteva (2007, p. 42), phonetic reduction is neither necessary nor sufficient for grammaticalization.

Given metaphorization and metonymization, it is also imperative to discuss the concepts of the expressions found in a static location (e.g., *sit*, *stand,* and *lie*), as their use is common. Dileep (2000) posited that "the kind of mental constructs and mechanisms that human beings use for reasoning and producing knowledge are mostly based on spatial-like notions" (p. 21). Spatial or static location verbs can potentially extend their use into other contexts or sentence structures.

Lakoff and Johnson (2003) offered two primary sources that work cooperatively to create metaphoric and literal meanings in the expressions of a given language. They are bodily or physical experiences and imaginative projection. That is, once basic forms of posture are realized, they can typically be applied to animate and inanimate objects in both real and intangible instances. Some examples of this are given in Newman (2002): a person *sits* on a chair and the same verb is used to convey that a computer *sits* on a desk. Similarly, dogs, cats, horses, or frogs (i.e., animals with legs) can *sit* in a field the same way that a telephone *sits* in a home. According to Newman (2002), "this extension works better with animals which can assume a position where some part of the body is lowered and in touch with … the ground" (p. 10). Further, cognition extends to another posture verb, *lie*, as snakes (who do not possess legs) can only *lie* on the grass (not sit or stand), just as one would not typically say that a notebook is standing on a dresser unless the notebook is upright. Newman (2002) judged that *stand* is appropriate when an object (animate or not) is supported by legs or *stands* when the object exhibits more

characteristics of standing than of sitting. He continued this allegory, explaining that "in the case of a mouse, it is not obvious whether *sit* or *stand* is appropriate" (due to the distance between legs and ground, raising a question as to which posture is more prevalent; both could be considered acceptable). Likewise, a table has legs that extend to the floor; therefore, it is mostly accepted as *standing* (although a *sitting* table in a kitchen is also possible). A mattress, to further exemplify the difficulty in grammaticalizing the principle of posture verbs as metaphors, cognitively speaking, could *sit* or *lie*; it could *stand* in a room only if it is upright. Newman (2002) posited that *lying* may be most appropriate, as the action most closely related to the mattress (lying down) extends to the action of the inanimate object. *Lying* is also most appropriate as the mattress has no feet on which to stand, nor a lower torso it can relax while maintaining an upper torso, as a person/animal would.

Given these instances, the contextual relevancy to spatial orientation allows for the expression of static location, which works by correlating postures to animate and inanimate objects in order to aid in the comprehension of a metaphor in a given language, since posture verbs are readily understood and extendable to nearly every noun that refers to an entity (Newman, 2002). Newman (2002) further claimed that the use of posture verbs to express the location or spatial configuration of inanimate objects can sometimes be considered to be a metaphorical extension of the posture verb forms to express animate posture. This comes as a direct result of a shift from a more lexical to a more grammatical meaning.

The ability for languages to extend posture verbs' meanings is widely varied, and their metaphors are exquisitely developed in many indigenous languages of the Americas. For example, in Euchee (aka Yuchi, an Indigenous isolate language of North America), a three-way gender system has been formed on the basis of the morphemes *ji* 'sit/stay', *fa* 'stand', and *ʔe* 'lie' (Newman 2002). Typically, these forms function as articles when they occur with singular inanimate nouns, but they do not occur with animate nouns, as Newman (2002, p. 11) noted and is demonstrated in Table 2.1 below.

Table 2.1

Euchee Articles and their Representation

ǰi 'sit' class	*fa* 'stand' class	*ʔe* 'lie' class
yastadekʔôǰi 'the chair'	*yafa* 'the tree'	*yaʔe* 'the log'
tiǰi 'the rock'	*yufa* 'the house'	*sʔaʔe* 'the field'
cetapaxǰi 'my strength'	*cewonefa* 'my spirit'	*ceʔeêʔe* 'the rain'
ditaxǰi 'my heart'	*dicifa* 'my eye'	*howedenefʔe* 'their language'

The issue of animate versus inanimate nouns in Newman's work seems simplified in the classifications found in Euchee, as the language provides sub-classifications "according to categories of tribal affiliation, kinship, and gender" (Newman, 2002, p. 11). I use the term "simplified" in this instance rather than "complicated" because Euchee provides clarification so that one is not obligated to imagine the extension of grammar in metaphor form, but instead can rely on the grammaticalization in the lexicalization of morphemes to do the heavy lifting.

In the same vein as the examples listed in Newman's (2002, p. 11) Table 2.1 above, there are many incidences of metaphor at play using posture verbs that require a cognitive realization in the grammar of a language to fully understand idioms and other

figures of speech. For example, auxiliaries are not required in all languages, but posture verbs can be used "as auxiliaries which simultaneously classify a subject referent in terms of posture as well as functioning in (TMA) marker" (Newman 2002, p. 12). An example of Mbay (Bongo-Bagirmi language spoken in Chad and the Central African Republic) is provided by Newman (2002), who explained that verbs such as *ndi* 'sit', *da* 'stand', or *tò* 'lie' directly preceding a verb function as progressive aspect markers. Furthermore, Tunica (an Indigenous isolate language of North America) has the posture verbs *-na* 'sit' and *-ra* 'lie', which, when used as auxiliaries in conjunction with a main verb, can be used as a continuous or incomplete aspect and also have "a postural meaning" (Newman 2002, p. 13). The concept of grammaticalization is most prevalent in these instances above as "the posture verbs may develop TMA meanings without any trace of the original postural meaning" (Newman 2002, p. 14). Therefore, many of Newman's (2002) ideas of grammatical comprehension help us understand how different languages use static location or postural verbs.

There is agreement among researchers that the posture verbs are progressive markers in pseudocoordination construction (Bybee, 1994; Ebert, 2005; Heine, 2003, pp. 594-595; Heine & Kuteva, 2002; Tonne, 2001; Wiklund, 2007). Now an important question can be addressed: how can a posture verb (e.g., *ndi* 'sit') be reanalyzed as a progressive marker? In answering this question, Bybee et al. (1994, p. 133) suggested that the original function of the progressive is to give the location of an agent as in the midst of an activity (see Bybee et al., 1994; Comrie, 1976; Heine et al., 1991; Heine, et al., 1991; Heine & Kuteva, 2002). Bybee et al. (1994) proposed a construction for the

sematic changes in development of the progressive and stated that these changes are "gradual erosions of the original, fuller meaning of the construction" (p. 136). It is used for activities involving a specific location for the subject and the activity at the same time and construction containing, either implicitly or explicitly, the following component of meaning, as shown in (1).

(1) a. an agent
b. is located spatially
c. in the midst of
d. an activity
e. at reference time

Thus, if *Anthony* as an "agent" is building, *Anthony* is considered as being located in the midst of building something. This means that ongoing activities are formed as locations wherein agents find themselves. See (2) below.

(2) Anthony is in the midst of building a tree house.

Bybee et al. (1994, pp. 127-137) considered location to be an essential semantic element of progressive markers. Consequently, posture verbs express positions where the agent is located or situated. The change from posture verb to progressive aspect marker can be attributed to the unidirectional shift from the more concrete domain of space to the more abstract domain of verbal aspect. This phenomenon might be a leading cause for posture verbs to develop into progressive markers crosslinguistically. According to Heine, Claudi, and Hünnemeyer (1991), the development of posture verbs into progressive markers may engage a metaphorical process whereby the abstract meaning of the durative/progressive aspect is conceptualized in the essence of the concrete lexical meaning of the posture verbs.

To summarize, static location, such as that provided by posture verbs, works differently in every language, but is based on the assumption that speakers and hearers can extend literal meanings to metaphorical meanings. The use of auxiliaries differs widely across languages, and these expressions do not fit into a one-size-fits-all category. Knowledge of static location helps us understand cognitive grammatical markers because the basic units of language, such as posture verbs, are more often than not symbols of other semantic conveyances, initiating a world of idioms, metaphors, and sayings that would otherwise merit an unimaginative world of language and would essentially be taking away a part of what makes us human.

2.2 Mechanisms and Principles of Grammaticalization

In §2.1, I noted that grammaticalization is both a synchronic and diachronic phenomenon in which lexical items are reanalyzed: e.g., posture verbs (*sit*, *stand*, *lay*, and *go*) are reanalyzed as progressive markers, volition verbs (e.g., *want* and *desire*) are reanalyzed as future markers, and action verbs (e.g., *do*) are reanalyzed as auxiliaries markers or modal auxiliaries *have to* or *have got to* (see Bybee, Pagliuca, & Perkins, 1991, 1994; Heine et al., 1991). Linguists have noted that the process of grammaticalization involves universal mechanisms and principles of language change, including desemanticization, extension, decategorialization (decategorization), and erosion (Bybee et al., 1994; Heine, 2003, p. 579; Heine & Kuteva, 2002, p. 2, 2005, pp. 15, 43, 2007, p. 33; Hopper, 1991, 1996; Hopper & Traugott 2003). These four grammaticalization principles reflect the components of grammar. For example,

desemanticization relates to semantics, decategorialization relates to morphosyntax, extension relates to pragmatics, and erosion relates to phonetics.

Grammaticalization starts when a construction is frequently used in contexts that give rise to a particular inference that, as a result, becomes conventionalized as part of the lexical meaning of the associated construction. At this stage, the construction undergoes *desemanticization.* Desemanticization (also known as *semantic bleaching*) is understood as semantic reduction or a loss of semantic content. This principle can be briefly described as a transition from a more lexical to a more grammatical meaning. The second principle, *extension,* is viewed as the use of a linguistic item in new contexts where it could not be used previously.

The third principle, *decategorialization*, pertains to the fact that, as a unit that undergoes grammaticalization, it loses the categorical features of the lexical category of which it was formerly a part. It is also known as the "loss of discourse autonomy" (Hopper 1991, p. 30). For instance, when verbs are reanalyzed as auxiliaries, they lose their argument structure; when nouns are reanalyzed as determiners, they lose their inherent descriptive content. When a lexical verb undergoes the grammaticalization process, it is anticipated that their grammatical properties (e.g., syntactic selection and ability to undergo valency-changing rules) will change.

Valency refers to the number of arguments that a verb can take. There are four common types of valency: valent (zero argument: *rain*, *snow*), monovalent (one argument: *sing, run, grow*), bivalent (two argument: *read, watch, drink*), and trivalent

(three arguments: *give, past, bring*). There are two methods for changing the valency of a predicate: reducing valency and increasing valency.

Reducing/decreasing valency is a process in which the number of arguments required by a given verb (predicate) is reduced. There are two common devices for reducing the valency of a verb. One is known as passivization (which results in the passive voice), which adds a morpheme, for instance *-ed*, to the verb and removes the AGENT argument, so that only the PATIENT remains. So instead of saying *Mona watches the cat*, we can passivize it and say *The cat is (being) watched*. On the other hand, with antipassivization, the second device, the AGENT is the focus and the PATIENT is removed, as in *Mona watches*.

The second method of changing the valency of a given verb is increasing the valency. Valency increasing adds arguments to verbs. There are two routes to increasing verb valency. The first route is causativization. Usually, this involves adding a causer NP: for example, *The mechanic pushed the car down the hill* (the mechanic caused the car to go down the hill). The second route is by adding an applicative; applicatives are similar to causatives except that they add an object argument, as in *The chef made Mansour a cake.*

The fourth and final principle is *erosion.* This principle refers to the loss of phonetic information. For instance, when a lexical item splits into two usages, the lexical form retains its full phonetic structure, while the grammaticalized item undergoes phonetic reduction. For example, this can be seen in the grammaticalization process of the future marker *going to* > *gonna.* Heine and Kuteva (2007, p. 42) noted that

"phonological reduction" is commonly understood to be the last phenomenon to occur in the grammaticalization process.

It is worth noting that the process of grammaticalization, which changes lexical items into grammatical ones, has been described as a cline (see Andersen, 2001; Hopper & Traugott, 2003, pp. 6-7). According to Hopper and Traugott (2003, p. 6), the change from lexical to grammatical is not expected to be smooth or sudden; rather, it is expected to undergo a series of small transitions (from one category to another). For instance, one cannot expect a lexical aspect to grammaticalize abruptly into grammatical aspect without going through a "path" or experience a rest stop in the grammaticalization process. An example of the process of a cline involves the English noun *back:* a term referring to a human body part over time developed to express a spatial relationship, as in *at the back of the restaurant*, to an adverb, and possibly developing into a prepositional phrase or affix (Hopper & Traugout, 2003). Although there might be disagreement among linguists on how many paths a grammaticalized item might face during the grammaticalization process, linguists agree on the "cline grammaticality," as schematized by Hopper and Traugott (2003, p. 7) below:

(3) lexical item → grammatical word → clitic → inflectional affix

In sum, when lexical verbs are grammaticalized, they eventually end up as TMA markers. In the following section, I provide a brief background about TMA terminologies and provide examples of them.

2.3. An Overview of TMA

2.3.1 Tense

In drawing a comparison between tense and aspect, Bhat (1999) described "tense as involving a distinction in the time that contains the event and aspect as involving a distinction in the time that is contained in the event" (p. 93). Tense differs from aspect in that it focuses on a specific point or event at one given time, not over a course of time or for the duration of an activity. Tense, according to Comrie (1985), is "the grammaticalization of location in time" (p. vii), which is achieved lexically, morphologically, or by means of composite expressions (p. 10). One way of indicating when an event/state has occurred is to add a morpheme to an existing word or to employ adverbials of time. In English, for example, the "normal" way (if there is such a thing) to indicate that an event has taken place in the past is to suffix *-ed* or *-t* (depending on the verb) to the verb. One example of this can be seen in the word *talk*. If someone *talk**ed*** (*talk* + *ed*) to you last Thursday, the talking occurred in the past, as in a one-time occurrence; the *-ed* indicates that this only happened in one (relevant) instance before the present time.

There are typically three relevant constraints in defining tense and identifying tense distinctions: the location of the deictic center, the location of the situation concerning the deictic center (i.e., prior to, following, or concurrent with the deictic center), and the distance in time at which the situation referred to is located from the deictic center. The idea of time, which is enough for an account of tense in human

language (including all time-location distinctions found in natural language), is represented in Figure 1 below.

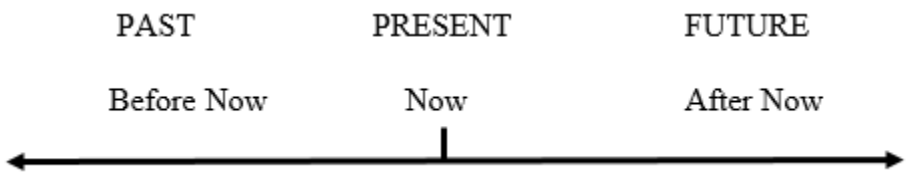


Figure 1. Model of time in natural language.

Figure 1 describes three time points. The past describes a point in time that occurred before now, as in the point in time when *Mansour broke the window*. The present tense describes the moment of speech, now, as in the point in time when *Mansour is driving a red car*. The future tense describes a point in time that will occur sometime after the moment of speech, as in the point in time when *Mansour will arrive at 6 p.m.*

2.3.2 Aspect

Comrie (1976), Bybee (2003), and Abraham and Leiss (2008) argued that aspect is a perspective through which a given situation can be seen in time. Comrie (1976) suggested that aspect is a universal semantic category that focuses on "viewing the internal temporal constituency of a situation" (p. 3). This means that aspect deals with describing the temporal distribution of an event (process, state, or activity), including its duration, completion, inception, recurrence, etc.

Although aspectual markers are universal, their appearance in languages varies. For example, some aspectual markers are not required to be overtly morphologically marked, as in the progressive aspect. Dahl (1985, p. 90) claimed that few languages encode morphologically progressive or durative categories. In other words, some

languages do not encode durativity or progressivity on the verb. Therefore, languages or language varieties have developed unique lexical entries to express aspectual markers like the progressive and prospective in SNA, which are discussed in detail in Chapter 3.

There are two types of aspect: lexical and grammatical. According to Filip (2012, p. 721), lexical aspect is a semantic category that refers to the temporal characteristics of verbs and the verbal meaning of predicates. Grammatical aspect, on the other hand, refers to the morphosyntactic marking of aspectual categories. Lexical aspect is also referred to as *Aktionsart* (Smith 1997, p. 3) or situation (Bybee et al., 1994, p. 55).

Grammatical aspect has two main categories: perfective and imperfective (Comrie 1976; p. 25), as demonstrated below in Figure 2. Crosslinguistically, the opposition between perfective and imperfective aspect is the one of the most crucial aspectual distinctions encoded in natural language. Comrie (1976) distinguishes between perfective and imperfective aspect:

> The perfective looks at the situation from outside, without necessarily distinguishing any of the internal structure of the situation, whereas the imperfective aspect looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation. (p. 4)

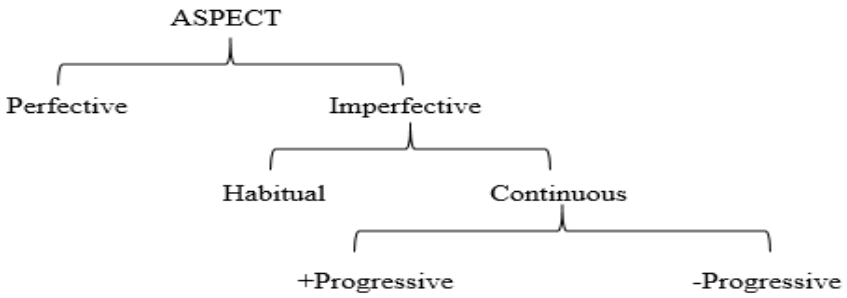


Figure 2. Comrie's aspectual oppositions between the perfective and imperfective

Perfective aspect presents the situation from an external perspective, often as complete, whereas imperfective aspect presents the situation from an internal viewpoint, often as habitual or continuous (+/-progressive). An example of this can be seen in *John was eating his lunch, but he didn't finish it.* In this example, the imperfective aspect expresses the fact that an event took place without giving any indication about its completeness or endpoint. In contrast, perfective aspect views the event as a whole, disregarding the internal structure of the situation. Therefore, perfective indicates that the event was in progress at a certain point in time. However, it does not indicate if the event has been finished or completed at any specific time in the past.

Vendler (1967, pp. 97-121) suggested a helpful classification of verbs (i.e., lexical aspect). He divided verbal predicates into four classes based on their time schema (see also Binnick 1991, p. 172; Croft 2012, pp. 33-45; Dowty 1979; Rothstein 2004; Smith 1997): statives, activities, accomplishment, and achievements. Stative predicates "are static, without no [*sic*] dynamic and no internal structure; they have duration of at least a moment" Smith (1997, p. 28). Activity predicates consist of successive phrases with one following another over time and do not have a set terminal point or endpoint: their processes are ongoing and must be homogenous and identical. Accomplishment predicates describe durative events that are telic or have a natural endpoint. Unlike activities, accomplishments are neither homogenous nor identical. Moreover, accomplishments refer to the entire duration of an event, not just a single point. Finally, achievement predicates are "instantaneous changes of states, with an outcome of a new state" Smith (1997, p. 28). Smith (1997, p. 3) extends Vendler's categorization to include

features of verb phrases, namely +/-telic, +/-durative, and +/-dynamic. Table 2.2 below illustrates Vendler's four classes, alongside Smith's features of verb phrases, with examples.

Table 2.2

Vendler's Aspectual Categorizations and Smith's Verb Phrase Features

Aspectual Class	Verb Phrase	Temporal Verb Phrase Features ±Durative	±Dynamic	Telic
Statives	*want, love, be happy, hate, know/believe, intend, fear, etc.*	+	-	-
Activities	*run, walk, swim, push a car, drive a car, etc.*	+	+	-
Accomplishments	*deliver a sermon, recover from illness, walk to school, run a mile, paint a picture, grow up, build a house, etc.*	+	+	+
Achievements	*stop/start/resume, recognize, find, lose, win the race, be born/die, spot, reach, win, etc.*	-	+	+

Verbal predicates are expected to fall into one of Vendler's classes, according to whether or not they have the features (e.g., telic, durative, and dynamic) suggested by Smith (1997, p. 3). Statives are telic and durative, but not dynamic. Activities have duration and are dynamic, but are not telic. Achievements are telic and dynamic, but are

not durative. Accomplishments are durative, dynamic, and telic, and consist of an outcome and process. Consider examples (4)-(7).

(4) *States*
   a. Mona knows the secret.
   b. John wants his car.

(5) *Activities*
   a. John was playing football.
   b. Sam was eating a burger and French fries.

(6) *Accomplishments*
   a. Mona and Mansour were drawing a picture.
   b. Tom was delivering a message.

(7) *Achievements*
   a. The contestants reached the top.
   b. Mark died.

While Vendler's verb categorizations are a beneficial tool for aspectual classification, it has been criticized. For example, Croft (2012, pp. 22-45) criticized Vendler's approach to verb categorization as basic and needing to be expanded. Croft presented several issues with Vendler's approach to verb categorization. Overall, Croft saw Vendler's views as inadequate because Vendler did not adhere to any universally accepted stance concerning verb categorizations and their definitions. While this may seem more of an issue at large than one that Croft had with Vendler's approach, Vendler did not apply any one singular definition to his verb categories. For instance, the claim that a verb phrase belongs to only one class is inaccurate. This is evidenced by the fact that other words in the same sentence (i.e., prepositions, adverbials, particles, etc.) can influence how the verb is used in different situation types, and the speaker's meaning cannot always be assumed.

One problem Croft outlined is the fact that the present tense can carry various meanings. For instance, the English simple present tense can be used for something other than a present time reference, including the future (Croft, 2012). An example of this can be seen in sentences such as *Juliet loves Romeo* (present) but *I leave tomorrow* (future). The future is described by Croft (2012) as having "confusing conceptual and grammatical categories" (p. 34). Croft suggested replacing grammatical terms like *perfective* and *imperfective* with conceptual semantic categories in order to avoid confusion. Croft's solution aimed to avoid synonymy and ambiguity in terminology, another problem seen in Vendler's approach.

Moreover, the classification of verbs into four categories is another problem Croft (2012) noted regarding Vendler (1967). Croft did not seem to take issue with the fact that tests are used to determine the categorical classifications; this is the methodology used by most linguists. However, the tests are inconclusive and ambiguous and depend on how grammatical the answer is. For example, to determine the stative/dynamic quality of a verb, Vendler's typical question is *What are you doing?* The answer could be *I am running* or **I am knowing it.* On this approach, Vendler tried to determine "at what moment…*"* instead of "how long…" The answer **I am knowing it* is odd for most varieties of English, but the equivalent would be acceptable in some other languages (e.g., Slavic languages, like Russian). While it may not be perfectly grammatical, the point of the statement is conveyed. A better example would be *At what moment did you spot the plane?* or **For how long did you spot the plane?* To Vendler, the latter ungrammatical sentence is not as bad as the former sentence, but it at least helps one

determine that the verb *spot* is an achievement. Now both "two o'clock" and "for fifteen minutes" are acceptable answers for the previous question, thus solidifying Croft's view that there is too much leniency and ambiguity in Vendler's approach.

Additionally, Croft (pp. 34-36) cited Vendler's test used to distinguish states from processes in simple present tense. The answers to the questions posed in those tests are invariably ambiguous as to the intent of meaning. For example, *Do you know Angela?* and *Do you swim?* both elicit the same type of answer in this test (such as *Yes, I know Angela*, and *Yes, I do*), although the two answers could indicate a state or process and it is not clear which answer is which.

Another instance of ambiguity Croft found in Vendler's approach involves the terms *see* and *know*. These words are described and viewed as having two separate senses by Vendler, yet Croft noted problems with this idea. In Vendler's eyes, the two senses of the words are dependent on their grammatical context. *To see* and *to know* in English both correlate to "perception and cognition predicates in general" and can be identified as either a state or achievement (Croft, 2012, p. 38). One can know how to do something or know the answer or know an acquaintance; hence, the knowledge of action versus the knowledge of a random person.

Simple present tense and simple past tense further complicate the process of determining whether verbs are states or achievements on Vendler's approach. This problem arises again with disposition predicates (*be careful*, for example). One can always be careful, as in *Joe is careful when it comes to money* (state). Yet, in a different example, *Joe is being careful of the electrical wires* is an activity.

Nearly all linguistic claims and theories have had their fair share of questioning and addendums, but Vendler's classification and categorization has resulted in seemingly endless alterations and additions. Predicates, as Croft showed, are notoriously ambiguous and thus do not adhere to a basic four-category structure as put forth by Vendler. Croft (p. 44) laid out an updated and more detailed classification system for predicates. The six basic categories listed by Croft are more clearly defined and possess more sub-categorizations than Vendler's initial approach, encompassing a vast variety of verbs and predicates than would have fit in the previous classification system. Croft's categorization attempted to be more inclusive regarding where the assumptions and intentions of the verb class, avoiding much ambiguity. Croft's solution to Vendler's lack of clarification in categorization is as follows:

a) Four types of states: inherent (permanent) state, acquired permanent state, transitory state, and point state (the last could be seen as a subtype of transitory state)
b) Two types of activities: directed activity and undirected activity
c) Two types of achievements: reversible achievement and irreversible achievement
d) Accomplishments
e) Cyclic achievements (semelfactives)
f) Run up achievements; not punctual like other achievements, but not incremental like Vendlerian accomplishments. (Croft, 2012, p. 44)

For our purposes, the verb classifications offered by Vendler and Croft will serve as a point of reference for this work. In other words, they are beneficial tools for

aspectual classification in SNA, as they will help us determine what type of verb class can co-occur with (or follow) posture verbs, the motion verb *raħ*, and the *b*-imperfective.

2.3.3 Mood and Modality

Mood is traditionally expressed via verbal morphology (Barbiers et al., 2002; Bybee & Fleischman, 1995; Palmer, 2001; Portner, 2009). According to van Gelderen (2017), "Mood adds the speaker's perspective on the sentence, e.g. if the event is likely or not" (p. 104). Adverbs, such as *likely* or *probably*, and auxiliaries can be used to express mood (van Gelderen, 2017). Mood is, therefore, the tone (attitude) of the verb in a sentence and adds clarity in the speaker's or the writer's intention.

There are three main types of mood (Palmer, 2001). The first is indicative mood, which is said to be unmarked and is normally expressed by the base form of the word (Palmer, 2001, p. 64). Indicative mood also has properties of standard inflection and has a paradigm of tense. Indicative mood is usually seen in the present (i.e., *He lives most of the year in Tempe but returns regularly to visit his ill father*) or past tense (i.e., *I saw something today that really annoyed me*) and has an essentially unaltered word form. Indicative mood is an indicator of expressions of fact, opinion, assertion, or question (Palmer, 2001). One example of this type of mood is the verb *taste*. For instance, *I think ice cream tastes good on a hot summer day* conveys the opinion (or fact) of the speaker and is in the present tense, but so does a sentence presenting a fact, as in *Tempe is where Arizona State University's campus is located*.

It is typically in the indicative mood where examples of realis or irrealis can be found. This is notable in cases where there is a known state of affairs or a declarative

sentence is used (Palmer, 2001), such as in the examples *He studies* and *It is necessary that he studies*. In the example of *He studies*, the verb *studies* is in the present indicative realis form of the verb. This verb is used to make a direct assertion of the real world that the student is actually in the process of studying. The second realization of the sentence is *It is necessary that he study*, and *study* is irrealis. It is irrealis because, while it may be necessary that the student studies, we do not know for a fact that he is in the process of studying. The student could be rejecting the necessity to study, could be doing something else, or could be involved in any number of other possibilities. In this instance, the sentence *It is necessary that he study* merely indicates the most desirable outcome of the student's affairs. Also it is a requirement according to some set of rules.

Next is the subjunctive, which is sometimes employed to explore imaginary and conditional situations. Like the indicative, subjunctive can be either realis or irrealis. According to Guan (2012, p. 170), subjunctive mood is typically used in subordinate clauses to express an action that has not yet taken place and usually comes in the form of possibility, wish, necessity, etc. An example of this is in the case where the absence of a third person singular marker creates a new form; this form is the subjunctive. For instance, in *If I were in Math class, I would be bored*, the verb *were* is the subjunctive form of *be* and expresses a wish for something to be true or is an expression of something contrary to what actually *is*.

The third kind of mood is imperative mood. Imperative mood is used to express commands (Palmer, 2001). One way to identify imperative mood is to ascertain whether

there is an implied/understood *you* in the utterance. Examples of imperative utterance include sentences like *Go to your room!* or *Put the groceries away*.

A final, more minor, mood exhibited often in English is the formulaic mood. This mood is most commonly used in sweeping statements like as in *I promise you, Mona, that next time I shall stay, Come what may*; this statement is rarely used as a direct command, unlike the other moods.

Modality is a term or function that goes alongside mood very well. In contrast to mood and according to the Cambridge dictionary (2019),

> Modality is about a speaker's or a writer's attitude towards the world. A speaker or writer can express certainty, possibility, willingness, obligation, necessity, and ability by using modal words and expressions. (para. 1).

There are three main types of modality: dynamic, deontic, and epistemic (Palmer, 2001). Dynamic modality is generally centered on an individual's ability and willingness, and is most commonly expressed by the auxiliary modals *can* and *will* (Palmer, 2001). A simple example is *Mona can walk*. What is meant here is that Mona has the ability to walk, not necessarily that she needs to or has the desire to do so. A synonymous sentence is *Mona is able to walk*. Examples of dynamic willingness can be seen in sentences such as *Steven won't pass the salt since he isn't talking to me* or *Mansour will help you*. Both *won't* and *will* have dynamic intention meanings, as in 'Steve had no intention to pass the salt' and 'Mansour intends to help you.'

Modal verbs are often more strongly defined by co-occurring non-verbal lexical categories, like nouns, adjectives, and adverbs, i.e., *She certainly can't run if she can't*

walk. On the other hand, deontic modality differs from dynamic modality in that it conveys duty (i.e., *Steve has to deliver the package early in the morning*), obligation (i.e., *You must finish eating your meal!*), necessity (i.e., *Mona should drive under the speed limit in order to avoid a speeding ticket*), or permission (i.e., *You can sit here if you wish*). The modal auxiliary *can* is a versatile auxiliary and can be used deontically. In speech acts, the most important types of deontic modality appear to be commissive and directive (Palmer, 2001, pp. 71-73), especially in speech acts where we commit ourselves to do something or where we ask someone to do something. Moreover, deontic modals vary in strength when expressing permission or obligation (Winiharti, 2012, p. 537). These modals are either strong or weak (i.e., weak/strong permission or strong/weak obligation), as in the case of *must* and *should*. *Must* is a strong deontic modal and *should* is a weak deontic modal: *You must finish your meal* (strong obligation) and *You should phone him later* (weak obligation). As far as permission is concerned, we have two types: strong and weak permission, which can be delineated respectively with *can* and *might*. While *can* expresses strong permission, as in the example *You can have these apples for free*, the modal verb *might*, on the other hand, expresses weak permission, as in *You might have these apples for free*.

Finally, epistemic modality exemplifies understanding or judgment about the factual status of a proposition or comprehension of an utterance (Palmer, 2001). Examples include *He may be sick* (there is a possibility that he is sick) and *He must get better at soccer* (there is a need for him to improve). Another example still is the more

elusive *That'll be my mom calling* in which *will* signifies that there is a probability that my mother is on the other end of the ringing phone.

In short, mood is realized by a particular grammatical feature of verb form, whereas modality is realized syntactically by means modal auxiliaries (in English). Mood and modality are like tense and aspect, in that they are similar yet vastly different. Having a clear understanding about the differences between mood and modality is relevant to our examination, as it will serve us in deciding the morphosyntactic functionality of each grammaticalized item in the proceeding chapters.

2.4 The Grammaticalization of Lexical Verbs in Arabic Dialects

In this section, I highlight the research on different Arabic dialects, with a particular focus on posture verbs, the motion verb *raħ*, and the *b*-imperative. When reading sources, I used three main criteria: the aspect these verbs have grammaticalized into and the possible explanation for that process, the hypotheses proposed for the changes, and if the authors discussed the grammaticalized verbs in terms of syntax and what their positions were argued to be in the syntax. I underline the gap that exists in the research. I highlight the unaddressed instances and unsustainable claims or hypotheses that have been suggested for the grammaticalization of the three types of aforementioned verb types.

2.4.1 Posture verbs

According to Jarad (2015), verbs that indicate certain postural positions (*sit, stand, lie*) can transform into progressive aspect when an imperfective verb follows them, as in Emirati Arabic. Crosslinguistically, progressive constructions originate from

locative constructions when the agent is portrayed as being in the middle of participating in an activity (Jarad, 2015). Jarad (2015) described the Emirati Arabic active participle *yālis* 'sitting' as an auxiliary verb. He claimed that this is as a result of grammaticalization, explaining that the participle has become desemanticized (bleached), extended, and decategorizalized. Jarad (2105) provided many examples from Emirati Arabic, including (8), which suggests both semantic and morphosyntactic lexical alterations, while keeping the phonetic content. According to Jarad (2015), *Jalasa* is the equivalent of 'sat' in Standard Arabic. *Jalasa* has grammaticalized in Emirati Arabic to *yilas* (some phonetic change that has occurred with this realization, as /ʤ/ became /y/ in Emirati Arabic).

(8) l-banšar-ji **yālis** yi-ṣalliḥ t-twāyir
the-puncture-man PROG.3P.SG.M he-repair the-tires
'The tire repairman is repairing the tires.' (Jarad, 2015, p. 101)

The posture verb *yilas* is one of the cardinal posture verbs, originally indicating the position of the subject. It is therefore stative. Furthermore, the posture verb *yālis* agrees with its proceeding imperfective verb (*yiṣalliḥ*). Due to the linguistic cycle, this stative verb has grammaticalized into a progressive aspect marker and has been reanalyzed as grammatical aspect (Jarad, 2015), as in (9).

(9) a. moza **yāls**-a ti-l'ab wiyya ribī'a-ta
Moza PROG-3P.SG.F she-play with friend-her
'Mosa is playing with her friend' (Jarad, 2015, p. 104)

b. kint **yālis** i-dris yom 'omar farr l-ḥaṣa
was-I PROG.3P.SG.M I-stud when Omar threw the-stone
'a-d-drīša
on-the-window
'I was studying when Omar threw the stone against the window.'
(Jarad, 2015, p. 104)

In (9), *yilas* expresses progressive action (Jarad, 2015), even when it co-occurs with the perfective tense marker (*kint* 'I was'). The active participle in (9b) indicates that two actions occurred in the past; one was in progress and the other is complete. This is translated as *I was studying when Omar threw the stone at the window.*

Jarad (2015) examined the active participle *yālis* using Vendler's verb classification (stative, activity, accomplishment, and achievement). He concluded that activity, accomplishment, and achievement verbs are compatible with *yālis* and that stative verbs are incompatible with *yālis*. He suggested that the Emirati Arabic active participle *yālis* 'sitting' functions like an auxiliary.

Jarad (2015) argued that the grammaticalization of *yālis* involved a metaphorical extension of the original meaning from the cognitive domain of space, or bodily action, to the abstract domain of time, a progressive aspect marker. Following Heine et al. (1991), Jarad (2015) proposed two stages involving the development of *yālis* from a locative (or bodily posture verb) to an abstract progressive aspect. Jarad describes these two stages as follows:

(10) Stage I: bodily posture (locativity) = stative
Stage II: progressivity = residually locative, durative, or progressive (Jarad, 2015)

According to Jarad (2015) and Bertinetto et al. (2000, p. 539), locative constructions express stative meanings, which implies that the meaning of the progressive was that of being in a state. In stage I, the locative verb does not function as an auxiliary, but is rather a lexical verb followed by a complement (intransitive verb + complement). At some point, the lexical verb is reanalyzed as an auxiliary verb, while the complement

acquires the status of the main verb (*sit* + imperfective verb/*eating*). In Stage II, the posture verb *yālis* becomes an auxiliary followed by a main verb (grammatical marker + main verb). This stage represents the initial stage of grammaticalization (Jarad, 2015). Jarad (2015), however, did not discuss the inflection (e.g., number, gender, person) on the posture verb *yalis* 'sit' or the imperfective verb that follows it. Also, he did not discuss or suggest any syntactic position for *yalis*.

Al Zahrani (2015) examined Hijazi Arabic posture verbs, focusing on three points: a) the usage of the posture verbs *gaʔad*/*Jalis* 'sitting' by describing their aspectual element expressing progressivity, b) the way that inflection is morphologically encoded on the posture verbs to differentiate habitual and progressive interpretations, and c) the explanation of morphosyntactic properties of *gaʔad*/*Jalis* and their interactions with functional categories in the syntax. In other words, what is *gaʔad*/*Jalis*'s position in the syntax? An example of *Jalis* in Hijazi is given in (11).

(11) **Jaalis** y-isbaħ
AKT.3SG.M IMPF.3SG.M-swim
'He is swimming.' (Al Zahrani, 2015, p. 62)

To investigate the syntactic properties of the Hijazi *gaʔad*/*Jalis*, Al Zahrani followed Chomsky's (1981, 1986) Principles and Parameters. He argued that the posture verbs *gaʔad* and *jalis* occupy what he calls the "Aktionsarten Phrase" (AktP), which is located between TP and AspP, which he refers to as TaxAspP.[1]

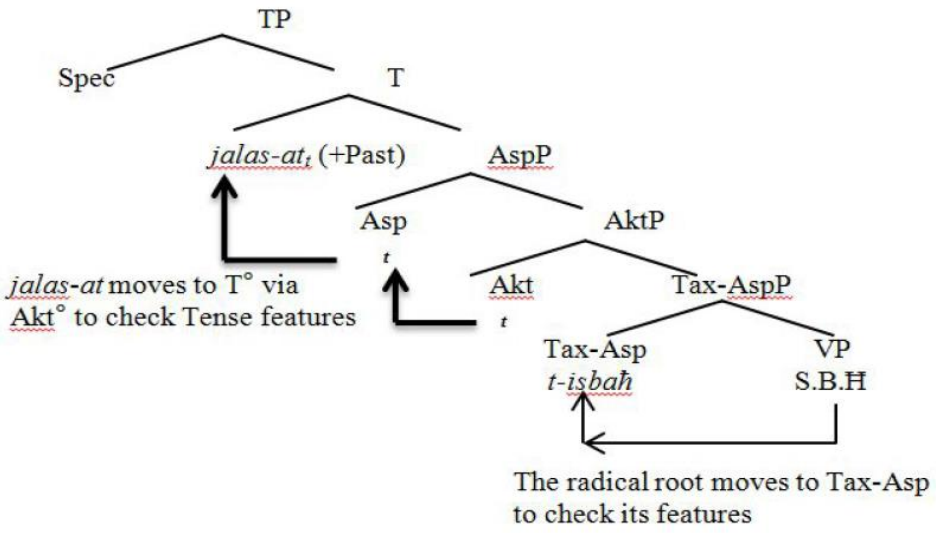
[1] Al Zahrani (2015) adapted the functional head TaxAsp^{o} from Bahloul (1994, 2008) for his framework. On this theory, the head occupies a position between the functional heads of Tense (TP) and TaxAspect (TaxAspP), while at the same time interacting with multiple functional categories across the hierarchy.

Contrary to Jarad (2015), Al Zahrani claimed that *gaʔad* and *Jalis* are lexical aspect. He also argued that, when the posture verbs *gaʔad/Jalis* are perfective and are followed by an imperfective verb (perfective verb + imperfective verb), the event is interpreted as being in progress. This means that there is an action that started in the past, spanned a period of time, and ended before the moment of speaking, as in (12).

(12) **jalas-at** t-isbaħ
AKT.PT-SG.F IMPF.3SG.F-swim
'She remained/had been swimming.' (Al Zahrani, 2015, p. 59)

Al Zaharani (2015) claimed that the perfective form *jalasat* 'sat' is base-generated in Aktº and the tense features of TP triggers it to move to T, as in (13). As for the imperfective verb *tisbaħ,* he argues that its root (*sbaħ/sawm)* moves from within the VP to TaxAspº where it receives its agreement features.

(13) Al Zahrani's (2015, p. 65) example (9) with *Jalast* moved to Tº.



In (13), there is only one Tº (TP) in the hierarchy; however, I argue against a single TP for this construction. I argue that the perfective *jalas-at* 'sat.PF-SG.F' and the

imperfective *t-isbaħ* 'IMPF.3SG.F-swim' are independent finite verbs that each represent an independent TP. Each finite verb is also a TP; i.e., each verb can stand alone in a sentence in Hijazi Arabic. In Chapter 7, I claim that (12) either has two TPs or is an instance of raising verbs in SNA and I provide evidence for my argument. Moreover, the perfective *jalasat* in (12) cannot be regarded as an instance of grammaticalization, as Al Zahrani claimed, because it is in fact an example of a serial verb construction (SVC), where a perfective verb is followed by an imperfective verb (Ouali & Al Bukhari, 2016).

Additionally, Al Zahrani identified *gaʔad* and *Jalis* in Hijazi Arabic as lexical aspect. Lexical aspect differs from grammatical aspect in that it carries semantic properties rather than having syntactic or morphological realizations (Bybee et al., 1994; Filip 2012; Smith 1997). The claim that they are lexical aspect cannot be adopted in this study because it entails that it is a rich finite verb that can express tense or have thematic relations, when in fact it cannot. Therefore, the syntax proposed by Al Zahrani is not correct, primarily because the author's main argument is that this feature is lexical aspect, which is incorrect. I follow Jarad (2015) in assuming that it is grammatical aspect when it is followed by an imperfective verb, a tenseless participle. In Chapter 6, I provide more detail and explain why it is an instance of grammatical aspect.

