

The Rise of New Copulas in Arabic

by

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## ABSTRACT

Arabic is widely known for the lack of copulas in nominal sentences in the present tense. Arabic employs a copula ‘kana’ in the past and future tenses. However, in some constructions the presence of a third person pronoun is necessary for the purpose of emphasis or ambiguity reduction. The data investigated in this thesis was from Classical Arabic, Standard Arabic, and the Western Saudi ‘Hijazi’ dialect. The thesis briefly discussed the grammaticalization of a transitive verb to a non-present tense copula in Classical Arabic. In addition, the thesis discussed the process of copularization that was a result of grammaticalization of the demonstrative third person pronoun ‘huwa’ to a present tense copula in Standard Arabic. It was shown that the pronoun went through a process of reanalysis from the specifier to the head position of PredP driven by Feature Economy and the Head Preference Principle. The result was the loss of the person feature. The new copula developed and attached to the negative particle ‘ma’ in the Hijazi dialect losing all its phi-features. These phenomena are known as the copula and negative cycles, respectively. The analysis was based on the Generative Grammar framework and the Minimalist program. This study attempted to shed light on Arabic copulas and contribute to more understanding of the use of these copulas in question and negative constructions. It may also help in typological studies, which may lead to a better understanding of the linguistic theory and the language faculty.

*Key Words:* Grammaticalization, Reanalysis, Copula, Linguistic Cycle

## DEDICATION

To my Father and Mother for their Love and Care.

To my wife and daughter for their Love and Support.

To my brothers and sisters for their Encouragement.

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# CHAPTER 1

## INTRODUCTION

### Overview

Nominal sentences in Arabic are widely known for the lack of copulas, linking verbs, in the present tense. The present tense in nominal sentences is understood intuitively. Arabic employs a copula ‘كان’ ‘kana,’ which means ‘was,’ in the past and future tenses. However, the presence of the third person pronoun ‘huwa,’ which means ‘he,’ in the present tense is necessary for emphasis or for the purpose of ambiguity reduction in some structures. The third person pronoun is known in the Arabic traditions as a ‘pronoun of separation’ in which it separates the subject from the predicate but connects them at the same time.

There are many sources of copulas mentioned in the literature. For example, Pustet (2003) stated, “copulas originating in pronouns are widely documented in the literature” (p. 55). This thesis is focused on the copulas that are derived from pronouns. The change of a pronoun, or any word, is generally known as copularization and is found in many languages, such as Tok Pisin, Mandarin, and Hebrew (Pustet, 2003). It is argued in this thesis that this process is also found in Arabic, although with some differences that are shown later. The data in this thesis are from Classical Arabic, Standard Arabic, and the Western Saudi dialect, “Hijazi,” a dialect spoken in the Hijaz area in Saudi Arabia.

In this thesis, the morphosyntactic changes of the third person pronoun ‘huwa,’ as a copula, in nominal sentences in present tense are investigated. It is shown that ‘huwa’ went through semantic changes from interpretable features to uninterpretable features in copular use. The loss of some or all phi-features is responsible for the reanalysis from



specifier to head position of Predicate Phrase (PredP). The reanalysis is driven by principles of economy, Feature Economy, and the Head Preference Principle (van Gelderen 2004, 2011, forthcoming). It is shown that ‘huwa’ is still used as a pronoun and the difference between the interpretations of pronouns and copulas is explained. The analysis is based on the Generative Grammar framework and the Minimalist program. This research on the structure and features of the copula ‘huwa’ sheds light on Arabic copulas and contributes to a greater understanding of copulas’ use in questions and negative constructions. The study may also help in typological studies, which may lead to a better understanding of the linguistic theory and the language faculty.

In the next section, the notion of grammaticalization and the term reanalysis are introduced and examples are given of both. Then, the linguistic cycle is explained and three cycles are introduced.

### **Grammaticalization and Reanalysis**

Grammaticalization is a unidirectional and gradual change in the syntactic and semantic properties of lexical words to function as grammatical words. It is the change that underlies the loss of the semantic and, probably, the phonetic characteristics of the lexical words and the gain of grammatical characteristics. Hopper and Traugott (2003, p. 7) described this process as the “cline of grammaticality,” as shown in (1) below.

(1) Content item > grammatical word > clitic > inflectional affix

In this cline, a lexical, or content item, on the left in (1), becomes grammaticalized. As a result, it loses some of its phonological realization and becomes a clitic and then an inflectional affix. Van Gelderen (2011, p. 6) provided morphosyntactic changes, as shown in (2a) and changes in argument status, as shown in (2b).

- (2) a. phrase > word/head > clitic > affix > 0  
 b. adjunct > argument > (argument) > agreement > 0

The scheme in (2) explains the steps of grammaticalization of a phrase as an adjunct to a single word on head position as an argument in the syntactic structure. Then, the argument is reduced phonologically to become a clitic. Then, the clitic becomes an obligatory affix as an agreement marker. Speakers eventually lose interest in the affix and delete it. Once the last step is reached (i.e., zero), a renewal is needed. Reanalysis is defined by Harris and Campbell (1995) as “[A] mechanism which changes the underlying structure of a syntactic pattern and which does not involve any immediate or intrinsic modification of its surface manifestation” (p. 61). In other words, the change is external. Van Gelderen (2011) used the term reanalysis “to emphasize the role of the child in acquiring the language” (p. 6). In other words, the child analyzes the data, economically, and comes up with a grammar that may be different from the earlier generation’s grammar. Van Gelderen provided examples of reanalysis of grammaticalized words from English. See van Gelderen (2011, p. 7) for more details, in (3) below.

- |      |                      |    |                   |       |                       |
|------|----------------------|----|-------------------|-------|-----------------------|
| (3)  | V > AUX              |    | P > AUX           |       | P > C                 |
| Go   | motion > future      | to | direction > mood  | for   | location > time>cause |
| Have | possession > perfect | on | location > aspect | after | location > time       |

As shown in (3), V means verb, AUX means auxiliary, P means preposition, and C means complementizer. The verb ‘go’ in (3) is grammaticalized as a future marker in the change from ‘I am going to school’ to ‘I am going to study Syntax now.’ The other examples went to similar grammaticalization and reanalysis.

## The Linguistic Cycle

Van Gelderen (2011, pp. 5-6) referred to the linguistic cycle as the reanalysis of a lexical word as a grammatical word, which necessitates a renewal for the whole process. In other words, the grammaticalization and reanalysis of a lexical item to a grammatical marker, which eventually becomes weak and lost. Then, a renewal, or a new lexical item, is expected. The new lexical item may take the same path and become lost and the cycle continues. Van Gelderen (pp. 7-8) explained, “[L]anguages do not reserve earlier change but may end up in a stage typologically similar to an earlier one.” In other words, the cycle does not end in the same lexical item that was lost, but rather in a stage, that has a similar item to the first one. This accounts for the unidirectional, but spiral, change. Van Gelderen (2013, p. 238) presented three of what she calls microcycles, as shown in (4) below.

### (4) Negative Cycle

Negative argument > negative adverb > negative particle > zero

Negative verb > auxiliary > negative > zero

### Subject Agreement Cycle

Demonstrative/emphatic > pronoun > agreement > zero

### Copula Cycle

Demonstrative > copula > zero

Verb/adposition > copula > zero

A negative argument in (4) reanalyzes as a negative adverb and then becomes a negative particle. Finally, the negative particle weakens and becomes lost. The same steps follow with the negative verbs. As for the subject agreement cycle, a demonstrative or emphatic word reanalyzes as a pronoun, which becomes an agreement marker. In the

following step, the agreement marker becomes weak and gets lost. Finally, the copula cycle starts with a full demonstrative or verb that reanalyzes as copula, and then becomes weak and gets lost.

The cycles relevant to this thesis are negative and copula cycles. The theme of this study was to locate and define the copulas in Arabic and provide a plausible structural and feature-based analysis to them. The goal of this study was to provide a descriptive analysis of copulas, both synchronically and diachronically. Negative and copula cycles may explain language change in terms of analyticity and syntheticity. Synthetic languages are languages that employ certain morphemes to encode grammatical information. They are known for multiple endings in nouns and verbs to indicate case, tense, mood, and aspect. Analytic languages are languages that employ grammatical words to compensate fixed word order. These grammatical words indicate tense, mood, and aspect and show fewer endings on nouns and verbs. The terms analytic and synthetic are relevant to the conclusion in Chapter 5.

So far, the goals of this thesis and the terms grammaticalization and reanalysis have been introduced from different sources. Also provided were some examples of grammaticalization and reanalysis. The linguistic cycle was introduced and explanations were provided of negative, subject agreement, and copula cycles.

In Chapter 2, a typology of copulas with similarities and differences between the copulas within are presented. Also presented is the framework and some brief information about Classical Arabic, Standard Arabic, and spoken Western Saudi. Chapter 3 provides the data and analysis of the distribution of pronouns and copulas for the three forms of Arabic. Chapter 4 provides an explanation of the process of copularization in Arabic and

how the change, structurally and in terms of features, took place. Chapter 5 contains a summary and the conclusion of this thesis.

## **CHAPTER 2**

### **TYPOLOGY OF COPULAS**

#### **Introduction**

The study of copulas in different languages has received a considerable amount of research. A cross-linguistic study of the origin of copulas will lead to a better understanding of the nature and behavior of copulas. As mentioned in the first chapter, the theme of this study was to locate and define the copulas in Arabic and provide a plausible structural and feature-based analysis of them, and the goal of this study was to provide a descriptive analysis of copulas both synchronically and diachronically. Furthermore, the linguistic cycle might provide a plausible explanation of the changes from pronoun to copula.

In this chapter, five things will be discussed. Definitions of the term copula will be synthesized from different books and articles and relevant examples from languages in which pronominal copulas originated from demonstratives will be discussed. Next, the framework of this thesis will be presented. After that, the three forms of Arabic from which the data are drawn will be briefly introduced. These forms are Classical, Standard, and Hijazi Arabic. Finally, a summary of the chapter will be provided.

#### **Copulas**

Hengeveld (1992, p. 32) indicated that copulas are semantically empty and their function is only supportive. They enable nonverbal predicates to act as main predicates. Hengeveld defined copulas and semicopulas as “auxiliary elements accompanying a nonverbal predicate, the main predicate status of which can be deduced from the valency and selection restrictions it imposes on the construction as a whole” (p. 45). Similarly,

Pustet (2003, p. 5) defined the copula as “a linguistic element which co-occurs with certain lexemes in certain languages when they function as predicate nucleus. A copula does not add any semantic content to the predicate phrase it [is] contained in.” In other words, copulas are meaningless but participate in the predication of nonverbal elements. Van Gelderen (2011, p. 129) referred to the copula as a linking or equating verb with no independent meaning.