Camilleri and Sadler (2017) explored the grammaticalization of posture verbs *gaʔad* and *Jalis* in the Tunisian, Emirati, Kuwaiti, Hijazi, Maltese, and Libyan Arabic dialects. However, they did not investigate SNA. The data mostly were obtained from previous research (e.g., Jarad, 2015; Persson, 2013; Saddour, 2009) and via personal correspondence with native speakers. Their basic claim was that the active participles

gaʔad or *Jalis* have developed an additional aspectual sense of progressive. Their primary argument was that *gaʔad* and *Jalis* appear to have been grammaticalized into a copula, an argument I do not believe is valid.

Camilleri and Sadler (2017) presented the first claim regarding the grammaticalization of posture verbs in multiple dialects of Arabic. For instance, they claimed that *gaʔad* and *Jalis* further grammaticalized into a copula in places where pronominal copulas are not allowed, as in (14).

(14) il-akil **gaʕid** bil-sħun
DEF-food.SG.M sit.ACT.PTCP.SG.M in.DEF-plate
'The food is on the plate.' (Kuwaiti, Camilleri & Sadler, 2017, p. 178)

According to Camilleri and Sadler (2017), *gaʔad* and *Jalis* function as copulas; when they are preceded by pronominal copulas, the sentence is ungrammatical, as would be the case in (14). I agree with Camilleri and Sadler (2017) that *gaʔad* and *Jalis* have undergone a grammaticalization process; however, they failed to provide evidence that they are copulas or stage-level copulas. In fact, *gaʔad* and *Jalis* do not function as copulas or stage-level copulas in (14) because according to some Kuwaiti native speakers (14) is perfectly grammaticalization when they co-occur with a pronominal copula (PRON), such as *hu*, as shown in (15).

(15) il-akil **hu** **gaʕid** bil-sħun
DEF-food.SG.M PRON sitting.3P.SG.P in.DEF-plate
'The food is on the plate./ The food is ready.'

The imperfective aspect *hu* in (15) serves as a pronominal copula, which implies that *gaʕid* cannot behave as copula or a stage-level copula in Kuwaiti Arabic. Moreover, according to some Kuwaiti native speakers via personal correspondence, the APPV *gaʕid*

in (14) is a figure of speech and it is does express its posture or static meaning as seen in the translation of (15). Other Kuwaiti native speakers find (14) odd or (for most speakers) ungrammatical. Although Kuwaiti and SNA share some similarities, inanimate subjects cannot occur before posture verbs in SNA. I provide more details about the usage of animate versus inanimate subjects with posture verbs in Chapter 6.

Saddour (2009) investigated progressivity in Tunisian Arabic. Saddour focused on the constructions of progressivity in oral utterances. He examined the similarities and differences between the systematicity and their use across varieties of Arabic. He focused mainly on the usage of the active participle *qa:'id* 'sitting' and the post-verbal marker *fi* in progressive environments, as in (16).

(16) E(l)-ra:jil **qa:'id** ye-kil **fi** ftu:r e(l)-sbeh.[2]
the-man PRG PS3M-eat PRG meal the-morning
'The man is having breakfast.' (Tunisian Arabic, Saddour, 2009)

Saddour highlighted the fact that the main function of *fi* 'in' is as a locative preposition. In Tunisian, when *fi* is used as a progressive marker, it must follow an imperfective verb that needs a complement or direct object. Both *qa:'id* and *fi* represent a one-tense clause (TP) expressing progressivity in Tunisian Arabic. Moreover, *fi* cannot be used in clauses where different aspectual events are present, such as the perfective aspect, as in (17).

(17) *E(l)-ra:jil kla-Ø **fi** ftu:r e(l)-sbeh.
the-man eat-PS3M PRG meal the-morning
*'The man ate in breakfast.' (Saddour, 2009)

[2] It is important to note that (16) is ungrammatical in SNA due to the presence of *fi*, which can only function as a preposition that must be followed by an NP/DP.

Like Al Zahrani (2015), Saddour considered *qa:'id* (sitting) in (14) to be a progressive marker and a lexical aspect because it expresses a state. Again, I have a different view. I discuss this in more detail in Chapters 3 and 6. One of the shortcomings of Saddour (2009) is that he did not explain how the active participle *qa:'id* 'sitting' and the preposition *fi* had grammaticalized into progressive markers in Tunisian Arabic.

2.4.2 The Motion Verb raħ *'went'*

In some Arabic dialects, the motion verb *raħ* 'went' denotes the certitude of the speaker with regards to a future event or its possible closeness. The motion verb *raħ* in Arabic dialects has received little attention in the literature compared to other elements, such as posture verbs and the *b*-imperfective. Jarad (2014) examined the way that future particles develop from motion verbs like *raħ* into future markers in Syrian Arabic. Jarad (2014) hypothesized that the Syrian Arabic prospective future particle arose from the Classical/Standard Arabic verb *raħ.* Ultimately, Jarad argued that grammaticalization from Classical Arabic *was* so extensive that *raħ* became an intentional future marker. In more concise terms, a phrase in English would be *I am going to go to the movies afterwards*, which is translated into Syrian Arabic as (18).

(18) (ʔana) **raħ** rūħ ʕa-s-sīnəmə baʕdēn
I FUT go to-the-cinema afterwards
'I am going to go to the movies afterwards.' (Jarad, 2014, p. 102)

In Syrian Arabic, the motion verb *raħ* changes the aspectual interpretation of a sentence, creating a future interpretation, allowing the sentence aspect to be unambiguous.

Jarad (2014) further provided information about how future markers such *raħ* 'went' work and indicated that the transition from motion (going from one place to

another) to conceptual (metaphor) involves some sort of intermediary context in semantics versus syntax. This, he posited, is largely because "the expressions of motion and futurity are recoverable from the same context; that is, they are somehow adjacent in that context" (Jarad, 2014, p. 102). However, in the instances outlined above, there was a semantic shift from a lexical sense to a future sense that involves reanalysis of not only *raħ*, but also of the imperfective verb following it, as in (19).

(19) maryam **raħ** **t-sāfer** ʕa sūrya baʕd šahr-ēn
Maryam FUT 3SG.F-travel to Syria after month-two
'Maryam is going to travel to Syria after two months.'
(Syrian Arabic, Jarad, 2014, p. 106)

Jarad (2014) questioned the position of the motion verb *raħ* in the syntax. Following Chomsky (1993) and Roberts and Roussou (2003, pp. 194-204), he hypothesized a mechanism of grammaticalization that resulted in the loss of movement, schematized in (20).

(20) a. [XP Y+X [YP… tY …]] ➡ b. [XP Y=X [YP…Y…]]

The formula represented in (20) provides two stages of grammaticalization: an earlier diachronic stage (i.e., a) and a later diachronic stage (i.e., b). Y undergoes movement to X, leaving a trace/copy in its original position. In the later stage, the element formally merged as "Y" is now merged directly as "X". Moreover, the element in "Y" experiences a shift in category membership from Y to X; this is what the "Y=X" notation indicates. Consider the English modals (e.g., Y), a subclass of lexical verbs that once moved to T (e.g., X) and now directly merge in T (Y=X), which have been reanalyzed as elements of T. According to Roberts and Roussou (2003, 200), this transition or reanalysis triggers a

categorical change in a subset of linguistic items that exhibit certain properties and undergo phonological reduction and semantic bleaching.

Following Roberts and Roussou (2003), Jarad (2014, p. 110) proposed the following syntactic structure for the motion verb *raħ* in (21).

(21) [TP T [AspP Asp [vP v [VP V]]]]

According to Jarad (2014, p. 110), the lexical verb in (21) is first merged in V and then moves to v and T. As far as theta roles and argument structure are concerned, Jarad suggested that the V(erb) in the VP layer assigns GOAL, while the v(erb) in vP layer assigns THEME. As a grammaticalized functional marker, *raħ* merges and becomes an element of ASP position (Jarad 2014). I show in Chapter 7 that this analysis fails to provide a clear explanation of the derivation process. For example, the structure in (21) does not explain why the main verb moves to T, even though this position can be occupied by the perfective tense marker *kan* 'was'. In Chapter 7, I argue that *raħ* is not just a generalized ASP marker, but is instead a head prospective aspect particle (PROSP) in the hierarchy.

Ouali and Al Bukhari (2016) examined Lebanese and Moroccan Arabic motion verbs, such as *raħ* 'went', *ʔaʕad* 'sat', and *naːdˤ* 'stood', co-occurring with imperfective verbs. Ouali and Al Bukhari posited that motion verbs, when co-occurring with main verbs, are light verbs that have aspectual functions. These constructions are also referred to as motion light verb constructions or SVCs (Ouali & Al Bukhari, 2016).

Ouali and Al Bukhari (2016) investigated the properties of motion verbs and the implications of their syntactic distribution. Their main argument was that the co-

occurrence of motion light verbs and main verbs could involve two different vP heads, wherein the motion light verbs select AspP. They argued against Larson's (1988) VP-shell hypothesis, claiming that it is not suitable for motion verb + main verb structures because they have different vP domains and two distinct vP heads. In support of their claim, they relied on the positions of the main verb, subject, and negation as evidence against Larson's hypothesis and suggested alternative structures in (22), which are examined and discussed in the following pages.

(22) a. [TP T [vP Light *v* [AspP Asp [vP v [VP V]]]]]
b. [TP T [vP Light *v* [AspP Asp [NegP Neg [vP v [VP V]]]]]]
c. [NegP Neg [TP T [vP Light *v* [AspP Asp [vP v [VP V]]]]]]
(Ouali & Al Bukhari, 2016, p. 175)

Ouali and Al Bukhari (2016, p. 173) presented three cases in Arabic where a sequence of two verbs can occur: a) subordination, b) auxiliary + main verb sequence, or c) light verb construction. The last is the main concern of their article; see (23).

(23) a. b-i-ħəb ji-ħki
ASP-3.M-like-IMP.SG 3.M-talk.IMP.SG
"He likes to talk." (Ouali & Al Bukhari, 2016, p. 174)

b. ka:n ji-ħki
be.PER.3.M.SG 3.M-talk.IMP.SG
"He was talking." (Ouali & Al Bukhari, 2016, p. 174)

c. **ʔaʕad** ji-ħki
sit.PER.3.M.SG 3.M-tak.IMP.SG
"He kept talking." (Ouali & Al Bukhari, 2016, p. 174)

According to Ouali and Al Bukhari (2016), not all Arabic dialects convey literal meaning via motion light verbs, such as *ʔaʕad/gləs* 'sat', *ʔa:m* 'stood', *natˁ/ngəz* 'jumped', *ʔiʒa/ʒa* 'came', *ra:ħ/mʃa* 'went', and *riʒəʕ/rʒəʕ* 'returned'. The non-literal meaning only arises when the main verb co-occurs with a motion light verb, as in (24).

(24) a. **raħ** ju-ʔʕod ʔaħmad ji-ħki maʕo
FUT 3.M-sit.IMP.SG Ahmad 3.M-talk.IMP.SG with-him
'Ahmad will keep talking to him.'
(Jordanian Arabic, Ouali & Al Bukhari, 2016, p. 177)

b. **gləs** ka-j-lʕəb ħetta l-sˁ-sˁba:ħ
sit.PER.3.M.SG ASP-3.M-play-IMP.SG until to-the-morning
'He kept playing until morning.'
(Moroccan Arabic, Ouali & Al Bukhari, 2016, p. 177)

In (24), *raħ* 'went' and *gləs* 'sat' are not associated with their literal meanings as they co-occur with main verbs (Ouali & Al Bukhari, 2016). Hussein (1990) and Versteegh (2003, 2005) considered the examples in (24) to be clear instances of SVCs; however, Woidich (2002) argued against that analysis (see Ouali & Al Bukhari 2016, 175).

Ouali and Al Bukhari (2016) did not clarify their stance on the matter of whether examples like (24) are instances of SVCs or not, leaving it to the reader to determine how to treat such sentence constructions. They did indicate, however, the definitions that one must consider before deciding whether a sentence contained an SVC or not. For example, for those who consider (24) to be examples of SVCs, they must agree that light verbs are semantically demoted and that they form a new sort of verb with a main verb without a coordinator, but having the same argument structure (Sebba, 1987). Those who have argued against SVCs, such as Woidich (2002), argued that that a V1-V2 structure counts as an SVC, that the subject of V1 and V2 cannot be placed between them, and that negation may only take scope over V2 (see Ouali & Al Bukhari, 2016, pp. 176-177). Ouali and Al Bukhari (2016) were ambivalent about these ideas, stating outright that they "do not have anything at stake in this whole debate" (p. 176). In their eyes, the main goal

is to provide a syntactic analysis explaining the properties of the light verbs, thereby negating any theoretical stance that may be approached in their work.

In an attempt to examine the derivation of (23), Ouali and Al Bukhari (2016) first presented reasons that the vP-shell hypothesis does not explain motion light verb + main verb constructions. They argued that the motion verb and main verb occupy different vP domains. They also noted that Arabic is assumed to be a verb-raising language with SVO and VSO word order and that SVO is the unmarked order (Aoun, Benmamoun, & Choueiri, 2010; Benmamoun, 2000; Soltan, 2007). According to Ouali and Al Bukhari (2016), motion verbs categorically act as light verbs and merge in the vP head projection when they are part of a V1-V2 construction (i.e., two verbs adjacent to each other), as in (20a,b). They argued, however, that light verbs cannot occur in the same vP-shell domain, as the main verb merges in an independent vP. In other words, V1 and V2 occupy two distinct vPs. To support their argument against the vP-shell hypothesis for motion verbs, they relied on three arguments: verb position (assuming an aspect projection), subject position, and negation (Al Bukhari & Ouali 2016, p. 184).

First, Ouali and Al Bukhari (2016) argued that the V(erb) in Arabic moves overtly. Perfective verbs move to T (Benmamoun, 2000) and imperfective verbs move to Asp (Soltan, 2007). See (25) from Jordanian and Moroccan Arabic, and their derivations in (26a) and (26b), respectively.

(25) a. **b-ji-ʃrab** ali ʔahwe
ASP-3.M-drink.IMP.SG Ali coffee
'Ali drinks/is drinking coffee.'
(Jordanian Arabic, Ouali & Al Bukhari, 2016, p. 185)

b. **ka-j-ʃrəb** ʕali l-qəhwa
ASP-3.M-drink.IMP.SG Ali the-coffee

‘Ali drinks/is drinking coffee.’
(Jordanian Arabic, Ouali & Al Bukhari, 2016, p. 185)

(26) a. [TP [Asp b-ji-ʃrab [v*P ʕali v* ~~ji-ʃrab~~ [VP ~~ʃrab~~ ʔahwe]]]]
b. [TP [Asp ka-j-ʃrab [v*P ʕali v* ~~ʃrab~~ [VP ~~ʃrəb~~ l-qəhwa]]]]

Now that we have the basic derivation of the main verb in Arabic, how are light verbs derived, as in (27)?

(27) **ʔaʕad** ji-ʃrab ʕali ʔahwe tˁu:l il-le:l
sit.PER.M.SG ASP-3.M-drink.IMP.SG Ali coffee all DEF-night
‘Ali kept drinking coffee all night.’

In answering this question, Ouali and Al Bukhari (2016) suggested that the main verb moves to Aspº (ASP’), then the motion verb moves to a higher position, as in (28). Both the main verb and the motion verb cannot occupy the same position in vP.

(28) [FP ʔaʕad [Asp -ji-ʃrab [v*P ʕali v* ~~ji-ʃrab~~ [VP ~~ʃrab~~ ʔahwe]]]]

As for the position of the subject, they suggested that since the main verb moves overtly out of the vP to Aspº, the base-generated subject in SpecvP must move to a higher position than Aspº (SpecAspP), as in (29) and (30).

(29) ʔaʕad **ʔaħmad** ji-ʃrab ʔahwe tˁu:l il-le:l
sit.PER.M.SG Ahmad ASP-3.M-drink.IMP.SG coffee all DEF-night
‘Ahmed kept drinking coffee all night.’
(Jordanian Arabic, Ouali & Al Bukhari, 2016, p. 186)

(30) [FP ʔaʕad [AspP ʔaħmad ji-ʃrab [v*P ~~ʔaħmad~~ v* ~~ji-ʃrab~~ [VP ~~ʃrab~~ ʔahwe tˁu:l il-le:l]]]]

Ouali and Al Bukhari (2016) argued that, in cases where the subject moves out of the vP domain, as in (30), the motion verb must occupy a higher position than vP. The motion verb *ʔaʕad* ‘sat’ in (29) can occur before the subject *ʔaħmad*, which forces the

subject to move at least to the SpecAspP position and the motion verb to move higher than AspP.

The third argument against the vP-shell hypothesis, according to Ouali and Al Bukhari (2016), is the position of NegP. According to them, negation can occur between the motion and main verb, which entails that there are two possible locations for the NegP: higher than the motion verb or higher than the vP, as in (31a).

(31) (**mɑ**:-)ʔaʕad ʔaħmad (**mɑ:**-)ji-ʃrab ʔahwe tˁu:l il-le:l
NEG-sit.PER.3.M.SG Ahmad NEG-3.M-drink.IMP.SG coffee all DEF-night
'Ahmed didn't keep drinking coffee all night.'

Ouali and Al Bukhari (2016) argued that NegP is selected by AspP and selects a vP. Therefore, the main verb must move to Aspº and, on the way, pick up negation, as in (32).

(32) [NegP mɑ: -ʔaʕad [TP ~~ʔaʕad~~ ji-ʃrab [vP ~~ʔaʕad~~ [AspP ʔaħmad jʃrab ʔahwe tˁu:l il-le:l]]]]

Lastly, according to Ouali and Al Bukhari (2016), the motion verb *raħ* 'went' in particular has gone through all stages of grammaticalization in Arabic, while the remaining motion verbs are at Stage II. According to them, the motion verbs have been semantically bleached and have gained an aspectual function, but they cannot convey lexical meaning without a main verb.

In sum, although Ouali and Al Bukhari (2016) provided a general and a thorough analysis of the syntactic representation of motion verbs when they co-occur with main verbs, they did not touch on all of the important aspects concerning the derivation of motion verb structures. For example, they did not examine cases where sentences (i.e., 23a,b) use mood markers, such as *likely* and *properly*. Moreover, they focused heavily on

the motion verb as occupying a vP domain and the main verb occupying a VP domain, yet they did not consider the possibility that each verb might represent an independent TP, explaining why one has perfective aspect and the other has imperfective aspect in present tense. Such questions and cases will be discussed in detail for SNA in Chapters 5, and 7.

2.4.3 The b-Imperfective

Another important instance of grammaticalization in SNA that is relevant to our purpose is the Arabic *b*-imperfective verb. Unlike the posture verbs *gaʔad*/*Jalis* 'sitting' and the motion verb *raħ* 'went', the *b*-imperfective verb has received more attention in the last three decades (e.g., Brocket, 1985; Holes, 2004; Jarad, 2013; Johnstone, 1967; Owens, 2018; Persson, 2008). Most studies of the *b*-imperfective in Gulf Arabic have focused on future tense, intentive mood, or a combination being encoded in the *b*- prefix. In the literature, the morpheme future marker *b*- is sometimes referred to as the '*b*-future' (i.e., Cowell 2005; Jarad, 2013) and sometimes referred to as the 'b-prefix' (i.e., Owens, 2018; Persson, 2008). Furthermore, Al-Wer (2014) referred to the future *b*-prefix as the '*b*-imperfect' verb, which still does not uncover the different functions of the morpheme *b*-. I suggest calling it the *b*-imperfective form, which accurately includes all the possible functions that *b*-imperfective is used for in SNA: namely futurity, habituality, and intentionality.

Based on a rigorous and thorough evaluation of the use of this marker in modern Arabic dialects, Johnstone (1967, pp. 143-152) posited that the *b*-imperfective is primarily used in Arabic as a generalized marker for irrealis mood rather than as a future

or intentive marker. While it is true that future is one of the most widely used meanings of the *b*-imperfective, it is not necessarily the most important meaning, despite its prevalence (Johnstone, 1967).

Owens (2018) suggested that all reflexes of the *b*-imperfective are grammaticalized from a common source (geographical and semantic/pragmatic sources). According to Owens (2018), verbs such as *baɣa* 'he wanted' or *yabɣa* 'he wants' are the most likely source that the b-imperfective grammaticalized from. It varies considerably among Gulf Arabic vernacular dialects as *ba-, baa-, bi-, or b-* (Owens, 2018), as demonstrated in (33). Before the *p*-stem a *b-* is sometimes added in some Gulf Arabic dialects; the same is known to occur in Sudanic, Nigerian, and Chad Arabic, where occasionally the prefix morphs to *bi-* but also can be *b-* (Owens, 2018).

(33) a. al-insan lo ma yiba yimut **bi**-ymut guwa
the-man if not want.3SG.M P.STEM B-die.3SG force
'If man doesn't want to die he'll die against his will…'
(UAE, Owens, 2018)

b. fi-l-mustaqbal al-iḫwan ma **b**-yaʕrifu baʔeḍ
in-the-future the-brothers not B-know.3PL.M.P.STEM each-other
'In the future brothers won't know each other.' (Oman, Owens, 2018)

Some sources gloss the *b*-imperfective as "future" or "intentional" (Brockett 1985, p. 21; Holes 2004, p. 27). Others do not gloss it (Ingham 1994a, p. 120; Jarad 2013; Owns 2018; Persson 2008). Additionally, Egyptian and Levantine Arabic exhibit the *b*-imperfective (Cowell, 2005; Owens, 2018). It is seen in (34) as a prefix on imperfective verbs forming the indicative mood or progressive or habitual aspect in Cairene and Levantine Arabic.

(34) a. lamma **b**-a-rgaʕ **b**-y-kūn-Ø **bi**-y-zakir-Ø
when HAB-1sg-return.IMP HAB-3-be.IMP-SG.M PRG-3-study.IMP-SG.M
'When I came back, he would be studying.'
(Cairene Arabic, Moshref, 2012, p. 104)

b. **b**-iďall **b**-teħki w-**b**-teħki
b-3SG.F.continue b-talks and-B-talks
'She keeps on talking and talking.' (Syrian Arabic, Jarad, 2013, p. 77)

Interestingly, as observed in (34), the *b*-imperfective has more aspectual interpretations in Syrian and Cairene Arabic compared to SNA, where it has a limited aspectual interpretation. This is discussed in more detail in Chapter 3.

Syrian Arabic not only has the *b*-imperfective, indicating that mood is suggested, but also has other aspectual interpretations (Owens 2018; Persson 2008). In yet another area close to Syrian and Yemeni dialects are reported to have a *b*-imperfective future marker (Owens, 2018; Persson, 2008). Throughout these areas, the *b*-imperfective indicates a future intention and mood; the *b*-imperfective is well known and common in these geographically close dialects (Persson, 2008).

In order to uncover the possible aspectual and mood interpretations of the *b*-imperfective in Arabic dialects, Persson (2008) examined a corpus of 23 hours of recorded authentic speech. The speech she examined was a collection of interviews that took place primarily in the participants' homes from 2006–2007 and were recorded by Persson and local staff. As a note, the interviews examined dealt mostly with syntactic and morphological traits, not with phonology and little with semantics – though the primary function has been established to be mostly semantic. The speakers were from Bahrain, Kuwait, Oman, Qatar, and the UAE and represented over 20 different municipalities, including large cities and small villages. Recordings were largely

narrative and expository, but also included two-way dialogue between participants and the interviewers. The database includes over 4,000 analyzed predicates, and of those predicates, Persson selected all of those that contained a future time reference. The 832 instances collected contained main and subordinate clauses, as well as final, temporal, complement, and conditional clauses. In addition to all instances in the database that contained the *b*-imperfective and/or *raħ*, there were also instances of the active participle *rayiħ* 'going' and the future marker *ħa-* co-occurring, along with the verb *yabgi/yabi* 'want'.

After reviewing Persson's methodology, it was discovered that 851 of the predicates contained future time reference, of which 385 (45%) were preceded by *b-* or *raħ* and only four of which were preceded by *yabgi/yabi*. A total of 462 predicates were unmarked. There was another part of the database that contained 138 instances of non-temporally referenced *b*-imperfective or *raħ* utterances and only 23 uses of *yabgi/yabi*. In addition, Persson (2008) noted that the *b*-imperfective in Gulf Arabic is used extensively in main and subordinate clauses alongside predicates encoding states or actions that encode neither intent nor future tense. Further, according to Persson (2008), no volition is encoded in *b-*. Instead, Persson (2008) claimed that the *b*-imperfective is used primarily in conditional clauses (especially in result clauses, known as apodosis) or without any apparent temporal implication (e.g., *if*-clauses, known as protasis), as in (35).

(35) an-nās **b**-yikūnu ʿāyšīn fi ḡiām. at-taʿlīm ma
the-people B-be.3PL.M.P-STEM live.PL.M.AP in tents the-teaching NEG
bi-yikūn nafs al-ḥēn
B-be.3SG.M.P-STEM same the-time
'(If I had lived 20 years ago,) people would be living in tents. Education would not be like it is now.' (Persson, 2008, p. 36)

Persson (2008) argued that the *b*-imperfective and *raħ* are *possible* but not *necessary* future markers. According to Persson (2008), the *b*-imperfective and *raħ* 'went' are sparingly used in complement and purpose clauses; the latter depends on context that would typically be encoded as subjunctive in languages that mark grammatical mood. Ultimately, Persson (2008) found that complement clauses are the most frequently used means of conveying future time reference in ordinary main clauses.

Having established their use as future markers, Persson (2008) found that the use of the *b*-imperfective and *raħ* in non-future contexts is minimal. Persson (2008) concluded that *raħ* is hardly ever used in non-future contexts (e.g., habitual and progressive) except in instances of apodosis. This discovery supports the status of the *b*-imperfective as a future marker. Yet, Persson did not provide examples from her records of such phenomena.

The second observation Persson highlighted is that there is extensive use of the *b*-imperfective throughout Gulf Arabic in conditional clauses. The 138 occurrences of non-future-marked *b*-imperfective or *raħ* occur 88 times (64%) in conditional clauses alone. There are another 43 occurrences (31%) in main clauses. The *b*-imperfective and *raħ* are mentioned in the literature as temporal markers, modal markers, or a combination of both (Owens 2018; Persson 2008). In the same spirit, the *b*-imperfective is considered to convey intent or volition and is suggested by Persson (2008) to have stemmed from *baga/yabi*, which is a claim I agree with. To reinforce this hypothesis of origin, *baga/yabi* in their full forms are used very sparingly in the established database, with only 26 instances found in the corpus. All of these instances, however, indicate expressions of

volition, whereas many languages have optional future markers (i.e., many languages have a variety of ways to say that the event is a future occurrence). Future is rarely, if ever, a true temporal category, lending more support to the theory that the Gulf Arabic *b*-imperfective stems from *baga/yabi* 'want' (Owens, 2018; Persson, 2008).

The *b*-imperfective in Arabic dialects has sparked a debate about its main source, unlike the English future marker *will*, which can be easily traced to the old English *wyllan* due to historical documentation (Bybee et al., 1994, pp. 254-256). Still, there are no historical records from Arabic that provide information about the development or evolution of this prefix. Eksell (2006, pp. 82-96) suggested that the *b*-prefix might be derived from the verb *bada* 'begin' and morphologically reduced in Syrian Arabic. However, Eksell (2006) did not provide an explanation of how this source could have developed into its current form. Jarad (2013) argued that the *b*-imperfective was first developed from the Standard Arabic verbal noun *biwuddi* 'I want' to the lexical verb *bedd* 'want'. Retsö (2014a) suggested two more possibilities of the source of this prefix: it could have developed from the preposition *bi* (with) that is widely used in Levantine, Iraqi, Gulf Arabic dialects or it could have developed from volition verbs such as *yabɣa*, *yiba*, or *yibi* 'want', which are quite widespread in contemporary Arabic. I follow the last suggestion, which also supported by Persson (2008) and Owens (2018).

According to Persson (2008), the use of *b*- remains unexplained in ordinary main clauses despite research on futurity and intent. Of the 126 instances of the *b*-imperfective used in non-future contexts, approximately one third were found in ordinary main

clauses. Persson sought common traits of these verbs and noted that half of them were expressions of habitual actions in the past in the Gulf Arabic Dialects presented above.

Persson (2008) relied on Palmer (2001), who noted that habitual past is sometimes treated as irrealis in certain languages, despite the observation that past-time reference usually receives realis marking. Palmer (2001) also noted that the habitual past typically describes a tendency to perform an action rather than a specific action that took place in the past. It is worth noting that, in most habitual past instances where the *b*-imperfective is used, speakers have most likely not experienced the past they are speaking about (Persson, 2008).

According to Persson (2008), future tense ranges from most prototypical realis to most prototypical irrealis, with most languages falling on the irrealis side of the scale, such as the Papuan languages and the Tanoan language Kiowa. This does not mean, however, that a language that uses irrealis markings for the future cannot leave the future unmarked or that future tenses should be marked as realis in the absence of irrealis marking. In fact, the corollary applies to the Gulf Arabic *b*-imperfective, which is used extensively for the future, conditional, and habitual past tense, in that the prefix has much in common with irrealis markers in other languages (Persson, 2008). The fact that not all irrealis categories are marked as such, despite their semantic meaning, is not relevant to this notion. As irrealis is a modal distinction, the speaker may choose to mark or not mark the difference according to pragmatics and other time-of-utterance-oriented situations (Persson, 2008). Thus, the speakers will choose whether or not to mark irrealis mood as they are speaking.

Jarad (2013) touched on many of the same points as Jarad (2014, 2015), but in this work, his primary goal was to explain the paths of the *b*-imperfective or *b*-future in Syrian Arabic, using synchronic data (Jarad, 2013). He argued that verbs of volition have begun to grammaticalize semantically, syntactically, and phonologically. Jarad (2013) hypothesized that some future markers follow the same path, resulting in an uncharacteristic regularity crosslinguistically. The hypothesis included words with a typically broad meaning, such as *want* (volition), *go* (motion), *come* (motion), *do* (action), and *have* (possession) (Jarad, 2013). Jarad (2013) theorized that "semantic, structural, and phonological changes" occurred. He also discussed the influence of metaphorization and metonymization crosslinguistically and the use of the future marker *b*-imperfective in Syrian Arabic. He concluded that verbs of volition had grammaticalized in Syrian Arabic to future markers, as indicated by the prefix *b*-. Jarad argued that the main source of *b*- is the Modern Arabic volition verb *biwuddi* 'I want', which first grammaticalized from the Syrian volition verb *badd* 'want' to the morpheme *b*-, in order to indicate a future intention, as mentioned previously. Jarad (2013) described the shift of the future marker *b*- in Syrian Arabic from a verb meaning 'want' to a more abstract idea; the word has been desemanticized or "bleached out" (Jarad 2013, p. 79). Jarad (2013) also noted that the volition verb that became the future marker was decategorized: "it lost its status as an independent word and became a prefix of the main word," creating a new lexical entry in the mind of a Syrian Arabic speaker: see (36).

(36) a. ʔiza **b**-tedros kwayes**,** **b**-ištrī-lak lab tob
if B-you-study well B-buy-you laptop
'If you study well, I'll buy you a laptop.'
(Syrian Arabic, Jarad, 2013, p. 77)

b. **b-**šūf-ak bukra ʕand mawʔif l-bāṣ
B-see-you tomorrow at stop the-bus
'I will see you tomorrow at the bus stop.'
(Syrian Arabic, Jarad, 2013, p. 80)

Other studies have investigated futurity and/or the *b*-imperfective in Arabic dialects. Qafisheh (1977, pp. 224-229) noted that the verb *baɣa or baga* 'want' has a volitional meaning, but he did not discuss the *b*-imperfective. Brockett (1985), on the other hand, found that the *b*-imperfective is used purely for future tense without implications of will, intent, or volition. This is almost completely in opposition to what other scholars have found, but this may be because Brockett's data is rather outdated (from the late 1970s or early 1980s) and Gulf Arabic was largely unexplored at that time. His data was also confined to the Omani town of Khabura – not a diverse cross-section of dialects. According to Brustad (2000), the Kuwaiti *b*-imperfective indicates both futurity and intentionality. Johnstone (1967, pp. 143, 152) concluded that the *b*-imperfective was a marker of near futurity and intentionality, noting that the same effects of the *b*-imperfective were described in Kuwaiti dialects. Holes (2004, p. 247) noted that the verb *yabi* 'want' was used along with a *p*-stem of the verb in Shiite dialects of Bahrain. According to Holes (2004), *yabi* denotes intention and wanting. He also noted in Gulf dialects a distinction between *ba-/bi-* expressing intention (as in *I'm going to go to the store*) versus *yabbi* + verb (as in *I'd like to*/*I want to go to the store*), and concluded that *ba-/bi-* do not denote volition.

In conclusion, the status of the *b*-imperfective in Gulf Arabic is unclear and requires a more thorough study in the geographic region. The studies cited above

examined the use of the *b*-imperfective in order to establish whether it is a tense marker or intentive mood. I argue that the *b*-imperfective is not a pure marker of future tense, but that it is instead irrealis mood. Although the *b*-imperfective co-occurs with the future marker, it is much more consistently used in conditional clauses expressing the habitual past (Persson, 2008). Persson noted that the *b*-imperfective is not an obvious marker of intentive mood, although it has the potential to be one. The most important argument is that the *b*-imperfective can occur in contexts where intention is possible. The main characteristic of the *b*-imperfective is that it can be a marker of irrealis or, at the very least, an irrealis mood category (Persson, 2008, p. 47), a claim I support. All three areas where the *b*-imperfective is systematically used (future time reference, conditionals, and past habitual) can be characterized as irrealis (see Persson, 2008). Finally, when labeling future tense and intentive mood, irrealis accounts for all the uses of the *b*-imperfective as recorded in the database surveyed in Persson's (2008) research.

2.5 Conclusion

What we have observed so far is that grammaticalization is a process by which words (and other lexical items, such as phrases) are altered over time from a lexical status into a grammatical status. This progress is typically gradual, taking place over years, generations, or even centuries before acquiring a new lexical entry. Further, a lexical item has the ability to change its status in a few different ways: grammatically, morphologically, syntactically, and even (throughout the process) in coding relationships. These developments are usually triggered by universal mechanisms and processes that change lexical verbs into markers of grammatical aspect. We also observed differences

between TMA terminologies and verb classifications. The difference between these terminologies will help us diagnose the kind of TMA characteristics that SNA exhibits. Moreover, I explored related sources that have examined the grammaticalization process of three elements: posture verbs, the motion verb *raħ*, and the *b*-imperfective.

Having briefly outlined the background of grammaticalization and TMA and presented the basic classification of Vendler's model in this chapter, we can now investigate their applicability to SNA in Chapter 3. I argue that the verbs in SNA behave in much the same way as their English counterparts. In Chapter 3, I present an overview of the SNA TMA marking system. I provide new data for the aforementioned lexical and grammaticalized verbs in SNA and examine their functions, using Vendler's (1967) verb classifications.

CHAPTER 3

TENSE AND ASPECT IN SAUDI NAJDI ARABIC: PROGRESSIVITY AND FUTURITY

SNA has a unique system of marking the imperfective, especially when expressing progressivity and futurity. Like the Arabic dialects addressed in Chapter 2, the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'went', and the *b*-imperfective have been grammaticalized in SNA. Yet, there are few differences compared to other Arabic varieties.

This chapter explores these three cases of grammaticalization of TMA markers. I examine and provide new data collected from SNA native speakers via personal encounters. Using the data, I assess the similarities and differences between SNA and the Arabic dialects highlighted in Chapter 2. This allows us to understand the status of the linguistic cycle and grammaticalization process of the aspectual and tense markers in SNA.

This chapter also describes how SNA marks its imperfective aspects and future tenses. In the analysis, I firstly demonstrate how the new aspectual and tense markers function (e.g., as auxiliaries, modals, aspect, or tense) in SNA and in the standard variety (MSA/CA). Secondly, I discuss how the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'went', and the *b*-imperfective are interpreted semantically and pragmatically. Thirdly, in this chapter, I analyze how Vendler's (1967) basic classification, Croft's (2012) aspectual categorizations, and Smith's (1997) verb phrase features apply to these three cases of grammaticalization. Finally, I add a new test,

passivization (valency decreasing) as part of valency changing rules (Chapter 2), which has received little to no attention by linguistic researchers. This is an important test for these grammaticalized markers because it allows us to determine what is real grammatical and lexical aspect in later chapters. In doing so, I passivize active sentences to see how grammatical and lexical aspect behave during the process.

3.1 The Perfective and Imperfective in Arabic language

Before we delve into the nature of tense and aspect in SNA, I provide a brief and general background of the lexical classes in Arabic (CA/MSA). According to some Arab grammarians (i.e., Owens, 1988), these are the foundation of Arabic grammatical rules. In Arabic, the lexical classes can be expressed either by perfective or imperfective forms (Benmamoun, 2000). The perfective and imperfective are morphologically different in Arabic in terms of marking agreement and mood features (Benmamoun 2000, p. 19). For instance, the perfective form only indicates past tense with agreement features (person, number, gender) that appear as suffixes. The imperfective, however, is circumfixal: the prefixes provide person, gender, and number features and the suffixes provide a number feature (Benmamoun 2000, p. 176). To see how this works, consider (1), taken from MSA.

(1) a. **katab-at** al-wadʒib-a
write$_{PERF}$-3P.SG.F the-assignment-ACC
'She wrote the assignment.'

b. **ya-katb-uun** al-wadʒib
3P.M-write$_{IMPF}$-PL the-assignment
'They write/are writing the assignment.'

Example (1) shows perfective and imperfective forms of *katab* 'wrote'. The perfective verb form in (1a) consists of an agreement suffix, where the verb (i.e., *katab*) is commonly constructed of a stem (CVCVC) that is made of vocalic melody of the verb and tri-consonantal root (Ryding 2005). The verb in example (1a) encodes a completed action determined by the suffix *-at* (CVCVC-*at*), and hence perfectivity. The imperfective verb form in (1b) consists of both a prefix and a suffix.[3] Therefore, depending on speakers' viewpoint of the event, they can decide to choose between the imperfective and perfective forms, resulting in a different aspectual meaning.

The imperfective form can sometimes create ambiguity in that it can either have a progressive or habitual interpretation. In fact, Aoun et al. (2010) and Benmamoun (2000) suggested that Arabic does not morphologically grammaticalize progressive aspect. For instance, (2) demonstrates how the imperfective prefix and suffix in the verbs *yaktubu* 'write' and *yubayyitūna* 'plan' could be interpreted as progressive or habitual aspect, and hence there is aspectual ambiguity.

(2) wa-llah-u **ya-ktub-u** mā **yu-bayyit-ū-na**
but-Allah-NOM 3P.SG.M.write$_{IMPF}$-IND what 3P.M-plan$_{IMPF}$-PL.M-ACC
'But Allah writes/is writing what they plan by night.'
(CA, Quran, sūrat l-nisāa: v. 81)

This means that examples like (2) could carry two aspectual interpretations: habitual aspect, which could be translated as, 'It is known that Allah regularly writes what the plotters do overnight', or progressive aspect, translated as, 'As those who are planning overnight, Allah is recording their deeds.' Indeed, Comrie (1976, pp. 98-103) treated

[3] For more information about the Arabic language and an overview of its morphophonological system, see Ryding (2005) or Aoun et al. (2010).

such imperfective cases in (2) as habitual and continuous, which are both viewed as subdivisions of the imperfective; he did not view them as progressive aspect.

As far as tense is concerned, futurity in Arabic is very different in other Arabic dialects (SNA among them). There are two kinds of future forms in Arabic: the near future *sa-* and the distant future *sawfa*. These future markers are used before imperfective indicative verbs to express distant (3a) or immediate futurity (3b).[4]

(3) a. **sawfa** yu-hadʒi-ru ʔal-ʔawlaadu
FUT 3P.M-immigrate$_{IMPF}$-PL the-children
'The children will travel.'

b. **sa**-yu-hadʒi-ru ʔal-ʔawlaadu
FUT-3P.M-immigrate$_{IMPF}$-PL the-children
'The children will travel.'

SNA exhibits considerable variation in the expression of imperfective aspect and future marking. In other words, it has developed (via grammaticalization) its aspectual and tense marking system dramatically differently from MSA/CA. This is discussed in detail in §3.2.

3.2 The Perfective and Imperfective in SNA

3.2.1 The perfective in SNA

The perfective form in SNA is formally in the past tense. The perfective expresses a completed action before the present moment. Semantically, it combines both the past simple and the past perfect. Morphologically, the perfective inflection form is mainly suffixal in SNA, as demonstrated in (4).

[4] For more discussion on the differences between *sawfa* and *sa*, see Hassan (1993), Holes (1995), and Ryding (2005, p. 442).

(4) a. l-bent **ktɪb-at** e-risalah l-barħa
the-girl wrote$_{PERF}$-3P.SG.F the-letter the-yesterday
'The girl wrote the letter yesterday.'

b. **ktɪb-na** ʕala l-ʤidar
wrote$_{PERF}$-3P.M/F.PL on the-wall
'We wrote on the wall.'

c. **ktɪb** abdulah e-risalah ʔams
wore$_{PERF}$.3P.SG.M Abdullah the-letter yesterday
'Abdullah wrote the letter yesterday.'

The perfectivity of the verb form in SNA is not entirely dependent on the CVCVC morphological template. For instance, in (4), although the morphological template is not CVCVC, the verb still expresses the notion of perfectivity in SNA. Table 3.1 illustrates the inflection process of the perfective verb form in SNA.