The process of copularization is well attested in many languages. Hengeveld (1992, p. 237) and Stassen (1997, p. 94) referred to copularization as the grammaticalization of verbs or nonverbal elements to copulas. Katz (1996) and van Gelderen (2011; forthcoming) were among the first to investigate the changes from demonstrative to copula and to analyze it as a cycle. Van Gelderen (2011; forthcoming) discussed this change and argued that it is possible because of the locational features on the demonstrative and the copula, a process of feature sharing. She argued that the Head Preference Principle and Feature Economy can explain the cyclical change.

Hebrew employs the verbal copula in non-present tense. Li and Thompson (1977, p. 427) introduced examples of the demonstrative pronoun ‘hu’ or ‘hi’ grammaticalization to copula in the present tense in Hebrew. They show this in the next example (the gloss is mine).

(1) ata (hu) ha-ganav

You (COP) def-thief

“You are the thief.”

(Li and Thompson, 1977, p. 427)

Berman and Grosu (1976) argued that “[I]n identity sentences, if the subject is a pronoun, the presence of a copula morpheme is optional, while it is obligatory if the subject

is full NP” (p. 266). Compare the sentence in (1) with the sentences in (2) and (3) below (the gloss is mine).

(2) david ha-ganav

David def-thief

“David the thief.”/ \*“David is the thief.” (Berman and Grosu, 1976, p. 266)

(3) david hu ha-ganav

David COP.ms def-thief

“David is the thief.” (Berman and Grosu, 1976, p. 266)

The copula in present tense nominal sentences in Hebrew is inflected for number and gender but not necessarily for person feature. This analysis is very similar to the analysis of copulas in Arabic.

McWhorter (1997) explained that the demonstrative ‘da,’ in (4), is employed as an identificational copula in Saramaccan, a creole language, while the demonstrative ‘de,’ in (5), is employed as an equative copula. He argued that early Saramaccan lacked copulas, and the new copulas arose from the demonstratives. This is shown in (4) and (5) below:

(4) a. Mi **da** i tatá

I COP your father

“I am your father.” (McWhorter, 1997, p. 87)

b. Hen **da** dí Gaamá

He COP the chief

“He is the chief.” (McWhorter, 1997, p. 98)

(5) a. a **de** mi tatá

He COP my father



“He is my father.” (McWhorter, 1997, p. 99)

b. Dí wómi dɛ a wósu  
The man COP LOC house

“The man is at home.” (McWhorter, 1997, p. 88)

Van Gelderen (2011, pp. 135-136) explained that ‘da’ and ‘dɛ’ are, in fact, reanalyzed from English demonstratives ‘that’ to ‘da’ and ‘there’ to ‘dɛ’ copulas in Saramaccan creole.

Pustet (2003, p. 55) cited Verhaar (1995) in order to provide an example from Tok Pisin, a creole language, which shows a similar reanalysis to Saramaccan’s from demonstratives to copulas. Tok Pisin shows a nonverbal copula that originated from the pronoun “em” in (6).

(6) **em** Praim Minista

COP Prime Minister

“That is the prime minister.” (Verhaar, 1995, p. 83)

Pustet (2003, p. 56) explained another example of pronoun to copula reanalysis but shows a homonymy between the pronoun and the copula. Pustet presented Kenya Luo from Tucker (1993) which employs a third person pronoun ‘e'n’ that can be used optionally as a copula, seen below in (7),

(7) a. dhákó e'n bé'r

Woman COP goodness

“Woman she is goodness.” (Tucker, 1993, p. 308)

b. dhákó bé'r

woman goodness

“Woman she is goodness.” (Tucker, 1993, p. 308)

Hengeveld (1992: 81) cited Lango, a language spoken in Uganda, from Noonan (1982). Lango has an optional pronominal copula ‘én’ that might only be inserted in definite identificational predications, a case that is very similar to Arabic present tense nominal sentences. An example can be seen below in (8).

(8) a. Mán ’gwôk

DEM 3.SG.dog.HAB

“This is a dog.”

(Noonan, 1982, p. 45)

b. Án (én) àdàktál

I (COP) 1.SG.doctor.HAB

“I am the doctor.”

(Noonan, 1982, p. 45)

Note that in (8a), the present tense copula will not surface because of the indefiniteness of the second argument, namely ‘a dog.’ On the other hand, in (8b), the present tense copula is possible because of the definiteness on the second argument, namely ‘the doctor.’ Hengeveld (1992) argued that “One of the primary functions of pronominal copulas is to disambiguate between a term and a predication reading. This also explains why pronominal copula is most often found in identifying predications” (pp. 250-251). In other words, one of the functions of pronominal copulas is to distinguish between phrasal and sentential readings. Most often, that happens when both the subject and its predicate are definite. Also note that ‘én’ is a third person pronoun but lost the person feature in (8b) with the first person pronoun as the subject indicating a sign of grammaticalization.

Van Gelderen (2011, p. 133; forthcoming, p. 3) explained the change from demonstrative to copula in Chinese. The demonstrative ‘shi’ was reanalyzed as a copula

in Old and Mandarin Chinese. The demonstrative function of ‘shi’ is lost in Mandarin Chinese. Examples (9) and (10) represent the reanalysis:

(9) Shi **shi** lie gui Old Chinese  
This is violent ghost  
“This is a violent ghost.” (Peyraube & Wiebusch, 1994, p. 398)

(10) Zhe **shi** lie gui Mandarin Chinese  
This is violent ghost  
“This is a violent ghost.” (Mei Ching Ho, p.c.)

The old Chinese example in example (9) is clear-cut evidence for the grammaticalization and reanalysis of the pronoun to copula since the copula and the demonstrative are presented together in one sentence, or one stage. The Mandarin Chinese example in (10) accounts for the loss of the demonstrative ‘shi’ and the rise of the renewal ‘zhe.’ Interestingly, Hengeveld (1992, p. 211) indicated that ‘shi’ is optional and that it reduces the ambiguity in the next sentences in (11) and (12) for Sino-Tibetan (from Hashimoto, 1969).

(11) Zhe shu  
DEM book  
“This book.” Or “this is a book.” (Sino-Tibetan; Hashimoto, 1969, p. 84)

(12) Yuehan xiaohair  
John child  
“The child John.” Or “John is the child.” (Sino-Tibetan; Hashimoto, 1969, p. 84)

Hengeveld (1992) explained that “to make the predication reading unambiguous, either the pronominal copula ‘shi’ or a pause should be inserted in between the two

constituents” (pp. 211-212). A similar discussion about the definiteness of the predicate and whether a copula or a pause will help in distinguishing phrasal from sentential readings of present tense nominal sentences in Arabic is found in Chapter 3.

Hengeveld (1992) indicated that the copula ‘shi’ in Mandarin Chinese is “normally optional” (p. 252). The copula becomes obligatory when it occurs with the a verbal negator “bu.” Hengeveld explained this as an instance of verbal characteristics acquisition by the pronominal copula, like in Egyptian Arabic, but he did not provide any evidence for this with Chinese. Soh and Gao (2006, pp. 118-119) explained that the negative particle ‘bu’ can become a clitic to the verb or the auxiliary that follows it. They showed this in example (13) below.

- (13) Ta bu-shi xiang jia  
He not-be miss home

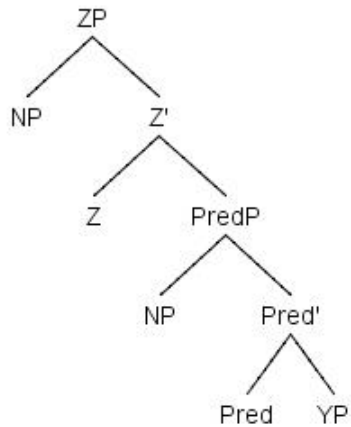
“It is not the case that he misses home.” (Soh & Gao, 2006, p. 118)

In Chapters 3 and 4, a similar example in the Hijazi dialect is presented where the copula attaches to the negative particle and then fuses together, forming a negative copula. This change can be explained as the negative cycle above.

### **Framework**

Bowers (1993) hypothesized a functional category, PredP, which may occur between inflection phrase (IP) and verb phrase (VP), or as a complement to the verb as represented in example (14).

(14)

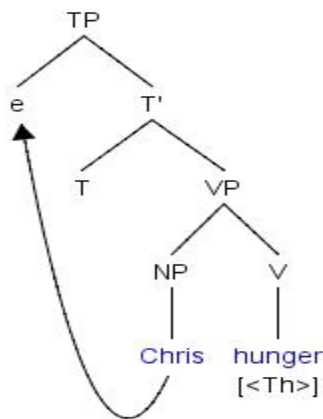


In this tree,  $Z = \{I, V\}$  and  $Y = \{V, A, N, P\}$ . In Bowers' (1993) representation in (14), he attempted to capture three main points. First, he included the internal subject hypothesis, by generating the lower NP. Second, he presented a unified structural representation, by unifying main and small clauses in one representation. Third, he followed the X-bar theory. Bowers assumed that Pred functions as a predication. He also stated that there are languages that represent Z as I, and Y as  $\{A, N, P\}$ , such as Sinhala, a language of Sri Lanka.

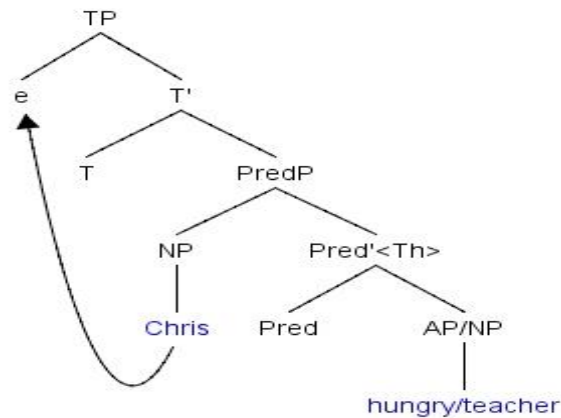
In short, Bowers' proposal introduced a functional category, PredP, as a uniform structure for main clauses with verbs, and for nominal and adjectival clauses without verbs. He claimed that PredP can be a complement of VP, which results in assigning an agent role to the subject. Assigning agent roles to the subject can be done by vP, introduced by Chomsky (1995). The use of VP or vP is the difference between Bowers' (1993) and Baker's proposals (2004). Both analyses attempt to link Syntax and Semantics at the LF representation.