Table 3.1

Saudi Najdi Arabic Perfective Features

Perfective	Suffixes	Gloss	ϕ-Features	Verb+Affix	Meaning
ktɪb	-Ø	write$_{PERF}$-Ø	3P.SG.M	ktɪb	He wrote
ktɪb	-at	write$_{PERF}$-F	3P.SG. F	ktɪb-at	She wrote
ktɪb	-at	write$_{PERF}$-NEU	3P.PL.NEU	ktɪb-at	They wrote
ktɪb	-t	write$_{PERF}$-F/M	2P.SG.F/M	ktɪb-t	I wrote
ktɪb	-ti	write$_{PERF}$-F	2P.SG.F	ktɪb-ti	You wrote
ktɪb	-u	write$_{PERF}$-PL	3P.F/M.PL	ktɪb-u	They wrote
ktɪb	-na	write$_{PERF}$-PL	3P.M/F.PL	ktɪb-na	We wrote
ktɪb	-tum	write$_{PERF}$-PL	2P. M/F.PL	ktɪb-tum	You wrote

As Table 3.1 illustrates, the agreement morphology in the perfective form is realized only by suffixes. Also, the empty suffix in *ktɪb* 'he wrote', glossed as Ø, is a default

placeholder for the empty suffix position in the perfective. Further, the glosses for mood features and ϕ-features in the above paradigm are adapted from Noyer (1992).

3.2.2 The Imperfective in SNA

The present and the future time in SNA is the imperfective that expresses incomplete or future action. The imperfective can be interpreted as either progressive or habitual in SNA. Rarely, this aspect creates ambiguity between progressive and habitual interpretations if it is not associated with an adverb or used out of the blue. Consider (5).

(5) a. e-tˁulab ya-ktb-uun l-rɪsayɪl (l-ħi:n)
the-students 3P.M-write$_{IMPF}$-PL the-letters (the-now)
'The students are writing letters **now**.'/'The students write letters.'

b. ʔant ta-ktib xitabat li-l-mudiir
you 2P.SG.M-write$_{IMPF}$ memos for-the-manager
'You are writing memos for the manager.'/'You write memos for the manager.'

Example (5a) expresses progressive aspect with the presence of the adverbial word *lħi:n* 'now'. However, without *lħi:n*, or out of the blue, the sentence can carry two aspectual interpretations (i.e., habitual or progressive).

The imperfective aspect in SNA (and in MSA) is sensitive to the discourse of conversation (spoken/written). In other words, the context plays an important role in determining the type of imperfective aspect of the sentence; the context can include a question and answer, as in (6) below.

(6) a. el-basˁ barra monna wayn-ha marrah metʔxar-ah
The-bus outside Mona where-3P.SG.F too.much late-she
'The bus is outside. Where is Mona? She is too late?'

b. ta-lbas malabis-ah ʃuwi wa tə-ʤi
3P.SG.F.IMP-wear clothes-her shortly and 3P.SG.F-come$_{IMPF}$
'She is putting on her clothes. Shortly and she will come.'

Example (6) shows how context can play an important role in determining the type of imperfective aspect in SNA. For instance, in (6a) the speaker exhibits concerns about Mona's delay, worrying that she might miss her bus. In reply, the speaker in (6b) describes Mona's current action of being in the process of putting on her clothes. Consequently, the imperfective verb form *talbas* 'wearing' in (6b) has only one interpretation: the progressive. This shows how the imperfective aspect is sensitive to the discourse or context.

Morphologically, the main difference between the imperfective and perfective forms in SNA is in the realization of their agreement features. The two forms are inflected for subject agreement differently (see Tables 3.1 and 3.2). Unlike the perfective, which is suffixal, the imperfective, as shown in (5a), is circumfixal. Table 3.2 illustrates the morpho-inflectional processes of the imperfective form of the verb *ktɪb* 'he wrote'.

Table 3.2

Saudi Najdi Arabic Imperfective Features

Imperf.	Affix	Gloss	ϕ-Features	Affix+Verb	Meaning
ktɪb	ʔa-	M/F-write$_{IMPF}$	1P.SG.M/F	ʔa-ktɪb	I write/I'm writing
ktɪb	ta-	M-write$_{IMPF}$	2P.SG.M	ta-ktɪb	You write/are writing
ktɪb	ta-	F/NEU-write$_{IMPF}$	3P.SG. F/NEU	ta-ktɪb	You write/are writing
ktɪb	ta-…-iin	F-write$_{IMPF}$	2P.SG.F	ta-ktɪb-iin	You write/are writing
ktɪb	ta-…-uun	M/F-write$_{IMPF}$-PL	2P.PL.M/F	ta-ktɪb-un	You write/are writing
ktɪb	ta-	F-write$_{IMPF}$	3P.SG.F	ta-ktɪb	She writes/is writing
ktɪb	ya-	Ø-write$_{IMPF}$	3P.SG.M	ya-ktɪb	He writes/is writing
ktɪb	ya-…-uun	Ø-write$_{IMPF}$-PL	3P. PL. F/M	ya-ktɪb-un	They write/are writing
ktɪb	na-	PL-write$_{IMPF}$	3P. PL.M/F	na-ktɪb	We write/are writing

Table 3.2 shows that in the SNA imperfective, person agreement is realized by the same prefix in the singular and plural, and number is realized by the suffix. Again, there is a

slight difference between MSA/CA and SNA imperfective inflectional process. For example, the latter uses front vowels such as /ɪ/ in the stem, as opposed to MSA/CA, which in some occasions uses the back vowel /u/. Not only does SNA use a front vowel in the stem, but it also deletes the final vowel. For example, *ʔakt**u**b**uu*** 'I write' (MSA/CA) and *ʔaktɪb* 'I write' (SNA). With regards to *taktɪb,* it can have two different interpretations based on the context such as *taktɪb* (second person singular masculine) and *taktɪb* (third person singular feminine), as shown in Table 3.2. Furthermore, SNA does not have dual, unlike MSA/CA, such as *taktubnaa* 'you write' or you are writing' (second person dual) or *yaktubnaa* 'they write' or 'they are writing' (third person dual).

3.3 The Evolution of Aspectual Forms in SNA

As previously stated, the aspectual ambiguity of the imperfective form in MSA or CA is rarely found in other dialects of Arabic, such as Emirati, Kuwaiti, Hijazi, or Tunisian. These dialects disambiguate by grammaticalizing posture verbs like *jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing' to indicate progressivity or durativity. Additionally, these dialects have also have grammaticalized future tense with new aspectual forms. This study focuses exclusively on the SNA dialect, where two imperfective aspect cases are scrutinized: namely progressive and future. The following sections present detailed descriptions of three common grammaticalized aspect forms in SNA.

3.4 Progressivity and Active Participle Posture Verbs

SNA has developed from having ambiguous imperfective marking (i.e., MSA/CA) to having a less ambiguous feature. This is because SNA grammaticalized the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing') to indicate progressivity, as in

(7). This is similar to Grinevald's (2006, 2007) and Newman's (2002) analyses of posture verbs, discussed in Chapter 2.

(7) a. alħi:n sarah (**qaʕaid**-ah) ta-sbaħ fi l-nadi
now Sarah (**PROG**-3P.SG.F) 3P.SG.F-swim$_{IMPF}$ in the-gym
'Now, Sarah is swimming in the gym.'

b. hom **jaalis**-iin ya-ktub-un el-waʤib
they **PROG**-3P.PL.M 3P.M write$_{IMPF}$-PL the-assignment
'They are writing the assignment.'

In (7), the APPVs are followed by imperfective verbs with progressive readings. This combination in SNA is interpreted as an incomplete durative action that is in progress. Interestingly, these APPVs, when they appear before imperfective verbs in a progressive construction, do not convey their regular semantic meanings ('to sit' or 'to stand') and are tenseless. They also have no argument structure. They can be regarded as light verbs in a pseudocoordination construction, since both the posture verbs and the imperfective are inflected (see Lodrup, 2019, p. 88). Also, *jaalis* or *qaʕaid* 'sitting' and *gayem* 'standing' can coexist with perfective verbs in tensed clauses, as in (8).

(8) a. kent **gayem** a-saly ʕalla l-waqt
was-3P.SG PROG.1.SG.M. 1P.SG.M-pray$_{IMPF}$ on the-time
yom ʤa ʕali
when came.3P.SG.M.PERF Ali
'I was praying on time when Ali came.'

b. lama kin-na **jaals-iin** na-tˁlib el-ʕasha
when were-we PROG-3P.PL.M 3P.PL.M/F-order$_{IMPF}$ the-dinner
nadi l-hilal saʤal hadaf ʔala l-nasser
club the-Hilal scored$_{PERF}$-3P.SG.M goal against the-Nasser
'While we were ordering dinner, Al-Hilal club scored a goal against Al-Nasser.'

Unlike the progressive in (7), which indicates a durative incomplete action, the progressive in (8) expresses a relative duration of one action to another, one of which took place while the other was in progress.

Morphologically, SNA APPVs are inflected based on the person, gender, and number of the subject, similar to the Emirati posture verb *yalis* 'sitting' (Jarad, 2015). In other words, APPVs, unlike perfective and imperfective verbs, inflect for person, gender, and number features that are suffixal, as in (7)-(8). Table 3.3 below illustrates the morphological properties of the SNA APPVs.

Table 3.3

The SNA APPVS Inflectional Features

APPVs	Suff.	Gloss	ϕ-Features
gayem/gaayem, qaʕaid/ qaaʕaid, jaalis	*-Ø*	SG.M	1P.SG.M/2P.SG.M/3P.SG.M
gayem-ah/ gaayem-ah, qaʕaid-ah, Jaalis-ah	*-ah*	SG.F	1P.SG.F/2P.SG.F/3P.SG.F
gayem-at/ gaayem-at, qaʕaid-at, Jaalis-at	*-at*	PL.F	3P.PL.F
gayem-iin/ gaayem-iin, qaʕaid-iin, Jaalis-iin	*-iin*	PL.F/M	1P.PL/2P.PL/3P.PL

Table 3.3 shows that any posture verb with singular masculine features is morphologically unmarked (-Ø). Also, any posture verb with feminine singular or masculine/feminine plural features will be marked with *-iin* or *-ah*, respectively. The feminine plural features are represented via the suffix *-at*.

In Chapter 2, I outlined the basic classification of Vendler's (1967) and Croft's (2012) aspectual categorizations and Smith's (1997) verb phrase features. I now explore how they apply to SNA posture verbs.

In SNA, *jaalis/qaʕaɪd* 'sitting' and *gaayem* 'standing' cannot exclusively occur with statives and rarely occur with achievements. The APPVs *jaalis/qaʕaɪd* 'sitting' and

gayem ‘standing’ more frequently co-occur with activities and accomplishments. They function similarly to the English language auxiliaries in that they must be followed by imperfective verb forms. This means action verbs, such as accomplishments and activities, occur more regularly than other types of verbs. Consider the following examples, where the APPVs are used with action verbs denoting activities (9) and accomplishments (10).

(9) a. **gaaʕaid** a-mʃi ʕala riʤul-i
PROG.1P.SG.M. 1P.P.M-walk$_{IMPF}$ on feet-my
‘I’m walking on my feet.’ (activity)

b. l-mudars-iin kan-u **jaalis-iin** ya-raqb-un
the-teacher-PL were-3P.PL.M PROG-3P.PL.M 3P.M-audit$_{IMPF}$-PL
ixtibarat l-tˤulab haqt l-fasˤal l-sˤaifi
tests the-students for the-term the-summer
‘The teachers were auditing the students’ tests for the summer term.’
(activity)

(10) a. monna **gayem-ah** ta-bni bayt-ha embəkır
Mona PROG-3P.SG.F 3P.SG.F.-build$_{IMPF}$ house-her early
‘Mona is building her house early.’ (accomplishment)

b. al-walad **gaʔaid** ya-kbar marah bisurʕah
the-boy PROG.3P.SG.M 3P.SG.M-grow$_{IMPF}$ so fast
‘The boy is growing up so fast.’ (accomplishment)

c. el-owalad **gaaʕaid-iin** ya-təmaʃ-un maʔ axu-hom
the-boys PROG-3P.PL.M 3P.M-walk$_{IMPF}$-PL with brother-their
il-kabiir
the-big
‘The boys are walking with their big brother.’ (accomplishment)

SNA APPVs are ungrammatical with stative verbs (11). Such imperfective verbs are usually those connected with emotion, cognition, and attitudes, which cannot occur with progressive constructions [*APPVs + stative imperfective verb].

(11) a. *zaid **gaʔaid** ya-ʕarif el-waʤib
Zaid PROG.3P.SG.M 3P.SG.M-know$_{IMPF}$ the-assignment
*‘Zaid is knowing the assignment.’ (stative)

b. *antum **jals**-iin ta-krah-un e-safar li ʤidah
you PROG-2P.M.PL PL.M 2P.hate$_{IMPF}$-PL the-travel to Jeddah
*‘You are hating to travel to Jeddah.’ (stative)

c. *monna **gayem**-ah ta-ħıs bi-ʔalammi
Mona PROG-3P.SG.F 3P.SG.F-feel$_{IMPF}$ my-pains
*‘Mona is feeling my pains.’ (stative)

Achievement and accomplishment verbs are [+telic] and have endpoints.

Accomplishment verbs differ from achievement verbs; they are [+durative] (10a-b).

When achievement verbs are used with *jaalis/qaʕaid* or *gayem*, they are less natural and mostly unacceptable (12a,b) according to native speakers of SNA. Very few cases in SNA allow achievement verbs in the following construction: [participle posture verb + achievement imperfective verb form], as in (12c).

(12) a. *__gaʕid__-ah ta-lga flus-ah fi e-ʃantah
PROG-3P.SG.F. 3P.SG.F.-find$_{IMPF}$ money-her in the-bag
*‘She is finding her money in the bag.’ (Achievement)

b. * l-basˁ **gaayem** yu-wsˁel-ik li-l-mattar
the-bus PROG.3P.SG.M 3P.SG.M-arrive$_{IMPF}$-you to-the-airport
*‘The bus is getting you at the airport.” (Achievement)

c. ʕala l-fadˁi **jaalis**-iin ta-xser-un flus-kum
for empty PROG-3P.PL.M/F 2P.M/F-lose$_{IMPF}$-PL money-your
fi e-suq
in the-market
‘For no reason, you are losing your money in the market.’ (Achievement)

SNA APPVs can be used in different types of sentences. They can be used in passive sentences. Consider (13).

(13) a. il-ʔakil **jaalis** y-u-kal wa ʔant
the-food PROG.3P.SG.M 3P.SG.M.PASS-eat$_{IMPF}$ while you
ta-naẓər
2P.SG.M-watching$_{IMPF}$
'The food is being eaten while you are watching.' (passive)

b. l-raʤal **gaʔaid** ya-t-sˁafag bisebeb
the-man PROG.3P.SG.M 3P.SG.M-PASS-beat$_{IMPF}$ because
saraqat-ah min il-maħal
theft-his from the-store
'The man is being beaten because of his theft from the store.' (passive)

SNA APPVs can co-occur before or after animate or inanimate subjects in progressive constructions whether in the passive or active. Note that the prefixes of the imperfective verbs (*yatsˁafag* and *yukal*) in (13) trigger a different templatic morphology than those in (9)-(11). It is important to bear this in mind: it will help highlight the difference between the grammatical aspect verbs *jaalis/qaʕaıd* 'sitting', *gayem* 'standing', and the lexical verbs, as in *jelis yaktib l-waʤib* 'He sat to write the assignment'. While grammatical aspect can occur in a passivized sentence, the lexical verb *jelis* 'sat' cannot be followed by a passivized imperfective verb.

It should be highlighted that the progressive expressions illustrated in (9)-(12) are the same as in Emirati (Jarad, 2012), Tunisian (Saddour, 2009), Kuwaiti (Camilleri & Sadler, 2017), and Hijazi Arabic (Al Zahrani, 2015), as discussed in Chapter 2. The only noticeable dissimilarity is that SNA, unlike Emirati, allows a few achievement verbs to occur with APPVs (12c). In addition, SNA does not allow the use of the post-verbal marker *fi* (Chapter 2, ex. (12)) in progressive constructions.

In brief, the progressive posture verbs illustrated in the above examples are sensitive to the aspectual categorizations of the verb that follows them. They are

compatible with activity and accomplishment verbs, similar to the English progressive, which is generally not compatible with stative or some achievement predicates (Smith, 1997). Based on the above examples, the three APPVs are grammatical markers and function more like aspectual markers rather than tense or mood.

3.5 Futurity with the *b*-imperfective and the Motion Verb *raħ (went)*

*3.5.1 The **b**-imperfective in SNA*

There is considerable variation in expressing futurity in SNA. One of the future expressions that SNA uses is encoded in the *b*-prefix,[5] also referred to in this work as the *b*-imperfective. For the *b*-prefix to mark a future event, it must be prefixed to an imperfective verb form, as in (14).

(14) a. laħaẓat wa **bi**-ya-ktub-uun el-waʤib
moments and B-3P.F/M-write$_{IMPF}$-PL the-assignment
'Moments and they will write the assignment.'

b. **bi**-ya-mer-ık xalid ħul e-saʕah thaman l-lilah
B-3P.SG.M-come$_{IMPF}$-you Khalid around the-clock eight the-tonight
'Khalid will come to you around eight o'clock tonight.'

The *b*-imperfective in SNA is a complex morpheme that can be interpreted as a future marker and also as a marker of intentionality, immediacy, or habituality. The *b*-imperfective can sometimes create ambiguity in that it can carry more than one interpretation (i.e., future tense or intentionality), as in (15).

(15) a. **aba**-ʔa-saʕaid-ik fi ħel waʤib-k bukrah
B-1P.SG.M/F-help$_{IMPF}$-you in answering assignment-2P.SG.POSS

[5] In glossing the morpheme *b*-imperfective, I adopt Persson's (2008), Jarad's (2013) and Owns' (2018) gloss as *b*-.

tomorrow
'I will help you in answering your assignment tomorrow.' (FUT)

b. sarah gal-at li ann-ha **b**-ta-sbaħ fi
Sarah said$_{PEFR}$-3P.SG.F to-me that-she B-3P.SG.F-swim$_{IMPF}$ in
l-nadi
the-gym
'Sarah said that she will swim in the gym after an hour.' (INT-FUT)

c. **ba**-ʔə-gara el-lilah maʕa-k
B-1P.SG.M/F-exercise$_{IMPF}$ the-tonight with-you
'I will read with you tonight.' (INT and FUT)

d. biserʕah **ba**-ʔa-ʕtˁik mefatıħ l-bayt wa
immediately B-1P.SG.M/F-give$_{IMPF}$ keys the-house and
ba-ʔa-mʃi
B-1P.SG.M/F-leave$_{IMPF}$
'Immediately! I'll give you the keys and I will leave.'(IMD and FUT)

e. la ta-xaf ıl-xiayat **b**-ya-fham
NEG 2P.SG.M-worry$_{IMPF}$ the-tailor B-3P.SG.M-understand$_{IMPF}$
ʕala-yk iða ta-ʕtˁi-h l-maqasat b-huduʔ
on-you if 2P.SG.M-explain$_{IMPF}$-him the-sizes with-slow
'Don't worry. the tailor will understand you if you give him the sizes calmly.' (HAB)

In (15a), the *b*-imperfective can denote future plans, with or without the adverbial word *bukrah* 'tomorrow'. As mentioned above, it can be ambiguous between two readings (i.e., 15b-d). Example (15c) exhibits the habitual meaning of the *b*-imperfective. Morphologically, the *b*-imperfective can appear in different forms, such as *bi-*, *ba-*, or *aba-*.[6] Unlike the posture verbs (*jaalis/qaʕaid* and *gayem*), the *b*-imperfective is not inflected based on the subject (person, number, or gender) in SNA. It is only the imperfective verb form that agrees with the subject.

[6] The prefix *aba-* is used only before imperfective verb forms that are inflected with the first person singular morphology, as shown in (11c).

The *b*-imperfective allows marking future progressive in SNA. This is only if it is prefixed to a subordinate copular auxiliary in the subjunctive mood that precedes imperfective indicative verbs, as shown in (16). Furthermore, it cannot be interpreted as a progressive marker, unlike in Levantine and Cairene Arabic (see Chapter 2, ex. (30)).

(16) a. nadir **bi**-ya-kun ya-əntaẓar-k fi l-mawaqif
Nader B-3P.SG.M-be$_{IMPF}$ 3P.SG.M-wait$_{IMPF}$-you in the-parking
'Nader will be waiting for you in the parking lot.'

b. l-ħariim **b**i-ya-kun-un ya-ʤahz-un
the-women B-3P.SG.F-be$_{IMPF}$-PL 3P.SG.F-prepare$_{IMPF}$-PL
e-sufrah maʕ ʕamat-ik
the-dinner-table with aunt-your
'The women will be preparing the dinner table with your aunt.'

c. axt-ik kan-t **b**-ta-kun ta-ktɪb
sister-your was-3P.SG.F B-3P.SG.F-be$_{IMPF}$ 3P.SG.F-write$_{IMPF}$
l-waʤɪb law ma kan-t taʕəban-ah
the-assignment if NEG was-3P.SG.F sick-3P.SG.F
'Your sister would have been writing the assignment if she hadn't been sick.'

From a morphosyntactic perspective, the occurrence of *kan* 'was' as a tense marker and *kun* 'be' as an auxiliary copula that is marked for progressive aspect show that the *b*-imperfective in SNA cannot function as a tense marker nor as an aspectual marker, as illustrated in (16). Thus, the *b*-imperfective in SNA can function as a future marker (16) or a mood marker.

The *b*-imperfective can also function as an indicative irrealis mood marker. This is commonly seen in non-future contexts: past habitual, progressive, conditional, or *if* clauses. Consider (17).

(17) a. kan-at **b**-ta-nam law ma ɣiyar-t
was-3P.SG.F B-3P.SG.F-sleep$_{IMPF}$ if NEG change$_{PERF}$.3P.SG.F-I.her
ray-ha
mind-her

‘She would have slept if I hadn’t changed her mind’

b. kan **bi**-ye-tˁiħ al-kas ʕala ras-ik law ma
was B-3P.SG.M-fall$_{IMPF}$ the-cup on head-your if NEG
mesak-t-ah
catch$_{PERF}$-I-it
‘The cup would have fallen on your head if I hadn’t caught it.’

c. law t-ðakir maʕi kul yum **aba**-a-sʕed-ık
if 2P.SG.M-study$_{IMPF}$ with every day B-help$_{IMPF}$-3P.SG-you
fi l-ʤamıʕah
in the-university
‘If you study with me every day, I will help you in the university.’

d. ʔax-ui **bi**-ya-ħıs bi-ʔallami law ya-ʕarif
brother-my B-3P.SG.M-feel$_{IMPF}$ my-pains if 3P.SG.M-know$_{IMPF}$
l-haqiqah
the-truth
‘My brother will feel my pains if he knows the truth.’

The above examples show that the SNA *b*-imperfective and the English epistemic *will* or *would* overlap in meaning, as in (17); however, the verb that follows has a different grammatical category: *b*-imperfective (+finite) and the epistemic *will* (-finite).

Generally, Palmer (2001) and Persson (2008) considered the use of the modal English *will* in sentences such as *We will walk to work during the evenings* or *We would walk to work most of the weekends* as invoking irrealis, meaning tending to act. This may be interpreted as either habitual or conditional (conditional based on other events). While the habitual can express realis in denoting a higher certainty, it can also express irrealis in lacking specific temporal reference as well as specific evidence (Givón, 1994). Persson (2008) viewed conditionality as a “modal” that defines the “actuality” (i.e., realness) of the event by way of what could occur or could have occurred. In Chapter 2, I highlighted the fact that imperfective aspect presents the situation from an internal viewpoint, often

as habitual or continuous (+/-progressive). I also noted that the future describes a point in time that will occur sometime after the moment of speech. As far as SNA *b*-imperfective is concerned, neither tense nor aspect is shared in the instance of the *b*-imperfective, as demonstrated in the above examples. This raises the following question: could the *b*-imperfective in SNA (a feature found in future, conditional, and habitual sentences) be determined by the way the speaker perceives the sentences/utterances rather than based on the temporal structure or location of the event?

The answer to this question can be addressed as follows. Since it is established that the SNA *b*-imperfective is neither tense nor aspect, as shown in (13), it leaves us with mood or modality, particularly irrealis mood. In (17) (as well as (14)-(16)), the speakers have not experienced the past they are referring to in all of the habitual pasts or conditional clauses where the *b*-imperfective is used. Since there is no evidence that the future action in the above examples will take place in time, their time reference becomes even more ambiguous (see Givón 1994; Palmer 2001; Persson 2008). In other words, what has not taken place in time yet cannot be resolutely built on the event because it may not have happened.

This conforms to the definition of the term *irrealis*, which describes a situation that is based on an assertion (Bybee, 1998, pp. 267-268) or expresses a lack of principle about an event that varies from a lack of certainty to knowledge of the reality (Chung & Timberlake, 1985, p. 245). For van Gelderen (2017, p. 80), irrealis mood is a future tense and does not realize an event. Based on the above examples (14)-(17), SNA *b*-imperfective conforms to Bybee, Chung, and Timberlake's and van Gelderen's

definitions of irrealis mood and the SNA *b*-imperfective has much in common with markers of irrealis found in some Gulf Arabic dialects (see Chapter 2, §2.4.3). Persson (2008) stated that irrealis modality in a language does not simply mean that everything is not marked as irrealis is by default realis. Languages vary in marking realis/irrealis in the scope of these two mentioned categories (Persson, 2008). Following Persson's (2008) proposal, since the irrealis is a modal distinction, it is up to the speaker to mark or not mark the *b*-imperfective. This also varies according to the context, including pragmatic or other speech-situation-oriented choices.

Having suggested that the irrealis is an important characteristic of the *b*-imperfective in SNA does not disregard nor isolate the characteristics shared between the other features, i.e., futurity, intentionality, immediacy, or habituality, as in (14)-(17). The significance of using the *b*-imperfective in *if*-clauses or conditional clauses could be a combination of its character as an irrealis marker and the way that SNA native speakers perceive it.

Based on our observation with regards to the classification of aspectual categorizations and verb phrase features, the *b*-imperfective can be followed by stative, activity, accomplishment, or achievement verbs. Let us first consider stative verbs with the *b*-imperfective, illustrated in (18).

(18) a. monna **b**-t-ʕarif kaif ta-ktɪm e-sir
Mona B-3P.SG.F-know$_{IMPF}$ how 3P.SG.F-keep$_{IMPF}$ the-secret
'Mona will know how to keep a secret. (stative)

b. antum **b**-ta-ħib-uun e-safar law ta-safar-tum maʕ-I
you B-2P.M/F-love$_{IMPF}$-PL the-travel if travel$_{IMPF}$-2P.M/F.PL with-me

‘You will love travelling if you travel with me.’ (stative)

c. ʔax-ui **bi**-ya-ħıs bi-ʔallami law ya-ʕarif
brother-my B-3P.SG.M-feel$_{IMPF}$ my-pains if 3P.SG.M-know$_{IMPF}$ l-haqiqah
the-truth
‘My brother will feel my pains if he knows the truth.’ (stative)

d. * **ba**-ʔa-bi sayaret-k bukrah ʕind l-bayt
B-1P.SG.M/F-want$_{IMPF}$ car-your tomorrow in-front the-house
‘I’ll want your car tomorrow in front of the house.’ (stative)

Imperfective stative verbs and the *b*-imperfective, illustrated in examples (18a-c), are compatible in SNA. The above examples show that the stative imperfective verbs are inherently [-telic] because in (18a-c) they do not require a goal or a terminal point and have no reference to change. The imperfective verbs also have [-dynamic/punctual] features because the verb *love/know/feel* is a notion that just happens (i.e., you either love/know/feel or not), as in (18). However, they can be [+/-durative], depending on the context. For example, the verb *btʕarif* ‘know’ in (18a) can have two interpretations: the act of knowing, either you know or you do not know [-durative], or the process of knowing, which refers to the duration of keeping a secret [+durative] (see Croft, 2012). Furthermore, (18d) is ungrammatical mainly because the *b*-imperfective cannot co-occur with the stative volition verb *yabɣa, tabi, yibi,* or *ʔabi* ‘want’. In the following chapter, I provide a detailed analysis for why *b*-imperfective verbs can co-occur with the stative volition verb. When co-occurring with a stative verb [*b*-prefix + stative imperfective verb], as in example (18a), native speakers view sentences as habitual, especially when the construction is part of the main clause. However, they view this morpheme in (18b,c) as an indicator that the events will not take place. Therefore, we can infer that such

sentences involve irrealis markers rather than future markers. Activity verbs work hand-in-hand with the *b*-imperfective, as in [*b*-prefix + activity imperfective verb]. Consider (19):

(19) a. **aba**-ʔa-mʃi li-dawam bukrah
B-1P.SG.M/F-walk$_{IMPF}$ to-work tomorrow
'I will walk to work tomorrow.' (activity)

b. istaʔdʒar-na masbaħ wə **b**-na-sbaħ
buy$_{PERF}$-3P.M/F.PL swimming.pool and B-3P.M/F.PL-swim$_{IMPF}$
fi-h yum l-ʔaħəd
in-it day the-Sunday
'We bought a swimming pool and we will swim in it on Sunday.' (activity)

c. l-mudars-iin kan-u **b**-ya-raqəb-uun ixtibarat
the-teacher-PL were-3P.PL.M B-3P.M-audit$_{IMPF}$-PL exam
l-tulab
the-students
'The teachers would have audited the students' exams.' (activity)

When activity verbs co-occur with the *b*-imperfective, as in (19), they are [+durative] because the act of swimming/walking/auditing involves an ongoing process. Based on sentences (19), activity verbs maintain their [+durative] feature in the *b*-imperfective. The above examples also show that imperfective activity verbs are [+dynamic] because there is a change in the heterogeneous internal structure of the verbs (e.g., *swim* and *walk*). However, they are [-telic] because the act of walking/swimming/auditing does not imply an endpoint. The *b*-imperfective with activity verbs can have various interpretations depending on the context or discourse of speaking. For instance, it can carry the meaning of futurity, intentionality, habituality, or a combination of two features as in (19a,b), which combines futurity and activity interpretations. Furthermore, it can be an irrealis marker (19c).

Accomplishment verbs are another verb class that is compatible with the SNA *b*-imperfective. They are constructed as follows: [*b*-prefix + accomplishment imperfective verb]. Accomplishment imperfective verbs, with this construction, are [+durative], [+dynamic], and [+telic]. With accomplishment verbs, the *b*-imperfective can denote intentionality (20a), futurity (20b), or indicative irrealis (20c).

(20) a. monna **b**-ta-kun ta-bni bayt-ha ʔmbəkir
Mona B-3P.SG.F-be$_{IMPF}$ 3P.SG.F-build$_{IMPF}$ house-her early
'Mona will be building her house early.' (accomplishment)

b. l-tulab **bi**-ya-rkɪẓ-uun miil daxil l-ħayi
the-students B-3P.M-run$_{IMPF}$-PL mile in the-neighborhood
'The students will run a mile inside the neighborhood. (accomplishment)

c. il-ʔuwalad **bi**-ya-maʃ-un maʔa-k li-l-madırasah
the-boys B-3P.M-walk$_{IMPF}$.PL with-you to-the-school
'The boys will walk with you to school.' (accomplishment)

d. l-ʔumal ma kan-u **b**-ya-ħdˤər-un əl-yawm
the-workers NEG were-3P.PL.M B-3P.M-attend$_{IMPF}$-PL the-today
'The workers wouldn't have come today.' (accomplishment)

Lastly but not least, constructions such as [*b*-prefix + achievement imperfective verb] are permissible in SNA. Achievement verbs are [+telic], [+dynamic], and [-durative]. The *b*-imperfective can be interpreted as a future or indicative irrealis marker. Consider (21).

(21) a. nasser **bi**-yə-fuz ʕala nadir fi l-sibaq
Naser B-3P.SG.M-win$_{IMPF}$ against Nader in the-race
'Naser will win the race against Nader.' (Achievement)

b. a-ʃık an-ha **b**-ta-lga
1P.SG.M/F-doubt$_{IMPF}$ that-she B-2P.SG.F-find$_{IMPF}$
flus-ha fi ʃantə-t e-sawaq
money-her in bag-POSS the-driver
'I doubt that she will find her money in the driver's bag.' (Achievement)

c. e-sawaq **bi**-yu-wesˁl-ık li-l-mattar fi saʕah
the-driver B-3P.SG.M-get$_{IMPF}$-you to-the-airport in hour
'The driver will get you at the airport in an hour.' (Achievement)

Like the APPVs, the SNA *b*-imperfective can be found in passive sentences. It can also carry the meanings of futurity, immediacy, intentionality, habituality, and irrealis mood. Note that the passivation of SNA *b*-imperfective is unexplored and to my knowledge has not been discussed so far. Consider example (22).

(22) a. **b**-yu-ktub el-waʤib fi laħaẓat
B-3P.F/M-PASS-write$_{IMPF}$ the-assignment in seconds
'The assignment will be written in seconds.' (Passive)

b. monna **b**-tu-ʕtˁa l-hadiah iða ta-ʔaxr
mona B-3P.SG.F-PASS-give$_{IMPF}$ the-gift if 2P.SG.M-come$_{IMPF}$
l-mutasabıq
the-contester
'Mona will be given the gift if the contester comes late.' (Passive)

In sum, the *b*-imperfective in SNA is no different from the *b*-imperfective in Gulf Arabic Dialects, such as UAE or Omani Arabic (Owens, 2018) or Kuwaiti Arabic (Johnstone, 1967) when it comes to marking futurity or denoting intentionality. However, it is unique in that it cannot denote progressivity (see Chapter 2, ex. (30b)). It resembles the English epistemic modal *will*. According to van Gelderen (2003), epistemic modals are used to describe knowledge and belief. In other words, *may, will, should, could,* and *must* can show both belief and permission. She adds that epistemic modals (i.e., *will*) mostly co-occur with an auxiliary, e.g., perfects or progressives. An example of this is *Nader will be waiting for you in the parking lot* (16a). Again, *will* serves as an epistemic modal followed by *waiting* in the imperfective or progressive. Now that I have presented

and discussed one expression of futurity in SNA, let us move to the motion verb *raħ* 'went'.

3.5.2 The motion verb raħ

Another common expression of futurity in SNA is the motion verb *raħ*. When the motion verb *raħ* precedes an imperfective verb, as in the [motion verb *raħ* + imperfective verb form] construction, it expresses a future event (23).

(23) a. sarah wa ʕali **raħ** ya-tswaq-uun li-l-ʕiid
Sarah and Ali FUT 3P.M/F-shop$_{IMPF}$-PL for-the-Eid
'Sarah and Ali are going to shop for Eid.'

b. **raħ** na-laʕəb kurah fi l-ħadigah
FUT 3P.M/F-play$_{IMPF}$-PL football in the-park
'We are going to play football in the park.'

c. *__raħ__ ʔa-rkiẓ ħul l-bayt ʔams
FUT 2P.SG.F/M-run$_{IMPF}$ around the-house yesterday
*'I am going to run around the house yesterday.'

The motion verb *raħ* functions as a future particle that does not accept any inflection (23a,b). Ouali and Al Bukhari (2016) viewed *raħ* as a light motion verb (see Chapter 2, ex. (20)), a claim I do not believe is valid. They overlooked the difference between the perfective inflected motion verb *raħ* as in *monna raħat ta-mʃi li-l-madarisah* 'Mona went walking to school' and the non-inflected *raħ,* as in (23). *raħat* 'she went' has lexical aspect; i.e., it is a full verb. Its semantic content is still intact. I provide a detailed analysis of the difference between the two types (*raħ* and *raħ*+ inflection) in Chapter 5.

Like other Arabic dialects (see Chapter 2, §2.4.2), the non-literal meaning only arises when the motion verb *raħ* co-occurs with a main verb in the imperfective. This also means that *raħ* loses its argument structure and becomes a grammatical aspect marker as

a result of the grammaticalization process. Consider (23a) above. The fact that Sarah and Ali are going to shop for Eid entails that the purchasing activity is about to take place in the future (see Hopper & Traugott, 2003, p. 3). Ouali and Al Bukhari (2016) and Persson (2008) equated *raħ* to the English future modal *will* in terms of semantic interpretations; *raħ* and *will* are identical according to them. I argue this analysis is incorrect for SNA. In fact, both the *b*-imperfective and *raħ* are used differently in SNA, depending on the context. Consider (24) and (25) below.

(24) a. dardʒat-i marah siyaʔah fi l-gıraʔah min ya-gdar
grades-my so terrible in the-reading who 3P.SG.M-can$_{IMPF}$
ya-saʕıd-ni
3P.SG.M-help$_{IMPF}$-me
'My grades are so terrible in reading. Who can help me?'

b. **aba**-ʔə-saʕid-ik el-lilah inʃallah
B-1P.SG.M/F-exercise$_{IMPF}$-you the-tonight God.willing
'I will help you tonight, God willing.'

(25) ixtibart l-fasˁal l-sˁaifi yum l-ʔaħəd l-dʒay **raħ**
exams the-term the-summer day the-Sunday the-coming PROSP
ʔə-saʕid-ik l-lilah
1P.SG.M/F-help$_{IMPF}$-you the-tonight
'The summer exams are going to be on the coming Sunday. I'm going to help you tonight.'

In example (24b), the *b*-imperfective is used to describe a sudden decision for the future. The verb *help* (24b) is used as a sudden reply during the moment of speaking to answer the speaker of (24a) and the request for help. Note that the context implies that the speaker in (24b) had no previous intention or plans to help the speaker in (24a) before the conversation. On the other hand, (25) shows that the intention of helping was planned before the event of the conversation. Therefore, like the English *be going to*, the SNA

motion verb *raħ* works in this context. However, using the particle *b*-imperfective instead of *raħ* in (25) results in ambiguity.[7]

This case was also highlighted in Syrian Arabic (Jarad, 2015). Like SNA, Syrian Arabic uses the *b*-imperfective or the motion verb *raħ* to express future events (Jarad, 2013; 2014). Cowell (2005, p. 232) suggested that in some Syrian Arabic contexts, the motion verb *raħ* is used to mark the future as unmistakably future; the *b*-imperfective is used to indicate a sense of habitual and semantic generality.

Unlike Ouali and Al Bukhari (2016) and Persson (2008), Jarad (2014) did not view *raħ* as a modal akin to *will*; rather, he saw *raħ* as a prospective aspect marker (see Chapter 2, §2.4.2). In English, for instance, examples of prospective events are sometimes expressed through the form *be going to*. Comrie (1976, p. 64) viewed the English *be going to* as prospective future aspect that expresses a relationship between the present and the future, the moment of speaking and a subsequent event. Interestingly, (23) and (25) demonstrate some close semantic and grammatical similarities between the English *be going to* and the SNA motion verb *raħ.*[8] The only dissimilarity found, however, is that the imperfective verb form that follows *raħ* must be morphologically inflected (e.g., gender, number, and person). Jarad (2015) overlooked the inflection process on the imperfective verb form in Syrian Arabic, which is not allowed in English. This is important for our purpose of study because it provides us with some evidence that *raħ* is not fully grammaticalized. I provide a detailed analysis of this case in Chapter 5.

[7] It is worth noting that the semantic variation between *raħ* and the *b*-imperfective in SNA are difficult to distinguish even among SNA native speakers. However, they agree on the fact that *raħ* fundamentally denotes future plans when co-occurring with imperfective verbs.
[8] For more discussion on *be going to,* see Hopper and Traugott (2003, pp. 1-3).

Following Jarad (2014), I argue that *raħ* functions as a future particle when it appears in [*raħ* + imperfective verb form] constructions. I also view *raħ* as a tenseless prospective grammatical aspect marker (PROSP), not a lexical aspect marker; i.e., it is not a full verb, as elaborated in Chapter 5.

In the [*raħ* + imperfective verb form] construction, the aspectual interpretation can sometimes vary depending on the context of the sentence. For example, the construction can sometimes imply future intentionality, immediacy, distance, or a two-combination set of any of the three, as illustrated in (25a,b)-(26a-c).

(25) a. mona **raħ** ta-tˁlaʔ li-k ʕind bab l-madarısah
Mona PROSP 3P.SG.F-come$_{IMPF}$ to-you at door the-school
'Mona is going to come out to you at the school door.' (FUT-IMD)

b. mita **raħ** ya-bda l-filim
when PROSP 3P.SG.M-start$_{IMPF}$ the-movie
'When is the movie going to start?' (FUT-IMD)

c. fi laħaẓat **raħ** ta-ʃuuf ʃi ʕadʒiib fi e-mubarah
in moments PROSP 2P.SG.M-see$_{IMPF}$ something strange in the-game
'In moments, you are going to see something strange in the game.' (FUT-IMD)

(26) a. **raħ** ʔa-safer maʔ ʕami saʔəd li-lxardʒ baʕad ʃahar
PROSP 1P.SG.M/F-travel$_{IMPF}$ with uncle Sa'ad to-the-Kharj after month
'I'm going to travel with uncle Sa'ad to Al-Kharj after a month.' (INT, distant future)

b. nadi l-hillal **raħ** ya-ʕaskir fi l-namsa fi fətrat e-sayf
club Al-Hilal PROSP 3P.SG.M-camp$_{IMPF}$ in the-Austria in period the-summer
'Al-Hilal (football) club is going to camp in Austria in the summer." (INT/distant future)

c. l-məstaʤir **raħ** ya-lɣi ʕəgɪd al-ʔaʤar
the-tenant PROSP 3P.SG.M-cancel$_{IMPF}$ contract the-leasing
'The tenant is going to cancel the contract.' (IMD)

It is important to keep in mind that *raħ* in the above examples marks future events but cannot be interpreted as irrealis mood. *raħ* describes a situation that is based on plans, intentions, or certainty, unlike the *b*-imperfective, which implies a supposition or lack of certainty. In (25), with the presence of the particle *raħ*, the sentences cannot be considered irrealis because the speaker has plans before the event of speaking. Therefore, their statements are not based on a supposition or a lack of certainty. The particle *raħ* only has future time reference and carries a prospective aspectual interpretation. *raħ* as a prospective aspect marker can be used in non-future time reference (e.g., the past tense). Additionally, *raħ* retains its prospective aspect meaning in the past tense. Consider (27).