Baker (2004) explained that there should be different basic structures for main and nominal or adjectival clauses. His theory made distinctions between main clauses, with verbs, and nominal and adjectival clauses, which lack verbs. Structures with verbs do not employ PredP. On the other hand, nominal and adjectival clauses employ PredP. Baker (2004, p. 35) presented two sentence structures as in (15) and (16) below. Note that ‘T’ in Bowers (1993) is the same as ‘T’ in Baker’s (2004) details about the position of auxiliary are suppressed:

(15)



(16)



In Baker’s proposal, there is no need for PredP in (15) for main clauses, for example “Chris hunger,” while Pred behaves like verbs in (16) for nominal/adjectival clauses, for example “Chris is hungry/teacher.” Baker includes <Th> under the verb in (15) to indicate that the verb theta-marks the grammatical subject with Th(eme) role, while in (16), <Th> is next to Pred’ to indicate that it is not the head Pred that theta-marks the Theme role. Rather, the head makes it possible for the complement NP or AP to theta-mark the grammatical subject with the theta-role.

Baker (2004) stated:

It is common for a functional category to be silent in some languages but rare it to be silent in all languages. If overt Preds can be found, we should be able to observe that they appear with nouns and adjectives but not verbs. (p. 39)

In this thesis, it is argued that the functional head, Pred, in Standard and Hijazi Arabic nominal sentences is optional in affirmative present tense, but obligatory in negative sentences in present tense. The obligatory role represents a stage of the grammaticalization of the pronoun to copula in most Arabic dialects. It is also argued in this thesis that Pred also appears with prepositions. Baker (2004) also indicated that the copula ‘be’ in English “rather appears when the lexical head of the clause cannot bear finite tense and agreement morphology” (p. 40). It is argued here that this analysis is also valid in Arabic. The presence of verbs prevents the presence of the functional head Pred, that is, ‘kana’ in non-present tense or ‘huwa’ in present tense.

Van Gelderen (forthcoming) adopts PredP in her paper “The Copula Cycle.” She explained that the changes from demonstratives to Pred is an instance of specifier to head change in the clause structure. She indicated that this analysis provides a possible solution for the problem of the labeling algorithm in the Minimalist Program (Chomsky 2013, 2014; Moro, 2000). The labeling algorithm problem arises when XP merges with YP at the interface level. The solution is through the change from XP to X, where the phrase is reanalyzed as head in {XP, YP} to become {X, YP}. Van Gelderen explained that “shi” in Chinese has gone through a reanalysis from demonstrative to copula of identity, which is due to the similarity between the demonstrative and the copula features as represented in (17) from van Gelderen (forthcoming, p. 4).

(17)            D                    >            Pred

	Shi	Shi
Semantic	[proximate]	[identity]
Formal	[i-3S]	

The Chinese demonstrative ‘shi’ started with deictic features and with third person singular features. The reanalysis of the demonstrative underlies the loss of the person and number features and results in the use of the demonstrative as a copula in identificational sentences.

Chomsky (1995) represented features with ‘i-’ for interpretable and with ‘u-’ for uninterpretable. Van Gelderen (2011) neatly explained that interpretable features are reanalyzed, diachronically, to uninterpretable features. This was formulated in van Gelderen (2007; 2008a; 2008b; 2009) as in (18) from van Gelderen (2011, p. 17).

(18) Feature Economy

Minimize the semantic and interpretable features in the derivation:

Adjunct	Specifier	Head	affix
Semantic	> [iF]	> [uF]	> [uF]

Features, or F as in (18), lose interpretability and become uninterpretable in head positions.

Van Gelderen (2004; 2011, p. 13) introduced the Head Preference Principle in (19) to account for (18) and to ensure simplicity of representation.

(19) Head Preference Principle (HPP)

Be a head, rather than a phrase.

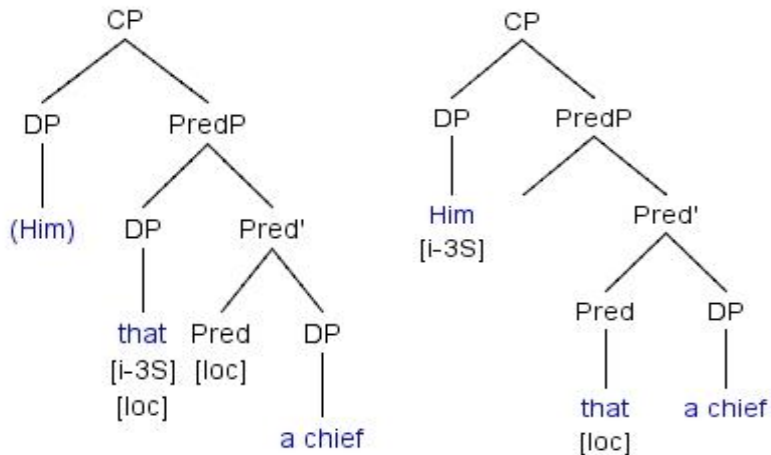
In (20), Van Gelderen (forthcoming, p. 5) structurally represented the change above in par with the principle in (19) for the demonstrative to copula cycle in Chinese and Sranan:



(20) a.

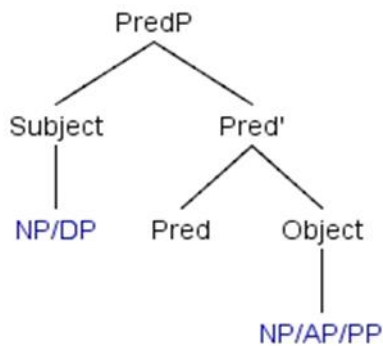
>

b.



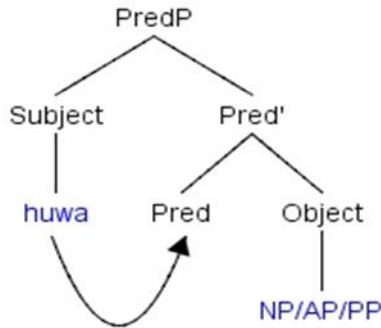
This analysis and formulation was followed in this thesis. Here, following Bowers (1993), Baker (2004), and van Gelderen (forthcoming), it is argued that the structural representation of nominal sentences in Arabic involves Predicate Phrases. This analysis accounts for the presence of functional head Pred mediating subjects and predicates in Arabic as shown in (21).

(21)



As for the pronoun to copula reanalysis, van Gelderen (2004, 2011) introduced Head Preference Principle (HPP) and Feature Economy to account for this reanalysis and this is followed in (22).

(22)



### **The Language Forms of the Data**

Arabic is a member of the Semitic languages that branch from the Afro-Asiatic family of languages. Arabic is mainly spoken in the Middle East and North Africa. Gordon (2005), as in Aoun, Benmamoun, & Choueiri (2010, p. 1), indicated that more than 200 million speakers speak Arabic (bilinguals are not included.) Aoun et. al. (2010), stated that “Arabic displays some of the typical characteristics of Semitic languages: root-pattern morphology, broken plurals in nouns, emphatic and glottalized consonants, and a verbal system with prefix and suffix conjugation” (p. 1). In this section, information about Classical Arabic, Standard Arabic, and Hijazi Arabic is provided.

#### **Classical Arabic**

Aoun et. al. (2010, p. 1) dated the standardization of Classical Arabic, which evolved from the seventh century with the Islamic expansion. Classical Arabic is the language of the Holy Quran. There are no native speakers of Classical Arabic today, but it is learned in schools and in mosques, in order to master the reading and the interpretation

of the Holy Quran by Muslims. Therefore, the only sources for Classical Arabic are the Quran script and classical poetry.

Owens (2013, pp. 456-457) indicated that the establishment of today's Classical Arabic was between 2nd-/8th- and 4th-/10th-centuries. Holes (1995, p. 8) described Classical Arabic as "a markedly synthetic character." The synthetic characterization was tested against Standard and Hijazi Arabic in this thesis only in copulas and negative copulas. According to Holes (1995), there was only orally composed poetry before the time of the Prophet Muhammad peace be upon him (570-632 A.D.). The grammarians of Basra and Kufa (southern Iraq) began collecting Arabic poetry in the middle of the eighth century. The basic word order for Classical Arabic is verb-subject-object, or VSO.

### **Standard Arabic**

Suleiman (2003), cited in Aoun et. al. (2010, p. 1), dated the emergence of Standard Arabic in the 19th century when Arabic started to gain the status of an official language in the Arab world. Modernizing the language started in the early 20th century with Arab academies emphasizing the role of preserving the Arabic language from "dialectal and foreign influence" (Aoun et. al. 2010, pp. 1-2). Standard Arabic is not the native tongue for any speaker today. However, the degree of simplicity of structure is higher than Classical Arabic with the Arabs today. Standard Arabic is taught in schools as well. It is the language of the media and politics. Standard Arabic is less synthetic than Classical Arabic and richer in morphology than spoken dialects. The basic word order of Standard Arabic is VSO, similar to Classical Arabic.

## **Hijazi Arabic**

Hijazi Arabic is widely spoken in the Western Region of Saudi Arabia, which consists of Makkah, Madinah, Ta'if, and Jeddah. It is the native tongue for the people of Hijaz. Hijazi Arabic is an oral “informal” dialect of Arabic. Therefore, there is no exact date for its emergence. The Hijazi dialect referred to here is today’s dialect in the Hijazi area, and not the old Hijazi dialect. The old Hijazi dialect is compatible with old forms of Arabic. In this thesis, the interest is in today’s Hijazi dialect.

The Hijazi dialect is more analytic than Standard Arabic. It is argued here that the loss of case markers on nouns and adjectives was because speakers of the Hijazi dialect stopped noticing those case markers, which resulted in *SVO* word order. Therefore, Hijazi Arabic speakers employ many grammatical markers to compensate for the *SVO* word order. Furthermore, Muslims from around the world visit the Hijaz area twice a year to perform their religious pilgrimage. The biannual contact of the Hijazi people with millions of foreigners affected the language. As a result, the dialect became much simpler and gained more grammatical words, by grammaticalization.