(27) a. kan-at **raħ** ta-nam law ma
was-3P.SG.F PROSP 3P.SG.F-sleep$_{IMPF}$ if NEG
ɣiyar-t ray-ha
change$_{PERF}$.3P.SG.F-I-her mind-her
'She was going to go to sleep if I hadn't changed her mind.'

b. kan **raħ** ya-tˤiiħ al-kas ʕala ras-ik
was.3P.SG.M PROSP 3P.SG.M-fall$_{IMPF}$ the-cup on head-your
law ma mesak-t-ah
if NEG catch$_{PERF}$-I-it
'The cup was going to fall on your head if I hadn't caught it.'

Additionally, *raħ* can be used before subordinate copular auxiliary in the subjunctive mood to indicate a state of being. The imperfective verb form that follows the subordinate copula functions as a progressive aspect marker, as demonstrated in (28).

(28) a. nadir **raħ** ya-kun ya-ntaẓar-k fi
Nader PROSP 3P.SG.M-be$_{IMPF}$ 3P.SG.M-wait$_{IMPF}$-you in

l-mawaqif
the-parking
'Nader is going to be waiting for you in the parking lot."

b. l-ħariim **raħ** ya-kun-un ya-ʤahz-un
the-women PROSP 3P.SG.F-be$_{IMPF}$-PL 3P.SG.F-prepare$_{IMPF}$-PL
e-sufrah maʕ ʕamat-ik fatʿmah ʕala e-subħyah
the-dinner-room with aunt-your Fatima in the-morning
'The women will be preparing the dinner table with your aunt Fatima in the morning.'

It is acceptable in SNA to precede *raħ* with a perfective auxiliary copula or subordinate auxiliary copula, or both (29). This supports my main claim that the motion verb *raħ* in SNA is grammatical aspect, not lexical aspect or a tense marker.

(29) nadir kan **raħ** ya-kun ya-ntaẓar-k
Nader was$_{PERF}$-3P.SG.M PROSP 3P.SG.M-be$_{IMPF}$ 3P.SG.M-wait$_{IMPF}$-you
fi l-mawaqif
in the-parking
'Nader was going to be waiting for you in the parking lot.'

The motion verb *raħ* is not sensitive to the lexical class and verb phrase features of the imperfective verb form. For instance, *raħ* can be used with achievement verbs that are predicted to happen in either future (30a-c) or non-future (30d), as in the following construction: [*raħ* + achievement imperfective verb]. Additionally, achievement verbs are most likely to be [+telic], [+dynamic], and [-durative].

(30) a. l-tulaab **raħ** ya-safer-un al-jimaʕa
the-student-2P.PM PROSP 3P.M-travel$_{IMPF}$-PL Friday
'The students are going to travel on Friday.' (achievement)

b. ʃakel al-tayyar-ah **raħ** ta-hbit ʕala l-Θlʤ.
seem the-plan-3P.SF PROSP 3P.SG.F-land$_{IMPF}$ on the-snow
'It seems the plan is going to land on the snow.' (achievement)

c. ma a-dri wiʃ **raħ** ya-sˁiir
NEG 2P.SG.M/F-know$_{IMPF}$ what PROSP 3P.SG.M-decrease$_{IMPF}$
l-e-ʃarikah baʕad l-xasarah
to-the-company after the-lost
'I don't know what's going to happen to the company after the lost.'
(achievement)

d. min kan **raħ** yə-wesˁl-ık li-l-mattar
who was PROSP 3P.SG.M-get$_{IMPF}$-you to-the-airport
'Who was going to get you to the airport?' (achievement)

Additionally, the motion verb *raħ* is compatible with other verb classes, such as accomplishment verbs with the following structure: [*raħ* + accomplishment imperfective verb]. The analyzed accomplishment predicates have [+telic], [+dynamic], and [+durative] features, as illustrated in (31).

(31) a. l-tulab **raħ** ya-rkɪẓ-uun miil daxil l-ħayi
the-students PROSP 3P.M-run$_{IMPF}$-PL mile inside the-neighborhood
'The students are going to run a mile inside the neighborhood.'
(accomplishment)

b. il-ʔuwalad **raħ** ya-maʃ-un maʔa-k li-l-madırasah
the-boys PROSP 3P.M-walk$_{IMPF}$.PL with-you to-the-school
'The boys are going to walk with you to school.' (accomplishment)

c. jar-na **raħ** ya-bni bayt-əh ʤanb bayt-na
neighbor-our PROSP 3P.SG.M-build$_{IMPF}$ house-his beside house-our
'Our neighbor is going to build his house beside our house."
(accomplishment)

raħ is also compatible with stative verb forms. They are constructed as follows: [*raħ* + stative imperfective verb]. In such sentences, the stative imperfective verb forms have [-telic], [+dynamic/durative], and [+durative] features (32).

(32) a. monna **raħ** ta-ʕarif kaif ta-ktım e-sir
Mona PROSP 3P.SG.F-know$_{IMPF}$ how 3P.SG.F-keep$_{IMPF}$ the-secret
'Mona is going to know how to keep a secret." (stative)

b. antum **raħ** ta-ħib-uun e-safar law
you PROSP 2P.M/F-love$_{IMPF}$-PL the-travel if
ta-safar-tum maʕ-I
travel$_{IMPF}$-2P.M/F.PL with-me
'You are going to love travelling if you travel with me.' (stative)

c. **raħ** a-xaf iða ʃaɣəl-t l-film
PROSP 1P.SG.M/F-scare$_{IMPF}$ if played-SP.SG.M.PF the-movie
l-murʕɪb
the-horror
'I'm going to be scared if you play the horror movie.' (stative)

d. **raħ** ʔa-bi sayaret-k bukrah ʕind l-bayt
PROSP 1P.SG.M/F-want$_{IMPF}$ car-your tomorrow in-front the-house
'I'm going to want your car tomorrow in front of the house.' (stative)

Lastly, *raħ* and activity verbs can co-occur, marking future prospective aspect: [*raħ* + activity imperfective verb]. Activity verbs are [-telic], [+dynamic], and [+durative] as in (33).

(33) a. **raħ** ʔa-mʃi li-dawam bukrah
PROSP 1P.SG.M/F-walk$_{IMPF}$ to-work tomorrow
'I'm going to walk to work tomorrow.' (activity)

b. istaʔdʒar-na masbaħ wə **raħ** na-sbaħ
buy$_{PERF}$-3P.M/F.PL swimming-pool and PROSP 3P.M/F.PL-swim$_{IMPF}$
fi-h yum l-ʔaħəd
in-it day the-Sunday
'We bought a swimming pool and we are going to swim in it on Sunday.' (activity)

raħ can be used in passive sentences. It can also carry the meanings of future immediacy, intentionality, or both. Consider (34).

(34) a. **raħ** yu-ktub el-wadʒib fi laħaẓat
PROSP 3P.F/M.PASS-write$_{IMPF.}$ the-assignment in seconds
'The assignment is going be written in seconds.' (passive)

b. monna **raħ** tu-ʕtˁa l-hadiyah iða
mona PROSP 3P.SG.F.PASS-give$_{IMPF}$ the-gift if
ta-ʔaxr l-mutasabıq
2P.SG.M-come$_{IMPF}$ the-contester
'Mona is going be given the gift if the contester comes late.' (passive)

Briefly, I suggest that the SNA motion verb *raħ* loses its main semantic and grammatical functions once it co-occurs with an imperfective verb form. SNA resembles Syrian and Gulf Arabic in terms of marking future intentionality or immediacy. *raħ* as a prospective aspect particle functions the same way as the Syrian Arabic dialect's particle does (Jarad, 2014). The data above show that the motion verb *raħ* in SNA conforms to Vendler's (1967) and Croft's (2012) aspectual categorizations and Smith's (1997) verb phrase features. Like the posture verbs and the *b*-imperfective above, *raħ* can also be used in passive sentences and still retains its aspectual interpretation: a prospective aspect marker.

3.6 Conclusion

This chapter examined three cases of grammaticalization in SNA: the APPVs (*jaalis/qaʕaıd* and *gayem*), the *b*-imperfective, and the motion verb *raħ*. The data show that SNA has considerable variation in marking TMA and that when these cases co-occur with imperfective verbs, they lose their semantic content and only denote TMA. For instance, when co-occurring with imperfective verb forms, the APPVs function as light verbs and have progressive aspect interpretations. Moreover, the data show that the APPVs are used more regularly with activity and accomplishment verbs; however, they are unacceptable with stative verbs and are rarely used with achievement verbs.

The data also show that the *b*-imperfective in SNA functions similarly to the English modal *will* in that one its main functions is irrealis mood. It can also be used with all imperfective verb classes, except the stative volition verb *yabɣa, tabi*, *yibi*, or *ʔabi* 'want.'

The data shows that the meanings of English *be going to* and SNA *raħ* overlap. That is, the motion verb *raħ* marks prospective aspect. Additionally, the data shows that *raħ* cannot be assimilated to the function of the *b*-imperfective because each morpheme has a different interpretation: namely, a sudden decision (*b*-imperfective) vs. a planned decision (*raħ*). Unlike the *b*-imperfective and the posture verbs, the motion verb *raħ* can be used with all verb classes and verb phrase features.

All three grammaticalized cases pass the passivization test in SNA. Also, they can occur before or after animate or inanimate subjects, in active or passive voice. This chapter compared SNA to the Arabic dialects discussed in Chapter 2 and the standard variety (MSA/CA). The findings suggest that SNA is more similar to other Arabic dialects, discussed in Chapter 2, with minimal variation, and is morphosyntactically different from MSA/CA. How did these verbs come to mark TMA in SNA? In Chapters 4, 5, and 6, I trace the grammaticalization process of the APPVs, the *b*-imperfective, and the motion verb *raħ*, taking into consideration their original functions as lexical verbs.

CHAPTER 4

THE GRAMMATICALIZATION OF FUTURITY IN SNA: THE *B*-IMPERFECTIVE

Chapter 4 attempts to provide a description of the grammaticalization of the *b*-imperfective. In other words, it seeks to provide a clear understanding of the reanalysis of the morphosyntax and morphology of the *b*-imperfective irrealis in SNA. In doing so, the chapter depends on the four principles of grammaticalization that were highlighted in Chapter 2: namely, desemanticization, extension, decategorialization, and erosion. Additionally, the chapter proposes a description of the different stages of grammaticalization for the reanalysis of the *b*-imperfective.

4.1 Volition Verbs as a Source of Futurity

Crosslinguistically, future markers are most often developed from constructions expressing obligatory or necessity, desire, or movement or intention (Bybee et al., 1994, p. 159). According to Trask (2015, p. 135), verbs that denote the meaning of 'want', 'go', 'must', and 'come' become grammatical markers of futurity in the languages of the world. As exemplified in Chapter 2, the English modal *will* in English was grammaticalized from the old English volition verb *wyllan* 'to desire', 'to wish', or 'to want'. Consequently, the modal verb *will* was generalized from the meaning of 'desire' to the English future tense marker (Bybee et al., 1994, pp. 254-256). There are several pathways of grammaticalization for markers of futurity to develop crosslinguistically. Among these pathways, the conventionalization of inference is worth mentioning. It is proposed that the transition from lexical to grammatical (modal) is attained by a dramatic frequency increase in the types and number of contexts where a grammatical morpheme

can be used (see Bybee, 2003, p. 602; Bybee et al., 1994, p. 8). Bybee et al. (1994, p. 256) delineated this pathway in (1) below:

(1) DESIRE > WILLINGNESS > INTENTION > PREDICTION

This means that, when a speaker utters a statement such as *Mona wants to leave now*, the hearer infers that Mona has the intention or the desire to leave and that the speaker uttering this statement is expressing Mona's intention. Based on Bybee et al. (1994, p. 256), this involves a conventionalization of the inference: *Mona wants to leave > Mona intends to leave soon > Mona will leave.* Therefore, the meaning of *want* becomes desemanticized or bleached, leaving behind a temporal relation of futurity: hence the English irrealis *will* (see Bybee, 2003, p. 602; Bybee et al. 1994, p. 8; Jarad, 2014).

Linguists such as Persson (2008) and Owens (2018) have suggested that the *b*-imperfective was grammaticalized from the *p*-stem of the volition verb *baɣa* 'he wanted' or *yabɣa* 'he wants' (see Chapter 2). This chapter supports Persson's and Owens' proposals since SNA native speakers use *baɣa* and *yabɣa* to express *wishes*, *willingness*, *desires*, *intentions*, and *wants*. However, I suggest that the *b*-imperfective was derived from the perfective volition verb *baɣa* (and not *yabɣa*) since *baɣa* is the main underlying morphological form for the conjugation. In the following section, I provide a description of the grammatical function of the verb *baɣa* and its conjugation.

4.2 Description of the SNA Volition Verb *baɣa* 'he wanted'

In SNA, the volition verb *baɣa* 'he wanted' is a stative verb that is inherently [+durative], [-dynamic], and [-telic]. It is also an accusative and a transitive verb because

it requires a CP object complement. It can only occur with animate subjects (2a-e). It cannot occur with inanimate subjects, especially if it is imperfective (2f).

(2) a. mona **baɣ**-at ta-ʔtˁi axt-ah ħalau
Mona want$_{PERF.}$3P.SG.F 3P-SG.F-give$_{IMPF}$ sister-her candy
'Mona wanted to give her sister candy.'

b. bısaraħə ʔa-**bi**/a-**ba**/a-**bɣa** ʔa-ruħ li-suq e-semək
frankly 1P.SG.F/M-want$_{IMPF}$ 1P.SG.F/M-go$_{IMPF}$ to-market the-fish
'Frankly, I want to go to the fish market.'

c. l-xarof ya-**bi** ya- tˁlaʕ min ıl-bayt
the-sheep 3P.SG.M-want$_{IMPF}$ 3P.SG.F-exisit from the-house
'The sheep wants to get out of the house.'

d. ʕali **baɣa** ya-safer lakin ma maʔ-ah
Ali want$_{PERF.}$3P.SG.M 3P.SG.M-travel$_{IMPF}$ but NEG with-he
fluus kafiah
money enough
'Ali wanted to travel but he did not have enough money.'

e. wafa qarer-at (inn-ha) ta-**bi**
Wafa decide$_{PERF}$-3P.SG.F that-she 3P.SG.F-want$_{IMPF}$
ta-ʃtıri
3P.SG.F-buy$_{IMPF}$
l-sayarah
the-car
'Wafa decided that she wants to buy the car.'

f. *el-saʔah illi ʔala l-ʤadar ta-**bɣa**/ta-**bi** ta-tˁiħ
the-clock that on the-wall 3P.SG.F-want$_{IMPF}$ 3P.SG.F-fall$_{IMPF}$
ʔala-ik
on-you
(Intended: The clock that is on the wall wants to fall on you.)

As a lexical verb, the volitional verb forms of *baɣa* in (2) are subjunctive and used to express desire, willingness, intention, or a wish. The verb *baɣa* has the argument structure [NP-{NP/VP}]. For instance, in (2a), *Mona* is the AGENT of *baɣat,* and *taʔtˁi axtah ħalau* is a VP complement. Within this VP complement is an NP that functions as

the THEME of the verb *taʔtˁi* and that the very same theta role assignment arises for (2, b, c). Another example is (2d), where *Ali* is the AGENT of *baɣa* and *yasafer* is a VP. Unlike (2a-c), there is no THEME because *yasafer* is intransitive and does not need an object or complement. Furthermore, *baɣa* is a control verb in SNA. For example, the subordinate clause in (2e) has two transitive verbs, namely, *qarerat*, and *tabi*. The first verb *qarerat* takes an AGENT (Wafa) and takes a CP complement. The verb *tabi* (wants) has a THEME and a PRO AGENT that is controlled by NP Wafa. Therefore, *baɣa*, in the instances of (2), is a control verb. In Chapter 7, I present a morpho-syntactic hierarchy analysis of position of the volition verb *baɣa.*

In addition to its volitional meaning, the perfective *baɣa* sometimes serves as an adverbial phrase in SNA. Consider the following sentences.

(3) a. **baɣa** ya-ruħ fi-ha əxu-k fi-ðak
want$_{PERF}$.3P.SG.M 3P.SG.M-go$_{IMPF}$ in-it brother-your in-that
l-ħadiϴ
the-accident
'Your brother almost got (himself) killed in that accident.'

b. l-mumərid^{ˁ}ah **baɣ**-at tə-ʤiib l-ʕiid ams
the-nurse want$_{PERF}$-3P.SG.F 3P.SG.F-bring$_{IMPF}$ the-aid
yesterday
'The nurse almost endangered herself yesterday.'

c. **baɣa** ya-t^{ˁ}iiħ nadər fi l-masbəħ
want$_{PERF}$.3P.SG.M 3P.SG.M-fall$_{IMPF}$ Nader in the-swimming.pool
'Nader almost fell in the swimming pool.'

d. el-saʔah illi ʔala l-ʤadar **baɣ**-at ta-t^{ˁ}iħ ʔala-ik
the-clock that on the-wall 3P.SG.F-want$_{IMPF}$ 3P.SG.F-fall$_{IMPF}$
on-you
'The clock that is on the wall almost fell on you.'

In (3), *baɣa* is used as an adverbial phrase to modify its VP complement (an imperfective verb phrase). In other words, it is a clause constituent that expresses the manner of its VP. Additionally, *baɣa* still has its theta roles that it assigns to its arguments and it agrees with its NP subject. It is worth noting that the uses of *baɣa* in (3) are completely different from (2). For instance, in (2d) *baɣa* functions as a lexical volition verb that cannot co-occur with inanimate subjects, hence the ungrammaticality of (2d). On the other hand, *baɣa* in (3d) has no volitional meaning and still carries its agreement features (2d). Thus, it is still lexical because it serves as an adverbial phrase.

There is another form of *baɣa,* the imperfective active participle *ba'ɣi* 'wish', 'will', or 'desire'. The only occasion *ba'ɣi* is used is in a negative sentence is as in (4). Since this form of *baɣa* is very rarely[9] used by SNA native speakers, *ba'ɣi* appears to be irrelevant to this research.

(4) ʕali mob **ba'ɣi** ya-mʃi maʕ-na
Ali NEG want$_{IMPF.}$3P.SG.F 3P.SG.F-walk$_{IMPF}$ with-us
'Ali does not want to walk with us.'

Morphologically, the verb *baɣa* 'he wanted' is the basic trilateral root and the *p*-stem for conjugation. In SNA, the *p*-stem *baɣa* can occur in two morphological forms: perfective and imperfective. Following Tables 3.1 and 3.2 in Chapter 3, the perfective and imperfective conjugations of the verb *baɣa* are represented in Tables 4.1 and 4.2, respectively, below.

[9] Some SNA native speakers consider the usage of the active participle *ba'ɣi* to be odd and instead prefer the perfective or imperfective forms of *baɣa.*

Table 4.1

Saudi Najdi Arabic Perfective Features of baɣa

Perfective	Suff.	Gloss	ϕ-Features	Verb+Affix	Meaning
baɣa	Ø	$want_{PERF}$-Ø	3P.SG.M	baɣa	He wanted
baɣa	-t	$want_{PERF}$ -F	3P.SG. F	baɣa-at	She wanted
baɣa	-t	$want_{PERF}$ -F/M	2P.SG.F/M	baɣa-t	I wanted
baɣa	-ti	$want_{PERF}$ -F	2P.SG.F	baɣa-ti	You wanted
baɣa	-u	$want_{PERF}$ -PL	3P.F/M.PL	baɣ-u	They wanted
baɣa	-na	$want_{PERF}$ -PL	3P.M/F.PL	baɣa-yna	We wanted
baɣa	-tum	$want_{PERF}$ -PL	2P. M/F.PL	baɣa-tum	You wanted

Table 4.2

Saudi Najdi Arabic Imperfective Features of baɣa

P-stem	Affix	Gloss	ϕ-Features	Affix+Verb	Meaning
baɣa	ʔa-	M/F-$want_{IMPF}$	1P.SG.M/F	ʔa-baɣa/ʔa-bi/aba	I want
baɣa	ta-	M-$want_{IMPF}$	2P.SG.M	ta-bi/bɣa	You want
baɣa	ta-	NEUT-$write_{IMPF}$	3P.SG.NEU	ta-bi/bɣa	It wants
baɣa	ta-	F-$want_{IMPF}$	3P.SG.F	ta-bi/bɣa	She wants
baɣa	ta-…-iin	F-$want_{IMPF}$	2P.SG.F	ta-b/bɣ-iin	You want
baɣa	ta-…-uun	M/F-$want_{IMPF}$-PL	2P.PL.M/F	ta-b/bɣ-uun	You want
baɣa	ya-	Ø-$want_{IMPF}$	3P.SG.M	ya-bi/bɣa	He wants
baɣa	ya-…-uun	Ø-$want_{IMPF}$-PL	3P. PL. F/M	ya-b/bɣ -uun	They want
baɣa	na-	PL-$want_{IMPF}$	3P. PL.M/F	na-bi/bɣa	We want

As Tables 4.1 and 4.2 show, the perfective and imperfective forms of *baɣa* are morphologically regular in ways that are in part a function of the morphological complexity of the verb. The two forms of *baɣa* are inflected differently for the subject NP. It is worth remembering that the perfective inflection form is mainly suffixal, whereas the imperfective inflection form is circumfixal in SNA (see Chapter 3). Tables 4.1 and 4.2 are important and significant for our purpose of examination because they display the different morphological forms of the verb *baɣa* that the *b*-imperfective can be

traced back to. For instance, *aba*, *bi*, *b*, and *ba* in Table 4.2 are variants of the verb *baɣa*, as illustrated in (5).

(5) a. monna **b**-ta-kun ta-bni bayt-ha ʔmbəkir
Mona B-3P.SG.F-be 3P.SG.F-build$_{IMPF}$ house-her early
'Mona will be building her house early.'

b. l-tulab **bi/b**-ya-rkɪẓ-uun miil daxil l-ħayi
the-students B-3P.M-run$_{IMPF}$-PL mile in the-neighborhood
'The students will run a mile inside the neighborhood.'

c. **aba**-ʔa-saʕaidik fi ħel waʤib-k bukrah
B-1P.SG.M/F-help$_{IMPF}$ in answering assignment-2SG.POSS tomorrow
'I will help you in answering your assignment tomorrow.'

Based on Tables 4.1 and 4.2 and example (5), I suggest that the SNA *b*-imperfective has been grammaticalized from the volition verb *baɣa*. In other words, as the lexical verb (*baɣa*) underwent grammaticalization, it was reduced to a prefix *b*- in order to function as an irrealis mood marker in SNA (see Chapter 3).

Having established that the *b*-imperfective originated from the volitional *p*-stem verb *baɣa* 'he wanted', it is important to understand how it has been reanalyzed in SNA as an irrealis marker. In the following sections, I provide a detailed analysis of the grammaticalization of the *b*-imperfective.

4.3 Description of the *b*-Imperfective Grammaticalization Process

Generally, the expression of futurity is marked in similar manners in the languages of the world. Bybee et al. (1994, p. 159) suggested that futurity markers are often developed from "constructions expressing obligation or necessity, desire, and movement or intention." In Chapter 2, I highlighted the four universal principles of grammaticalization: desemanticization, extension, decategorialization, and erosion (see

Hopper & Traugott, 2003). It is expected that the SNA *b*-imperfective will have undergone those four principles in order to be reanalyzed as an irrealis marker.

4.3.1 Semantic bleaching

The first grammaticalization principle tested in the analysis is *desemanticization*. Given that the volition verb *baɣa* has been reanalyzed as a generalized form of irrealis, it is no longer compatible with any argument structure, hence the [NP-{NP/VP}] structure. Therefore, in the absence of argument structure, we are left with the morpheme form *b*- from the lexical verb *baɣa*. Consider (6).

(6) a. **aba**-ʔa-saʕaidik fi ħel wadʒib-k bukrah
B-1P.SG.M/F-help$_{IMPF}$ in answering assignment-2SG.POSS tomorrow
'I will help you in answering your assignment tomorrow.'

b. biserʕah **ba**-ʔa-ʕtˁik mefatıħ l-bayt wa
immediately B-1P.SG.M/F-give$_{IMPF}$ keys the-house and
ba-ʔa-mʃi
B-1P.SG.M/F-leave$_{IMPF}$
'Immediately! I'll give you the keys and I will leave.'

c. law t-ðakir maʕi kul yum **aba**-a-sʕed-ık
if 2P.SG.M-study$_{IMPF}$ with every day B-help$_{IMPF}$-3P.SG-you
fi l-dʒamıʕah
in the-university
'If you study with me every day, I will help you in the university.'

d. sarah gal-at li ann-ha sˁıdıq **b**-ta-sbaħ
Sarah said$_{PEFR}$-3P.SG.F to-me that-she really B-3P.SG.F-swim$_{IMPF}$
fi l-nadi
in the-gym
'Sarah said that she truthfully will swim in the gym after an hour.'

The *b*-imperfective in (6) has been bleached. In other words, the verb *baɣa* has been *desemanticized*, having lost the volitional meaning related to its s-selection (theta roles), and has gained an irrealis mood interpretation. Bybee et al. (1994) described this

development as a change from agent-oriented to speaker-oriented modality. Therefore, the volitional meaning of the verb *baɣa,* e.g., *aba* or *ba* in (6), has been bleached, leaving only futurity. As result of semantic bleaching, the volition verb *baɣa* has become generalized; hence, this is an example of semantic extension.

4.3.2 Semantic extension

The second grammaticalization principle tested in the analysis is generalization (or extension). The role of semantic extension in the grammaticalization of a lexical item is important (Hopper & Traugott, 2003, p. 101). This is because when a lexical item is semantically richly specific or has a specific reading, it is likely to have very limited distribution. However, if the specific lexical content of a lexical item is lost, it becomes less restricted in usage. Linguists have suggested that when metaphorization or metonimization are involved, a lexical item's interpretation will become broadened and used with high frequency. As established in Chapter 2, the involvement of metaphorization or metonimization mechanisms trigger inviting inferences. Therefore, to ensure that the word meaning is understood as being part of the context/discourse (in conversation or written), the speaker expresses her/his statement in a manner that the addressee feels invited to infer the meaning of a given word (see Hopper & Traugott, 2003, p. 101; Traugott & Dasher, 2002, pp. 27-34).

Despite the importance of metaphorization and metonimization mechanisms in the grammaticalization process, when it comes to the volition verb *baɣa,* there is no historical linguistic documentation of metaphorization or metonimization in SNA. However, in (2), we saw that the volitional verb *baɣa* can express *intention*, *willingness*,

want, and *desire*. Such expressions can be regarded as cases of metaphorization and metonimization in SNA. Additionally, when *baɣa* is used as a lexical verb, it requires an animate subject. However, due to grammaticalization, the *b*-imperfective has extended its use to contexts that involve inanimate subjects, as illustrated in (7).

(7) a. l-mawʿid **b**-ya-ruħ ala-yna
the-appointment B-3P.SG.M-miss$_{IMPF}$ on-us
'We will miss the appointment.'

b. l-sayarah **b**-ta-maʃi bukrah ħul e-saʕah ʕaʃir e-subaħ
the-car B-leave tomorrow around the-clock ten the-morning
'The car will leave around 10 o'clock in the morning.'

c. el-saʔah illi ʔala l-ʤadar **b**-ta-tˁiħ ʔala-ik
the-clock that on the-wall B-3P.SG.F-fall$_{IMPF}$ on-you
'The clock that is on the wall will fall on you.'

Based on (7), *baɣa* seems to have lost its meanings of *want*, *desire*, and *willingness*, and has grammaticalized into a generalized marking of 'irrealis' (see Chapter 3). As a result, the meaning of *baɣa* must involve inferred futurity. This leads us to question its syntactic selection, and therefore its decategorialization.

4.3.3 Decategorialization

Following desemanticization, the *b*-imperfective becomes "decategorialized" or decategorized (see Chapter 2). Due to the grammaticalization process, the volition verb *baɣa* lost its status as an independent lexical verb form (*baɣa*) and, consequently, became prefixed to a main imperfective verb. As a result, its syntactic selection and valency (Chapter 2) should have changed.

4.3.3.1 Syntactic selection properties

It was highlighted above that the volition verb *baɣa* has the argument structure [NP-{NP/VP}], as in (1a) and repeated in (8) below.

(8) sarah ta-**bɣa**/ta-**bi** ta-dəfaʔ iidʒar-ha l-matʔaxir
Sarah 3P.SG.F-want$_{IMPF}$ 3P.SG.F-pay$_{IMPF}$ the-rent-her the-late
'Sarah wants to pay her late rent.'

As discussed in §4.1, the verb *tabɣa* subcategorizes for an NP AGENT (*sarah*) and a VP complement (*tadəfaʔ iidʒarha l-matʔaxir*), which serves as the THEME. As *baɣa* underwent the grammaticalization process, it was reanalyzed as an irrealis marker, the *b*-imperfective, in SNA and, as a result, lost its argument structure (8). In fact, the syntactic c-selection (category selection) of the *b*-imperfective has been lost. Therefore, the imperfective verb that the morpheme *b*- is prefixed to has the c-selection role as the main verb, which can have zero to three arguments, as in (9).

(9) a. **b**-ta-mtˁər (bara)
B-3P.SG.F-rain$_{IMPF}$ outside
'It will rain (outside).'

` b. hom **b**-ya-ktub-un el-wadʒib
they B-3P.M-write$_{IMPF}$-PL the-assignment
'They will write the assignment.'

c. mona **b**-ta-ʔtˁi axt-ah ħalau
Mona B-SG.F-give$_{IMPF}$ sister-her candy
'Mona will give her sister candy.'

In (9a), the imperfective verb *ta-mtˁər* has no argument and takes an optional PP complement. The imperfective finite verb *yaktubun* in (9b) has two arguments, the NP subject *hom* and the NP complement object *el-wadʒib*. The imperfective verb *tʔtˁi* 'give' in (9c) is a ditransitive verb and has three arguments: the NP subject (Mona) and two NP

objects, *axtah* ‘her sister’ and *ħalaw* ‘candy’. The examples in (9) show that the *b*-imperfective has no c-selectional properties. In other words, it lost its c-selectional properties and was reanalyzed as an irrealis marker as a result of the grammaticalization process.

4.3.3.2 Changing valency rules

In Chapter 3, I argued that the *b*-imperfective is a grammaticalized form that it is reanalyzed as irrealis marker in SNA. This implies that as a once-lexical volitional verb (*baɣa*), it had lost all of its theta roles and selectional categories (c-selection). Therefore, it cannot undergo any valency increase or decrease, as illustrated in (10).

(10) a. **bi**-yu-ktub el-wadʒib fi laħaẓat
B-3P.F/M-PASS-write$_{IMPF}$ the-assignment in seconds
‘The assignment will be written in seconds.’ (passive)

b. monna **b**-tu-ʕtˁa l-hadiah iða ta-ʔaxr
Mona B-3P.SG.F-PASS-give$_{IMPF}$ the-gift if 2P.SG.M-come$_{IMPF}$
l-mutasabıq
the-contester
‘Mona will be given the gift if the contester comes late.’ (passive)

c. l-sayarh **b**-t-i-daf
the-car B-3P.SG.F-PASS-beat$_{IMPF}$
‘The car will be pushed.’ (antipassive)

d. mona **b**-ta-dif l-sayarah daxil l-bayt
Mona B-3P.SG.F-push$_{IMPF}$ the-car inside the-house
‘Mona will push the care inside the house.’ (causative)

e. ʕam-ik **b**-ya-xbir nader ʕan l-mufadʒʔah
uncle-your B-3P.SG.M-inform$_{IMPF}$ Nader about the-surprise
‘Your uncle will tell Nader about the surprise.’ (applicative)

The imperfective verb, suffixed to the future morpheme /b-/, functions as the main verb and as a result, it can decrease or increase its valency, as illustrated in (10). Therefore, the

imperfective verb can undergo passivization (10a,b), antipassivization (10c), causativization (10d), and applicativization (10e). Having shown that the *b*-imperfective exhibits no s/c-selectional properties and cannot undergo any valance changing proves that the *b*-imperfective cannot function as a lexical verb (like *want*), due to the grammaticalization process, and suggests that it behaves like the English particle *will* (also see Chapter 3, §3.5.1).

In brief, the decategorization examination is critical as it shows that the *b*-imperfective is a prefix functioning as an irrealis marker in SNA, like the English modal *will* (see Chapter 3); instead, its suffixed imperfective verb agrees with the subject. In Chapter 7, further syntactic analysis of the grammatical structure of the *b*-imperfective is provided. Our next examination with regards to the principles of grammaticalization is erosion.

4.3.4 Erosion

The grammaticalization of the verb *baɣa* 'he wanted' into the irrealis *b*-imperfective is associated with phonological reduction (or erosion). As highlighted in §4.2, *aba-*, *bi-*, *b-*, and *ba-* are variants of *baɣa* that are results of morphological conjugation (see Tables 4.1 and 4.2). This means that the verb *baɣa* is phonologically reduced to the morpheme *b-* and expresses future irrealis meaning in SNA. Therefore, *b-* becomes a clitic with syntactic characteristics.

Contrary to the proposal in this dissertation, Jarad (2013) claimed that the *b*-imperfective in Syrian Arabic originated from the verbal noun *biwuddi* 'I want'. This proposal does not apply to SNA's *b*-imperfective because the *b*-imperfective is neither

morphologically nor phonologically compatible with *biwuddi.* It consists of two morphemes, namely the preposition *bi-* 'with', which does not express volitional meaning, and the lexical verb *wuddi* 'I want' (see Chapter 2). Additionally, the *b-* imperfective cannot be derived from verbs such as *bada* 'begin' (Eksell, 2006) or the preposition *bi* 'with' (Retsö, 2014a). This is because *bada* and *bi* are not volitional verbs and again future markers are commonly derived from volitional verb expressions (Chapter 2). In the next section, a full description of the reanalysis process of the SNA *b-* imperfective is provided.

4.4 Reanalysis of the *b*-Imperfective

As this lexical verb underwent semantic, phonetic, and morphosyntactic changes, its usages extended to new contexts. It developed an entirely new usage (irrealis marker) that no longer co-exists with the volitional verb form. Finally, the changes of the lexical verb *baɣa* into an irrealis modal marker in SNA can be attributed to two mechanisms, namely metonymy and metaphor (Traugott & Dasher, 2002, pp. 27-34). Metaphorization and metonymization helped the semantic shift of the verb *baɣa* from 'he wanted' to 'he intended/desired/wished', as in (2), repeated as (11) below.

(11) a. sarah ta-**bɣa**/ta-**bi** ta-dəfaʔ iidʒara-ha l-matʔaxir
Sara 3P.SG.F-want$_{IMPF}$ 3P.SG.F-pay$_{IMPF}$ the-rent-her the-late
'Sara wants to pay her late rent.'

b. ʕali **baɣa** ya-safer lakin ma maʔ-ah fluus kafiah
Ali want$_{PERF.}$3P.SG.M 3P.SG.M-travel$_{IMPF}$ but NEG with-he money enough
'Ali wanted to travel but he did not have enough money.'

c. bısaraħə ʔa-**bi**/a-**ba**/a-**bɣa** ʔa-ruħ li-suq
frankly 1P.SG.F/M-want$_{IMPF}$ 1P.SG.F/M-go$_{IMPF}$ to-market
e-semək
the-fish
'Frankly, I want to go to the fish market.'

d. l-xarof ya-**bi** ya- tˁlaʕ min ıl-bayt
the-lamb 3P.SG.M-want$_{IMPF}$ 3P.SG.F-exisit from the-house
'The lamb wants to get out of the house.'

e. wafa qarer-at (inn-ha) ta-**bi**
Wafa decide$_{PERF}$-3P.SG.F that-she 3P.SG.F-want$_{IMPF}$
ta-ʃtıri l-sayarah
3P.SG.F-buy$_{IMPF}$ the-car
'Wafa decided that she wants to buy the car.'

f. *el-saʔah illi ʔala l-ʤadar ta-**bɣa**/ta-**bi** ta-tˁiħ
the-clock that on the-wall 3P.SG.F-want$_{IMPF}$ 3P.SG.F-fall$_{IMPF}$
ʔala-ik
on-you
(Intended: The clock that is on the wall wants to fall on you.)

As in (11), *baɣa* underwent a shift from a lexical verb to a prefix, developing into the *b*-imperfective irrealis marker. Such a shift was highlighted in §4.3.1.

Based on Hopper and Traugott's (2003, p. 7) theory of cline (Chapter 2), I propose that SNA *b*-imperfective underwent the following process.

(12) lexical item → grammatical → clitic → affix
(*baɣa)* (*aba, bi, ba, b*) [*b*=] [*b*-imperfective]

The above scheme (12) aligns with Hopper and Traugott's Cline theory (Chapter 2). As shown in (12) from left to right, the volition verb *baɣa* developed from a lexical verb to a more grammatical marker. However, there is no historical documentation regarding whether the *b*-imperfective changed suddenly or had rest stops during the grammaticalization process. Based on the Cline theory scheme in (12), I suggest the following reanalysis stages of the *b*-imperfective in SNA:

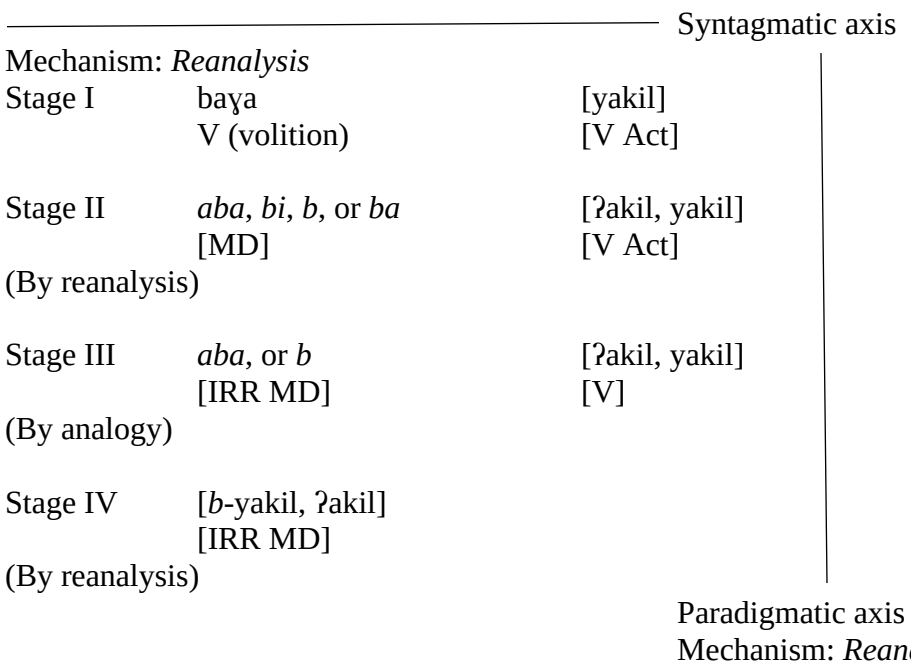


Figure 1: Scheme of the reanalysis of the *b*-imperfective in SNA

Figure 1 shows that in Stage I, *baɣa* functions as a lexical volitional verb followed by an activity clause as in (2). However, at the same stage, it can be followed by other types of verb clause: for example, stative, accomplishment, and achievement verbs. Stage II represents the early stage of reanalysis, where the morphological variants of *baɣa* (e.g., *aba* or *b*) serve as mood markers followed by an activity clause, as in (6). In Stage III, the variants of *baɣa*, extend via analogy[10] from mood markers to markers that include inanimate subjects, as in (5) and (7) above. In Stage IV, not only does *baɣa* lose all its lexical meanings (therefore becoming desemanticized) and its theta roles, but it also

[10] The difference between reanalysis and analogy is the former is a development of new forms out of old ones and involves the covert modification of the underlying syntactic, semantic, and morphological representations of the abstract form. Reanalysis usually occurs within syntagmatic axis innovation. Analogy occurs within paradigmatic axis innovation and only influences the surface abstract form overtly. It may influence rule spread (generalization), but it does not influence the rule change of an abstract form (see Hopper & Traugott, 2003, pp. 68-69).

becomes decategorialized, as illustrated in (6), (9), and (10). As a result, *baɣa* arises as a clitic *b=* functioning as irrealis mood marker by reanalysis, hence *b=yakil*.

After a thorough examination of the reanalysis of the *b*-imperfective in SNA, the verb *baɣa* seems to fit Hopper and Traugott's reanalysis in its change from main verb to irrealis *b*-imperfective. This finding is essential in that it contributes to the Arabic linguistic literature by describing how the verb *baɣa* changed from a lexical verb into the *b*-imperfective form.

4.5 Conclusion

The data examined in this chapter suggest that the *b*-imperfective was grammaticalized from the perfective volitional verb *baɣa* to an irrealis marker in SNA. To support such a claim, I tested the volitional verb *baɣa* against the four principles of grammaticalization. The outcomes of the tests suggest *baɣa* underwent semantic extension and bleaching. It also underwent decategorization and erosion, resulting it in becoming the irrealis *b*-imperfective marker in SNA. Furthermore, it is suggested that the grammaticalization of the lexical verb *baɣa* into the grammatical irrealis *b*-imperfective satisfies Hopper and Traugott's Cline theory and the syntagmatic and paradigmatic scheme of reanalysis. The notion of futurity can also be expressed through the motion verb *raħ* 'he went', which will be discussed in the following chapter.

CHAPTER 5

THE GRAMMATICALIZATION OF FUTURITY IN SNA: THE MOTION VERB *RAĦ*

This chapter examines the grammaticalization of the prospective future particle *raħ* 'he went' in SNA and provides a description of its grammaticalization and reanalysis. Following the investigation of the *b*-imperfective in Chapter 4, the spatial motion verb *raħ* is examined based on four universal grammaticalization principles: desemanticization, extension, decategorialization, and erosion (see Chapters 2 and 3). Finally, Chapter 5 provides a description of the stages of grammaticalization of the reanalysis of the prospective future particle *raħ.*

5.1 Motion Verbs as a Source of Futurity

There are many examples from languages where motion verbs such as *go* or *come* have been grammaticalized into future progressives or prospective future markers (see Comrie, 1976, p. 64, 106; Hopper & Traugott, 2003, pp. 1-3). As established in Chapter 3, the prospective future aspect expresses the relationship between the "present" and the "future", i.e., the moment of speaking and a subsequent event (see Comrie, 1976, p. 64). Additionally, it was established that the spatial motion *raħ* sometimes serves as a prospective future marker in SNA, especially when it is followed by an imperfective verb form (Chapter 3). However, *raħ* can also surface as a lexical aspect (verb) and as an active participle of a spatial motion verb. In the next section, a full detailed description about *raħ*'s grammatical functions/forms in SNA is provided.

5.2 The Motion Verb *raħ* in SNA

It is important to have a clear understanding of the different forms of the spatial motion verb *raħ* in SNA, as it will allow us to perceive where *raħ* is in its current linguistic cycle and hence its grammaticalization process. In SNA, the verb *raħ* has three common forms: namely, a) the perfective and imperfective motion verb *raħ,* b) the active participle verb *rayħ*, and c) the prospective future particle *raħ*. The three forms of *raħ* are each discussed below.

5.2.1 The perfective and imperfective raħ

The perfective and the imperfective forms of *raħ* (inflected *raħ*) are two of the main expressions of spatial motion in SNA used to express the subject's physical movement and represent the concrete domain of space (see Hopper & Traugott, 2003; Traugott & Dasher 2002, pp. 27-34). From an aspectual categorization perspective, *raħ* is categorized as an accomplishment or activity verb depending on the context *raħ* is used in—whether it is imperfective or perfective (1). Unlike the volitional verb *baɣa* 'he wanted', discussed in Chapter 4*, raħ* is an intransitive and an unergative verb because it involves volition or will of the subject, hence the subject is an AGENT. Moreover, it can assign an accusative case, as seen in (1a). It is inherently [+durative], [-dynamic], and [+/-telic]. It can occur with animate subjects (1a-d). However, it can (rarely) occur with an inanimate subject, especially when it is used as an imperfective verb (1e).

(1) a. monna wa ziyad **raħ**-u l-bayt ʕanqasˁd
Mona and Ziyad go$_{PERF}$-3P.PL the-home deliberately
'Sarah and Ali went home deliberately.'

b. əxt-i dayem ta-**ruħ** tə-ðakır fi-l-məktɛbah
sister-my always 3P.SG.F-go$_{IMPF}$ 3P.SG.F-study$_{IMPF}$ in-the-library

‘My sister always goes to study in the library.’

c. **raħ**-na na-sˁali fi-l-məsdʒid
go$_{PERF}$-3P.M/F.PL 3P.SG.F-pray$_{IMPF}$ in-the-mosque
‘We went to pray in the mosque.’

d. Mona **raħ**-at ta-talaʔ juwal-ah ʕanqasˁd
Mona go$_{PERF}$-3P.SG.F 3P.SG.F-watch$_{IMPF}$ mobile-her deliberately
lama ʃaf-at-ni
when see$_{PERF.}$3P.SG.M/F-me
‘Mona deliberately went to check her mobile when she saw me.’

e. ta-**ruħ** ʔalaat el-xiyatˁah li-l-mustawdaʔ
3P.PL.NEU-go$_{IMPF}$ machines the-sewing to-the-storage
kil-yum
everyday
‘The sewing machines go to storage every day.’

Generally, the perfective/imperfective *raħ* has the argument structure [NP-{VP/PP}] and subcategorizes for both an AGENT and a GOAL (1a,b,d) or a THEME. Furthermore, it can be coordinated with stative, activity, accomplishment, or achievement imperfective verbs. When it is coordinated with an imperfective verb, as in (1b) and (1d), *raħ* assigns a nominative case to its AGENT subject (*əxti* ‘my sister’ and *Mona*), and assigns accusative case to its VP complement (*təðakır fi-l-məktɛbah* ‘study in the library’ and *yatala*ʔ *juwalah lama ʃafni* ‘check her mobile when she saw me’), which functions as an adjunct of the VP *raħ*.

From a morphological perspective, the perfective form *raħ* is mainly suffixal, while its imperfective form is circumfixal. Tables 5.1 and 5.2 represent the perfective and imperfective conjugation of the motion verb *raħ.*

Table 5.1

Saudi Najdi Arabic Perfective Features of raħ

Perfective	Suffixes	Gloss	ϕ-Features	Verb+Affix	Meaning
raħ	-Ø	go$_{PERF}$-Ø	3P.SG.M	raħ	He went
raħ	-t	go$_{PERF}$-F	3P.SG. F	raħ-at	She went
raħ	-t	go$_{PERF}$-F/M	2P.SG.F/M	raħ-t	I went
raħ	-ti	go$_{PERF}$-F	2P.SG.F	raħ-ti	You went
raħ	-u	go$_{PERF}$-PL	3P.F/M.PL	raħ-u	They went
raħ	-na	go$_{PERF}$-PL	3P.M/F.PL	raħ-na	We went
raħ	-tum	go$_{PERF}$-PL	2P. M/F.PL	raħ-tum	You went

Table 5.2

Saudi Najdi Arabic Imperfective Features of raħ

P-stem	Affix	Gloss	ϕ-Features	Affix+Verb	Meaning
raħ	ʔa-	M/F-go$_{IMPF}$	1P.SG.M/F	ʔa-ruħ	I go
raħ	ta-	M-go$_{IMPF}$	2P.SG.M	ta-ruħ	You go
raħ	ta-	F-go$_{IMPF}$	3P.SG.F	ta-ruħ	She goes
raħ	ta-	NEU-go$_{IMPF}$	3P.SG.NEU	ta-ruħ	She goes
raħ	t-…-iin	F-go$_{IMPF}$	2P.SG.F	t-ruħ-iin	You go
raħ	t-…-uun	M/F-go$_{IMPF}$-PL	2P.PL.M/F	t-ruħ-uun	You go
raħ	ya-	Ø-go$_{IMPF}$	3P.SG.M	ya-ruħ	He goes
raħ	ya-…-uun	Ø-got$_{IMPF}$-PL	3P. PL. F/M	ya-ruħ-uun	They go
raħ	na-	PL-go$_{IMPF}$	3P. PL.M/F	na-ruħ	We go

Note that the central vowel /a/ of the stem /raħ/ shifts into a short back /u/ when it is conjugated in the imperfective verb form (Table 5.2). It is worth noting that one of the main characteristics of the perfective and imperfective forms of *raħ* is that it agrees with its subject NP, as shown in (1).

5.2.2 The active participle motion verb rayħ

The second expression of the motion verb *raħ* is the imperfective active participle *rayħ* ‘going’. The verb *rayħ* can be used with present, past, and future time references, as in (2).

(2) a. l-ħiin sarah wa ziyad **rayħ**-iin ya-təgəẓ-uun
the-now Sarah and Ziyad **go$_{IMPF}$**-3P.PL 3P-shop$_{IMPF}$-PL
fi-l-riyad
in-the-Riyadh
'Now, Sarah and Ziyad are going shopping in Riyadh.' (present)

b. əxt-i dayem **rayħ**-ah tə-ðakır fi-l-məktɛbah
sister-my always **go$_{IMPF}$**-3P.SG.F 3P.SG.F-study$_{IMPF}$ in-the-library
'My sister always goes to study in the library.' (habitual)

c. nadir **rayħ** amms maʔ axu-h li-l-mubarat
Nader **go$_{IMPF}$**.3P.SG.M yesterday with brother-his to-the-match
'Yesterday, Nader went with his brother to the match. (past)

d. ʔanna **rayħ** ʔa-təgəẓ-a fi-l-muwl baʔəd ʃuwi
1P.SG.M **go$_{IMPF}$**.1P.SG 3P.shop$_{IMPF}$.PL in-the-mall after moment
'I am going shopping/to shop after a moment.' (future)

e. ***rayħ**-at ʔalaat el-xiyatˁah li-l-mustawdaʔ kil-yum
3P.PL.NEU-go$_{IMPF}$ machines the-sewing to-the-storage everyday
'The sewing machines are going to the storage.

Unlike *raħ* in (1)*, rayħ* functions only as an imperfective verb; like *raħ,* it agrees with its subject NP. Furthermore, *rayħ* cannot occur with inanimate subjects (2e), unlike *raħ* (1e). Table 5.3 below illustrates the morphological properties of the active participle *rayħ* in SNA.

Table 5.3

The SNA Active Participle rayħ *Inflectional Features*

Posture verbs	Suffix	Gloss	ϕ-Features
rayħ	Ø	SG.M	1P.SG.M/2P.SG.M/3P.SG.M
rayħ-ah	*-ah*	SG.F	1P.SG.F/2P.SG.F/3P.SG.F
rayħ-at,	*-at*	PL.F	3P.PL.F
rayħ-iin,	*-iin*	PL.F/M	1P.PL/2P.PL/3P.PL

As a lexical verb, *rayħ* behaves similarly to the perfective/imperfective *raħ.* For instance, *rayħ* has same argument structure as the inflected *raħ* does: [NP-{VP/PP}]. Therefore,

rayħ subcategorizes for both an AGENT and a GOAL. The main dissimilarities between *rayħ* and inflected *raħ* are that the former has only one aspectual interpretation, e.g., imperfective progressive aspect, and it can be used in different time references, as seen in (2).

5.2.3 The prospective future marker raħ

The third function of *raħ* is as a prospective future particle in SNA, and as established earlier in Chapter 3, *raħ* carries the meaning of future intentionality, immediacy, distant future, or a combination of any two of the three, as in (3).

(3) a. mita **raħ** ya-bda l-filim
when PROSP 3P.SG.M-start$_{IMPF}$ the-movie
'When is the movie going to start?' (future intentionality)

b. fi laħaẓat **raħ** ta-ʃuuf ʃi ʕadʒiib fi m-mabarah
in moments PROSP 2P.SG.M-see$_{IMPF}$ something strange in the-game
'In a moment, you are going to see something strange in the game.'
(immediacy)

c. **raħ** ʔa-safer maʔ ʕami saʔəd li-lxardʒ baʕad ʃahar
PROSP 1P.SG.M/F-travel$_{IMPF}$ with uncle Sa'ad to-Al.Kharj after month
'I'm going to travel with uncle Sa'ad to Al-Kharj after a month.'
(distant future)

d. istaʔdʒar-na masbaħ wə **raħ** na-sbaħ fi-h yum l-ʔaħəd
buy$_{PERF}$-3P.M/F.PL swimming.pool and PROSP 3P.M/F.PL-swim$_{IMPF}$ in-it day the-Sunday
'We bought a swimming pool and we are going to swim in it on Sunday.'
(intentionality, distant future)

As established in Chapter 3, the uses of *raħ* in (3) are instances of grammaticalization in SNA (§3.5.2). However, it is important to note that the inflected *raħ* (1) and the participle

active *rayḥ* (2) cannot be equated with the non-inflected form of *raḥ* (3), the prospective aspect particle. As mentioned in Chapter 2, scholars such as Ouali and Al Bukhari (2016) viewed the inflected and the non-inflected *raḥ* as a light verb (see §2.4.2). As stated in Chapter 3, Ouali and Al Bukhari's proposal cannot be extended to SNA due to valency changing, as discussed in §5.3. In the same spirit, Jarad (2014) viewed the Syrian Arabic active participle *rayḥ* as a prospective future particle (4).

(4) a. (ʔana) ***rāyiḥ*** šūf rifʔāt-i
I FUT.1P.SG.M 1P.SG.M.see$_{IMPF}$ friends-my
'I am going to see my friends.' (Syrian Arabic; Jarad, 2014, p. 102)

b. (ʔana) rāyiḥ-a šūf rifʔāt-i[11]
I going-1P.SG.F 1P.SG.F.see$_{IMPF}$ friends-my
'I am going to see my friends.'

Jarad claimed that the Syrian non-inflected *raḥ* and the active participle *rāyiḥ* in (4) are prospective future particles. However, Jarad did not provide an explanation of why the Syrian *rāyiḥ* is a future particle. The claim that *rayḥ* and *rāyiḥ* are future particles is not accurate because particles never bear inflectional features as in (4b) (see Zeller, 2002, pp. 1-6). Additionally, *rayḥ*/*rāyiḥ* do not always function as future markers. In fact, having an adverb phrase such as *ams* 'yesterday' in (4) results in a past continuous/progressive reading[12] (also see (3c)). Furthermore, in §5.3, I show that *rayḥ*'s imperfective verb forms cannot change their valency. Therefore, I suggest that *rayḥ* is a full lexical verb that expresses spatial motion movement.

[11] Sentence (4b) was obtained via personal correspondence with Syrian native speakers.
[12] Some Syrian native speakers attest that when *rāyiḥ* occurs with adverb phrases such as *ams* or *əmbarıḥ* 'yesterday', it serves as progressive aspect.

Now that I have discussed the different forms of the motion verb *raħ* in SNA, I turn to provide a detail description of its grammaticalization and reanalysis process.

5.3 Description of the motion verb *raħ* grammaticalization process

In Chapter 3, I established that the non-inflected motion verb *raħ* is a grammatical aspect marker that has undergone the grammaticalization process in SNA (see §3.5.2). It is worth remembering that Jarad (2014) claimed that the Syrian Arabic prospective future particle *raħ* has grammaticalized from the CA/MSA *raħ* (see Chapter 2). However, Jarad's hypothesis is not founded on historical documentation; rather, it is founded on the findings and generalizations of grammaticalization theory and synchronic evidence from Syrian Arabic. Still, Jarad's hypothesis is weak because *raħ* is still frequently used in Syrian Arabic. Therefore, it is more reasonable to consider that the future *raħ* grammaticalized out of the Syrian dialect itself. For this reason, I suggest that the grammaticalized non-inflected *raħ* is derived from the SNA perfective root stem *raħ* (see Table 5.1). Also, like the *b*-imperfective in Chapter 4, the SNA motion verb *raħ* (non-inflected form) likely underwent grammaticalization and therefore the four principles of grammaticalization (Chapter 2) apply. Next, I provide an examination of the grammaticalization principles of the prospective future particle *raħ*.

5.3.1 Semantic extension

Semantic extension is involved in the grammaticalization process of the verb *raħ*. As noted in §5.2.3, *raħ* implies future intentionality, immediacy, and distance, and as a result, its meaning has been broadened from a spatial motion interpretation to a future interpretation. Unlike the verb *baɣa* 'he wanted' (Chapter 4), the semantic meaning of

raħ, as a lexical verb, is more generalized in different contexts. For example, it is sometimes used to denote intentional and purposive interpretations, as shown in (5).

(5) a. **raħ**-na na-sˁali fi-l-məsdʒid
go$_{PERF.}$3P.M/F.PL 3P.SG.F-pray$_{IMPF}$ in-the-mosque
'We went to pray in the mosque.'

b. axwan-ni **raħ**-u yu-qniʕ-uun e-tadʒir
brothers-my go$_{PERF}$-3P.PL.M 3P.M-convince$_{IMPF}$-PL the-merchant
ya-biʕ l-bayt
3P.SG.M-sell$_{IMPF}$ the-house
'My brothers went to convince the merchant to sell the house.'

Furthermore, *raħ* is frequently used as a metaphorical extension by SNA native speakers. Put differently, *raħ* sometimes behaves as part of figures of speech in SNA. Consider (6).

(6) a. **raħ**-u fi-ha l-muʕalimiin
go$_{PERF}$-3P.PL.M in-it the-teachers
'The teachers got in trouble.'

b. **raħ** fi-ha e-tadʒiir fi l-suq
go$_{PERF}$.3P.SG.M in-it the-merchant in the-market
'The merchant was lost in the market.'

c. e-ʃəms **raħ**-at. yallah na-tˁlaʔ
the-sun go$_{PERF}$-3p.SGF let-us 3P.PL.M/F-leave$_{IMPF}$
'The sun disappeared. Let's leave!'

d. l-ṣaħafiinyn **raħ**-u wara l-ʃəms
the-journalists go$_{PERF}$-3P.PL.M behind the-sun
'The journalists were jailed/punished/killed/disappeared.'

In (6), *raħ* does not express its spatial motion meaning. In fact, it sometimes has a different meaning depending on the context of the conversation, i.e., *got in trouble, was lost, disappeared, was jailed, was punished,* or was *killed*. Being frequently used in different contexts triggers a speaker's inference (see Chapter 2). This suggests that the instances of *raħ* in (6) can be described as a frequency increase (see Bybee 2003, 2007).

Therefore, *raħ* serves as a grammaticalized metaphor in SNA. Interestingly, the instances of *raħ* in (6) are not found in CA or MSA and therefore there is no evidence that the motion verb *raħ* has been metaphorically extended in CA/MSA. This supports my earlier proposal that the prospective future particle *raħ* grammaticalized out of the perfective verb form *raħ* in SNA (see §5.3).

In sum, the semantic extension of the verb *raħ* may have been influenced by generalization and metaphorization; as a result, the verb *raħ* became semantically generalized to a prospective future marker in SNA. Lakoff and Johnson (1980) suggested that the concept of prospective meaning comes from the idea that "[t]ime is metaphorically conceptualized in terms of space" (p. 126). This means that motion in space is generalized to the more abstract motion through time (Bybee et al., 1994, p. 25). In other words, the shift is from the concrete domain of space (7a) to the more abstract domain of time (7b).

(7) a. mona **raħ-at** ta-ktɪb al-waʤib
Mona go$_{PERF}$-3P.SG.F 3P.SG.f-write$_{IMPF}$ the-assignment
'Mona went to write the assignment.'

b. mona **raħ** ta-ktɪb al-waʤib
Mona PROSP 3P.SG.f-write$_{IMPF}$ the-assignment
'Mona is going to write the assignment.'

Based on the examples (5)-(7), *raħ* underwent a semantic extension, and as a result, was reanalyzed as a future prospective marker in SNA.

5.3.2 Desemanticization

Semantic bleaching is triggered by the grammaticalization process. After the verb *raħ* was reanalyzed as a prospective future particle, it was no longer compatible with argument structure. Consider (8).

(8) a. l-tulab **raħ** ya-ruħ-uun l-el-melʕab
the-students.3P.P.M PROSP 3P.M-go$_{IMPF}$-PL to-the-stadium
'The students are going to go to the stadium.'

b. **raħ** a-ruħ l-el-melʕab
PROSP 1P.SG.M/F-go$_{IMPF}$ to-the-stadium
'I'm going to go to the stadium.'

c. *__raħ__-at t-ruħ-iin l-el-melʕab
go$_{PERF}$-2P.SG.F 2P.SG.F-go$_{IMPF}$ to-the-stadium
*'You went going to the stadium.'

d. *__rayħ__ ya-ruħ li-l-matˁar l-hiin
go$_{IMPF}$.3P.SG.M 3P.SG.M-go$_{IMPF}$ to-the-airport the-now
*'He is going to the airport now."

The presence of *raħ* before an imperfective verb only adds grammatical meaning to the sentence: prospective futurity (8). The argument structure for the motion verb *raħ* is [AGENT, GOAL], and the future marker's s-selectional properties have been semantically bleached, leaving only the relation of prospective futurity. Furthermore, the prospective future particle *raħ* is not semantically compatible with its earlier lexical meaning which is the imperfective verb *aruħ* in (8b). In other words, *raħ* lost its lexical meaning even when it is followed by an imperfective motion verb such as *yaruħuun* 'go' (8a). As established in Chapter 3, the prospective future particle *raħ* functions similarly to the English auxiliary *be going to* (see Chapter 3).

On the contrary, the inflected (perfective) *raħ* and the active participle motion verb *rayħ* ‘going’ cannot co-occur with their motion imperfective verbs (8c,d). This is evidence that they cannot be viewed as light verbs or future particles. Therefore, I suggest that *raħ* has undergone desemanticization resulting it to serve as a future marker in SNA.

5.3.3 Decategorialization

Like the *b*-imperfective (Chapter 4), the grammaticalization of the motion verb *raħ* involved decategorization. As the prospective future particle *raħ* lost its s-selectional properties, its syntactic selection and ability to change valency also occurred during the grammaticalization process.

5.3.3.1 Syntactic selection properties

After the verb *raħ* was reanalyzed as a prospective future particle, it was no longer compatible with any argument structure (see §5.3.1). Consequently, *raħ* no longer serves as a lexical verb and instead serves as a functional element. Consequently, *raħ* can force a proceeding imperfective verb to serve as the main verb and bear the c-selectional properties in the sentence. Therefore, *raħ*’s imperfective verb can have zero to three arguments, as illustrated in (9).

(9) a. **raħ** ta-mtˁər (bara)
PROSP 3P.SG.F-rain$_{IMPF}$ outside
‘It is going to rain (outside).’

b. hom **raħ** ya-ktub-un el-waʤib
they PROSP 3P.M-write$_{IMPF}$-PL the-assignment
‘They are going to write the assignment.’

c. mona **raħ** ta-ʔtˁi axt-ah ħalau
Mona PROSP 3P.SG.F-give$_{IMPF}$ sister-her candy
‘Mona is going to give her sister candy.’

5.3.3.2 Changing valency rules

In SNA, the non-inflected *raħ* never undergoes valency reduction or increase, similar to the *b*-imperfective (10). This is because *raħ* has lost the categorical features of a spatial motion verb (see Hopper 1991, p. 30) and has been decategorized into a grammatical marker (prospective future marker) in SNA. Since *raħ* has only a grammatical function, the imperfective verb that follows it can undergo valency reduction and increase, as in (10).

(10) a. **raħ** yu-ktub el-wadʒib l-saʔah əʃɪr
PROSP 3P.F/M-PASS-write$_{IMPF.}$ the-assignment the-clock ten
'The assignment is going be written at 10 o'clock.' (passive)

b. l-sayarh **raħ** t-i-daf baʕəd ʃuwi
the-car PROSP 3P.SG.F-PASS-beat$_{IMPF}$ after while
'The car is going to be pushed after a while.' (antipassive)

c. mona **raħ** ta-dif l-sayarah daxil l-bayt
Mona PROSP 3P.SG.F-push$_{IMPF}$ the-car inside the-house
'Mona is going to push the car inside the house.' (causative)

d. ʕam-ik **raħ** ya-xbir nader ʕan l-mufadʒʔah
uncle-your PROSP 3P.SG.M-inform$_{IMPF}$ Nader about the-surprise
'Your uncle is going to tell Nader about the surprise.' (applicative)

Valency diagnosis plays a critical role in the determining the grammaticalization of the prospective future *raħ*. Similar to the *b*-imperfective, if *raħ* has developed into a prospective future particle, it is not expected to undergo valency changing rules. The examples in (10) show that *raħ* cannot be passivized nor antipassivized (10a,b). However, reducing valency only occur with *raħ*'s proceeding imperfective verbs. Moreover, *raħ* cannot occur as a causative or applicative (10c,d). Interestingly, however, when examining the valency changing rules of the inflected *raħ* and the active participle

motion verb *rayħ*, it is clear that their proceeding imperfective verbs never undergo valency reduction; hence, (11a,b) are ungrammatical.

(11) a. *__raħ__-at/__rayħ__-ah tu-ktub el-wadʒibat
go$_{PERF/IMPEF}$-3P.PL.NUE 3P.SG.NUE-PASS-write$_{IMPF}$ the-assignments
*‘The assignments going/went to be written at 10 o’clock.’ (passive)

b. *l-sayarat __raħ__-at/__rayħ__-ah t-u-daf baʕəd
the-cars go$_{PERF/IMPEF}$-3P.PL.NUE 3P.NEU-PASS-beat$_{IMPF}$ after
ʃuwiat
moments
*‘The cars going/went to be pushed after a moment.’ (antipassive)

In fact, the examples in (11) are evidence that inflected *raħ* and the active participle *rayħ* are grammatically different from non-inflected *raħ.* For instance, their imperfective verbs cannot be passivized or antipassivized. In fact, (11) supports my earlier proposal that *raħ* and *rayħ* cannot function either as particles or light verbs (see §5.2.1 & §5.2.2).

As far as valency increasing is concerned, both inflected *raħ* and the active participle *rayħ* can take applicatives or function as causatives. However, they cannot serve as prospective future markers, as illustrated in (12).

(12) a. mona __raħ__-at/__rayħ__-ah ta-dif l-sayara daxil
Mona go$_{PERF/IMPEF}$-3P.SG.F 3P.SG.F-push$_{IMPF}$ the-car inside
l-bayt
the-house
‘Mona is going/went to push the care inside the house.’ (causative)

b. ʕam-ik __raħ/rayħ__ ya-xbir nadır ʕan
uncle-your go$_{PERF/IMPEF}$ 3P.SG.M-inform$_{IMPF}$ Nader about
l-mufadʒʔah
the-surprise
‘Your uncle is going/went to tell Nader about the surprise.’ (applicative)

The motion verbs *raħ* and *rayħ* in (12) only function as full verbs when they express spatial movement and their semantic and syntactic properties remain intact. In other

words, they are lexical verbs that represent the concrete domain of space and cannot function as future particles or light verbs. In Chapter 7, I describe the syntactic distribution of the prospective future *raħ.* In the next section, the erosion of the motion verb *raħ* is addressed.

5.3.4 Erosion

One of the main characteristics of the prospective future particle *raħ* in SNA is that it cannot be inflected (see §5.2.3 and Chapter 3). This suggests that during the grammaticalization process, *raħ* underwent phonological reduction and was morphologically reduced from inflected *raħ* (13a) to an uninflected prospective future particle *raħ* (13b).

(13) a. monna wa ziyad **raħ**-u li-mɛkəh ʕanqasˁd
Mona and Ziyad go$_{PERF}$-3P.PL to-Makkah deliberately
'Sarah and Ali went to Makkah deliberately.'

b. **raħ** ʔa-safer maʔ ʕami saʔəd li-lxardʒ baʕad ʃahar
PROSP 1P.SG.M/F-travel$_{IMPF}$ with uncle Sa'ad to-the.Kharj after month
'I'm going to travel with uncle Sa'ad to Al-Kharj after a month.'

It is worth noting that the prospective future particle *raħ* is phonology less reduced than the *b*-imperfective (Chapter 4). This is because the prospective future particle *raħ* is less advanced in the grammaticalization process in terms of phonological reduction. However, this does not mean that *raħ* has stopped being reduced or stopped grammaticalizing in SNA. In fact, in some spoken Arabic varieties, the future *raħ* sometimes surfaces as a morpheme /*ha*-/, which is prefixed to an imperfective verb, as illustrated in (14).

(14) a. iftakart-u **ħa**-yruħ
thought-I-him PROSP-go

'I thought he was going to go.'(Egyptian Arabic; Brustad, 2000, p.208)

b. l-madrasə **ħa**-təʕlin n-nətāyij bukra
the-school PROSP-announce the-results tomorrow
'The school is going to announce the results tomorrow.'
(Syrian Arabic; Jarad, 2014, p.102)

c. **ħa**-ya-ruħ maʕa-k la-bayet sitt-y[13]
PROSP-3P.SG.M with-you to-house grandmother-my
'He is going to go with you to my grandmother's house.'(Hijazi Arabic)

Based on (14), it would not be surprising to see the SNA prospective future particle *raħ* reduce to the prefix *ha-*. This is because SNA native speakers are currently in contact with the Hijazi, Syrian, and Iraqi Arabic varieties.[14] Therefore, based on (14), I argue that the SNA future *raħ* will eventually reduce to a prospective future particle affix *ħa-*, just like Egyptian, Syrian, and Hijazi Arabic. Now that I have shown that the prospective future particle *raħ* has been subjected to the four grammaticalization principles above, it is important to understand the reanalysis process, described below.

5.4 Reanalysis of the Motion Verb *raħ*

In SNA, unidirectionality plays an important role in the grammaticalization process of the motion verb *raħ*. The change from motion verb (*raħ* 'go') to prospective future marker ('going to') is due to the unidirectional shift from the more concrete domain of space to the more abstract domain of verbal aspect (see Haspelmath, 1999; Hopper & Traugott, 2003, pp. 99-139.) As highlighted in Chapter 2, Heine (2003) suggested that one the main sources for future tenses is motion schemas (*X goes to/comes*

[13] Example (14c) was obtained via personal correspondence with SNA native speakers.
[14] It is worth noting that there are very few SNA native speakers who use the examples in (15). However, the majority of SNA native speakers I have encountered find the uses of the morpheme prefix *ha-* to be odd, and yet they consider it to be a future marker.

to Y). Based on the data examined above, I argue that the SNA prospective future particle *raħ* grammaticalized from the perfective spatial motion verb *raħ* 'he went'.

Jarad (2014) suggested that the Syrian prospective future *raħ* is split into two uses, which can be described as "divergent uses": the grammaticalized prospective future particle preserves its full phonetic content (see Chapter 2). Jarad's *raħ*'s divergent uses proposal is unconvincing because *raħ* does not preserve its morphological content/features (person, gender, and number). In fact, *raħ* has developed into an independent prospective future particle (see (13) and (14)). This means that *raħ* has developed from a perfective lexical aspect marker to a grammatical aspect marker that is independent and no longer has a spatial motion meaning, as seen in the above data. However, grammaticalization of the prospective future particle *raħ* is not complete and is still in process. For instance, it is still undergoing Hopper and Traugott's (2003, p. 7) Cline of grammaticality theory (see Chapter 2), as shown in (15).

(15) Lexical item → grammatical → clitic → affix
(Inflected *raħ*) (non-inflected *raħ*) [=*ħa*] [*ħa*-imperfective]

In (15), the verb *raħ* has developed from a motion verb expressing the concrete domain of space to the more abstract domain of time: a prospective future marker. The only dissimilarity between *raħ* and the *b*-imperfective (Chapter 4) is that the former has not yet become a clitic in the grammaticalization process in SNA. As (15) shows, the grammaticalization of *raħ* to the prospective future particle *ħa-* is in pending or at a "rest-stop" stage. In other words, *raħ's* path in the grammaticalization process can be described as steady and slow, but with pauses (see Hopper & Traugott, 2003). Based on (15), *raħ*

will then further grammaticalize into a prospective future prefix *ha-*, just like in the Hijazi, Syrian, and Iraqi Arabic varieties in (14).

Having established that the prospective future particle *raħ* is subject to the four grammaticalizing principles and satisfies the cline scheme in (15), I suggest the following reanalysis stages for the prospective future particle in SNA:

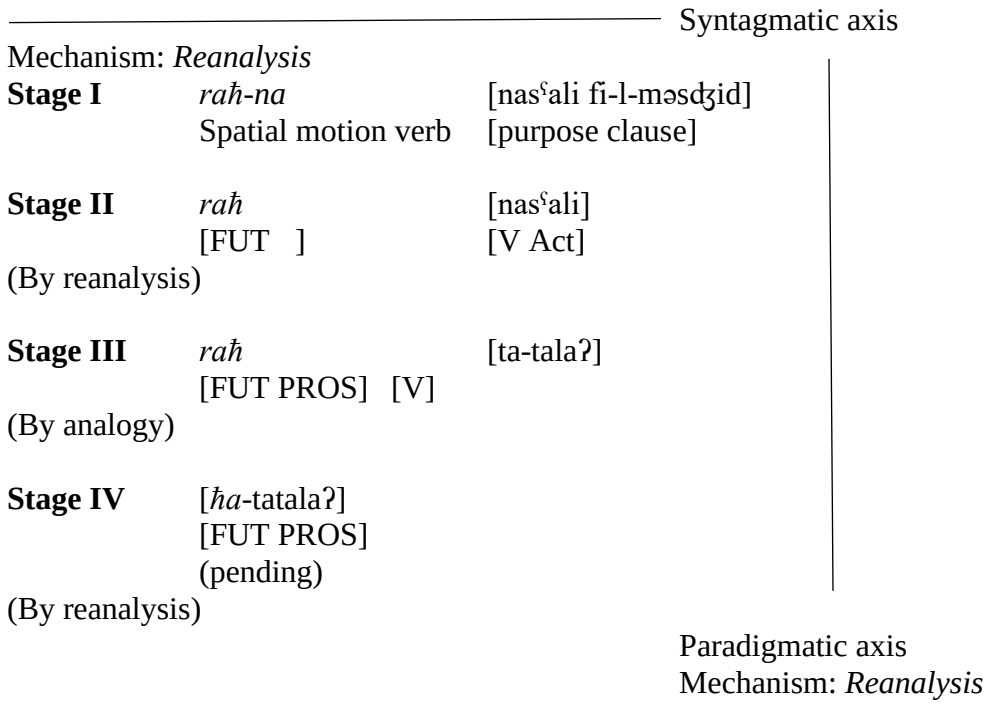


Figure 1: Scheme of the reanalysis of the prospective future particle *raħ* in SNA

I established in Chapter 3 that there are close semantic and grammatical similarities between the English *be going to* and the prospective future particle *raħ.* Following Hopper and Traugott's (2003, p. 68) syntagmatic and paradigmatic scheme of reanalysis of the English *be going to, raħ* has likely undergone the same reanalysis stages of the English *be going to*. Stage I is the stage of spatial motion that expresses intentional and purposive clauses, as in (1). Stage II is the reanalysis of *raħ* as a future with a verb of

activity. Stage III is analogy of the intentional clause, which motivates the extension (generalization) of *raħ* to other linguistic contexts (discourses), hence figure of speech, as illustrated in (6). Stage IV is the stage where *raħ* is expected to arise as a reanalyzed affix *ha-* functioning as a prospective future particle similar to the Hijazi, Syrian, Iraqi, Arabic varieties, as shown in (14).

5.5 Conclusion

In this chapter, I examined the linguistic cycle of the spatial motion verb *raħ* based on the four principles of grammaticalization. I conclude that *raħ* underwent semantic extension, semantic bleaching, decategorization, and erosion. In other words, *raħ* grammaticalized from a lexical verb (spatial motion verb) to a grammatical aspect marker (prospective future particle) in SNA. This means that it is independent and no longer has a spatial motion meaning. Unlike the irrealis maker *b*-imperfective in Chapter 4, *raħ* resembles the English prospective future marker *gonna* (see Chapter 3). Additionally, I demonstrated that the inflected *raħ* 'he went' and the active participle motion verb *rayħ* 'going' cannot function as future particles or light verbs. One reason is the proceeding imperfective verbs' valency cannot be reduced, as seen in (11), while the imperfective verbs of the non-inflected *raħ* (prospective future) permit valency changing rules as in (10).

The grammaticalization of the prospective future particle *raħ* can be described as unidirectional. Like the *b*-imperfective, the SNA *raħ* satisfies Hopper and Traugott's Cline theory (16); however, it is yet to become phonologically and morphologically reduced clitic or prefix *ha=/ha-*, like English *gonna* and the Hijazi, Syrian, Iraqi Arabic

varieties (14). Finally, *raħ* has undergone the five stages of Hopper and Traugott's (2003, p. 68) syntagmatic and paradigmatic scheme of reanalysis. In the following chapter, I explore the grammaticalization of the active participle of posture verbs (APPV) in SNA.

CHAPTER 6

THE GRAMMATICALIZATION OF THE ACTIVE PARTICIPLE OF POSTURE VERBS

The active participle of posture verbs (APPVs) *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' have grammaticalized into progressive aspect markers in SNA. Similar to Chapters 4 and 5, this chapter first provides a brief background regarding the grammatical and semantic functions of the APPVs and attempts to provide an explanation of the grammaticalization of these verbs. It suggests their possible semantic shift and grammatical development. Additionally, this chapter's evaluation relies on the cross-linguistic regularities, generalizations, and findings of grammaticalization theory, such as the universal mechanisms and principles of grammaticalization: namely, desemanticization, extension, decategorialization, and erosion (Chapter 2).

6.1 SNA APPVs

SNA APPVs are basically deverbal nouns that denote the performer of an activity or process or the experiencer of a state of being. In other words, they denote the performance of the action or the experience of a state indicated by the verb contrary to the event of the action. Morphologically, SNA APPVs usually use the CVVCVC pattern, as highlighted in Ryding's (2005) work on MSA; this pattern is referred to as a "trilateral verb" or "verb form I."[15]

In SNA, when an APPV is used independently, it can serve as a verb, noun, adjective, or even adverb. The equivalent to the SNA APPV in English are nouns ending

[15] For more discussion on MSA verbal morphological patterns, see Ryding (2005).

in *-er,* as in *write/writer* or *sit/sitter* (1a). It can also behave like the English progressive aspect, *-ing,* as in (1b), where *gaayemiin* functions as a main argument (with lexical aspect). It is an adjective when it is used to describe noun phrases, as in (1c). Furthermore, it can be used as an adverb to describe a verb (1d). Ryding (2005, p. 689) viewed the active participle as "a deverbal adjective that may function as a noun."

(1) a. **l-kaatib/l-jaalis** ktıb e-risalah
the-writer/the-sitter write$_{PERF.}$3P.SG.M the-letter
'The writer/the sitter wrote the letter.' (noun)

b. **gaayem-iin** l-dˁuyuf fi sˁalah lħiin
stand$_{IMPF}$-PL.F/M the-guests in living room now
'The guests are standing in the living room now.' (verb)

c. l-ħariim **l-qaaʔaıd-at** fi l-ɣurfah tˁalib-at
the-women the-sitting-3P.PL.F in the-room students
'The women sitting in the room are students.' (adjective)

d. ʤa l-maridˁ **jaalis** ʔala kersiy-ah
come$_{PERF}$.3P.SG.M the-patient sitting.3P.SG.P on chair-his
l-mutaħərik
the-moving
'The patient came sitting on his wheelchair.' (adverb)

In (1a), the active participles *l-kaatib* 'the writer' and *l-jaalis* 'the sitter' behave like noun phrases (NPs) and function as THEME for the verb *ktıb* 'wrote'. *l-kaatib* and *l-jaalis* are assigned nominative case by the verb *ktıb*. However, in (1b), the active participle *jaalisiin* does not assign accusative case because it is unaccusative. However, examples (1a,c,d) show that APPVs have no case marking and do not describe an action or activity. Generally, APPVs in (1) are inflected for definiteness, case, gender, and number.

6.2 Tense, Aspect, and APPVs

SNA APPVs describe a motion or state of action, whether they are a posture verb or another type of verb.[16] APPVs can occur in different times (i.e., present, past, or future). They can also express an action that began in the past and continues to the present. Moreover, they can be used to express an action that will take place in the future (irrealis). Consider the following examples.

(2) a. l-sˁəɣaar **gaayem-een** ʕala l-sareer
the-youngsters stand$_{IMPF}$-3P.PL.M/F on the-bed
'The youngsters are standing on the bed.'

b. ʔana **jaalis** fi l-ɣurfah
I sit$_{IMPF}$-1P.SG.M/F in the-room
'I'm sitting in the room.'

c. kan-at **jaalis-ah** fi l-muʔtamar
was-3P.SG.F sit$_{IMPF}$-3P.SG.F in the-conference
'She was sitting in the conference.'

d. ʕali ya-kun **qaaʔaid** fi l-muʔtamar
Ali 3P.SG.M-be$_{IMPF}$ sit$_{IMPF}$-3P.SG.F in the-conference
'Ali is sitting at the conference.'

e. **jaalis** l-muwaẓẓəf fi maktəb-ah min-mudah
sit$_{IMPF}$-1P.SG.M/F the-employee in office-his from-period
tˁawilah.
long
'The employee has been sitting in his office for a long period of time.'

f. ɪŋʃalla q**aaʔaid-ah** monna fi l-maħal bukrah
God.willing sit$_{IMPF}$-3P.SG.F Mona in the-store tomorrow
'God willing, Mona is sitting in the store tomorrow.'

g. **qaaʔaid-ah** monna fi l-maħal ams
sit$_{IMPF}$-3P.SG.F Mona in the-store yesterday

[16] In this section, I only focus on APPVs. I intentionally overlook other verb types (participles) because both types (APPVs and participles) are used with the same tenses and aspects. For more in depth information on Arabic active participles, see Ryding (2005, pp. 102-118).

‘Mona was sitting in the store yesterday.’

h. *ʔana **jaalis** l-ɣurfah
I sit$_{IMPF}$-1P.SG.M/F the-room
‘*I’m sitting the room.’

The APPVs in (2) are used independently and have different tenses. For instance, *gaayemeen* (2a) and *jaaliseen* in (2b) can receive two different tense interpretations. The first interpretation is that the youngsters and I are currently standing or sitting. The second interpretation is that the action of sitting or standing started in the past and is still ongoing. In examples like (2a,b), tense is sometimes challenging to determine, especially if there is no auxiliary or adverbial marker. Depending on the context of speech, SNA speakers must infer the time of the event. In fact, a SNA listener may make a follow up inquiry to sentences (2a,b), such as: *How long have they been standing?, How long have you been sitting here?,* or *Are they sitting now?* Answers to such questions usually require adverbial markers to disambiguate the tense of APPVs. On the other hand, when APPVs are preceded with a perfective or imperfective auxiliary copula (or subordinate copula), such as *kan* (was.3P.SG.M) or *yakun* (3P.SG.M.be$_{IMPF}$), their time reference is disambiguated: past (2c) or present (2d). Furthermore, SNA APPVs can be used independently to describe an event that took place in the past and spans to the present time of speaking (2e). Adverbial markers, such as *minmudah tˁawilah* ‘for a long period of time’, can sometimes lead APPVs to be interpreted like the English present perfect. In the same vein, adverbial markers (e.g., *tomorrow, yesterday*) are vital for determining the time reference of SNA APPVs, as in (2f,g). All instances of APPVs in (2) can be classified as intransitive verbs with bare durative incomplete action or progressive aspect.