### **Summary**

In this chapter, several definitions of the term copula were presented, and the typological studies from the literature on copulas originating from demonstratives were discussed. There are many differences among the languages discussed in the typological section. Some of these languages show similarities with the data from Arabic that will be discussed in Chapters 3 and 4. The framework followed in the analysis was outlined. The framework is guided by the Head Preference Principle and Feature Economy. Finally, the

Classical, Standard, and Hijazi Arabic were introduced as three different stages of the same origin. These stages will be distinguished further in the upcoming chapters.

## CHAPTER 3

### COPULAS IN ARABIC NOMINAL SENTENCES

#### Introduction

In Arabic, a non-present tense nominal sentence, that is a sentence without an overt verb, requires the copula ‘kwn.’ In the present tense, nominal sentences do not require certain copulas. Nevertheless, the third person pronoun ‘huwa’ adds an emphasis on quality of the predicate to the subject. It also enhances the comprehensibility of the nominal sentence. This pronoun is known by Arab grammarians as the “pronoun of separation.” It separates the subject from the predicate. This position gives the pronoun the chance to behave like a linking verb.

The pronoun of separation can also be called the “pronoun of distinction” because it distinguishes the sentential reading from the phrasal reading, as clearly mentioned in Khan (1984) that “the purpose of it [the pronoun of separation] is to eliminate the confusion between a modifier and a predicate” (p. 492). This function gives the pronoun the property of verbs, that is, copula.

The next section is about the distribution of pronouns and copulas in nominal sentences in Classical Arabic, namely the Holy Quran. Following that is a discussion about the distribution of copulas in nominal sentences in Standard Arabic, from the literature, newspapers and some of the researcher’s own. The following section discusses the distribution of copulas in nominal sentences in Hijazi Arabic, from the researcher’s own experiences. The final section contains a summary of the data and analyses.

## Distribution of Pronouns and Copula in Classical Arabic

In this section, sentences from Classical Arabic, namely the Holy Quran, were provided using an online source offered by King Saud University. The online source also provides English translations of the meaning of those sentences; however, some modifications were added when needed. An analysis is presented for their distributions and structures. First, nominal sentences from Classical Arabic in which it is clear that a “pronoun of separation” is not obligatory, are presented, as in (1).

(1) اللهُ غَنِيٌّ حَمِيدٌ

Allah-u          ghanii-un      hamiid-un

Allah-Nom      rich-Nom      praiseworthy-Nom

“Allah is Free of need and Praiseworthy”

(The Holy Quran; 64:6)

In (1), the predication is constructed by mere juxtaposition. The subject and the predicate, in this case AP, provide a sentential reading. The reason why this verse cannot be interpreted as a phrase is that phrases in Arabic must agree in definiteness. This construction provides evidence for the default Nominative case. In (2), a similar verse is presented that differs from (1) only in definiteness:

(2) اللهُ الْغَنِيُّ

Allah-u          Al-ghanii-u

Allah-Nom      Def-rich-Nom

“Allah is the Free of need”

(The Holy Quran; 47:38)

Definiteness agreement raises ambiguity between sentential vs. phrasal reading as in (2). It is argued here, following Eid (1983, 1991), that the intervention of a third personal demonstrative pronoun will provide the sentential reading. This pronoun is known by Arab

grammarians as the “pronoun of separation.” This pronoun surfaces only in the present tense. This is shown in the next verse.

(3) اللَّهُ هُوَ الْغَنِيُّ الْحَمِيدُ

Allah-u **huwa** al-ghanii-u al-hamiid-u

Allah-Nom he Def-rich-Nom Def-praiseworthy-Nom

“Allah is the Free of need, the Praiseworthy” (The Holy Quran; 35:15)

This pronoun, also, can precede predicational NPs optionally as shown in examples

(4) and (5).

(4) ذَلِكَ الْفَوْزُ الْعَظِيمُ

Dhalika l-fauz-u l-‘adim-u

that Def-attainment-Nom Def-great-Nom

“That is the great attainment.” (The Holy Quran, 4:13)

(5) ذَلِكَ هُوَ الْفَوْزُ الْعَظِيمُ

dhalika **huwa** l-fauz-u l-‘adim-u

that he Def-attainment-nom Def-great-nom

“That is the great attainment.” (The Holy Quran, 9:111)

Another note is that subjects are always definite in Classical Arabic but not necessarily the predicate. The examples in (3) and (5) may indicate that the presence of ‘huwa’ requires definiteness on the predicate; therefore, the next example is presented before specified indefinite APs:

(6) إِنَّ رَبَّكَ هُوَ أَعْلَمُ مَنْ يَضِلُّ عَنْ سَبِيلِهِ وَهُوَ أَعْلَمُ بِالْمُهْتَدِينَ

inna raba-ka **huwa** a’lam-u man ya-Dilu ‘an sabili-hi

that Lord-your he most knowing-Nom who 3-strays.ms from way-his.Gen





It was not of much interest in this thesis to include instances of VP since the verb in Arabic is inflected for number, gender, and person. This means that the pronoun functions as anaphoric in all these constructions, even with (8) referring to a full phrase.

Now, let us investigate the environments of the non-present tense copula ‘kana’ in Classical Arabic. This copula comes from the verb ‘kwn’ which means “exist” to be used as a copula verb “to be.” The original meaning was grammaticalized, as a copula used in grammatical constructions. Arab grammarians called the subject of a nominal sentence, in the presence of ‘kana,’ ‘kana’s noun’ and the predicate ‘kana’s predicate.’ Unlike what has been argued for by Arab grammarians that the copula ‘kana’ assigns a nominative case to its subject, it is argued in this thesis that the subject is never affected by ‘kana’ since, even in the absence of ‘kana,’ it carries the nominative case. It is argued here that the nominative case of the subject is the default case. On the other hand, the predicate is assigned an accusative case by ‘kana.’ The verse in (9) presents an example of the use of the past tense copula ‘kana’ before an AP.

(9) كُلُّ الطَّعَامِ كَانَ حَلًا لِبنِي إِسْرَائِيلَ

Kull-u	at-t'aam-i	<b>kana</b>	hill-an	li-bani	Israeal-a
All-Nom	Def-food-Gen	COP	lawful-Acc	for-sons	Israel-Acc

“All food was lawful to the Children of Israel.” (The Holy Quran; 3:93)

The distribution of ‘kana’ in (9) is between the NP subject and the AP predicate. However, the distribution of ‘kana’ as a copula in the Holy Quran is more frequent in initial clause as in (10).

(10) كَانَ النَّاسُ أُمَّةً وَاحِدَةً

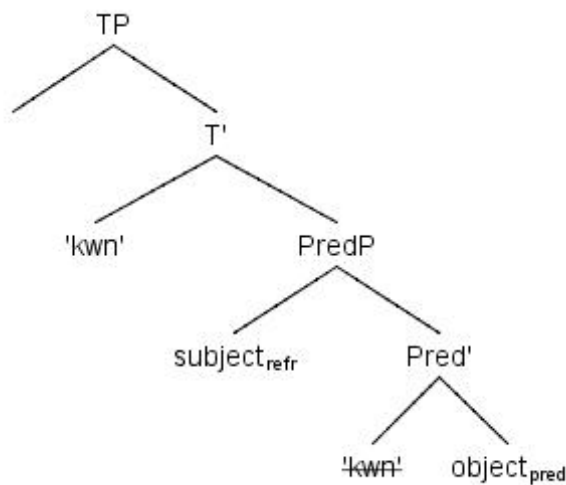
<b>Kana</b>	an-naas-u	ummat-an	wahidat-an
-------------	-----------	----------	------------

COP      Def-people-Nom      nation.f-Acc.Indef      one.f-Acc.Indef

“Mankind was [of] one religion [before their deviation]” (The Holy Quran; 2:213)

Here the copula behaves like a verb showing asymmetrical agreement with the subject. The position of ‘kana’ in Classical Arabic can be higher than the subject and the predicate assigning accusative case to the predicate. However, the derivation may be that ‘kana’ starts before the predicate and after the subject, possibly in PredP, but raises above the subject to ‘T’ to check for tense and for case of the lower predicate through probe. This is represented in (11).

(11)



The subject can raise above T, in Spec-TP or higher, especially when preceded by the complementizer ‘inna.’

So far, a possible derivation for the past and present tenses of nominal sentences in Classical Arabic have been presented. It has been explained that the individuation of the predicate determines phrasal vs. sentential reading distinctions. Moreover, the distribution of the copula ‘kana’ in these nominal sentences was introduced and it was shown that the

copula ‘kana’ is grammaticalized from the verb ‘kwn.’ The data in the Holy Quran does not reflect any loss of phi-features in the pronoun ‘huwa,’ which indicates that it is a third person demonstrative pronoun and not a copula yet. That is, it was used as anaphoric. In the next chapter, it is argued that the anaphoric function of the pronoun in the examples, such as in (8), made it possible for the pronoun to lose some of its phi-features and, eventually, become a present-tense copula.

### **The Distribution of Copulas in Standard Arabic**

Standard Arabic is not very different from Classical Arabic. However, it shows fewer case markers (i.e., short vowels) in most texts but not in pronunciation. In pronunciation, case markers must be indicated in Standard Arabic. Therefore, when reading magazines or newspapers, no short vowels are shown in the text. On the other hand, when teaching Standard Arabic, short vowels have to be taught extensively because they carry the case markers and the melody of the sentences. Nevertheless, other case markers, such as long vowels, are still present in Standard Arabic. These long vowels are markers of the case of dual and plural forms.

Ali (2010, p. 11) indicated:

Arab grammarians explained the presence of pronouns of separation between a subject and its predicate by structurally emphasizing that what comes after ‘huwa’ is the predicate of the subject, providing sentential reading rather than a phrasal, while semantically strengthening the proposition and delivering the meaning that the predicate is a property of the subject”(trans. by thesis author).

These two explanations, according to Ali (2010), show the relationship between structure and value significance. In Chapter 4, it is explained that, in fact, the copula comes with an

identity flavor. The sentences used in Ali (2010) are introduced in (12) and (13) with NP-AP and NP-COP-AP structures.

(12) زيدٌ النشيط

Zaid-un          an-nashiiT-u

Zaid-Nom      Def-active-Nom

“The active Zaid” / “Zaid is the active” (Ali, 2010, p. 11)

The sentence in (12) is ambiguous. It is not clear whether this is a full sentence or a phrase that will be followed by a comment. In order for (12) to be unambiguously understood as a sentence, the third person demonstrative pronoun must be inserted between the subject and the predicate, agreeing in number and gender features with the subject, not necessarily for person. This is done in (13).

(13) زيدٌ هو النشيط

Zaid-un          **huwa**          an-nashiiT-u

Zaid-Nom      COP          Def-active-Nom

“Zaid is the active” (Ali, 2010, p. 11)

The insertion of ‘huwa’ in (13) rules out the phrasal reading such as in (12). The only possible reading for (13) is sentential, that is, the subject-predicate relationship, attained by the presence of this copula. In fact, this provides evidence against small clause representation of (12) since there is an empty position for functional heads that must be filled as in (13).

The fact that the pronoun does not necessarily agree in the person feature accounts for the grammaticalization of the pronoun to become a copula in Standard Arabic and not in Classical Arabic, as shown in the previous subsection. Standard Arabic shows instances

where the copula agrees with the subject in number and gender but not in person. These instances involve first- and second-person pronouns as subjects. Next, examples from Cantarino (1974) (14) and a well-known newspaper in Saudi Arabia that uses ‘huwa’ as a copula in present tense (15) are presented.

(14) أنا هو القلب البشري

Ana	<b>huwa</b>	l-qalb-u	l-basharii
I.m	COP	Def-heart-Nom	Def-human

“I am the human heart” (Cantarino, 1974, p. 434)

(15) أنت هو الذكي

Anta	<b>huwa</b>	D-Dakii
You.sm	COP	Def-smart

“You are the smart one” (Okaz newspaper, 05/09/2012)

The person feature on the pronoun must be uninterpretable in sentences (14) and (15), otherwise the syntax will clash. Throughout this thesis, the interest is on the nominal sentence with overt subjects and not with pro-drop examples. The absence of the subject will lead to the interpretation of the pronoun as such, since they are homophonous. Next, examples of equational sentences in the present tense are given.

(16) الحامي هو الحرامي

Al-hamii	<b>huwa</b>	al-haramii
Def-protector	COP	Def-thief

“The protector is the thief” (Al-madina newspaper; 14/10/2014)

In case the subject is followed by an indefinite noun or indefinite adjective, phrasal reading is ruled out and the only possible reading is sentential, as in (17). This is similar

to the Classical Arabic example in (1) above. Then the presence of a present tense copula is not necessary. In fact, many speakers of Standard Arabic tend to avoid the use of the present tense copula ‘huwa’ in this construction. Therefore, the argument that definiteness affects the structure of the sentence is accounted for in (17).

(17) الفتاةُ جميلةٌ

Al-fataat-u jamiilat-un

Def-girl-Nom beautiful-Nom

“The girl [is] beautiful”

(Thesis author)

It is not only definiteness that plays a role here, but also how specific the predicate is, as clearly stated by Khan (1984). He explained that it is not the definiteness but the degree of individuation/salience of the predicate that is required, that is, being qualified (Hierarchy 5). When the predicate is specified enough, the pronoun can function as a copula. Example (18) shows the specified predicate NP.

(18) المواطن هو رجل الأمن الأول

Al-muuaTin-u **huwa** rajul-u al-‘amn-i al-‘auwal-i

Def-citizen-Nom COP man-Nom Def-security-Gen Def-first-Gen

“The citizen is the first security man”

(Al-madina newspaper; 10/08/2014)

In this structure, the predicate is specified in a genitive construct. This specification allows the structure to be emphasized by the copula ‘huwa’ that agrees with the subject in number and gender. The present tense copula can precede a PP as in (19), though not in a locational sense.

(19) كل وزير هو في النهاية مسؤول

Kull waziir-in **huwa** fi an-nihaaiat-i mas’uul-un

Every minister-Gen COP at Def-end-Gen responsible-Nom

“Every minister at the end is responsible” (Al-madina newspaper; 25/05/2013)

In case the subject and the predicate differ in gender and number, the copula agrees with the subject, as in (20):

(20) الفشل هو الفرصة التي تتيح لك البدء من جديد

l-fashal huwa l-furSat-u allatii tutiih laka l-bad'-u min gadiid

Def-failure.m COP.m def-chance.f which.f allow for.you def-start-Nom again

“Failure is the chance, which allows you to start fresh” (Okaz newspaper, 05/09/2012)

Let us now turn to the distribution of non-present tense copula ‘kana.’ Interestingly, the non-present tense copula ‘kana’ shares the same distribution with the copula ‘huwa.’ The copula ‘kana’ is more frequent in the second position, after the subject, in Standard Arabic. In (21), an example of the copula ‘kana’ in a nominal sentence is presented.

(21) البلوي كان مهتما بالعمل الميداني

Al-balawi kana muhtam-an bi-l-'amal-i l-maydani-i

def-balawi.Nom COP.3ms interested-Acc with-def-work-Gen def-field-Gen

“Al-Balawi was interested in fieldwork” (Okaz newspaper; 08/01/2015)

The copula ‘kana’ is inflected for the masculine-singular third person features. It assigns an accusative case to the predicate, AP in (21). In (22), another example with a feminine subject and an NP as its predicate is presented.

(22) مجلة «العربي» كانت مصدرا للتثقيف

majallat-u l-'arabi kanat masdar-an li-t-tathqiif-i

magazine.f-Nom def-'arabi COP.3fs source-Acc.Indef for-def-culture-Gen

“The Arabian magazine was a source for the culture” (Okaz newspaper; 02/02/2013)



In (23) and (24), examples where the subjects are first and second person, respectively, are presented.

(23) أنا كنت البديل

ana     **kuntu**     l-badiil-a

I     COP.1s     def-alternative-Acc

“I was the alternative”

(Okaz newspaper; 21/12/2013)

(24) أنت كنت الوحيد

Anta     **kunta**     l-wahiid-a

You     COP.2ms     def-only one-Acc

“You were the only one”

(Okaz newspaper; 23/05/2013)

The sentences in (23) and (24) are in the past tense. If we want to change them to present tense, we need to remove the ‘kana’ forms and the accusative case on the predicate. Interestingly, the copula ‘huwa’ can replace ‘kana’ in the same position in the present tense and can be inflected for number and gender only. Obviously, the copula ‘huwa’ does not assign an accusative case, and this can be attributed to one of two reasons. First, the ability of ‘kana’ to assign case is due to the fact that ‘kana’ was a full verb before it was grammaticalized, while the copula ‘huwa’ is grammaticalized from a demonstrative pronoun, which does not assign cases. The second reason might be attributable to the fact that Arabic speakers gradually neglected case and, therefore, it became missing in understood situations. This resulted in the default case of the predicate after ‘huwa.’ Both reasons seem plausible.

So far, examples have been presented from Standard Arabic from newspapers and the literature. Examples where the copula clearly makes a distinction between sentential

and phrasal readings have been presented. In addition, examples of specified predicate similar to Classical Arabic were presented, on a par with Khan's analysis (1984). Interestingly, the examples in (14) and (15) show clear-cut evidence that the person feature is lost from the copula, which accounts for the reanalysis of the demonstrative pronoun to copula in Standard Arabic. An example where, in case the subject and the predicate differ in gender and number, the copula agrees with the subject in gender and number was presented.

Furthermore, it is important to observe that, when there is no overt subject in the clause but the pronoun, there is no evidence that this pronoun is functioning as a copula. It must be the subject with thematic roles. When there is another element that can function as the subject, the pronoun can function as a copula in the present tense. In addition, the non-present tense copula 'kana' is in complementary distribution with the copula 'huwa' with only a case-assigning difference. Finally, two possible reasons for the inability to assign the accusative case by the present-tense copula 'huwa' was provided.

### **The Distribution of Copulas in Hijazi Arabic**

Now, we turn to the Western Saudi 'Hijazi' dialect. By Hijazi dialect, today's Hijazi dialect is meant, which has developed radically since the 6th and 7th century. Case is lost in this dialect, except from pronouns, as mentioned above. Today's Hijazi is much simpler and employs many grammatical words developed from lexical words, by grammaticalization and layering. In this thesis, the interest is in only one grammatical word, the copula 'huwa.' The copula developed more to become obligatory with negated nominal sentences, possibly due to the loss of the negative copula 'laysa' in Classical and Standard Arabic. The discussion begins with the simple sentence in (25).

أحمد الدكتور (25)

Ahmad ad-duktoor

Ahmad def-doctor

“Ahmad is the doctor”/”the doctor Ahmad” (Thesis author)

This sentence is ambiguous between sentential and phrasal readings. This case is similar to (12) in the Standard Arabic examples of this chapter. In order to make it clear that the second word is a predicate, we need to employ the copula ‘huwa’ between the subject and the predicate to remove any confusion, as in (26).

أحمد هو الدكتور (26)

Ahmad **huwa** ad-duktoor

Ahmad COP def-doctor

“Ahmad is the doctor” (Thesis author)

The copula ‘huwa’ and the copula ‘kana’ cannot occur together. If they did, the form ‘huwa’ would be interpreted as a pronoun, inflected for person, gender and number. Sentence (27) is similar to sentence (14) in the Standard Arabic examples of this chapter, but used here to show that the copula ‘huwa’ is employed in the Hijazi dialect:

أنا هو الدكتور (27)

Ana **huwa** ad-duktoor

I COP def-doctor

“I am the doctor” (Thesis author)

The use of the third person pronoun with the first-person pronoun subject indicates that the pronoun loses the person feature when it is used as a copula in the Hijazi dialect, too. The same thing occurs with the second-person subject, as follows in (28).

أنت هو الدكتور (28)

Anta **huwa** ad-duktoor

You COP def-doctor

“You are the doctor”

(Thesis author)

Sentence (29) is strange, indicated by ‘?’:

هو هو الدكتور? (29)

Huwa huwa ad-duktoor

? “He is the doctor”

(Thesis author)

One of the limitations of this thesis, and of any study of dialects as well, is the variations and the degree of acceptance among speakers of that dialect. If we assume the sentence in (29) is acceptable, then we need to focus more on the context. Since the pronoun and the present tense copula are homophonous, two interpretations are possible. If the first ‘huwa’ is intended to be the subject, then the second must be a copula, in Pred. If the first ‘huwa’ is intended by the context of the sentence as the question particle and the second ‘huwa’ as the pronoun, then the first must be base-generated in lower position in the tree, in Pred, and rise to fill a position for the question particle. The second ‘huwa’ will be the subject of the sentence inflected for person, gender, and number. The use of the copula ‘huwa’ as a question particle is presented later.

Let us now investigate the non-present tense copula ‘kana’ in the Hijazi dialect and show how it is in complementary distribution with the present tense copula ‘huwa’ and does not show any difference between their structures, since case is lost, as in the dialect (30).