They are unaccusatives because it is not possible for them to assign an accusative case, hence, the ungrammaticality of (2h). They also express locative meanings or/and spatial configurations. Dowty (1979, p. 180) viewed posture verbs as statives or "iterative states."

6.2.1 APPVs: Locative expressions

In Chapter 2, I showed that posture verbs or static location expressions tend to grammaticalize into aspectual markers. Interestingly, this is also true in SNA. The SNA APPVs *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' are static location expressions. They describe the spatial location of humans or animal subjects when they are used independently. Consider (3).

(3) a. **jaalis-ah** axt-ik fi ə-ṣalah
sit$_{IMPF}$-3P.SG.F sister-your in the-living room
'Your sister is sitting in the living room.'

b. l-dˤayf kan **qaʕaɪd** ʤenb nasiib-ik
the-guest was.3P.SG.M sit$_{IMPF}$.3P.SG.M beside brother.in.law-your
'The guest was sitting beside your brother in law.'

c. e-tˤulab **gaayem-iin** min karasi-hum.
the-students stand$_{IMPF}$-3P.PL.M from chairs-their
'The students are standing up from their chairs.'

d. lama kent **jaalis** ʕali gam min kersi-ɑh
when was.3P.SG.M sit$_{IMPER}$.3P.SG.M Ali stood$_{PERF}$.3P.SG.M from chair-his
'When I was sitting, Ali stood up from his chair.'

e. fih qatwah **jaalis-ah** ʕala e-tawalah
there cat sitting-3P.SG.F on the-table
'There is a cat sitting on the table.'

f. ar-raʤal **qaaʕaɪd** fi l-bayt
the-man sitting.3P.SG.M in the-house

‘The man is sitting in the house.’

In (3), the APPVs describe the central spatial location of their animate subjects. Newman (2002) claimed that the use of posture verbs to express location and sometimes the spatial configuration of inanimate subjects can be considered to be a metaphorical extension of the posture verb forms for expressing animate posture. However, sentences (4) from SNA below do not support Newman’s claim that posture verbs are used to describe inanimate entities in configurations that resemble animate postures.

(4) a. *l-kaas **jaalis/qaaʔaɪd** ʕala e-tawalah
the-cup.SG.M sit$_{IMPF}$.3P.SG.M on the-table
(Intended: ‘The cup is sitting on the table.’)

b. *kan **gaayem** l-bab fi l-madɪrasah
was$_{PERF}$.3P.SG.M stand$_{IMPF}$.3p.SG the-door.SG.M in the-school
(Intended: ‘The door was standing in the school.’)

c. *l-akil **qaaʔaɪd** fi l-səħən
the-food.SG.M sit$_{IMPF}$.3P.SG.M in the-plate
(Intended: ‘The food was sitting on the plate.’)

In (4), speakers cannot use APPVs in existential contexts or in constructions where the subject is inanimate. As a result, the sentences in (4) are only grammatical if the APPVs are removed or the inanimate subjects are replaced by animate subjects, as in (3). This shows that SNA restricts its posture expressions to animate subjects, with limited usage. Moreover, SNA resembles Emirati Arabic, where inanimate subjects are not permissible with the APPV *yalis* ‘sitting’ (Jarad, 2015, p. 93). Therefore, SNA APPVs can only be used to denote the spatial position of animate entities, not inanimate entities.

6.2.2 APPVs in pseudocoordination constructions

Like the Emirati (Jarad, 2012), Tunisian (Saddour, 2009), Kuwaiti (Camilleri & Sadler, 2017), and Hijazi (Al Zahrani, 2015) Arabic, discussed in Chapter 2, SNA APPVs *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ have developed an additional aspectual meaning: progressive (5).

(5) a. **qaaʕaɪd** a-mʃi fi al-bayt
PROG.1P.SG.M 1P.P.M-walk$_{IMPF}$ in the-house
‘I’m walking in the house.’ (activity)

b. monna **gaayem**-ah ta-bni bayt-ha embəkır
Mona PROG-3P.SG.F 3P.SG.F.-build$_{IMPF}$ house-her early
‘Mona is building her house early.’ (accomplishment)

c. ʕala l-fadʿi **jaalis**-iin ta-xser-un flus-kum fi e-suq.
for empty PROG-3P.PL.M/F 2P.M/F-lose$_{IMPF}$-PL money-your in the-market
‘For no reason, you are losing your money in the market.’ (achievement)

I showed in Chapter 3 that the APPVs *qaaʕaɪd, gaayemah,* and *jaalisiin* are used to express progressive aspect when they are followed by imperfective achievement, activity, or accomplishment verbs. Such instances were referred to as pseudocoordination constructions. Pseudocoordination, according to Lødrup (2019):

> Contains two verbs with the same inflectional form and the conjunction *og* ‘and’ between them. It might look like a coordination of two verb phrases, but its grammatical properties are different from those of regular coordination. (p. 88)

A pseudocoordination construction mainly consists of two adjacent verbs that share grammatical, inflectional, and agreement features. Moreover, one of the important

characteristics for determining pseudocoordination is when the posture verb (APPV) and its following verb (the imperfective) have identical grammatical features; this is also consistent with SNA. Therefore, I propose that the APPV followed by the imperfective verb in SNA is pseudocoordination. The identification of grammatical criteria for pseudocoordination in SNA is necessary to help us determine if a sentence can be considered to involve pseudocoordination or regular coordination. This will serve us in providing more syntactic derivations of APPVs in Chapter 7.

6.3 Description of the Grammaticalization Process of SNA APPVs

The grammaticalization of *jaalis, qaaʕaıd,* and *gaayem* involves the metaphorical extension of the main meaning from the cognitive domain of location to the abstract domain of aspect (progressivity). Like the *b*-imperfective (Chapter 4) and the motion verb *raħ* (Chapter 5), APPVs in SNA underwent the four universal principles of grammaticalization. The reanalysis of SNA APPVs as progressive aspect markers is expected to involve these four principles. It is difficult to determine which process happened first in the grammaticalization of SNA APPVs, since there is no historical documentation of the development of these verbs. Nevertheless, I lean toward Jarad's (2015) and Heine and Kuteva's (2002, p. 3; 2007, p. 35) proposals that semantic extension (generalization) is the first principle to occur in the grammaticalization process, followed by desemanticization, decategorialization, and erosion.

6.3.1 Semantic extension

I have shown that SNA APPVs serve as different parts of speech (i.e., nouns, verbs, adverbs, and adjectives). They can occur in different tenses (present, past, and

future), even in non-pseudocoordination constructions. I also showed that they can serve as progressive markers in pseudocoordination constructions without expressing their locative meanings. Similar to *raħ* in Chapter 5, they can even be used in figures of speech (idiomatic expressions), as in (6f). These usages as different parts of speech can be regarded as a case of frequency and metaphorical extension (context generalization) (see Chapter 2). Example (6) provides examples of the semantic extensions of SNA APPVs.

(6) a. **l-jaalis** ktıb e-risalah
the-sitter write$_{PERF.}$3P.SG.M the-letter
'The writer/the sitter wrote the letter.' (noun)

b. l-dˁuyuf **gayem-iin** fi e-sˁalah lħiin
the-guests stand$_{IMPF}$-PL.F/M in the-living.room now
'The guests are standing in the living room now.' (verb)

c. l-ħariim **l-qaaʔaıd-at** fi l-ɣurfah tˁalib-at
the-women the-sitting-3P.PL.F in the-room students
'The women sitting in the room are students.' (adjective)

d. ʤa l-maridˁ **jaalis** ʔala kersiy-ah l-mutaħərik
come$_{PERF}$.3P.SG.M the-patient sitting.3P.SG.P on chair-his the-moving
'The patient came sitting on his wheelchair.' (adverb)

e. lama kent **jaalis** ʕali gam
when was.3P.SG.M sit$_{IMPER}$.3P.SG.M Ali stand$_{PERF}$.3P.SG.M
min kersi-ɑh
from chair-his
'When I was sitting, Ali stood from his chair.'
(grammatical aspect/progressive)

f. **jaalis** ʕala ʔaʕsab-ah l-mesafer
sit$_{IMPER}$.3P.SG.M on nerves-his the-traveler
'The traveler is nervous.' (figure of speech)

6.3.2 Semantic bleaching

SNA APPVs are also semantically bleached, an important component of the grammaticalization process. Consider again (5), repeated as (7).

(7) a. l-hiin **qaʕaıd** a-mʃi fi al-bayt
Now PROG.1P.SG.M 1P.P.M-walk$_{IMPF}$ in the-house
'I'm walking now in the house.'

b. monna **gaayem**-ah ta-bni bayt-ha embəkır
Mona PROG-3P.SG.F 3P.SG.F-build$_{IMPF}$ house-her early
'Mona is building her house early.'

c. ʕala l-fadˁi **jaalis**-iin ta-xser-un flus-kum
for empty PROG-3P.PL.M/F 2P.M/F-lose$_{IMPF}$-PL money-your
fi e-suq
in the-market
'For no reason, you are losing your money in the market.'

What (7) shows is that APPVs *jaalis*, *qaaʔaıd*, and *gaayem* have no locational meaning and have been semantically bleached. Therefore, these verbs have been grammaticalized from lexical verbs (with concrete, locational meanings) to items with more abstract, grammatical meanings (see Bybee et al. 1994, pp. 127-137). As stated previously, when an APPV appears before an imperfective, it does not convey its regular semantic meaning ('to sit' or 'to stand') and does not have tense or an eventive interpretation. Once the APPVs in (7) have been semantically bleached, they can develop a secondary usage as progressive aspect markers. Such usage is described by Hopper and Traugott (2003) as a "redistribution or shift, not a loss, of meaning" (p. 94). Thus, the APPVs in (7) have not been attenuated or weakened.

In the same vein, there are examples from other languages (Icelandic, Dutch, and Norwegian) that resemble SNA when it comes to marking the progressive aspect, as in (8).

(8) a. María **situr** og les.
Mary sits and reads
'Mary is reading.' (Icelandic, Jóhannsdóttir 2007, p. 361)

b. Onze ploeg **stond** lamlendig te hockeyen.
Our team stood sluggishly to hockey
'Our team was playing hockey sluggishly.'
(Dutch, Lemmens, 2005, p. 185)

c. Jeg **står** i dusjen.
I stand in shower.DEF
'I am showering.' (Norwegian, Lødrup 2019, p. 93)

Like in SNA, the posture verbs in (8) do not express actions of sitting or standing; rather they exhibit a bleached meaning. Languages such as Icelandic, Dutch, or Mainland Scandinavian use posture verbs to express progressivity. The original meaning was likely bleached gradually over time. Synchronically, each APPV in (7) and (8) does not express the same complementation pattern as its non-grammaticalized lexical forms (which are intransitive). For example, each APPV has a double predicate that subcategorizes for DP/NP and a locative PP, as in (9).

(9) a. **jaalis**-ah/**qaaʕaıd**-ah axt-ik fi ə-ṣalah
sit$_{IMPF}$-3P.SG.F sister-your in the-living room
'Your sister is sitting in the living room.'

b. e-tˁulab **gayem**-iin min karasi-hum
the-students stand$_{IMPF}$-3P.PL.M from chairs-their
'The students are standing up from their chairs.'

Therefore, when *jaalis*/*qaaʕaıd* ‘sitting’ and *gaayem* ‘standing’ are reanalyzed as progressive markers, their theta roles (s-selection) are removed, leaving only the relation of progressivity, as in (7).

It is important to have a better understanding of the origin of the semantic bleaching of SNA APPVs. Jarad (2015, p. 105) proposed that the reanalysis of the APPV *yālis* ‘sitting’ in Emirati Arabic originated from the lexical perfective posture verb *yilas* ‘he sat’. He argued that the perfective verb *yilas* ‘he sat’ is a main verb with an AGENT and a THEME, as in (10).

(10) a. **yilas** ‘ala l-kanabaqq w-ḡifa
sat on the-sofa and-dozed
‘He sat on the sofa and dozed off.’ (Emirati Arabic, Jarad, 2015, p. 93)

b. ali **yālis** yi-gra yarīda
Ali PROG he-read newspaper
‘Ali is reading a newspaper.’ (Emirati Arabic, Jarad, 2015, p. 90)

Jarad (2015, p. 105) suggested that the verb *yilas* in (10b) developed a secondary, “aspectual” meaning in Emirati Arabic. However, he did not explain or give evidence for why the perfective verb form *yilas* would have the semantic or grammatical root form of the grammaticalized APPV *yālis* in Emirati Arabic.

Suggesting that the perfective posture verb *yilas* (as a lexical item) is the main source of grammaticalization cannot be applied to SNA. Jarad seems to have overlooked the fact that APPVs in Arabic (including Emirati Arabic[17] and SNA) can also have two arguments, namely an NP and/or a PP, as in (2) and (3) above. Both the perfective verb

[17] I obtained this information via personal communication with some Emirati Arabic native speakers at ASU.

yilas/*jelis* ‘he sat’ and the lexical participle posture verb *yālis/jaalis* are similar in their theta role assignments (especially in non-pseudocoordination contexts). Yet, they cannot be treated grammatically and syntactically equally. For instance, the perfective lexical posture verb *yilas/jelis* ‘he sat’ cannot be preceded by a copula auxiliary, suggesting that both verb types cannot be treated the same. Consider (11), from SNA.

(11) a. axt-ik **jelis**-at fi ə-ṣalah
sister-your sit.PERF-3P.SG.F in the-living.room
‘Your sister sat in the living room.’ (perfective)

b. ***kan**-at axt-ik **jelis**-at fi ə-ṣalah
was-3P.SG sister-your sit$_{PERF}$-3P.SG.F in the-living.room
(Intended: ‘Your sister was sat in the living room.’) (perfective)

c. l-dˁayf **qeʕed** ʤenb nasiib-ik
the-guest sit$_{PERF}$.3P.SG.M beside brother.in.law-your
‘The guest sat beside your brother-in-law.’ (perfective)

d. *l-dˁayf **kan** **qeʕed** ʤenb nasiib-ik
the-guest was.3P.SG.M sit$_{PERF}$.3P.SG.M beside brother.in.law-your
(Intended: ‘The guest was sat beside your brother in law.’ (perfective)

e. e-tˁulab **gam**-uu min karasi-hum
the-students stand$_{PERF}$-3P.PL.M from chairs-their
‘The students stood up from their chairs.’ (perfective)

f. ***kan**-u e-tˁulab **gam**-uu min karasi-hum
were-3P.PL.M the-students stand$_{PERF}$-3P.PL.M from chairs-their
(Intended: ‘The students were stood up from their chairs.’) (perfective)

Unlike the perfective verbs in (11), the APPVs *jaalis*/*qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ can be preceded by an auxiliary copula (*kan* ‘was’), a subordinate copula auxiliary in the subjunctive mood, or both at same time. Therefore, by replacing the perfective verbs in (11) with APPVs (i.e., *jaalis/qaaʕaɪd* or *gaayem*), examples (11b,d,f) are grammatical in SNA. As a result, the desemanticization of the APPVs is more likely

to have originated from the APPV form *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’, not from the perfective verb forms in (11), as Jarad claimed.

The semantic bleaching of SNA APPVs can also be found in non-pseudocoordination contexts. When APPVs are used independently, they can sometimes be used in figures of speech (metaphoric extensions). An example of an idiomatic expression in SNA is highlighted in (6f), where the APPV has no locative meanings (‘sit’ or ‘stand’). More examples of idiomatic expressions can also be found in (12).

(12) a. **jaalis** ʕala ʔaʕsab-ah l-mesafer
sit$_{IMPER}$.3P.SG.M on nerves-his the-traveler
‘The traveler is nervous.’

b. **qaʕaɪd**-ah ʕala qalb-i/kabd-i
sit$_{IMPER}$-3P.SG.F on heart-my/kidney-my
‘She is bothering me.’ or ‘She is irritating me.’

c. l-ʕumaal **gayem**-een l-liil
the-workers stand$_{IMPER}$-3P.PL.M the-night
‘The workers are up all night.’

d. xal-ik **gaayem** bi-l-waʤib
uncle-your stand$_{IMPER.}$3P.SG.M with-duty
‘Your uncle is doing what he does best.’

e. ʔana ma adri layʃ ta-dˤħək lakın
I NEG know$_{IMPF}$ why 2P.SG.M-laugh$_{IMPF}$ but
qaaʕaɪd/jaalis li-k
sit$_{IMPER}$.1P.SG.F for-you
‘I don’t know why you are laughing, but I’m on to you.’

f. axt-ik **jaalis**-ah ʕala l-wajib
sister-your sit$_{IMPF}$-3P.SG.F on the-assignment
‘Your sister is working on/writing the assignment.’

In (12), SNA APPVs[18] are used in non-pseudocoordination contexts. None of the APPVs express their supposed semantic locative meanings. In fact, each verb expresses a state of affair. For instance, in (12a,b) the semantic interpretation of the APPV *jaalis* 'sitting' is completely bleached of its literal meaning and has an idiomatic meaning: the AGENT's state of being. Examples (12c,d) describe the AGENT's current state of activity. The APPV can denote the speaker's intention, as in (12e). Interestingly, the common characteristic in (12) is that they all carry progressive interpretations. Example (12) helps us understand how the verbs *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' came to express progressivity. It is worth remembering Bybee's (1994) construction for the semantic changes in the development of the progressive aspect (Chapter 2). Consider example (12f). The AGENT (*axtik* 'your sister') is described as being located in the midst of writing/doing the assignment, even though sentence (12f) has no verbs with that refer to writing or doing, leaving it to the listener to infer the AGENT's current state of being. Additionally, examples like (12) show that ongoing activities are formed as locations that AGENTs find themselves in, as explained above. Therefore, SNA APPVs (*jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing') likely adapt Bybee's (1994) construction, as discussed in Chapter 2.

Lødrup (2019, p. 93) argued that the concept of "bleached meanings" of posture verbs in pseudocoordination is older than many other modern grammaticalization

[18] It is important to remember that the APPVs in (23) cannot be used in figures of speech in MSA or CA. This is because MSA APPVs are only used as lexical aspect (with locative meanings).

theories. He disputed it by stating that posture verbs with bleached meanings are an independent factor from establishing pseudocoordination, as seen in (13).

(13) Her **sitter** jeg med 650 mbite download.
here sit I with 650 MB download
'As for me, I have 650 MB download.' (Norwegian, Lødrup 2017, p. 94)

The assumption that semantic bleaching is independent from pseudocoordination is sufficient in SNA (12). However, the bleaching and extension of meanings of SNA APPVs with/without pseudocoordination are key factors in the grammaticalization process.

Semantic bleaching is an important factor in determining pseudocoordination and the grammaticalization of SNA APPVs. It has already been established in this chapter that the first verb in pseudocoordination can be semantically bleached when it is followed by an imperfective verb form. Therefore, whenever an SNA APPV is followed by an imperfective verb form, its lexical semantics are lost and it expresses only progressive aspect.

6.3.3 Decategorialization

The third principle of grammaticalization is decategorialization or decategorization (see Chapter 2). Like the *b*-imperfective and the motion verb *raħ*, the grammaticalization of the APPVs into progressive aspect markers involve decategorization. If SNA APPVs undergo decategorialization in pseudocoordination constructions, then their syntactic selection and valency should change, as discussed in Chapters 4 and 5.

6.3.3.1 Syntactic selection properties

As mentioned in §6.3.4, when APPVs (i.e., *jaalis, qaaʕaɪd,* and *gaayem*) are used independently, they can select two arguments: NP and PP. Consider (14).

(14) l-dˤuyuf **jaalis**-iin fi e-sˤalah lħiin
the-guests sit$_{IMPF}$-PL.F/M in the-living.room now
'The guests are sitting in the living room now.

APPVs such as *jaalisiin* in (14) subcategorize for an NP (AGENT: *l-dˤuyuf* 'the guests') and a PP (THEME: *fi e-sˤalah* 'in the living room'), which describes the subject's location. The syntactic c-selection of SNA APPVs is very different from verbs that are not pseudocoordinated (15a).

(15) a. **qaaʔaɪd**-ah ta-mtˤər (bara)
PROG-3P.SG.F 3P.SG.F-rain$_{IMPF}$ outside
'It is raining (outside).'

` b. hom **jaalis**-iin ya-ktub-un el-waʤib
they PROG-3P.PL.M 3P.M-write$_{IMPF}$-PL the-assignment
'They are writing the assignment.'

c. mona **gaayem**-ah ta-ʔtˤi axt-ah ħalau
Mona PROG-3P.SG.F 3P.SG.F-give$_{IMPF}$ sister-her candy
'Mona is giving her sister candy.'

When APPVs (e.g., *jaalisiin*) are reanalyzed as aspectual markers, they lose their argument structure and inherent descriptive content, as seen in (15b,c). Jarad (2015, p. 105) suggested that when posture verbs lose their syntactic properties, they do not surface as lexical verbs in isolation. In other words, when the APPV is used in the structure [APPV+ imperfective verb] with some other grammatical items, the APPV indicates progressive aspect. During the grammaticalization process, the syntactic structure of the APPV changes from a main verb [verb + complement] to an auxiliary [PROG + finite

verb]. This suggests that the syntactic selectional properties (c-selection) of SNA APPVs are deactivated when they mark progressive aspect in pseudocoordination. This case is interesting because APPVs have two usages, or "divergent" usages (see Hopper & Traugott, 2003, 114ff). Similar to the *b*-imperfective and the motion verb *raħ*, the finite imperfective verb then serves as a main verb and c-selects arguments.

In Chapter 7, further syntactic analysis of the grammatical structure of SNA APPVs is provided. Briefly, I conclude that when APPVs are used in non-pseudocoordination constructions (as main verbs), their c-selection properties are different than they are in pseudocoordination constructions, as described above.

6.3.3.2 Changing valency rules

SNA APPVs are inherently unaccusative when they are used as main arguments. If we assume that APPVs (*jaalis, qaaʕaıd,* and *gaayem*) have been grammaticalized into aspectual markers (i.e., a progressive marker, auxiliary, or light verb), then that they cannot undergo further changes in valency. Consider (16) from SNA.

(16) a. l-ʔakil kan **jaalis/qaʕaıd** y-u-**kal**
the-food was.3P.SG.M PROG.3P.SG.M 3P.SG.M.PASS-eat$_{IMPF}$
wa ʔant ta-naẓər.
while you 2P.SG.M.IMP-watching
'The food was being eaten while you are watching.' (passive)

b. l-raʤal **qaʕaıd/jaalis** ya-**t**-sˁafag bisebeb
the-man PROG.3P.SG.M 3P.SG.M-PASS-beat$_{IMPF}$ because
saraqat-ah min il-maħal
theft-his from the-store
'The man is being beaten because of his theft from the store.' (passive)

c. l-sayarh **qaʕaıd**-ah/**jalis**-ah t-**i**-daf l-ħiin
the-car PROG.3P.SG.F 3P.SG.F-PASS-beat$_{IMPF}$ now
'The car is being pushed now.' (antipassive)

In (16), *jaalis* and *qaaʕaɪd* cannot decrease or increase their valency in pseudocoordination constructions. They cannot take causatives or applicatives (17). This can be attributed to the fact that *jaalis* or *qaaʕaɪd*'s theta roles and selectional categories (c-selection) are lost when they shift into progressive markers once they are followed by an imperfective verb. However, valency changing only affects imperfective verb forms, as in (16) and (17).

(17) a. mona **jaalis**-ah ta-dif l-sayarah daxil l-bayt
Mona PROG-3P.SG.F 3P.SG.F-push$_{IMPF}$ the-car inside the-house
'Mona is pushing the care inside the house.' (causative)

b. ʕam-ik **qaaʔaɪd** ya-xbir nader
uncle-your PROG.3P.SG.M 3P.SG.M-inform$_{IMPF}$ Nader
ʕan l-mufadʒʔah
about the-surprise
'Your uncle is telling Nader about the surprise.' (applicative)

However, when imperfective verbs are used with the APPV *gaayem* 'standing', they very rarely decrease their valency. In other words, imperfective verbs with *gaayem* 'standing' cannot easily be passivized or antipassivized. Consider (18).

(18) a. *l-radʒal **gayem** y-u-kram bisebeb
the-man PROG.3P.SG.M 3P.SG.M-PASS-beat$_{IMPF}$ because
lutʿf-ah maʔ l-masak-iin
kindness-his with the-poor
(Intended: 'The man is being rewarded because of his kindness towards poor people.') (passive)

b. al-walad **gaayem** y-u-ẓrab wa ant
the-boy PROG.3P.SG.M 3P.SG.M-PASS-hit$_{IMPF}$ while you
ta-nẓer
2P.SG.M-watch$_{IMPF}$
'The boy is being hit while you are watching.' (passive)

c. *l-sayarh **gaayem**-ah t-i-daf l-ħiin
the-car PROG-3P.SG.F 3P.SG.F-PASS-beat$_{IMPF}$ now
(Intended: 'The car is being pushed now.') (antipassive)

On the other hand, imperfective verbs with APPV *gaayem* ‘standing’ can increase their valency. This occurs particularly with animate subjects, but not with inanimate ones, as shown in (19).

(19) a. mona **gaayem**-ah ta-dif l-sayarah daxil l-bayt
Mona PROG-3P.SG.F 3P.SG.F-push$_{IMPF}$ the-car inside the-house
‘Mona is pushing the car inside the house.’ (causative)

b. *l-ʤayb **gaayem** ya-dif l-sayarah daxil l-bayt
the-Jeep PROG.3P.SG.M 3P.SG.M-push$_{IMPF}$ the-car inside the-house
(Intended: ‘The Jeep is pushing the car inside the house.’) (causative)

c. ʕam-ik **gaayem** ya-tˁbax kabsah li ħermat-ah
uncle-your PROG.3P.SG.M 3P.SG.M-cook$_{IMPF}$ Kabasah for woman-his
‘Your uncle is cooking Kabasah for his wife.’ (applicative)

d. *l-furn **gaayem** ya-tˁbax kabsah
the-oven PROG.3P.SG.M 3P.SG.M-cook$_{IMPF}$ Kabasah
(Intended: ‘The oven is cooking Kabasah.’) (applicative)

Based on (16)-(19), APPVs *jaalis* and *qaaʕaɪd* ‘sitting’ are decategorized since they have lost their syntactic selectional properties and cannot change valency (as they have no valency at all). As for the APPV *gaayem* ‘standing’, the imperfective verb rarely decreases its valency (18). The imperfective verb in (18) can be causativized or take an applicative only with animate subjects (19). Nevertheless, this finding does not mean that because *gaayem* is not a fully decategorized verb in SNA (19a,c), it cannot be regarded as a case of grammaticalization. This is evidence that it is not as advanced as *jaalis* and *qaaʕaɪd* in the grammaticalization process when it comes to valency.

While some linguists, such as Lødrup (2019), have investigated the topic of valency in Mainland Scandinavian, this topic has received little to no attention in Arabic. For example, Lødrup suggested that posture verbs in pseudocoordination constructions are not expected to change valency. Particularly, he looked at decreases in valency (i.e., passivation) in Norwegian posture verbs in pseudocoordination and found that both the posture verb and the following verb can undergo passivization. According to Lødrup, (20) from Norwegian suggests that posture verbs in pseudocoordination can change their valency.

(20)	Her	skal	det	**sittes**	og	**koses**
	here	shall	EXPL	sit.PASS	and	cuddle.PASS
	'We will sit here and cuddle.'					(Norwegian, Lødrup 2019, p. 98)

Valency decreasing is an important device in determining the grammatical status of a verb. For instance, (20) demonstrates that even though both the *sittes* 'sit' and *koses* 'cuddle' are passivized (i.e., their valency has decreased), the posture verb retains its locative meaning and is a full lexical verb, which is not expected to happen in grammaticalization. Lødrup (2019, p. 100) considered (20) as an example of a "long passive." In fact, examples like (20) may suggest that the posture verbs in pseudocoordination cannot be considered as advanced cases of grammaticalization in Mainland Scandinavian. However, we saw in (16)-(19) that SNA APPVs are not subject to changes in valency. This leads us to question the current grammatical status of SNA APPVs in pseudocoordination, which is discussed thoroughly in §6.4.

6.3.4 Erosion

The final process of grammaticalization is phonetic erosion. Each of the above posture verbs has two usages. This has previously been described as "divergence" and is a natural and expected result of grammaticalization. Hopper (1991, p. 118) described this process as "a fixing of a lexical form in a specific potentially grammatical environment, where the form takes on a new meaning." Heine and Reh (1984, p. 57-59) referred to this quirky spectacle as "split," because the context of the initial grammaticalization is only one of several contexts for grammaticalization that will make an appearance over its lifetime. The primary form can become obsolete, should the language decide to retire its use. In SNA, this case is interesting because APPVs are split into two divergent uses, and the grammaticalized APPVs preserve the full phonetic content of the lexical verbs. However, how important is the phonetic erosion in the grammaticalization of APPVs? Jarad (2015, p. 105) viewed erosion of the Emirati Arabic posture verb *yālis* 'sitting' as an expected case, since phonological change is independent from syntactic change. Yet, he does not provide any explanation of why it is independent from syntactic change. Furthermore, Heine and Kuteva (2007, p. 42) suggested that phonological erosion is not a requirement for grammaticalization to take place, which means it is not necessary for grammaticalization.

When comparing *jaalis/qaaʕaɪd* 'sitting' or *gaayem* 'standing' to the *b*-imperfective and the motion verb *raħ* 'he went', it is apparent that SNA APPVs are not as advanced as the *b*-imperfective and the motion verb *raħ* 'he went' in the grammaticalization process. For instance, agreement (inflectional morphology) between

raħ ‘he went’ and a proceeding imperfective verb is not required, unlike with *jaalis/qaaʕaɪd* ‘sitting’ or *gaayem* ‘standing’ with/without pseudocoordination. Moreover, I showed in Chapter 3 and (26) that APPVs *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ and their proceeding imperfective verbs must agree with their subject. In other words, the motion verb *raħ* ‘he went’ and the *b*-imperfective are not inflected, unlike SNA APPVs. To my knowledge, and after through in-depth research, very few linguists have discussed the relevancy of agreement between APPVs and their proceeding imperfective verbs in the grammaticalization process. This is important because the fact that SNA APPVs are still able to retain their phonological content can help us understand their current grammatical and syntactic functions. This is explained thoroughly in the following section.

6.4 The Grammatical Function of APPVs in Pseudocoordination Constructions

Since I have demonstrated that SNA APPVs *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ developed into aspectual markers in pseudocoordination due to semantic bleaching, extension, and decategorialization, but not phonological erosion, a questioning worth asking is what kind of grammatical functions *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ have. Before I suggest an answer, let us briefly explore some early proposals about the grammatical status of posture verbs in pseudocoordination.

6.4.1 Auxiliaries

Jarad (2015), Heine (1993, pp. 37-39), Seiss (2009, pp. 506-509), and Newman (2002) explicitly viewed posture verbs in pseudocoordination constructions as auxiliaries. For instance, Jarad (2015) claimed that the APPV *yālis* in Emirati Arabic had

grammaticalized into an auxiliary or "auxiliary-like" verb. Jarad argued that when *yālis* is followed by an imperfective verb, it adds a functional meaning to the sentence that it appears in. Emirati Arabic, according to Jarad, resembles the English progressive auxiliary verb *be* in that this posture verb cannot be followed by stative verbs or some achievement imperfective verbs, as seen in (10). He proposed two stages of reanalysis of the APPV *yālis* 'sitting'. In the first stage, it is a locative expression (a lexical verb followed by a complement); at the same time, *yālis* is reanalyzed as an auxiliary verb, while the complement acquires the status of main verb. In the second stage, *yālis* becomes an auxiliary followed by a main verb (Chapter 2).

Jarad's (2015) two-grammaticalization stages description is not accurate. These verbs are not auxiliary-like in pseudocoordination constructions. True, SNA APPVs seem to function like the English auxiliary verbs (i.e., *be*) since they are not generally permissible with stative verbs or some achievement predicates (see Chapter 3). However, this is not enough evidence that these APPVs are like English auxiliaries. Claiming that these grammaticalized SNA APPVs are auxiliaries implies that they are tense markers, and such an insinuation is incorrect. APPVs in pseudocoordination constructions can coexist with a perfective, imperfective, or subjunctive mood copular auxiliary, as in (21).

(21) a. kent **gaayem** a-saly ʕalla l-waqt
was-3P.SG PROG.1.SG.M 1P.SG.M-pray$_{IMPF}$ on the-time
yom ʤa ʕali
when came.3P.SG.M.PERF Ali
'I was praying on time when Ali came.'

b. lama kin-na **jals**-iin na-tˤlib el-ʕasha
when were-we PROG-3P.PL.M 3P.PL.M/F-order$_{IMPF}$ the-dinner
nadi l-hilal sadʒal hadaf ʔala l-nasser
club the-Hilal scored$_{PERF}$.3P.SG goal against the-Nasser
'While we were ordering dinner, Al-Hilal club scored a goal against Al Nasser.'

c. kan nadir ya-kun **qaaʔaɪd**
was.SG.M Nader 3P.SG.M-be$_{IMPF}$ PROG-3P.SG.M
ya-ənta$_{ẓ}$ar-k fi l-mawaqif
3P.SG.M-wait$_{IMPF}$-you in the-parking
'Nader would have been waiting for you in the parking lot.'

The ability for auxiliaries, such as *kinna*/*kan* 'was'/'were' or/and *yakun* 'be$_{IMPF}$', to occur before APPVs is strong evidence that APPVs cannot serve as auxiliaries in (21). These verbs only serve as progressive aspect markers. They express a relative duration between one action and another, where one took place while the other one was in progress. SNA APPVs (*gaayem, jalisiin,* and *qaaʔaɪd*) in (21) do not express an event or time. Syntactically, if we assume that they are tense markers—which they are not—then there would be multiple tense projections in a single sentence (TP), which highly unlikely. Additionally, multiple auxiliaries are possible only when they are different kinds of auxiliaries. For instance, it is hardly possible to encounter two progressive auxiliaries in one TP. Therefore, the subjunctive mood copular auxiliary *yakun* and the auxiliaries *kinna* and *kan* helped us determine that *gaayem, jaalsiin,* and *qaaʔaɪd* in (21) are not auxiliary markers. For these reasons, I do not believe that *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' have grammaticalized into copulas or auxiliaries. Now that I have established that SNA APPVs in pseudocoordination constructions are not auxiliary verbs, let us see if they are light verbs.

6.4.2 Light verbs

I showed in §6.2.2 that pseudocoordination consists of two adjacent verbs that share identical inflectional morphology (see Lødrup, 2019, p. 88). The morphological agreement features (person, number, gender) between the two verbs (APPV+ imperfective verb) is one reason to view these verbs as at an early stage that have been reanalyzed as light verbs. In SNA, both the APPV and the imperfective verb form must be morphologically inflected based on the subject (see Chapter 3). In other words, SNA APPVs inflect based on the person, gender, and number of the subject. Kjeldahl (2010, pp. 153-155) and Winklund (2007, p. 8) viewed posture verbs in pseudocoordination as light verbs. However, Lødrup (2019) viewed posture verbs in pseudocoordination as grammaticalized light verbs only in long passives and presentational focus sentences, as in (22). According to Lødrup, pseudocoordination can be turned into a monoclausal complex predicate construction in long passives and with presentational focus. In other words, the light verb merges its argument structure with that of the following verb and no longer has its own clausal domain. However, Lødrup suggested that it is impossible for posture verbs to be light verbs in pseudocoordination constructions, as pseudocoordination is not compatible with a complex predicate analysis[19] (22) (see Lødrup, 2019, pp. 100-102).

(22)	Jeg	**sitter**	her	og	har	gjort	alt	utenom	å	betale.
	I	sit	here	and	have	done	everything	except	to	pay

[19] According to Lødrup (2019, p. 100), posture verbs in pseudocoordination constructions can be sometimes viewed as complex predicates. In Norwegian, both the posture verb and following verb can be passivized as one unit (20). According to Lødrup (2019), the argument of the second verb corresponds to the passive subject, which makes posture verbs complex predicates.

‘I am sitting here, having done everything apart from paying.’
(Lødrup 2019, p. 99)

Lødrup’s long passives (20) do not apply to SNA APPVs. In (21), I noted that *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ never change valency, unlike Norwegian pseudocoordinated posture verbs. This means that it is impossible for pseudocoordinated *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ to function as locative expressions. This leads me to suggest that the APPVs are more likely to function as light verbs in pseudocoordination. Therefore, the Norwegian VP1 *sitter* ‘sit’ in (20) has no locative expression and the SNA APPV functions as a light verb, as in (23).

(23) anna **jaalis** hina ʔa-sawi kil ʃi ila e-dafaʔ
I PROG.1P.SG.M here 1P.SG.M-do$_{IMPF}$ every thing except the-paying
‘I’m doing everything here except paying.’

Unlike the posture verbs in Mainland Scandinavian, *jaalis/qaaʕaɪd* ‘sitting’ and *gaayem* ‘standing’ serve as aspectual markers and have no locational interpretation. This means that they are semantically and grammatically bleached in pseudocoordination constructions. Following Kjeldahl (2010, pp. 153-155) and Wiklund (2007, p. 8), when SNA APPVs are pseudocoordinated, they function as light verbs. Simultaneously, they are progressive aspect markers, as discussed in §6.4.3.

Another piece of supporting evidence that SNA APPVs can function as light verbs comes from Hindi. In Hindi, one verb (such as a posture verb) may function as a light verb and simultaneously carry all of the grammatical, inflectional, and agreement features. As shown in (24) the verb *cal* ‘go’ only contributes to the meaning (lexical

verb). On the other hand, the light verb *pəɽa* ‘fall’ in (24) has been completely semantically bleached and carries only grammatical and inflectional features.

(24) a. woh cal **pəɽa**
3P.SG.M/F walk fall$_{PERF}$.SG.M
‘He started walking.’ (Hindi[20])

b. sumit ro **pəɽa**
Sumit.M cry fall $_{PERF.}$SG.M.
‘Sumit burst out crying.’ (*Hindi*, Kachru, 2006, p. 85)

In (24) *pəɽa* ‘fall’ is a light verb with no semantic meaning (see Kachru, 2006). The verb *cal* ‘walk’ is its root form. In SNA, it would be expected that the APPV would become a total light verb once the accompanying imperfective verb loses all of its features.

6.4.3 Progressive markers

One of Heine’s (2003) generalizations related to the grammaticalization of TMA markers is that progressives are frequently derived from location schemas (*X is at Y*), companion schemas (*X is with Y*), or actions (*X does Y*). SNA APPVs express the location or situation of the AGENT. According to Bybee et al. (1994), posture verbs are an essential semantic element of progressive markers. The change from APPV to progressive aspect marker can be attributed to the unidirectional shift from the more concrete domain of space to the more abstract domain of verbal aspect (see Bybee et al., 1994, pp. 127-137). As highlighted in Chapter 2, this phenomenon could be a leading cause of posture verbs developing into progressive markers crosslinguistically; SNA APPVs fit this analogy. As I have shown in this chapter, *jaalis/qaaʕaɪd* ‘sitting’ and

[20] Example (24a) was obtained via personal correspondence with a native speaker.

gaayem ‘standing’ have evolved from locative predicates to grammatical markers, i.e., to progressive aspect and light verbs.

There is agreement among researchers that posture verbs in pseudocoordination contexts are grammaticalized progressive markers (see Bybee et al., 1994; Comrie, 1976; Heine et al., 1991; Heine et al., 1991; Heine & Kuteva, 2002). However, Lødrup (2019) does not entirely believe they are progressive or durative markers. According to Lødrup (2019, p. 104), there are inconsistencies in Mainland Scandinavian, where VP2s are not affected by the posture verb (VP1) and the pseudocoordination is not translated as a progressive, as in (25).

(25) **Står** han inte och **somnar** på sitt pass!
stands he not and dozes.off on his guard
‘He actually stands there and dozes off on his guard!’
(Swedish, Lødrup 2019, p. 104)

Posture verbs in pseudocoordination structures consistently lack aspectual interpretations and therefore they should not be viewed as progressive markers (Lødrup, 2019, p. 104). Lødrup (2019, p. 104) instead adapts Blensenius’s (2015, pp. 35-42), Tonne’s (2001, p. 121), and Behrens, Flecken, and Carroll’s (2013, pp. 129-130) arguments that posture verbs in pseudocoordination constructions are locational expressions. However, Lødrup does not clearly explain why they are locational constructions. Perhaps posture verbs in Mainland Scandinavian can play two grammatical functions in that they can function as locational expressions or as progressive markers, as seen in (26) below.

(26) a. Han **sitter** ikke og leser.
he sits not and reads
‘He is not reading.’ (Lødrup 2019, p. 92)

b. Her skal det **sittes** og koses
here shall EXPL sit.PASS and cuddle.PASS
'We will sit here and cuddle.' (Lødrup 2019, p. 98)

The argument that posture verbs are locational or situative in pseudocoordination constructions does not hold up well for SNA APPVs. If we assume that they are locational expressions, then these verbs should still involve concrete lexical aspect—which they do not. As discussed in §6.2, *jaalis and qaaʕaɪd* 'sitting' and *gaayem* 'standing' are semantically bleached and grammatically decategorized when they are followed by imperfective posture verbs. My general analysis, however, is that pseudocoordinated APPVs are further along in the grammaticalization process than Mainland Scandinavian posture verbs.