أنا كنت الدكتور (30)

Ana **kunt** ad-duktoor

I COP.ms def-doctor

“I was the doctor”

(Thesis author)

The sentence in (30) changes (27) from present tense to past tense just by replacing the ‘copula ‘huwa’ with the copula ‘kana.’ The same change can be done with (26) and (28), and with feminine gender, in which case the copula is ‘hiya’ (i.e., inflected for gender feature). These sentences account for the fact that the copula ‘huwa’ is in complementary distribution with ‘kana.’

Furthermore, the negation of nominal sentences in the Hijazi dialect accounts for the complementary distribution between ‘huwa’ and ‘kana’ after the negative particle ‘ma.’ In addition, the present-tense copula ‘huwa’ passes the syntactic test of verbs with negative particles. It follows the negative particle ‘ma’ directly and does not allow any interference between them, which is similar to ‘kana’ and all verbs in the Hijazi dialect. The only negative particles that survive in most of the dialects, specifically the Hijazi, are ‘la’ with imperatives and ‘ma’ elsewhere. This thesis had an interest in ‘ma’ in nominal sentences because it is the only negative particle that is used in predicate phrases. When negating (25) or (26) we find the same sentence in (31).

(31) أحمد ما هو الدكتور

Ahmad ma **hu(wa)** ad-duktoor

Ahmad not COP.ms def-doctor

“Ahmad is not the doctor”

(Thesis author)

Sentence (31) requires the presence of the copula ‘huwa’ to become grammatical. The ungrammaticality of (32), represented by ‘\*,’ explains the need for the present tense copula ‘huwa.’

(32)\* أحمد ما الدكتور

Ahmad ma ad-duktoor

Ahmad not def-doctor

\*“Ahmad not the doctor”

(Thesis author)

On the other hand, sentences (27) and (28) require different forms, as in (33) and (34):

(33) أنا ماني الدكتور

Ana **mani** ad-duktoor

I not-me def-doctor

“I am not the doctor”

(Thesis author)

(34) أنت مانت الدكتور

Anta **manta** ad-duktoor

You not-you def-doctor

“You are not the doctor”

(Thesis author)

The negative pronouns ‘mani’ and ‘manta’ show full agreement with the subject. Interestingly, the negative copula in sentence (31) was developed, or grammaticalized, to become ‘mhu’ and ‘mu,’ a combination of the negative element ‘ma’ and the copula ‘huwa.’ The phonological process that underlies the development to ‘mu’ is called elision. The scenario is similar to the copula ‘shi’ in Chinese when ‘shi’ is optional in positive sentences but obligatory in negative contexts with ‘bu.’ The negative copula ‘mu’ is used

more frequently in the Hijazi dialect. Sentence (35) presents sentence (31) with the new form.

(35) أحمد مو الدكتور

Ahmad      **mu**              ad-duktoor

Ahmad      not.COP          def-doctor

“Ahmad is not the doctor” (Thesis author)

This negative copula, ‘mu,’ is generalized in all the contexts of nominal sentences negation in the present tense. Below, the negative copula with sentences (33) and (34) is presented in (36) for the first person and (37) for the second person, respectively.

(36) أنا مو الدكتور

Ana      **mu**              ad-duktoor

I      not.COP          def-doctor

“I am not the doctor” (Thesis author)

(37) أنت مو الدكتور

Anta      **mu**              ad-duktoor

You      not.COP          def-doctor

“You are not the doctor” (Thesis author)

It is argued here that the negatives (33) and (34) differ from (36) and (37) in that the latter are negative copula examples while the earlier are negative pronoun examples. The sentences (36) and (37) account for the loss of the person feature of the negative copula ‘mu.’ The feminine gender agreement is preserved in positive nominal sentences, while in negative nominal sentences it is most frequently lost. Compare sentences (26) above with (38) below.

هدى هي الدكتورة (38)

Huda **hiya** ad-duktoorah

Huda COP def-doctor-fs

“Huda is the (female) doctor” (Thesis author)

Negation of sentence (38) can be done by any of (39), (40), or, as predicted (41) below where ‘mi’ is inflected for feminine gender.

هدى ما هي الدكتورة (39)

Huda ma **hiya** ad-duktoorah

Huda not COP.f def-doctor-fs

“Huda is not the (female) doctor” (Thesis author)

هدى مي الدكتورة (40)

Huda **mi** ad-duktoorah

Huda not.COP.f def-doctor-fs

“Huda is not the (female) doctor” (Thesis author)

هدى مو الدكتورة (41)

Huda **mu** ad-duktoorah

Huda not.COP.m def-doctor

“Huda is not the (female) doctor” (Thesis author)

The sentence in (41) accounts for the loss of the gender feature of the negative copula ‘mu.’ Next, another sentence that accounts for the loss of the number feature also is provided in (42):

إحنا مو في البيت (42)

Ihna **mu** fi l-bait



We not.COP.s at def-home

“We are not at home” (Thesis author)

The negation of the non-present tense nominal sentence involves ‘ma’ and ‘kan.’ Interestingly, ‘ma kan’ is in complementary distribution with the negative copula ‘mu’ in the Hijazi dialect. The distribution is accounted for by negating the non-present tense sentence (41) in (43) for singular, and the non-present tense (42) in (44) for plural.

(43) هدى ما كانت الدكتورة

Huda ma **kanat** ad-duktoorah

Huda not COP.3sf def-doctor

“Huda was not the (female) doctor” (Thesis author)

(44) إحنا ما كنا في البيت

Ihna ma **kuna** fi l-bait

We not COP.1p at def-home

“We were not at home” (Thesis author)

Questions in the Hijazi dialect are mainly conveyed through raising intonation or by moving the copula to a position higher than the subject position. The sentences in (45), (46) and (47) account for the use of the present-tense copula ‘huwa’ as a question particle when it rises to a position higher than the subject, probably to C.

(45) هو انتو في البيت

**Huwa** antu fi l-bait

Q you.p at def-home

“Are you at home?” (Thesis author)

(46) هو انتي في البيت

**Huwa** anti fi l-bait

Q you.fs at def-home

“Are you at home?”

(Thesis author)

(47) هي أمك نايمة

**Hiya** ummik naaimah

Q your.mother.2fs asleep

“Is your mother asleep?”

(Thesis author)

So far, it has been indicated that case is lost in most dialects, except for pronouns. The loss of case makes ‘huwa’ in more complementary distribution with the copula ‘kana,’ although optionally in present-tense nominal sentences. The reason the distribution is described as more complementary is that when replacing ‘huwa’ with ‘kana,’ there is no need to represent the accusative case on the predicate since case is lost. In addition, I showed that the copula ‘huwa’ lost the person feature, similar to Standard Arabic. Interestingly, negation of the nominal sentences in Hijazi Arabic requires the copula ‘huwa,’ obligatorily, in the present tense. The copula became more grammaticalized by losing gender and number features when it was attached to the negative particle ‘ma.’ The new form is the negative copula ‘mu,’ which is not specific to the Hijazi dialect but to all Gulf and Levantine dialects. One possible reason for the obligatory role of the copula ‘huwa’ in negation is the loss of the negative copula ‘laysa.’ The movement of the copula ‘huwa’ or ‘hiya’ to a higher position than the subject (i.e., in CP), can explain the question feature on the copula in that position.

## Summary

In this chapter, three forms of Arabic, namely Classical, Standard, and Hijazi were introduced. The different stages that the pronoun ‘huwa’ went through in its grammaticalization were shown. In the first stage, Classical Arabic did not show feature loss in the pronoun; as a result, the pronoun was not used as a copula. This stage is very important for the copula cycle. The extensive use of the third person demonstrative pronoun ‘huwa’ as anaphoric to sentences or phrases made it possible for it to function in predicational phrases in the next stages. In addition, it was explained that it is not only definiteness that connects the subject and the predicate but also how qualified or specific the predicate is. Finally, it was explained that the copula ‘kana’ is derived from the verb ‘kwn.’ In the second stage, Standard Arabic shows a loss in the person feature of the pronoun. The loss of the person feature of the pronoun made it possible for the pronoun to be used as a copula in copular sentences with first- and second-person subjects. It was shown that the copulas ‘huwa’ and ‘kana’ were in complementary distribution but used for different tenses, and only ‘kana’ had the ability to assign the accusative case to the predicate. Two possible reasons were provided for the inability to assign the accusative case by the copula ‘huwa.’ Standard Arabic still employs case but not in writing, only in pronunciation. In the third stage, the Hijazi dialect lost case, except in pronouns in most cases. The copula ‘huwa’ was grammaticalized more and lost gender and number features. The loss of the gender and the number features took place when the copula was attached to the negative particle ‘ma.’ The result of the attachment was a negative copula ‘mu.’ This negative copula is similar to the negative copula in Egyptian and Moroccan dialects,

which may have gone through the same stages. The copula was also used as a question particle in Hijazi, by movement.

## **CHAPTER 4**

### **THE STRUCTURAL AND FEATURE-BASED ANALYSIS**

#### **Introduction**

In this chapter, a structural and feature-based account for the copula and negative cycles in Arabic is provided. The structural-based analysis relies heavily on the Head Preference Principle (van Gelderen 2004, 2011, forthcoming). On the other hand, the feature-based analysis is based on Feature Economy (van Gelderen 2007, 2008a, 2008b, 2009). The two analyses provide an account for the grammaticalization that happened in Arabic copulas in nominal sentences and in negative constructions. As a result, cyclical change is observed.

In the next section, some of the examples of Classical Arabic from the previous chapter are explained. Represented is a copula cycle originated from a verb in Classical Arabic. Then in the following section, the grammaticalization of the Standard Arabic demonstrative pronoun to present-tense copula in equational sentences, as a copula cycle originated from a demonstrative pronoun in Standard Arabic, is explained. Following this, the development of the copula in the Hijazi dialect is shown, through more grammaticalization, to be involved in negative and question constructions, a specific characteristic of verbs. The negative construction with the copula is explained as a negative cycle. Finally, a summary of the chapter is provided.

#### **Copula in Classical Arabic**

Classical Arabic shows characteristics of highly synthetic languages, which are reflected in the data drawn from the Holy Quran in the previous chapter. These verses do not show copula in present-tense nominal sentences. All the instances of the demonstrative

pronoun show full agreement in phi-features with the subject NPs. In addition, the demonstrative pronoun is used as anaphoric to full phrases such as (8) in the previous chapter. However, nominal sentences in the non-present tense require the presence of a specific copula (i.e., copula ‘kana’). It was argued that this copula was originated from the verb ‘kwn,’ which means ‘exist.’ The change in (1) was suggested to be the possible path for this grammaticalization, in which Feature Economy was relied upon, following van Gelderen (2004, 2011, forthcoming).