6.5 Reanalysis of the APPVs

The fact that the APPVs serve as progressive markers and light verbs in pseudocoordination suggests that they have not completed their grammatical cycle, because each verb still has a lexical function (static location expression). However, once the APPV is followed by an imperfective verb form, it is reanalyzed as a progressive marker functioning as a light verb, and hence has split functions. This suggests that *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' are still undergoing the grammaticalization process and raises the possibility that their reanalysis is still pending and slowing, which is expected to happen during the grammaticalization process (see Hopper & Traugott, 2003). In other words, the transition from lexical aspect (i.e., locative meaning) to grammatical aspect (i.e., light verb/progressive) is not an abrupt or smooth process, as some pauses or stops may occur during grammaticalization (Hopper & Traugott, 2003).

Therefore, the current grammaticalization stage of pseudocoordinated APPVs is expected to be something in between progressive aspect and a light verb. This explains why APPVs simultaneously retain their lexical meaning and are used as grammatical aspects, which are divergent usages. In §6.4.2, APPVs are predicated to fully function as light verbs once the imperfective verb, a lexical verb, loses its agreement features, as in the Hindi examples in (35) above. In other words, the imperfective verb is potentially undergoing a degrammaticalization process in order to force the posture verb to simultaneously undergo the process of grammaticalization in such an instance.

6.6 The Difference between Perfective and Imperfective Posture Verbs

SNA APPVs and perfective posture verbs both mainly exhibit aspectual interpretations (progressive vs. perfective) when they are followed by an imperfective verb. However, they behave very differently. For instance, (38a) is a pseudocoordination construction, while (38b) is a coordination construction (also see §6.2.2).

(27) a. ʕusˁman kan **jaalis** ya-ktıb e-risalah
Ousmane was.3P.SG.M PROG.3P.SG.M 3P.SG.M-write$_{IMPF}$ the-letter
'Ousmane was writing the letter.' (progressive)

b. ʕusˁman **jelis** ya-ktıb e-risalah
Ousmane sit$_{PERF.}$3P.SG.M 3P.SG.M-write$_{IMPF}$ the-letter
'Ousmane sat to write the letter.' (perfective)

A clear dissimilarity between APPVs (27a) and perfective posture verbs (27b) is their ability to change valency. We saw in §6.3.3.2 that *jaalis/qaaʕaıd* 'sitting' and *gaayem* 'standing' in pseudocoordination constructions do not change their valency; however,

their following imperfective verbs can (passivization or antipassivization), as shown in example (16), repeated as (28) below.

(28) a. il-ʔakil kan **jaalis/qaaʕaıd** y-u-**kal**
the-food was.3P.SG.M PROG.3P.SG.M 3P.SG.M.PASS-eat$_{IMPF}$
wa ʔant ta-naẓər.
while you 2P.SG.M-watch$_{IMPF}$
'The food was being eaten while you are watching.' (passive)

b. l-sayarh **qaʕaıd-ah/jaalis-ah** t-i-**daf** l-ħiin
the-car PROG.3P.SG.F 3P.SG.F-PASS-beat$_{IMPF}$ now
'The car is being pushed now.' (antipassive)

However, perfective posture verbs that are followed by imperfective verbs cannot decrease their valency. For instance, the perfective posture verb (*jelis* 'he sat') and the imperfective verb cannot be passivized or antipassivized; hence, the examples in (29) are ungrammatical.

(29) a. *il-ʔakil **jelis/gaʔed** y-u-**kal**
the-food **sit**$_{PERF}$.3P.SG.M 3P.SG.M.PASS-eat$_{IMPF}$
wa ʔant ta-naẓər
while you 2P.SG.M.IMP-watching
(Intended: 'The food sat eaten while you are watching.') (passive)

b. *l-sayarh **gaʔed-at/jelis-at** t-i-**daf**
the-car **sit**$_{PERF}$.3P.SG.F 3P.SG.F-PASS-beat$_{IMPF}$
(Intended: 'The car sat pushed now.') (antipassive)

Examples (28) and (29) are evidence that APPVs are truly grammaticalized, while perfective posture verbs are lexical verbs. Based on the above examples, I propose that sentences containing perfective posture verbs followed by an imperfective verb [perfective posture verbs + imperfective verb] involve regular coordination and are raising verb constructions in SNA, which are explained in Chapter 7. However, a

sentence that consists of an APPV followed by an imperfective is pseudocoordination. Therefore, pseudocoordinated SNA APPVs are grammaticalized.

6.7 Conclusion

In this chapter, I examined the grammaticalization of SNA APPVs. I proposed that structures consisting of [APPV + imperfective verb] are pseudocoordinated. This proposal is based on the grammatical similarities (inflectional and agreement features) between the APPV and the imperfective verb. The APPVs *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' were tested against the principles of grammaticalization. Based on the analysis in this chapter, *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' have undergone semantic extension, semantic bleaching, and decategorialization, but have not undergone phonological reduction (erosion). Semantic bleaching and semantic extension of SNA APPVs play an important role in this particular grammaticalization cycle. Like the *b*-imperfective (Chapter 4) and the motion verb *raħ* (Chapter 5), an examination of valency changing was very helpful. Not only did it prove that APPVs cannot change their valency, it also helped us understand the current stage of the grammaticalization of these APPVs. Moreover, valency changing helped us unveil the aspectual confusion between APPVs *jaalis/qaaʕaɪd* 'sitting,' *gaayem* 'standing' and the perfective posture verbs *jelis/qaʔed* 'he sat' and *gam* 'he stood' and helped us understand their behavior. In other words, it helped us distinguish between APPVs and perfective posture verbs. The findings suggest that sentences consisting of SNA APPVs followed by imperfective verbs are pseudocoordination constructions, while sentences consisting of perfective posture verbs followed by imperfective verbs are coordination constructions. Thus, due to the

grammaticalization process, APPVs are split into two usages, which can be described as "divergent." These verbs in pseudocoordination constructions function as light verbs and progressive aspect markers. However, APPVs are not as advanced as the *b*-imperfective and the motion verbs *raħ* 'he went' in the grammaticalization process. This is because APPVs still contain their locational meanings and their phonological characteristics are intact. In other words, APPVs have not abandoned their locative meaning, rather, they have developed a new grammatical function (progressive aspect/light verb) while maintaining their locative meanings. In Chapter 7, I provide syntactic derivations of grammaticalized APPVs, the *b*-imperfective, and the motion verb *raħ*.

CHAPTER 7

THE SYNTAX OF THE *B*-IMPERFECTIVE, THE PROSPECTIVE FUTURE *RAḤ*, AND THE PROGRESSIVE APPVS IN SNA

Given that the progressive APPVs (*jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing'), the future *b*-imperfective, and the prospective future *raḥ* are grammaticalized functional categories in SNA, an important question arises regarding how to provide a morphosyntactic analysis for these grammatical markers in SNA. Following the cartography program, I provide a syntactic analysis for the above three grammaticalized forms. In addition to the grammaticalized forms above, I discuss the syntactic structures of their lexical verbs (their sources of grammaticalization), namely, *baɣa* 'he wanted,' *raḥ* 'he went,' and APPVs.

Chapter 7 is organized as follows. First, I provide a brief background of the theoretical framework for my syntactic analysis, namely generative grammar and the cartography program. Subsequently, I address how the lexical and grammatical forms can be couched within the theoretical framework of cartography.

7.1 Theoretical Framework

7.1.1 Generative Grammar

Generative grammar has undergone a fair number of changes over the years. In the 1980s, the *Principle and Parameters theory* came out. More importantly, this theory led to the Minimalism Program (MP) (Chomsky, 1995, 2005, 2008) a decade later. MP was an approach wherein grammatical structure was assumed to be better viewed as

oriented bottom-up rather than the top-down approach that had been gospel for so many years before.

In MP, all parameters are encoded in the lexicon and the derivation begins by selecting items from the lexical array called the *numeration* (Chomsky, 1995, p. 225). Once these items have been picked, they are processed together with the functions *Merge* and *Move* prior to the mapping of the lexical items into both the Logical Form (LF) and Phonological Form (PF) interfaces, respectively (Chomsky, 1995). Chomsky (2005, p. 230) also explained that in the MP there are three sets of lexical item features that each includes both intrinsic and optional features. The three primary features are associated with different branches of linguistics, namely, semantic, phonological, and syntactic features (see Chomsky, 1995, p. 231).

Chomsky further explained in his 2005 work that intrinsic features seem to also possess categorical features, the case-assigning features of verbs, and the person and gender features on nouns. It is worth noting that optional features are added immediately during the numeration process. These features include *case* and *number* features for nouns and *tense* and *agreement* features for verbs (see Chomsky, 1995, pp. 230-277).

A language's lexicon is comprised of bundles of features and the *feature checking* (valuing) operation is another important feature of MP. These features can be constructed syntactically to form structures that are interpreted by the Conceptual-Intentional (CI) interface and the articulatory-perceptual systems (Chomsky, 1995, pp. 230-277). Features are divided into two dimensions: interpretable and uninterpretable. Uninterpretable features are labeled as [uF], while interpretable features are labeled as [iF]. For a lexical

entry to have interpretable features, it must contain semantic content. For example, some noun and pronoun features are interpretable because the nouns/pronouns refer to an entity (number, person, gender) and the features are therefore viewed as phi-features (φ-features). φ-features are uninterpretable when they are on T, D, or *v*. Uninterpretable features are intolerable at the interface and must be removed by feature checking. In other words, they are required to be valued/checked by interpretable features before they get removed (checked) or the derivation will crash. Table 7.1 provides the uninterpretable and interpretable features of the noun *airplane* and the verb *build*.

Table 7.1

Uninterpretable and Interpretable Features of Airplane *and* Build

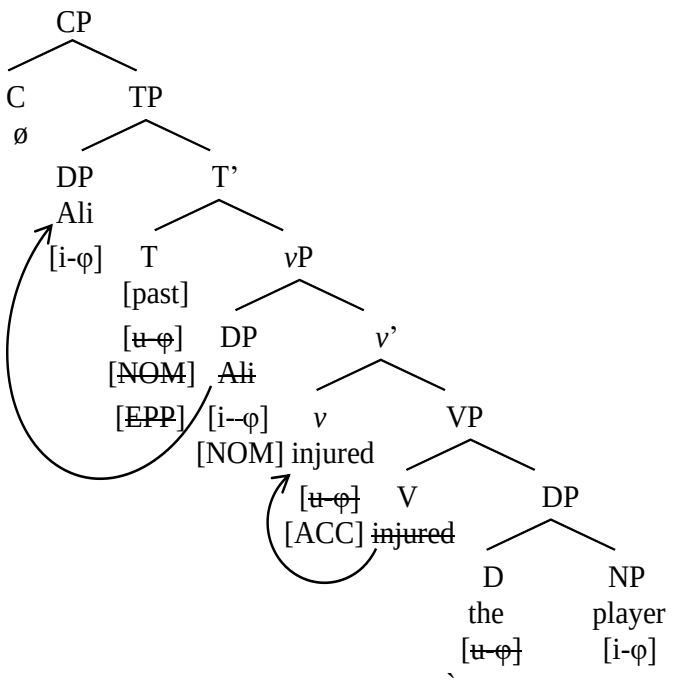
	airplane	*build*
Uninterpretable	[case]	[phi]
Interpretable	[nominal]	[verbal]
	[3rd person]	[assign accusative]
	[non-human]	

(adapted from van Gelderen, 2017, p. 118)

In mapping phrases in MP, one must first understand that the phrase structure is instigated by the lexical operation known as *select.* Fundamentally, *select* selects/chooses items from the available lexicon to build a derivation. One instance of this kind of operation (grouping) might be an array of words that will eventually form phrases (constituents), as in (1). Using *merge* within MP, the lexical entries of (1) are paired/grouped via a tree using *external* and *internal merge* operations (Chomsky, 2001), illustrated in (2).

(1) {injured, player, Ali, the}

(2)



In (2), the verb *injured* is a two-place predicate or transitive verb. It requires two NP arguments, namely, an AGENT and a THEME. Therefore, *injured* projects two empty positions that need to be satisfied by two NPs (e.g. *Ali*-AGENT and *the player*-THEME). As illustrated in (2), the direct object (*the player*) is the internal argument since it forms a closer unit with the predicate (*injured*). The subject argument NP *Ali* (AGENT) is the external argument because unlike the object predicate (*the player*), *Ali* does not form a unit with the predicate.

Note, T and *v* are used as probes. These probes have uninterpretable features, indicated by a ~~strikethrough~~. The probes (T, *v*, and D) search to find goals with interpretable φ-features in their c-command[21] domains (see Chomsky, 2000, 2001). These

[21] C-command or constituent-command is a process that defines the relation between sisterhood in a tree or the relation between nodes of syntactic trees.

are then able to be valued as uninterpretable features. Chomsky (2005) proposed that the probe-goal checking system in the c-command system is an alternative rather than an oppositional method to the former Spec-head agreement. In this vein, *Agree* guarantees that there is an agreement between the uninterpretable features (*v* or T) and interpretable features of a noun (NP). In the case of grouping of words listed above ({injured, player, Ali, the}), *v* is valued by *the player*; however, T is valued by *Ali,* T's goal value.

Chomsky (2001) proposed, alongside *external merge*, "move" or *internal merge*. The operation of *move* is basically when an element of a syntactic structure, formed by *external merge*, is moved internally into a position that c-commands its original position. Consider the tree in (2): the subject NP *Ali* originates in Spec*v*P. The NP *Ali* then internally merges into SpecTP in order to satisfy the Extended Projection Principle (EPP) feature in English data (see Chomsky, 1981). In (2), *v*P is merged with the functional heads T and C because of the uninterpretable features of C and T. As the subject DP (*Ali*) moves from the Spec*v*P to SpecTP, it checks and removes most of the uninterpretable features of T and its uninterpretable case feature. Eventually, through phonetic (PHON) and semantic (SEM) interfaces, e.g., CI and the Sensorimotor (SM) system, the derivation reaches the interface (see Chomsky, 1995, pp. 277-278, 2001, 2004; van Gelderen, 2017, pp. 10, 52).

7.1.2 Cartography Program

The cartography program was developed by Rizzi (1997) and Cinque (1999) in the same era as MP was developed (Chomsky 1995 and much proceeding work). It is a program that seeks to draw syntactic trees as detailed and precise as possible (Cinque &

Rizzi, 2008). In other words, it is an approach that assigns each functional category a precise position in the hierarchy.

The cartography program was sparked when linguists such as Rizzi (1997), Cinque (1999), and Larson (1988) started to split up layers to host or accommodate different functional categories in the clausal architecture. For instance, Larson (1988) introduced the VP-shell analysis. He suggested that the VP-shell (split VP hypothesis) accommodates verbs with multiple complements that stand as the base for many cartographic analyses of the VP layer. As demonstrated in (2), the VP layer can split into *v*P and VP layers. The VP-shell hypothesis has resulted in syntactic developments of structures revolving around inner aspect (Aktionsart).

In addition to Larson's VP-shell, Rizzi offered the split CP hypothesis. Rizzi (1997) suggested that in structures consisting of focused and topicalized constituents, the CP layer splits into a number of various projections. Rizzi (1997, p. 288) argued that the CP layer can split up into four projections: Force Phrase, Topic Phrase, Focus Phrase, and Finiteness Phrase. An example of this kind of split CP layer is illustrated in (3).

(3) You should know that this kind of offer I cannot accept.

The sentence clause in (3), structured in (4), is a *that-clause* structure where the CP is forced by the object *this kind of offer* to be split into three projections, namely ForceP, TopP and FinP constituents.

(4) [ForceP [Force that] [TopP *this kind of offer* [Top ø] [FinP [Fin ø] [TP I [T cannot] accept t]]]]

Within the cartography program and roughly along the lines of Rizzi's (1997) CP split layers (the left periphery) is Cinque's (1999) *Adverbs and functional heads*. Cinque

(1999) suggested that the IP (TP) is complex and consists of a rich and crosslinguistically stable hierarchical order of functional projections. Cinque (1999) and Cinque and Rizzi (2016) identified multiple functional projections in which each one has specific tense, mood, aspect, modality, and voice features. Their proposals are based on a crosslinguistic[22] comparison that integrated syntactic, morphological, and interpretive evidence. For instance, Cinque (1999) observed that crosslinguistically *adverbs* are ordered in a rigid structure across languages and they are elements mapped onto specifier positions.

Functional particles (morphemes), on the other hand, are typically heads and, like *adverbs*, they have rigid structure crosslinguistically. Rizzi and Cinque (2016, p. 150) attempted to adjoin the sequence of *adverbs* and of *functional particles* (projections) in the same underlying hierarchical ordering positions for languages. Consider the hierarchy in (5).

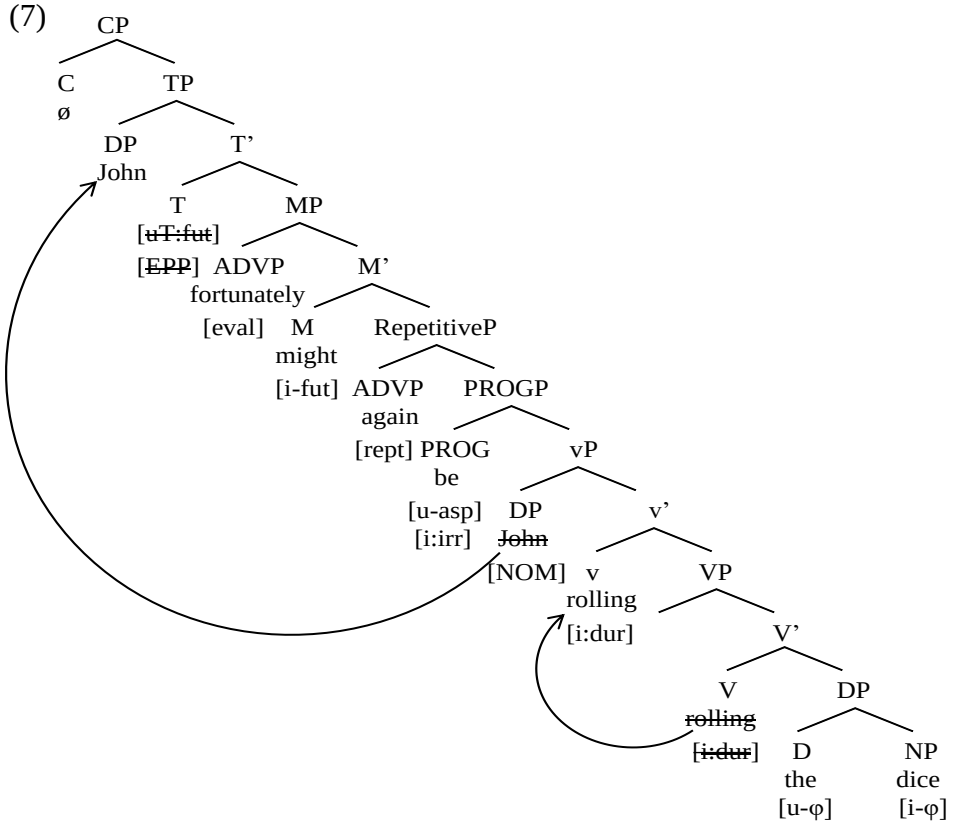
[22] Cinque (1999) and Rizzi and Cinque (2016) examined Italian, Norwegian, Ponapean (Micronesian), Thai, Evenki (Altaic), and Hebrew; however, they did not examine SNA.

(5) a. $Mood_{speech\ act}$ b. $AdvP_{seech\ act}$ (frankly,…)
$Mood_{evaluative}$ $AdvP_{evaluative}$ (oddly,…)
$Mood_{evidential}$ $AdvP_{evidential}$ (allegedly,…)
$Mod_{epistemic}$ $AdvP_{epistemic}$ (probably,…)
$Tense_{past/future}$ $AdvP_{past/future}$ (then,…)
$Mod_{necessity}$ $AdvP_{necessity}$ (necessarily,…)
$Mod_{possibility}$ $AdvP_{possibility}$ (possibly,…)
$Aspect_{habitual}$ $AdvP_{habitual}$ (usually,…)
$Aspect_{delayed}$ AdvPdelayed (finally,…)
$Aspect_{predispositional}$ $AdvP_{predispositional}$ (tendentially,…)
$Aspect_{repetitive}$ $Adv_{repetitive}$ (again,…)
$Aspect_{frequentative}$ $AdvP_{frequentative}$ (frequently,…)
$Mod_{volition}$ $AdvP_{volition}$ (willingly,…)
$Aspct_{celerative}$ $AdvP_{celerative}$ (quickly,…)
$Tense_{anterior}$ $AdvP_{anterior}$ (already,…)
$Aspect_{terminative}$ $AdvP_{anterior}$ (no longer,…)
$Aspect_{continuative}$ $AdvP_{continuative}$ (still,…)
$Aspect_{continuous}$ $AdvP_{continuous}$ (always,…)
$Aspect_{retrospective}$ $AdvP_{retrospective}$ (just,…)
$Aspect_{proximative}$ $AdvP_{proximative}$ (soon,…)
$Aspect_{durative}$ $AdvP_{durative}$ (briefly,…)
$Aspect_{prospective}$ $AdvP_{prospective}$ (imminently,…)
$Mod_{obligation}$ $AdvP_{obligation}$ (obligatorily,…)
$Aspect_{frustrative}$ $AdvP_{frustrative}$ (in vain,…)
$Aspect_{completive}$ $AdvP_{completive}$ (partially,…)
$Voice_{passive}$ $AdvP_{passive}$ (well,…)
Verb **Verb**

In the hierarchy above, (5a) represents the sequence of functional particles (projections) that are heads, while (5b) represents the sequence of adverb projections that are specifiers in the hierarchy. What the hierarchy in (5) shows is that tense, mood, and aspect adverbials have a rigid structure crosslinguistically and are adjoined to the projections of TP, MP, and other domains. Consider example (6a), with its accompanying structure in (7).

(6) a. John fortunately might again be rolling the dice.
b. *John fortunately might **happily** be rolling the dice.
c. *John fortunately **be** again might rolling the dice.

(7)



The tree in (7) fits with Cinque's (1999) and Rizzi and Cinque's (2016) hierarchy in (5). Both *adverbs* and *functional categotries* in (7) are ordered in a fixed manner. Therefore, it is unlikely for adverbs such as *fortunately* and *happily* to co-occur in a sentence; hence, (6b) is ungrammatical. This is because both adverbs belong to and occupy the same *evaluative* adverb specifier position. As a result, only one adverb is permissible—otherwise the operation will crash (see Cinque, 1999, pp. 81-106). The same reasoning applies to functional categories. For example, the epistemic modal *might* in (6a) always precedes the progressive auxiliary *be*, while *be* never precedes *might*, as shown in (6c).

Although Cinque's (1999) and Rizzi and Cinque's (2016) cartography program has been attested and identified in various linguistic works,[23] it is sometimes challenging. For example, an adverb such as *probably* is hard to decide because it could be either an epidemic or evidential adverb. Similarly, the adverb *again* in (6a), can either have habitual or repetitive interpretation (see van Gelderen, 2013). Moreover, it is difficult to accommodate all adverbs in the hierarchy. In fact, van Gelderen (2013) stated that there are approximately 4,000 adverbs in English, and as a result, each adverb needs to be incorporated in the hierarchy in (5), which would be very difficult to acquire, although not impossible.

In the following sections, I use cartography to account for the morphosyntactic structures for the future *b*-imperfective, the future prospective particle *raħ*, and the progressive APPVs (*jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing').

7.2 The Syntax of the Future *b*-Imperfective

7.2.1 *The volition verb baɣa*

Before we delve into the syntactic representation of the *b*-imperfective in SNA, it is important to understand the syntactic derivation of the lexical verb *baɣa,* the underlying form. Consider the following examples in (8).

(8)	a.	monna	**baɣ**-at	ta-ʔtˁi	axt-ha	ħalau
		Mona	want$_{PERF.}$3P.SG.F	3P-SG.F-give$_{IMPF}$	sister-her	candy
		'Mona wanted to give her sister candy.'				

[23] Many researchers have tested/followed Cinque's (1999) and Rizzi and Cinque's (2016) cartography program: Rackowski and Travis (2000) on *Malagasy*; Legate (2001) on *Warlpiri*; Beijer (2001) on *Swedish*; Haddican (2001, 2004) on *Basque*; Bhatia (2006) on *Hindi*; Kiss (2009) on *Hungarian*; Adger et al. (2009) on *Kiowa*; Smit (2013) on *Afrikaans*; and Biloa (2013) on *Tuki*.

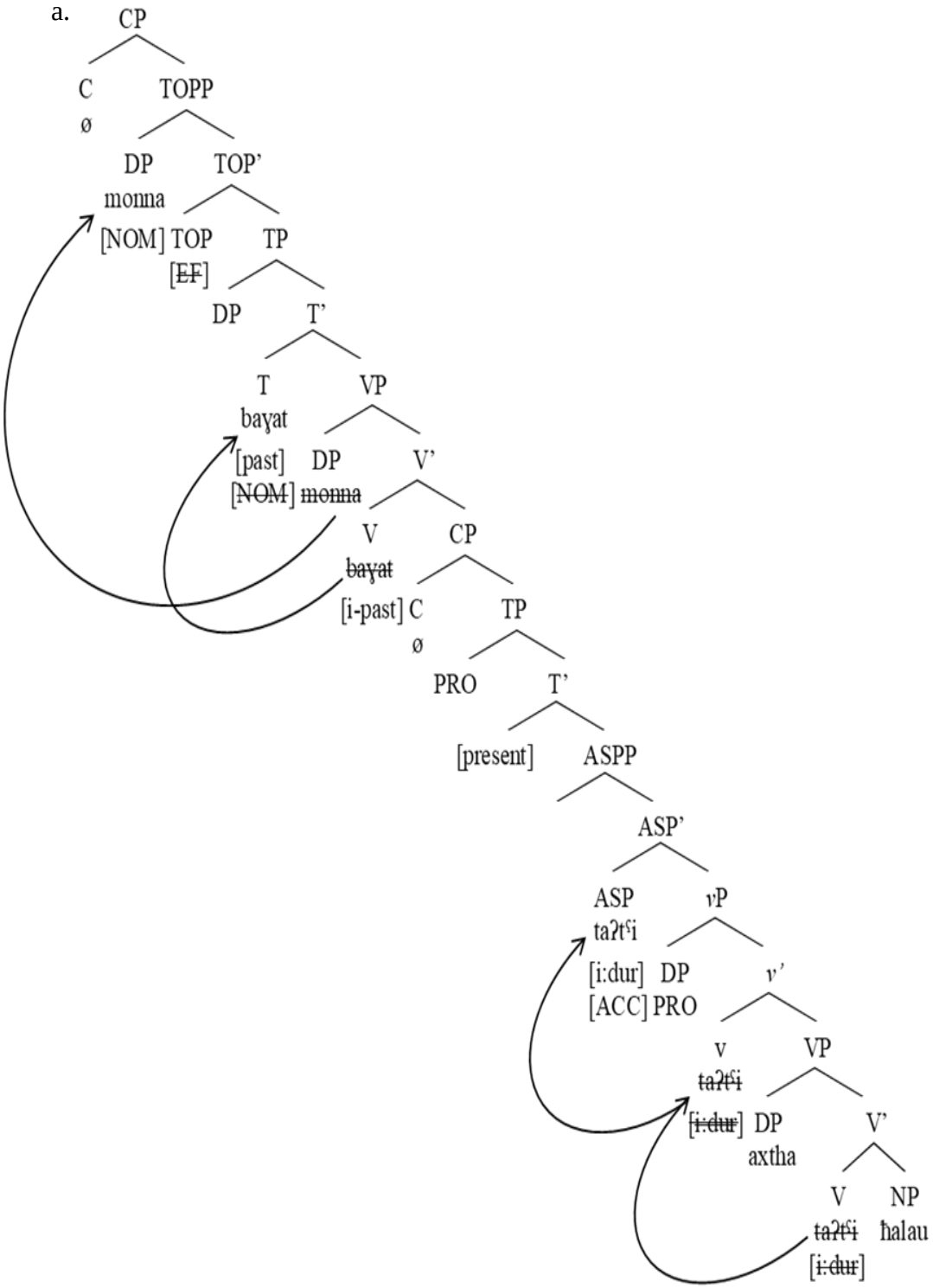
b. **baɣa** l-ʔawlad ya-ʔtˁ-un axt-hum ħalau
want$_{PERF.}$3P.SG.M the-boys 3P.M/F-give$_{IMPF}$-PL sister-their candy
'The boys wanted to give their sister candy.'

c. ʕali **baɣa** monna ta-ʔtˁi axt-ha ħalau
Ali want$_{PERF.}$3P.SG.M Mona 3P-SG.F-give$_{IMPF}$ sister-her candy
'Ali wanted Mona to give her sister candy.'

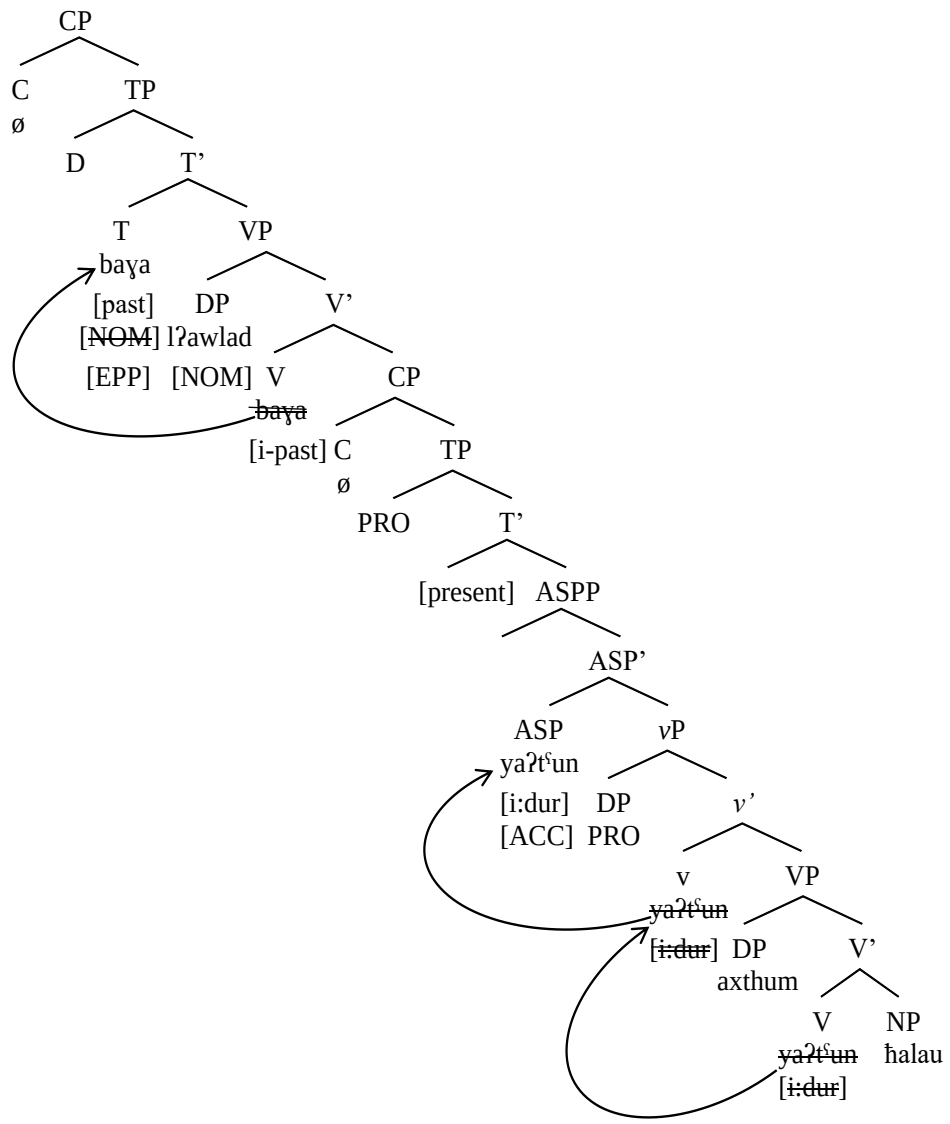
In (8), *baɣa* functions as an accusative or transitive verb. It can be followed by a finite verb functioning as a VP complement or a subject NP (Chapter 4). As a predicate, *baɣat/baɣu* in (8) assigns thematic rolls to its arguments. For instance, the AGENT *monna*, in (8a), receives its thematic role from *baɣat* – not from the imperfective *taʔtˁi* – as shown in (9a). Furthermore, *baɣa* has only two arguments and assigns two theta roles. For example, in (8c), *baɣa* is a two-place predicate where *ʕali* functions as a topic NP and *monna* as its direct object.

In Chapter 4, I argued that *baɣa* in SNA is a control verb. This means that (8a,b) have a subject PRO in their embedded CP layer. PRO is controlled by the AGENTs *monna* in (8a) and by *l-awlad* in (8b), as illustrated in (9a) and (9b), respectively. However, in the case of (8c), the direct object *monna* raises from the embedded clause (CP) to the object position of the verb *baɣa*, while a subject PRO occupies the embedded SpecTP.

(9) a.


CP
C
ø
TOPP
DP
monna
[NOM]
TOP'
TOP
[EF]
TP
DP
T'
T
bayat
[past]
VP
DP
[NOM] monna
V'
V
bayat
[i-past]
CP
C
ø
TP
PRO
T'
[present]
ASPP
ASP'
ASP
taʔtˤi
[i:dur]
vP
DP
PRO
[ACC]
v'
v
taʔtˤi
[i:dur]
VP
DP
axtha
V'
V
taʔtˤi
[i:dur]
NP
ħalau

b.



Regarding the verb movements in (8), Benmamoun (2000) suggested that perfective verbs move to T, while Soltan (2007) proposed that imperfective verbs move to Asp (Chapter 2). Based on this, I argue that the perfective verbs *baɣat* and *baɣu* in (8), represented in (9), move from V to T. On the other hand, the imperfective verbs *taʔtˁi* and *ya-ʔtˁun* in the embedded CP layer move from V to *v* and then to Asp.

As for the subject movement of the AGENTs in (8), it depends on the word order of the sentence. For instance, (8a) is an instance of Subject Verb Complement structure (SVC), while (8b) is an instance of a Verb Subject Complement (VSC). According to Benmamoun (1992), SVO involves full agreement between the subject and the verb in MSA in terms of ϕ-features (person, number, and gender). However, only partial agreement occurs in VSO (Benmamoun, 1992). In Arabic SVO order, the subject does not move to SpecTP to satisfy the EPP, but rather moves to a higher position than SpecTP (Aoun et al., 1994; Fakih, 2016; Fassi Fehri, 1993; Mohammad, 2000; Musabhien, 2009).

In the SVC/SVO order, nouns phrases such as *monna* (8a) act as topics (see Aoun et al., 1994; Fassi Fehri, 1993). However, in the VSC/VSO order, Soltan (2007) suggested that the functional head T in VSO order lacks an EPP feature. Furthermore, Fakih (2016) suggested, based on Chomsky's (2005) analysis, that the subject in VSO does not move to SpecTP and remains in situ in SpecVP in MSA because its features are valued via Agree with the c-commanding head T (Chomsky 2000, 2001; Fakih, 2016). Generally, the ϕ-features in T are inherited from the Edge Feature (EF) in C (Chomsky 2005). However, C (as a phase head) in VSO order lacks this feature (Fakih, 2016).

Following Rizzi's (1997) split CP hypothesis and in line with Fakih (2016), Fassi Fehri (1993), and Aoun et al. (1994), I argue that the DP *monna* in (8a) moves from Spec*v*P of the lower clause to SpecTopP. This is because the movement of *monna* is not motivated by the functional head T, but rather by the edge feature of C of the matrix clause (CP) (see Fakih, 2016). Put differently, T inherits all of its ϕ-features from C, and

it is the edge feature of C that motivates *monna* to move directly from SpecVP to SpecTopP. Therefore, the movement of the DP in (9a) is not initiated by EPP in T, but rather by the edge feature in the head Top of TopP. According Fakih (2016), Top receives the edge features from C and C transmits ϕ-features to T of TP.

The verb *baɣa* in (8b) agrees partially with the DP *lʔawlad* in gender and person, but not in number, because it is a VSC structure, as seen in (9b). Therefore, I argue, following Fakih (2016), that the subject *lʔawlad* in (8b) remains in its base-generated position and its features are valued under the Agree relation with T. Now that I have explained the syntactic derivation of the lexical verb *baɣa*, let us move to the derivation of the *b*-imperfective in SNA.

7.2.2 The b-imperfective

In Chapter 4, I suggested that the future *b*-imperfective particle was grammaticalized from the volition verb *baɣa* in SNA. This means that the volition verb *baɣa* has been reanalyzed as a generalized form of irrealis and is no longer compatible with any argument structure (Chapter 4). Consider (10).

(10) a. monna mumkin **b**-ta-ʔtˁi axt-ah ħalau
Mona perhaps B-SG.F-give$_{IMPF}$ sister-her candy
'Mona perhaps will give her sister candy.'

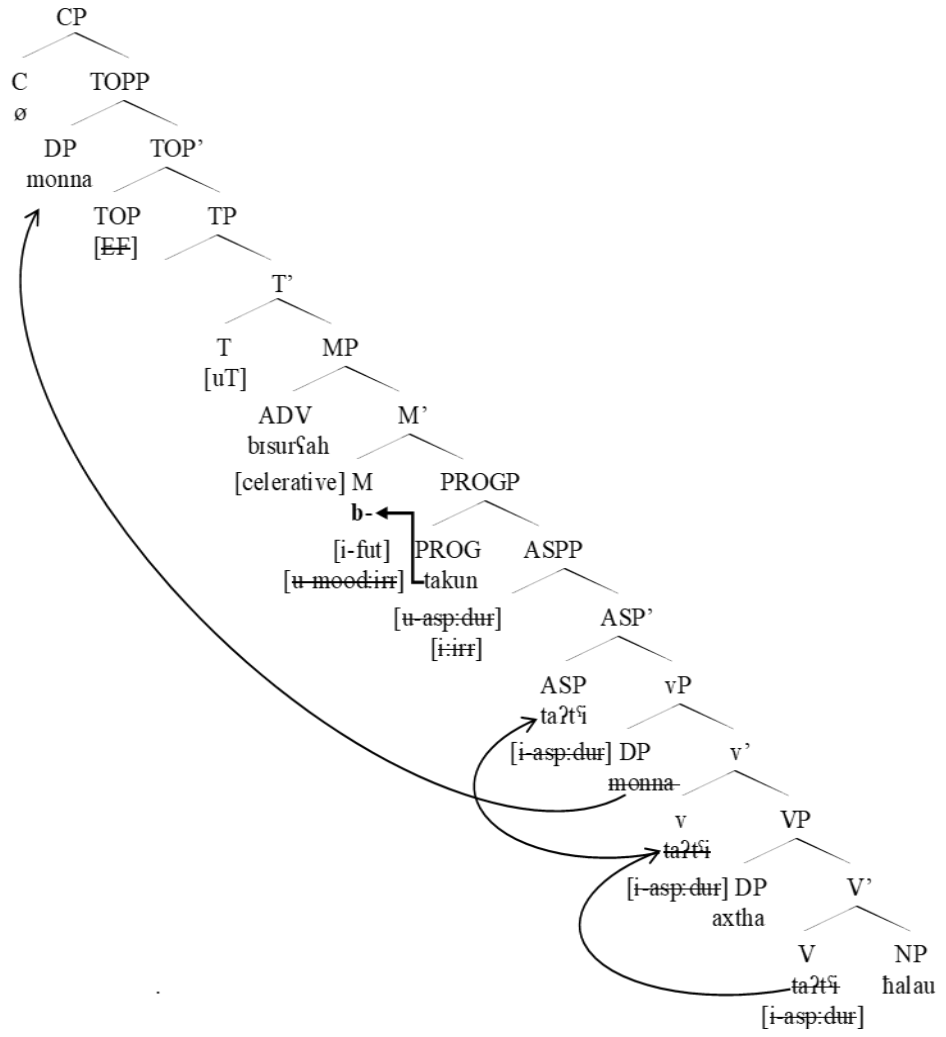
b. monna bɪsurʕah **b**-ta-kun ta-ʔtˁi axt-ah ħalau
Mona quickly B-3P.SG.F-be$_{IMPF}$ 1P. SG.F-give$_{IMPF}$ sister-her candy
'Mona will quickly be giving her sister candy.'

c. monna kan-at mumkin **b**-ta-kun ta-ʔtˁi axt-ah ħalau
Mona was-3P.SG.F perhaps B-3P.SG.F-be$_{IMPF}$ SG.F-give$_{IMPF}$ sister-her candy

‘Mona would have been giving her sister candy.’

In (10), the morpheme *b-* is an irrealis future particle in SNA and behaves similarly to the English future modal *will*, except that the verb following *b-* is inflected for person, number, and gender (ϕ) features, while *will* is followed by an non-finite verb (see Chapters 3 and 4). Following Cinque’s (1999) and Rizzi and Cinque’s (2016) hypotheses, I argue that the future morpheme *b-* is a clitic that affix-hops to the head of mood phrase (MP) and it is assumed to be projected between the TP and AspP layer, as illustrated in (11).

(11)



The imperfective verb *taʔtˁi* is listed in the lexicon with a durative feature. It enters the derivation with [i-dur] (or [iasp:dur]). The copula *takun* enters the derivation with an inherent mood feature [i-mood:irr], but also with an aspect feature that needs to be valued, [u-asp:dur]. It is empty until Agree happens at transfer. The clitic *b-* enters the derivation with an inherent tense feature [i-fut] (or [iT:fut]) but also with a mood feature that needs to be valued: [u-mood:irr]. Then, T and C enter the derivation and C gives T a tense feature that needs to be valued, [uT]. At transfer, *taʔtˁi*'s [i-asp:dur] feature values the [u-asp:dur] feature of *takun* making it [u-asp:dur]. *takun*'s [i-mood:irr] feature then values the [u-mood] feature of the clitic *b-* making it [u-mood:irr]. Next, the future morpheme's (*b-*) [i-T:fut] feature values T's [uT] feature. There are of course movements in (11). *monna* (DP topic) moves directly from Spec*v*P to SpecTopP and *taʔtˁi* moves from V to *v* and then to Asp. The clitic *b-*(imperfective), via affix-hopping, merges with the adjacent PROGP copula. In other words, *takun* moves to the head of MP and attaches itself to *b-* at PF.