(1)

Syntax	V	>	Pred
Semantics	Existence		[tense]

The verb ‘kwn’ in Classical Arabic was grammaticalized to function in a predicate phrase carrying a tense feature. This is clearly shown in the differences between sentences (2), and sentence (9) from the previous chapter, repeated below as (3).

(2) **يَوْمَ يَقُولُ كُنْ فَيَكُونُ**

Yawm	ya-qulu	kun	fa-yakuun
The.day	3ms-say	be	then-3ms-be

“The day he says Be then it is” (The Holy Quran; 6:73)

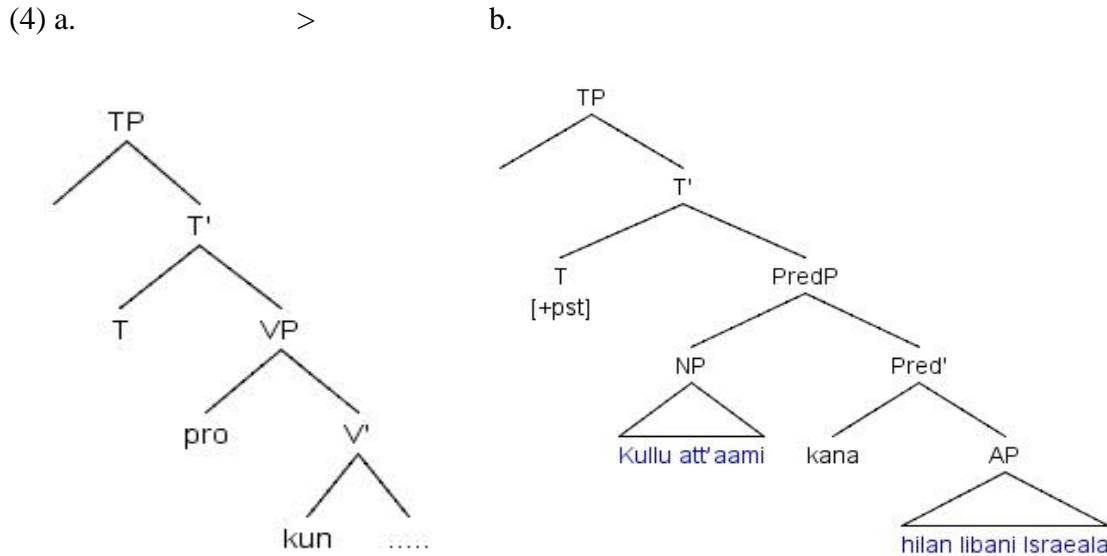
(3) **كُلُّ الطَّعَامِ كَانَ حَلَالًا لِّبَنِي إِسْرَائِيلَ**

Kull-u	at-t’aam-i	<b>kana</b>	hill-an	li-bani	Israeal-a
All-Nom	Def-food-Gen	COP	lawful-Acc	for-sons	Israel-Acc

“All food was lawful to the Children of Israel.” (The Holy Quran; 3:93)

The sentence in (2) shows the use of the verb ‘kwn’ twice, in imperative and resultative forms. On the other hand, the sentence in (3) shows the use of the copula ‘kana’

in the past tense. The change in (1) represents the change from sentence (2) to sentence (3), namely from verb to copula in Classical Arabic. Structural representations of (2) and (3) indicating the change from verb to copula are in (4) below:



The sentence in the tree (4a) shows the use of ‘kwn’ as a verb. ‘Kwn’ is a full verb (i.e., argument in the structure). On the other hand, the sentence in (4b) shows the use of ‘kwn’ as a copula, which changes to ‘kana.’ The copula is positioned in a functional category, PredP. The copula’s function in the structure is to connect the two parts of the nominal sentence, showing agreement with the subject, and carrying the tense of the sentence. The verb and the copula are still present in all the dialects of Arabic.

So far, a structural and feature-based account for the grammaticalization of the non-present tense copula in nominal sentences in Classical Arabic has been presented. It was argued that this copula is in head position of PredP and can be distinguished from the verb ‘kwn,’ which occupies the head position of VP. The change is explained as a copula cycle from verb to copula. The fact that the copula is originated from a verb explains its ability to assign the accusative case to its complement.

## The Change from Pronoun to Copula in Standard Arabic

Standard Arabic shows a change from a demonstrative pronoun to a copula. The change is accounted for by the loss of the person feature of the pronoun. The loss of the person feature led the pronoun to reanalyze from the specifier position to head in PredP. The feature loss is represented in (5), following van Gelderen (forthcoming, p. 4) with some differences in the formal features:

(5)	D	>	Pred
	Huwa		huwa
Semantic	[deictic]		[identity]
Formal	[i-3MS]		[i-MS]

The change in (5) represents the uninterpretability of the person feature on Pred as derived from interpretable person feature on the pronoun. This uninterpretability accounts for the grammaticality of the sentence (14) (in the Standard Arabic section in the previous chapter) with first person and the sentence in (15) (in the Standard Arabic section in the previous chapter) with second person, repeated below as (6) and (7) respectively:

(6) أنا هو القلب البشري

Ana	<b>huwa</b>	l-qalb-u	l-basharii
I.m	COP	Def-heart-Nom	Def-human

“I am the human heart”

(Cantarino, 1974, p. 434)

(7) أنت هو الذكي

Anta	<b>huwa</b>	D-Dakii	
You.sm	COP	Def-smart	

“You are the smart one”

(Okaz newspaper; 05/09/2012)



The first pronoun in Arabic, as in (6), is not inflected for gender, so when the speaker is female, the copula will be inflected for feminine feature using ‘hiya.’ The second person pronoun in (7) agrees with the copula in gender, since both are masculine, but in case the second pronoun is inflected for gender feminine (i.e., ‘anti’), and the copula must agree in gender, too. The same is applied to the number feature agreement. When the pronoun or the subject is plural, the copula must agree in number as ‘hum’ or ‘hun,’ but they are rarely used in plural.

Let us now turn to the structural representation of the change from pronoun to copula in Standard Arabic. First is the clause structure of present tense nominal sentences without a copula, which are represented as in (12) from the previous chapter, repeated below as (8).

(8) زيدٌ النشيطُ

Zaid-un          an-nashiiT-u

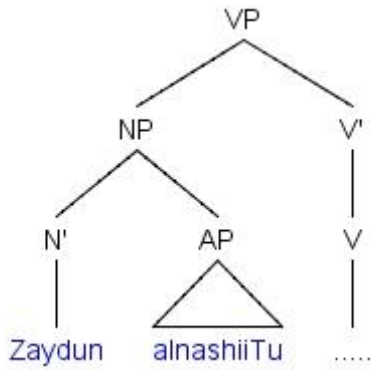
Zaid-Nom      Def-active-Nom

“The active Zaid” / “Zaid is the active”

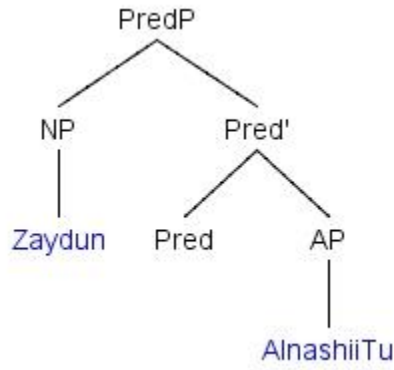
(Ali, 2010, p. 11)

As explained in the previous chapter, the sentence in (8) is ambiguous between phrasal and sentential readings and is similar to the nominal sentences in Mandarin and Hebrew. Two different structures for the two readings are represented below in (9).

(9) a.



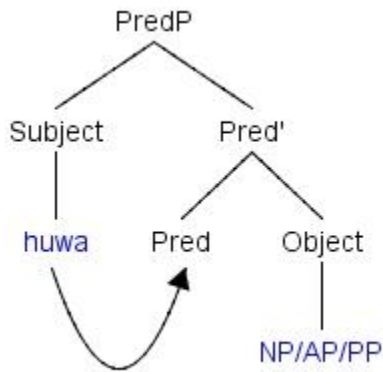
b.



Speakers of Standard Arabic use the same utterance to convey the two structures in (9a and b). The structure of (9a) indicates the phrasal reading of the sentence in (8), while (9b) indicates the sentential reading. The head Pred in (9b) is not occupied by any lexeme, but it is argued that this head carries a location feature to make the predication possible. The proposition of (9b) may be presented, phonologically, by a small pause after the subject and falling intonation on the last syllable of the predicate. However, the structural representation provided in (9) provides a plausible structural analysis and does not contrast with the phonological analysis.

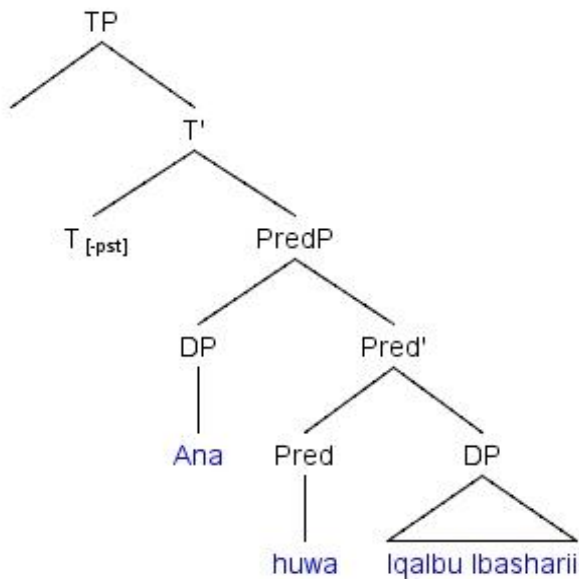
The grammaticalization of the demonstrative pronoun to copula is accounted for by the reanalysis of the demonstrative pronoun from specifier to the head of PredP. Before representing the sentences in (6) and (7), an explanation of the grammaticalization of the pronoun to copula is next in (10).