Moreover, the hierarchy in (11) suggests that the future clitic *b-* cannot be viewed as a tense marker because T's position can be occupied by a perfective auxiliary such as *kanat* (10c). In fact, the hierarchy in (11) supports the fact that that the *b-*imperfective is a future irrealis mood particle in SNA (see Chapter 4). In the next section, I discuss the morphosyntactic representation of the motion verb *raħ* as lexical verb and as a prospective future marker in SNA.

7.3 The Syntax of the Future Prospective *raħ*

7.3.1 The motion verb raħ

In Chapter 5, I highlighted the fact that the lexical motion verb *raħ* is an unergative verb in SNA (or in MSA/CA). Whether it is a perfective or imperfective verb, *raħ* has the argument structure [NP-{VP/PP}] and subcategorizes for both an AGENT/THEME and a GOAL/THEME complement (see §5.2.1). Consider (12).

(12) a. monna **raħ-at** mubaʃərah ta-ktıb al-waʤib
Mona go$_{PERF}$-3P.SG.F immediately 3P.SG.f-write$_{IMPF}$ the-assignment
'Mona immediately went to write the assignment.'

b. **raħ-at** bıserʕah monna ta-ktıb l-wajib
go$_{PERF}$-3P.SG.F quickly Mona 3P.SG.F-write$_{IMPF}$ the-assignment
'Nader went quickly to write the assignment.'

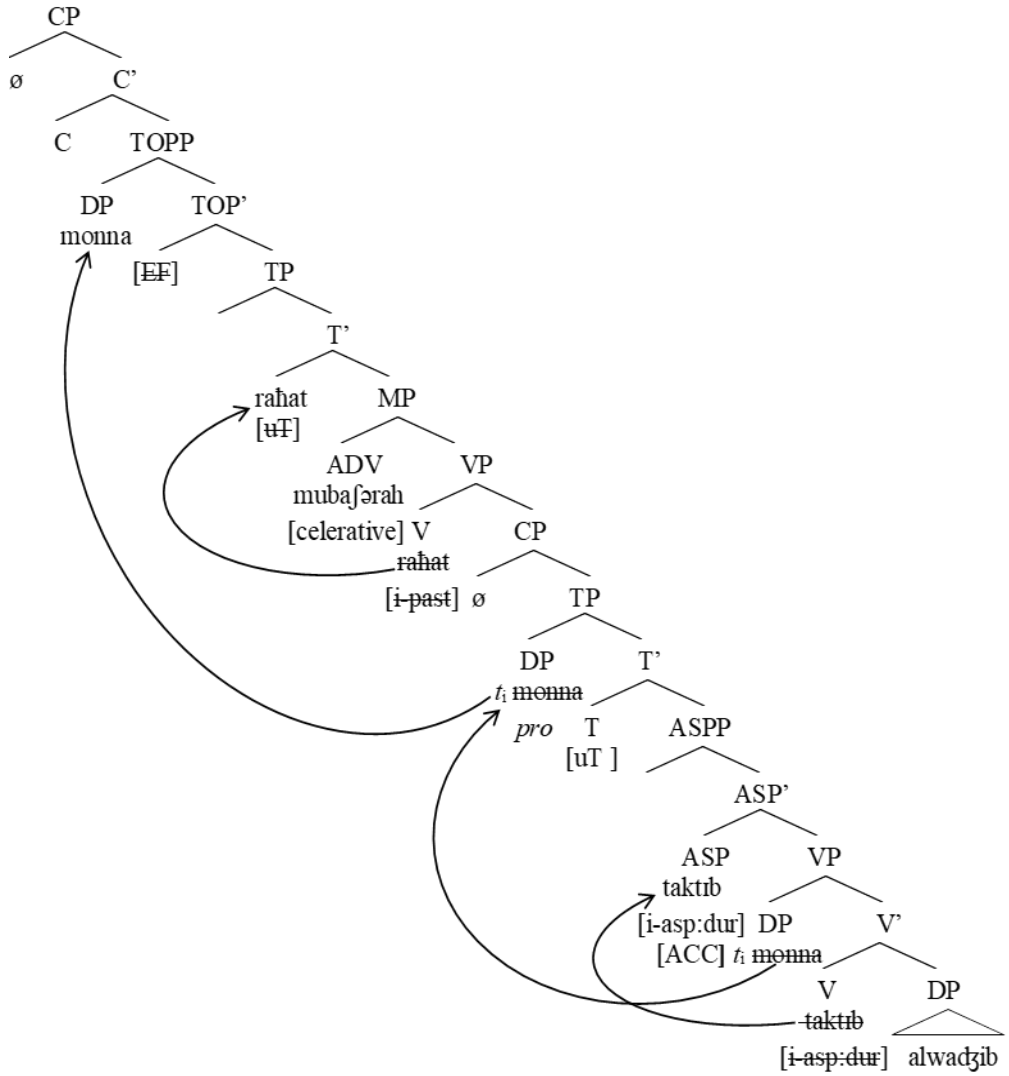
c. *monna **raħ-at** ʕali ya-ktıb l-wajib
Mona go$_{PERF}$-3P.SG.F Ali 3P.SG.M-write$_{IMPF}$ the-assignment

In (12), *raħat* assigns nominative case to its AGENT *monna* and accusative case to its VP complement THEME *yaktıb lwajib* (Chapter 4). Unlike *baɣa* in §7.2, *raħ* does not allow object insertion. In other words, adding another argument such as a direct object (*ʕali*) renders the sentence ungrammatical, as seen in (12c). Ouali and Al Bukhari (2016) viewed verbs such as *raħ* in (12) as light verbs when followed by a main verb (see Chapter 2). They suggested that light verbs in [light verb + main verb] constructions involve a vP and a VP under one T, wherein the motion light verb moves to a higher position than Asp, hence Force (see Chapter 2, §2.4.2, example 28). Ouali and Al Bukhari claimed that perfective motion verbs in serial verb or coordination constructions are functional categories, which implies that motion verbs in serial verb constructions (12) have no theta roles. Ouali and Al Bukhari's (2016) hypothesis cannot be adapted in

this work since I have shown in Chapter 5 and in (12) that the inflected perfective *raħ* is a lexical verb and can assign theta roles.

Now the question is how to derive the inflected *raħ* in (12). To answer this question, I propose two alternative hypotheses for *raħ* in (12). The first hypothesis is that *raħ* is not a functional category, but rather behaves like a raising verb in SNA. Unlike *baɣa*, it does not allow the insertion of a direct object (*ʕali*), as seen in (12c). Consider example (12a) and its derivation in (13).

(13)



In (13), the verb *taktɪb* assigns accusative case to *alwaʤib*. Like *taʔtˁi* in (10), *taktɪb* has an [i-asp:dur] feature and moves from V to *v* to Asp. *raħat* in (13) has an [i-past] feature, and as a perfective verb with thematic roles, it moves directly from V to T. It assigns nominative case to *monna* and accusative case to its embedded CP complement. In other words, the DP *monna* in (13) does not get its nominative case from *taktɪb*; rather, it gets it from the lexical verb *raħat* in T via C. The adjunct adverb *mubaʃərah* only modifies *raħat.* As an AGENT for *raħat* (raising verb), I argue that the topic *monna* in (12a) is also an AGENT *pro* for *taktɪb,* as seen in (13). This means that *monna* is base-generated in SpecVP.

I also argue that there are two DP movements in (12a). The first movement involves subject movement of the DP *monna* from SpecVP to SpecTP. The second movement is a topic movement, where *monna* moves from SpecTP to SpecTopP in order to check the edge feature in the head Top of TopP, as seen in (13). In other words, the topic movement in (12a) is motivated indirectly by the C features that T inherits in the derivation. *monna* leaves traces behind in SpecTP and Spec*v*P; as a result, *pro* (null subject) is the subject in SpecTP of the embedded clause. It is the topic of the matrix clause. Evidence that *monna* involves subject drop in the embedded clause involves the fact that an overt subject pronoun *hi* (she) can occupy SpecTP instead of the *pro* in (13). This subject *hi* only refers to the topic DP *monna* in the matrix clause. Sentence (12a) exhibit a topic and a subject-drop that refer to one AGENT. Therefore, the topic of the matrix clause and the subject of the lower clause exhibit the same ϕ-features. Additionally, the agreement between *monna* in SpecTopP and the verbs *raħat* and *taktɪb*

is further strong evidence that *raħat* is a raising verb in (12). As stated above, the direct DP object (*ʕali*) following the motion verb *raħat* renders the sentence ungrammatical, as in (12c).

The second hypothesis for the morphosyntactic derivation of *raħ* in (12) is to treat each finite verb (*raħat* and *taktıb*) as involving an independent TP layer. This is because the inflectional *raħ* is an unergative verb that can assign accusative THEME/GOAL argument (Chapter 5). This means that *raħat*'s VP complement is a TP adjunct clause that is structurally dispensable.

7.3.2 The prospective future raħ

In Chapter 5, I showed that the motion verb *raħ* has undergone grammaticalization, has been reanalyzed as prospective future particle in SNA, and is no longer compatible with any argument structure. Jarad (2014) argued that the prospective future *raħ* in Syrian Arabic merges in Asp, while the main verb merges in head *v*P and then moves to *v* and then T (see Chapter 2, structure (21)). However, his approach fails to explain why the main verb ends up in T, even though this position can be occupied by a perfective tense marker like *kan* 'was'. Additionally, the claim that *raħ* occupies Asp is ambiguous. For example, Jarad's approach does not involve adverbs with *raħ,* as seen in (14).

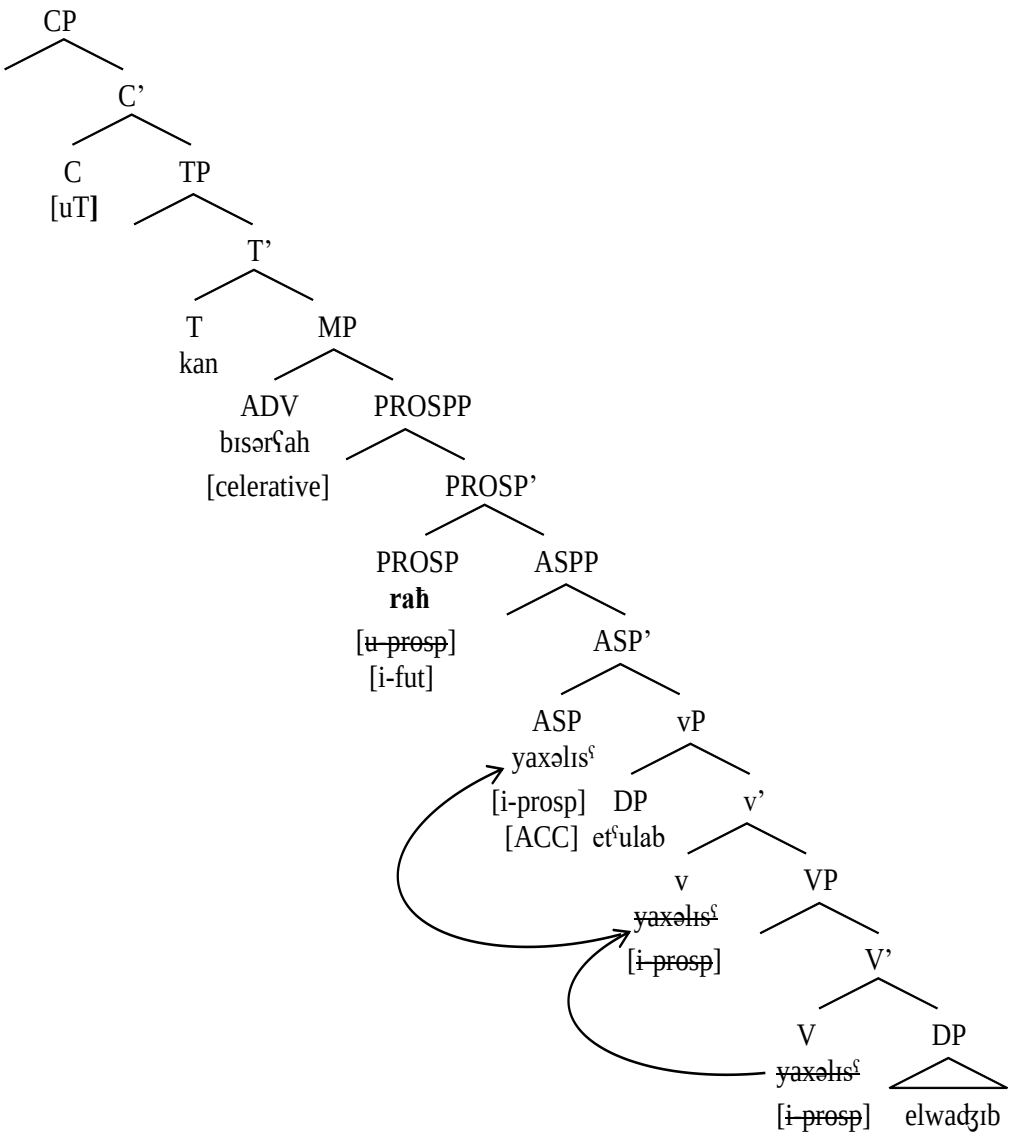
(14) a. bısərʕah **raħ** ya-xəlısˁ e-tˁulab el-wadʒıb
quickly PROSP 3P.SG.M-finish$_{IMPF}$ the-students the-assignment
'The students are quickly going to finish the assignment.'

b. kan bısərʕah **raħ** ya-xəlısˁ e-tˁulab el-wadʒıb
was.3P.SG.M quickly PROSP 3P.SG.M-finish$_{IMPF}$ the-students the-assignment

‘The students were quickly going to finish the assignment.’

Since *raħ* is a future prospective particle in SNA (Chapter 4), I suggest that it can occupy a separate aspectual ProspP projection. Following Rizzi and Cinque’s cartography program in (5), the syntactic structure of *raħ* in (14a) can be assumed to be as in (15).

(15)



The hierarchy in (15) alternates between uninterpretable and interpretable features. From bottom to top, the main (imperfective) verb *yaxəlısˁ* is base-generated in SpecVP with an

[i-prosp] feature. It moves from V to *v* to Asp. Also, it assigns nominative case to its subject DP *etˤulab* and accusative case to its object *el-waʤɣıb*. Since (15) has VSO word order, there is partial agreement between the DP *etˤulab* and Asp *yaxəlısˤ*. As a result, *etˤulab* remains in SpecVP and does not raise to SpecTP. Whether it occurs in the SVO or VSO word order, the prospective *raħ* has its own PROSP projection with [u-prosp], [i-asp], and [i-fut] features and remains in situ. *raħ*'s ([u-prosp]) feature scans its c-command domain for [i-prosp] under *yaxəlısˤ* and it gets valued. The celerative adverb *bısərʕah* is an adjunct that only modifies the main verb *yaxəlısˤ* and its presence shows that *raħ* has no thematic roles and functions as prospective marker or future prospective marker (see Chapters 3 and 5). Additionally, T has an [uT] feature and *kan* remains in situ. Conversely, C inherits [uT] and *kan* does not raise from T.

In brief, *raħ* (PROSP) projection is projected between T and Asp in SNA. This means that *raħ* is not base-generated in *v* and/or it does not move to Asp from *v*. As shown in (15), only an imperfective verb (*yaxəlısˤ*) merges/moves to Asp position. Next, I provide some syntactic derivations of grammaticalized APPVs.

7.4 The Syntax of Progressive APPVs

7.4.1 Lexical APPVs

The APPVs *jaalis/qaaʕaıd* 'sitting' and *gaayem* 'standing' have undergone grammaticalization and have been reanalyzed as progressive aspect markers (Chapter 6). When APPVs are used to express static location expressions, they have the argument structure [NP-{PP}], as illustrated in (16).

(16)	a.	**jaalis-ah**	axt-ik	fi	ə-ṣalah.
		sit_{IMPF}-3P.SG.F	sister-your	in	the-living room

'Your sister is sitting in the living room.'

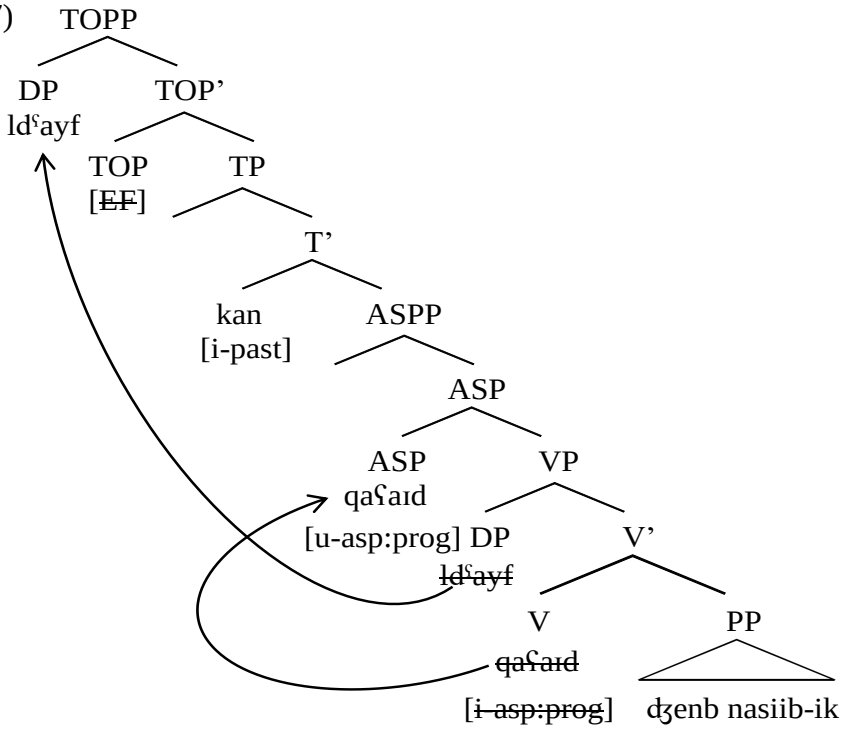
b. e-tˤulab **gaayem-iin** min karasi-hum.
the-students stand$_{IMPF}$-3P.PL.M from chairs-their
'The students are standing up from their chairs.'

c. l-dˤayf kan **qaʕaɪd** ʤenb nasiib-ik.
the-guest was.3P.SG.M sit$_{IMPF}$.3P.SG.M beside brother.in.law-your
'The guest was sitting beside your brother in law.'

d. *l-dˤayf **qaʕaɪd** ʕali ʤenb nasiib-ik.
the-guest sit$_{IMPF}$.3P.SG.M ali beside brother.in.law-your
*'The guest was sitting Ali beside your brother-in-law.'

In (16), the APPVs are unaccusative verbs and treat their complements (PP) as adjuncts. As highlighted in Chapter 6, they describe the spatial location of humans/animals. In other words, they describe the central spatial location of their animate subjects. Syntactically, these lexical verbs are locative imperfective verbs which means they merge in Asp (see Soltan, 2007). Consider (17) below.

(17)



The APPV *qaʕaɪd* in (17) is unaccusative with a durative incomplete action feature or progressive aspect (Chapter 6). Like *raħ* in §7.3, *qaʕaɪd* cannot be followed by a DP argument (*ʕali*), as seen in (16d). Since *qaʕaɪd* is imperfective lexical verb, I suggest that it moves directly from V to Asp where it does not assign accusative case to its adjunct PP (*ʤenb nasiibik*).

In Chapter 6, I showed that structures consisting of [APPV + imperfective verb] are pseudocoordinated. In such structures, I argued that APPVs are split into two usages, which can be described as "divergent" (Chapter 6). These verbs in pseudocoordination constructions function as grammaticalized progressive aspect markers and/or light verbs, as in (18).

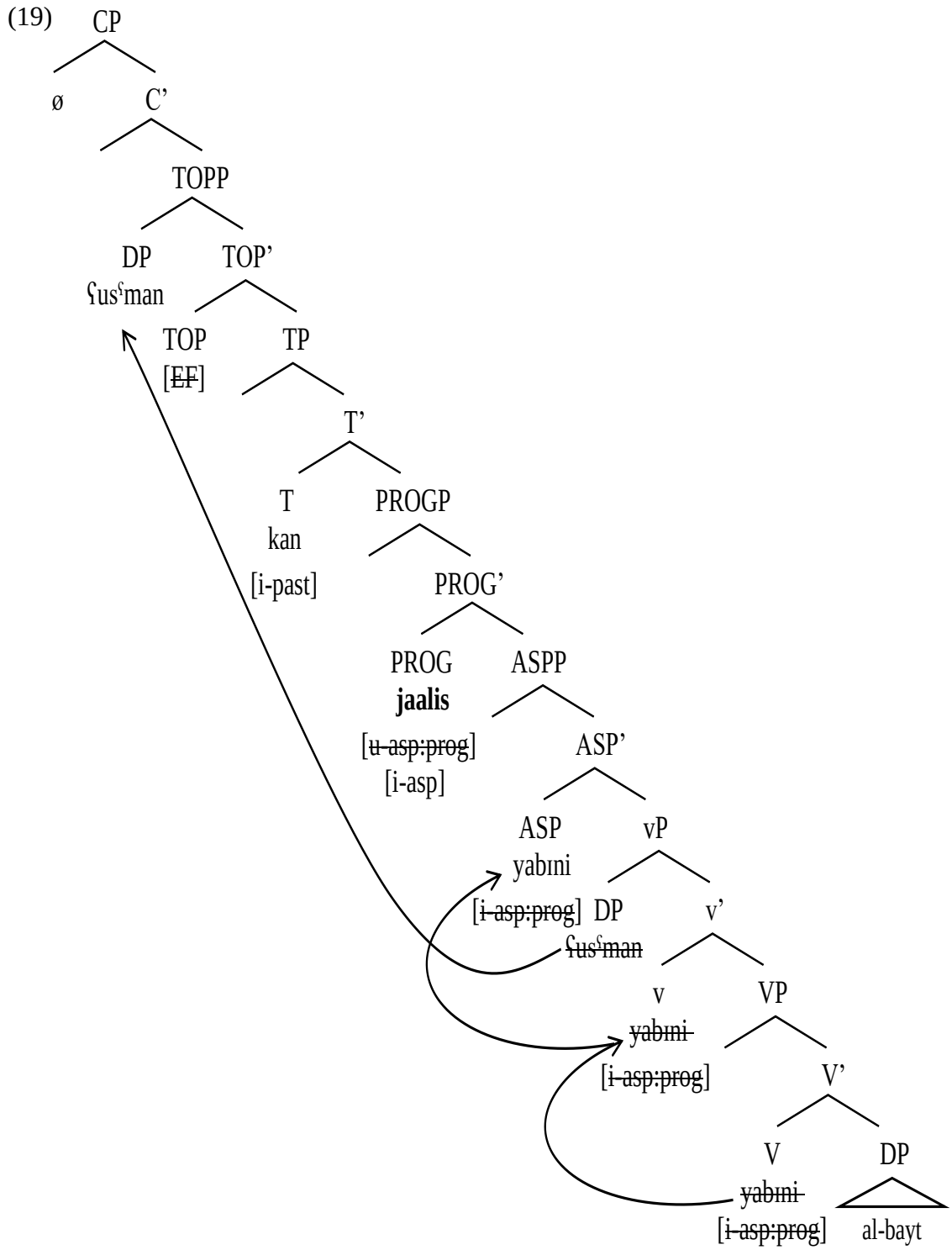
(18) a. ʕusˁman kan **jaalis** ya-bını al-bayt
Ousmane was.3P.SG.M PROG.3P.SG.M 3P.SG.M-build$_{MPF}$ the-house
'Ousmane was building the house.'

b. l-hiin **qaʕaɪd** a-mʃi fi al-bayt
now PROG.1P.SG.M 1P.P.M-walk$_{IMPF}$ in the-house
'I'm walking now in the house.'

c. monna **gaayem**-ah ta-bni bayt-ha embəkır
Mona PROG-3P.SG.F 3P.SG.F-build$_{IMPF}$ house-her early
'Mona is building her house early.'

The two grammatical functions (progressive aspect and/or light verb) entail two different syntactic projections. For example, if we assume the APPV *jaalis* in (18a) is a progressive aspect marker, then it likely has its own PROG projection. This means that *jaalis* is projected in situ between T and Asp, as illustrated in (19).

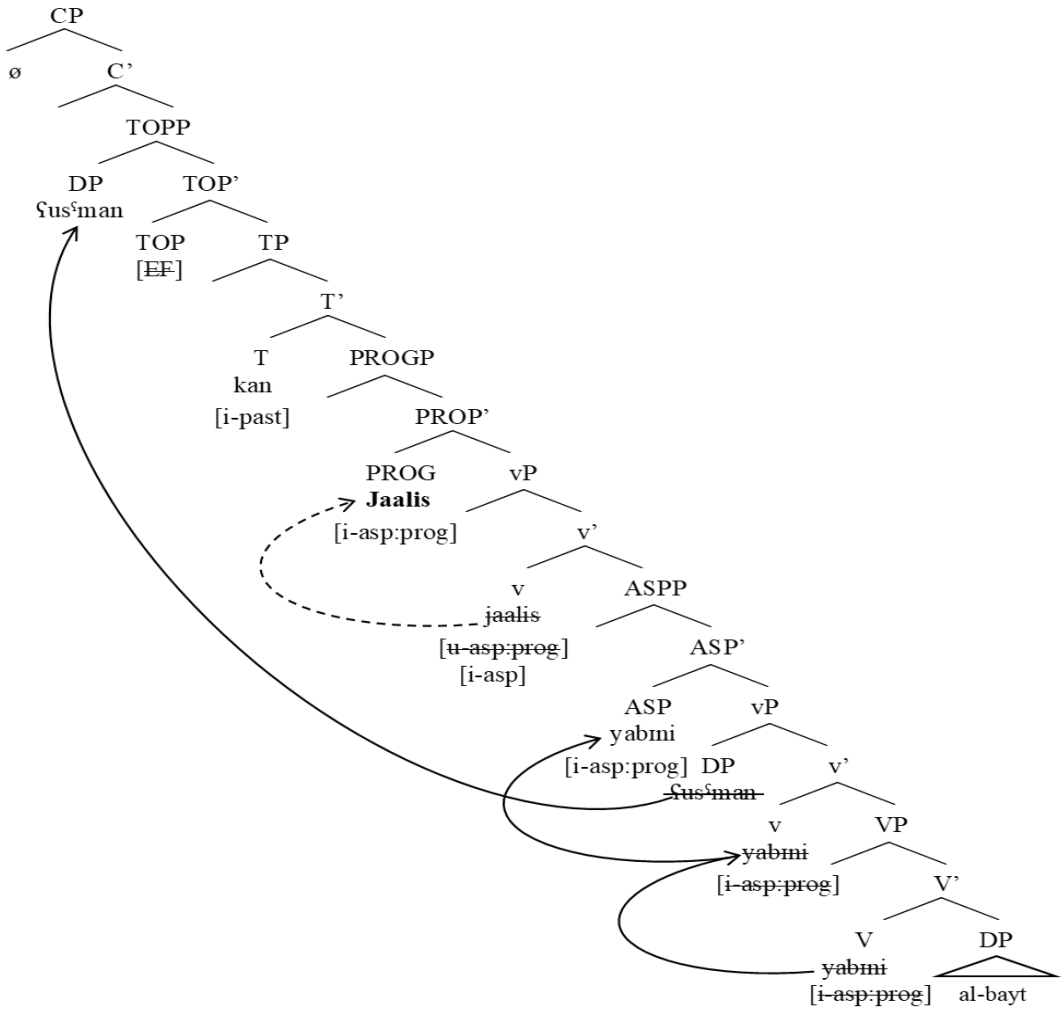
(19)


CP
ø
C’
TOPP
DP
ʕusˁman
TOP’
TOP
[~~EF~~]
TP
T’
T
kan
[i-past]
PROGP
PROG’
PROG
jaalis
[~~u-asp:prog~~]
[i-asp]
ASPP
ASP’
ASP
yabıni
[~~i-asp:prog~~]
vP
DP
~~ʕusˁman~~
v’
v
~~yabıni~~
[~~i-asp:prog~~]
VP
V’
V
~~yabıni~~
[~~i-asp:prog~~]
DP
al-bayt

In (19), *jaalis* has a [u-asp:prog] feature that is valued by the [i-asp:prog] feature of the main imperfective *yabɪni*. Moreover, *jaalis* has no thematic roles or tense. It cannot function as an auxiliary or as a copula since the probe T is occupied by a copula-auxiliary *kan*, as in (19).

On the other hand, if we assume that *jaalis* is a light verb, (18a) would have two *v*P projections under one T. This indicates that the APPV (*jaalis*) and its adjacent imperfective verb *yabɪni* in (18a) are base-generated separately in two *v*P projections, as shown in (20).

(20)



In (20), the APPV *jaalis* is base-generated in the higher *v*, located between T and Asp. As illustrated in the dotted arrow, *jaalis* moves from *v* to PROG after its [u-asp:prog] feature values *yabɪni'*s [i-asp:prog] feature. The APPV and the DP *ʕusˁman* share the same φ-features. The DP *ʕusˁman* in (20) can undergo two types of topic-movement to SpecTopP. Either it moves directly from *yabɪni*'s Spec*v*P, or it moves from *jaalis*'s Spec*v*P to SpecTopP.

Perfective posture verbs, such as *jelis/gaʔed* 'he sat' and *qam* 'he stood' are commonly confused with APPVs (18). In Chapter 6, I highlighted the fact that SNA APPVs and perfective posture verbs have different aspectual interpretations (progressive vs. perfective), especially when they are proceeded by an imperfective verb. Sentences (18) above are examples of pseudocoordination constructions, while sentences (21) involve verb coordination (Chapter 6).

(21) a. ʕusˁman **jelis/*gaʔed*** ya-ktɪb e-risalah
Ousmane sit$_{PERF.}$3P.SG.M 3P.SG.M-write$_{IMPF}$ the-letter
'Ousmane sat to write the letter.'

b. ***qam/gam*** ya-ktɪb e-risalah
stand$_{PERF.}$3P.SG.M 3P.SG.M-write$_{IMPF}$ the-letter
'Ousmane stood to write the letter.'

What makes perfective posture verbs (21) different from APPVs (18) is that the former behave like *raħ* in (12). In other words, the perfective posture verbs *jelis/gaʔed* 'he sat' and *qam* 'he stood' in (21) subcategorize for both an AGENT and a THEME. They have the argument structure [NP-{VP/PP}]. They are unaccusatives and treat their complements as adjuncts. I argue that these verbs ([perfective posture verbs + imperfective verbs]) cannot function as progressive markers; rather, they are raising verbs

in SNA (see Chapter 6). This means that the perfective posture verbs in (21) have the same derivation as *raħ* in (13). Therefore, a perfective posture verb such as *jelis* in (21) is base-generated in V, and as a result, it moves from V to T. Another hypothesis is (21) has two TP clauses, which means that *ʕusʿman* jelis/*gaʔed* is a TP and *yaktıb erisalah* is another adjunct TP.

7.5 Conclusion

This chapter examined the morphosyntactic structures of three grammaticalized cases in SNA. The findings of the examination suggest that the accusative volition verb *baɣa* (8) has grammaticalized from a control verb occupying V to a future irrealis marker that has affix-hopped, occupying M (11). As for the unergative motion verb *raħ*, it has grammaticalized from a base-generated V (12), raising to a future PROSP projection (13). Moreover, I proposed two hypotheses for the derivation of APPVs in pseudocoordination constructions. First, they could be progressive aspect markers that are projected and remain in situ in PROG, between TP and the AspP layers (19). Conversely, they could be light verbs that are base-generated in the head vP, which would move from v to PROG, as seen in (20). Furthermore, this chapter drew a morphosyntactic distinction between APPVs and perfective posture verbs in SNA. I argue that both verbs cannot function as progressive markers because each has a different aspectual interpretation (imperfective vs. perfective). I also suggest that perfective posture verbs are raising verbs, just like *raħ* in (13).

CHAPTER 8

CONCLUSION

8.1 Summaries and Contributions

The primary focus of this dissertation was to examine the grammaticalization and syntactic representation of the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective in SNA. These three elements are crucial, as each element can carry multiple aspectual, mood, and tense interpretations depending on the context they are used in. As established throughout the dissertation, these interpretations have sometimes been the cause of confusion among linguists. Therefore, it was the goal of this dissertation to explain these confusions and examine these elements carefully.

Grammaticalization is a process by which words are altered over time from a lexical status to a grammatical status (Chapter 2). This process or development is commonly triggered by universal mechanisms and processes that change lexical verbs into markers of TMA, which are functional categories. We also observed differences between TMA and verb classifications that helped us diagnose the kind of TMA characteristics that SNA exhibits. To better explain the grammaticalization and syntactic structures of the APPVs (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing'), the motion verb *raħ* 'he went', and the *b*-imperfective in SNA, three goals were set for this dissertation.

The first was to examine and explain the aspectual classification and phrase features of the three elements especially when they are followed by imperfective verb forms in SNA. For this goal, I examine new data collected from SNA native speakers.

The main outcome of the data was the conclusion that there is considerable variation in TMA marking in SNA. Additionally, I showed that when the APPVs, the motion verb *raħ* 'he went', and the *b*-imperfective co-occur with imperfective verbs, their semantic content is lost and they become functional categories (grammatical markers). For instance, the data showed that when co-occurring with imperfective verb forms, *jaalis* or *qaaʕaɪd* 'sitting' and *gaayem* 'standing' behave as progressive aspect markers in SNA. These progressive markers are commonly used with activity and accomplishment verbs. However, they cannot co-occur with stative verbs and are rarely used with achievement verbs. The data showed that the *b*-imperfective in SNA acts much like the English modal verb *will*: one of its primary functions is as an irrealis marker and it can be used with virtually all verb classes in SNA. In further comparisons with English, the data showed that SNA *rah* overlaps in meaning with the English *be going to/gonna.* This is mainly via the prospective future aspect being marked in both, although SNA does not permit *rah* to be assimilated to the function of the *b*-imperfective because each morpheme has a different interpretation: namely, a sudden decision (*b*-imperfective) vs. a planned decision (*raħ*).

Chapter 3 introduced a new testing method, *passivization* (valency-decreasing), a valency-changing rule. I showed that all three cases pass the passivity test in SNA. Also, they can occur before or after animate or inanimate subjects, in the active or passive voice. This test is crucial as it distinguishes between lexical and functional categories. For example, it allowed us to determine what is real grammatical and lexical aspect

throughout the dissertation. Summarizing the findings of the data found thus far in the research, SNA behaves more like other Arabic dialects than like MSA/CA.

The second goal set for this dissertation was to provide an explanation of the grammaticalization and reanalysis of the APPVs, the motion verb *raħ,* and the *b*-imperfective. This goal was executed by evaluating the three elements based on four universal grammaticalization principles and mechanisms: namely, desemanticization, extension, decategorialization, and erosion. I also followed Hopper and Traugott's (2003) Cline theory in providing descriptions of the stages for the reanalysis of three elements.

SNA is most grammatically related to other Arabic dialects, and not MSA/CA; this fact allows us to trace the grammaticalization process of the APPVs, the *b*-imperfective, and the motion verb *rah* when considering their original functions as lexical verbs. This idea is supported by the examination of the *b*-imperfective compared to the perfective volition verb *baya* as an irrealis marker in SNA (Chapter 4). I rejected theories that argue that the future *b*-imperfective grammaticalized from verbs such as *bada* 'begin', *biwuddi* 'I want', *yabɣa, yiba, yibi* 'he wants', or *baga* 'he wanted' (Chapter 4). I showed that *baya* underwent semantic extension and bleaching in addition to decategorialization and erosion, culminating in the irrealis *b*-imperfective marker in SNA. The data also suggests that the reanalysis of the *b*-imperfective followed Hopper and Traugott's Cline theory. The grammaticalization of the lexical verb *baya* into the grammatical irrealis *b*-imperfective also followed their syntagmatic and paradigmatic scheme of reanalysis (Chapter 4).

The second element evaluated in this dissertation was the grammaticalization of the spatial motion verb *raħ* 'he went'. In Chapter 5, I showed that the verb *raħ* in SNA has three common forms: namely, a) the perfective and imperfective motion verb *raħ,* b) the active participle verb *rayħ*, and c) the prospective future particle *raħ*. I concluded that only the non-inflected *raħ* carries the meaning of future intentionality, immediacy, or distant future. Therefore, it cannot be equated to the inflected imperfective motion verb *raħ* or the active participle verb *rayħ* forms. One reason is that their following imperfective verbs' valency cannot be reduced, whereas the imperfective verbs of the non-inflected *rah* (the prospective future aspect marker) can change their valency. As with the *b*-imperfective, I argued that *raħ* satisfies Hopper and Traugott's Cline theory and has undergone the five stages in the syntagmatic and paradigmatic scheme of reanalysis; however, it is yet to become a phonologically and morphologically reduced morpheme clitic *ħa=/ħa-*, like the equivalent in Hijazi, Syrian, and Iraqi Arabic.

The APPVs' (*jaalis* or *qaʕaɪd* 'sitting' and *gayem* 'standing') grammaticalization and reanalysis were examined. I showed that structures consisting of [APPV + imperfect verb] are pseudocoordinated (Chapter 6): the APPV and its adjacent imperfective verb exhibit the same grammatical, inflectional, and agreement features. I showed that *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' have undergone semantic extension, semantic bleaching, and decategorialization, but not phonological reduction (erosion) (Chapter 7) and that APPVs are notably not as advanced as the *b*-imperfective or the motion verb *rah* 'he went' in the grammaticalization process. The reason for this is that APPVs still contain their original locative meanings and they are not phonologically

reduced. Thus, there are divergent usages of the APPVS as a result of the grammaticalization process: they function both as light verbs and as progressive aspect markers in pseudocoordination constructions in SNA. Moreover, I suggested that structures consisting of [APPV + imperfect verb] can undergo valency-changing rules, which is a sign that they have been decategorialized, just like the irrealis *b*-imperfective and the prospective future *raħ.*

The third goal of this dissertation was to propose new and precise syntactic hierarchies for the grammaticalized future *b*-imperfective, the future prospective particle *raħ*, and the progressive APPVs (*jaalis/qaaʕaıd* 'sitting' and *gaayem* 'standing'). To account for the morphosyntactic structures for the above forms, I used Cinque's (1999) and Rizzi and Cinque's (2016) Cartography Program. In Chapter 7, I showed that the accusative volition verb *baɣa* (8) had grammaticalized from a control verb occupying the head of VP to an affix-hop future irrealis occupying the head of MP. On the other hand, the accusative motion verb *raħ* has grammaticalized from a raising verb to a future prospective aspect occupying the head Prosp position (13).

As for the derivation of the APPVs in pseudocoordination constructions, I proposed two hypotheses. One hypothesis is that they are progressive aspect markers that are base-generated in the head of ProgP between TP and AspP. The second hypothesis is they are light verbs base-generated in the head of *v*P, moving from *v* to Prog. Finally, this dissertation drew a morphosyntactic distinction between APPVs and perfective posture verbs in SNA. Based on the findings of Chapter 7, I suggested that neither verb can function as a progressive marker in SNA because each has a unique aspectual

interpretation (imperfective vs. perfective). Further, I argued that perfective posture verbs are raising verbs.

8.2 Recommendations and Future Research

One of the contributions of this dissertation was using valency-changing rules to determine the grammaticalization of the progressive APPVs (*jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing'), the future *b*-imperfective, and the future prospective particle *raħ*. In fact, valency-changing rules helped distinguish between the aspect of APPVs *jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing' and the perfective posture verbs *jelis/qaʔed* 'he sat' and *gam* 'he stood', helping us understand their behavior. Additionally, it played a critical role in distinguishing between the prospective future *raħ,* the inflected *raħ,* and the active participle *rayħ* (Chapter 5). Valency-changing rules may help determine if a functional category has really undergone the grammaticalization process in Arabic dialects and other languages.

Another important point to consider for future research is whether language contact has any impact on the grammaticalization of the APPVs (*jaalis/qaaʕaɪd* 'sitting' and *gaayem* 'standing'), the future *b*-imperfective, or the future prospective particle *raħ.* The reason that language contact is important is it is the usual suspect when it comes to determining a cause of linguistic variation that cannot genetically be explained. Because SNA is largely a dialect of MSA, it comes as no surprise that SNA shares nearly every aspect with MSA. However, I cannot determine whether the cause was influenced entirely by language contact, because no historical records trace the evolution of the grammaticalized markers (APPVs, the motion verb *raħ,* and the *b*-imperfective). In this

dissertation, I claimed that grammaticalization was instigated by metaphoric and metonymic processes. However, I could not determine with certainty whether those grammaticalized forms were originally borrowed. SNA has been in contact (geographically, culturally, and linguistically) with various foreign languages (from India, Pakistan, Turkey, Indonesia, etc.) that SNA is not genetically related to. Grammaticalization thus could have been caused by language contact, but this needs further investigation; to claim that there has been no language contact that has influenced grammaticalization in SNA would be incorrect. I claim that SNA underwent grammaticalization as a result of language contact, based on the fact that the geographically contiguous languages surrounding Saudi Arabia may have undergone the same grammaticalization processes. Therefore, examining languages that are in contact with SNA could lead to a discovery pattern of relation between them.

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