(10)

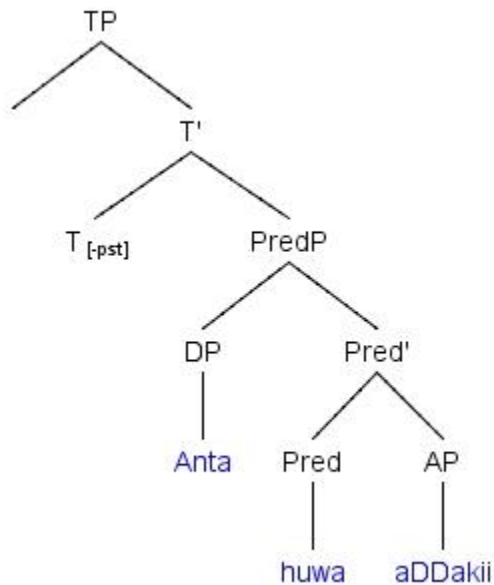


The structure in (10) represents the reanalysis of the pronoun from specifier to head position driven by Feature Economy and Head Preference Principle as in van Gelderen (2011, p. 130). The result is that the pronoun, optionally, functions as a copula in predicational sentences. Now the structures of sentences (6) and (7) are represented in (11) and (12), respectively:

(11)

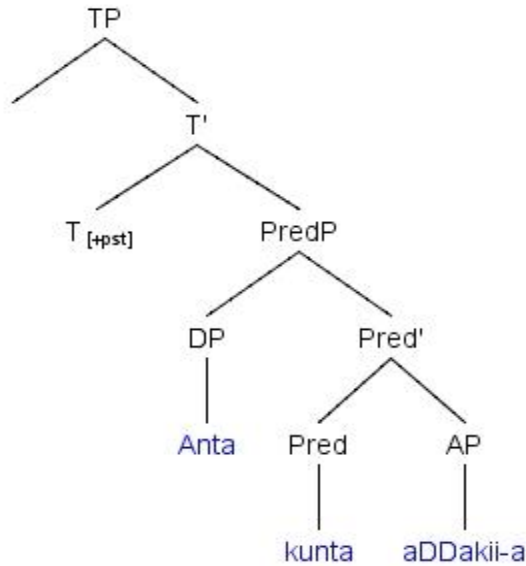


(12)



The structures in (11) and (12) represent the loss of person feature from the pronoun by showing the reanalysis from specifier to head position. The reanalysis led the pronoun to function as a copula in the functional projection PredP. The function of the copula is to connect the two parts of the nominal sentence, showing agreement with the subject, and carrying the tense of the sentence. The feature [-pst] on 'T' represents the present tense of the sentences. Now let us turn to the past tense of the sentence in (7). The copula of the non-present tense is 'kana' and must be involved. This is represented in (13).

(13)



The sentence in (13) shows that ‘huwa’ and ‘kana’ are in complementary distribution. The only difference is the accusative case marker ‘-a’ on the predicate. The ability to assign an accusative case may be attributable to the fact that the non-present tense copula ‘kana’ originated from a verb, ‘kwn.’ The feature [+pst] on ‘T’ represents the past tense of the sentence. Pred checked its tense feature with ‘T’ by c-command relationship.

Although the non-present tense copula ‘kana’ lost the semantic meaning of the verb ‘kwn,’ it is always inflected for person, number and gender similar to verbs in Classical and Standard Arabic. The full paradigm of ‘kana’ inflection is represented in (14):

(14)	Singular	Dual	Plural
1 <sup>st</sup>	kuntu	kunna	kunna
2 <sup>nd</sup> M	kunta	kuntumaa	kuntum
2 <sup>nd</sup> F	kunti	kuntumaa	kuntunna
3 <sup>rd</sup> M	kana	kanaa	kanuu

3<sup>rd</sup> F kanat kanataa kunna

So far, the grammaticalization and reanalysis of the demonstrative pronoun to copula in Standard Arabic is accounted for. The feature-based analysis for the change from pronoun to copula through the loss of person feature has been presented. Also presented is a structural account for the grammaticalization and reanalysis of the pronoun from a specifier position to head position in PredP. The fact that it is located in the functional head (i.e., PredP), explains the function of the pronoun as a copula in this structure. The structures of the two copulas in the data were compared and accounted for their complementary distribution relationship. An agreement paradigm was provided to show the agreement on the non-present tense copula to be compared with the agreement paradigm of the same copula in the Hijazi dialect. Following Baker (2004), I assume that, unlike Pred ‘kana,’ ‘huwa’ does not assign the accusative case to the subject. On the other hand, Pred ‘kana’ assigns the accusative case to its complement.

### **The Change from Pronoun to Copula in Hijazi Arabic**

The paradigm in (14) above lost some of its features in the Hijazi dialect, namely the dual agreement and person agreement of 1st singular and 2nd masculine singular, and gender of 2nd and 3rd plural. The singular forms lost the final vowels in the Hijazi dialect except in the feminine forms. This is represented in (15) next.

(15)	Singular	Dual	Plural
1 <sup>st</sup>	kunt	kunna	kunna
2 <sup>nd</sup> M	kunt	kuntuu	kuntuu
2 <sup>nd</sup> F	kunti	kuntuu	kuntuu
3 <sup>rd</sup> M	kan	kanuu	kanuu

3<sup>rd</sup> F kanat kanuu kanuu

The similarities between dual and plural forms indicate not only the loss of dual number but also its fusion with the plural number. This is identical to verbal agreement in the Hijazi dialect. The verbal agreement paradigm in (16) is represented using the verb ‘akal,’ which means, “ate” but the dual agreement is ignored since it is similar to the plural agreement.

(16)	Singular	Plural
1 <sup>st</sup>	akalt	akalna
2 <sup>nd</sup> M	akalt	akaltuu
2 <sup>nd</sup> F	akalti	akaltuu
3 <sup>rd</sup> M	akal	akaluu
3 <sup>rd</sup> F	akalat	akaluu

Interestingly, the copula ‘huwa’ lost the dual agreement, person agreement as in Standard Arabic, and gender feature of the plural. This is represented in (17) next.

(17)	Singular	Plural
M	huwa	hum(a)
F	hiya	hum(a)

This accounts for the grammaticalization of the pronoun to copula in the Hijazi dialect in that it shows verbal characteristics on the present tense copula ‘huwa.’

Negation of nominal sentences in Classical and Standard Arabic employs the negative copula ‘laysa.’ This negative copula originated from the combination of the negative element ‘la’ and the lexeme ‘aysa,’ which mean, ‘existence’ or ‘exist.’ This negative copula grammaticalized to show verbal characteristics through agreement with

the subject. Its main use is before nonverbal elements. By looking up every instance of ‘laysa’ in the Holy Quran, no instance of using ‘laysa’ before verbs was found. However, the negative copula generalized to include verbal sentences (i.e., before verbs) in Standard Arabic. The use of the negative copula ‘laysa’ before verbs made it a negative particle negating and category. This negative particle weakened and is lost in most Arabic dialects today, including the Hijazi dialect. This represents a linguistic cycle.

The next step is to employ a renewal. Speakers of these dialects employ different negative copulas (i.e., renewals) by combining the negative element ‘ma’ with copulas available to them. As predicted by the cycle, this renewal will follow similar changes until it becomes weak and gets lost, and the cycle continues. This is explained in (4) from the first chapter, repeated here as (18).

(18) Negative Cycle

Negative argument > negative adverb > negative particle > zero

The most surviving negative element is ‘ma.’ This negative element survived in the Hijazi dialect. However, the position of the negative ‘ma’ has changed radically in the three stages in this thesis. In Classical Arabic, the position of this negative ‘ma’ can come before nouns and verbs. However, in Standard Arabic it appears less frequently before nouns but more often before verbs.

Finally, ‘ma’ comes before verbs and never before nouns, adjectives, and bare prepositions (i.e., prepositions without pronoun agreement) in the Hijazi dialect. This means that ‘ma’ became a preverbal negative. In order to compensate for the missing verb, speakers of the Hijazi dialect combined the negative ‘ma’ with the copula ‘huwa’ in present tense nominal sentences.



Next presented are examples of negative nominal present tense sentences from the Hijazi dialect's data in the previous chapter (31) and (32), repeated here as (19) and (20).

(19) أحمد ما هو الدكتور

Ahmad ma **hu(wa)** ad-duktoor

Ahmad not COP def-doctor

“Ahmad is not the doctor”

(Thesis author)

Sentence (19) requires the presence of the copula ‘huwa’ after the negative ‘ma’ to become grammatical. This explains the ungrammaticality of (20) represented by ‘\*’.

(20)\* أحمد ما الدكتور

Ahmad ma ad-duktoor

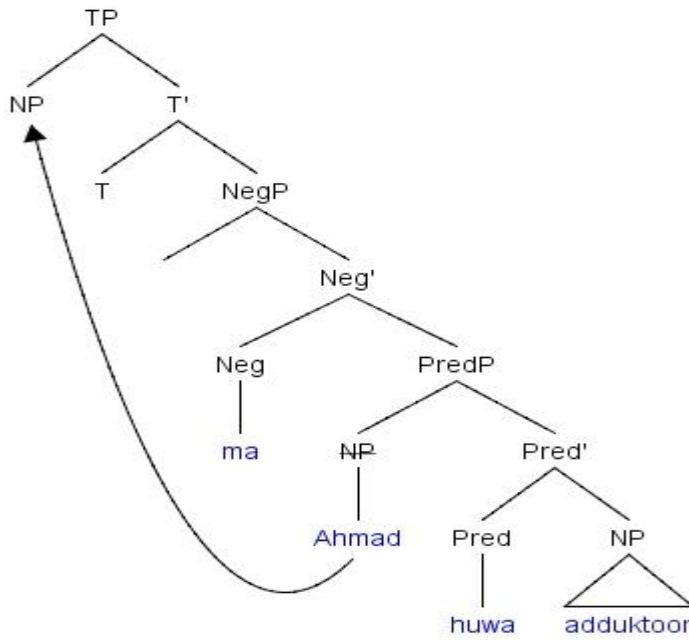
Ahmad not def-doctor

\*“Ahmad not the doctor”

(Thesis author)

The preverbal negative ‘ma’ needs a following verb to strengthen its connection with nonverbal elements in the sentence. The copula ‘huwa’ in the present tense provides the required assistance for the negative particle to precede nonverbal elements. The structure of sentence (19) is presented next in (21).

(21)



In this structure, the subject moves to Spec of TP and leaves the negative particle ‘ma’ and the present tense copula ‘huwa’ with no interference between them. If we change the tense of the sentence in (19) to the past, we get the sentence in (22) and its structure in (23) below.

(22) أحمد ما كان الدكتور

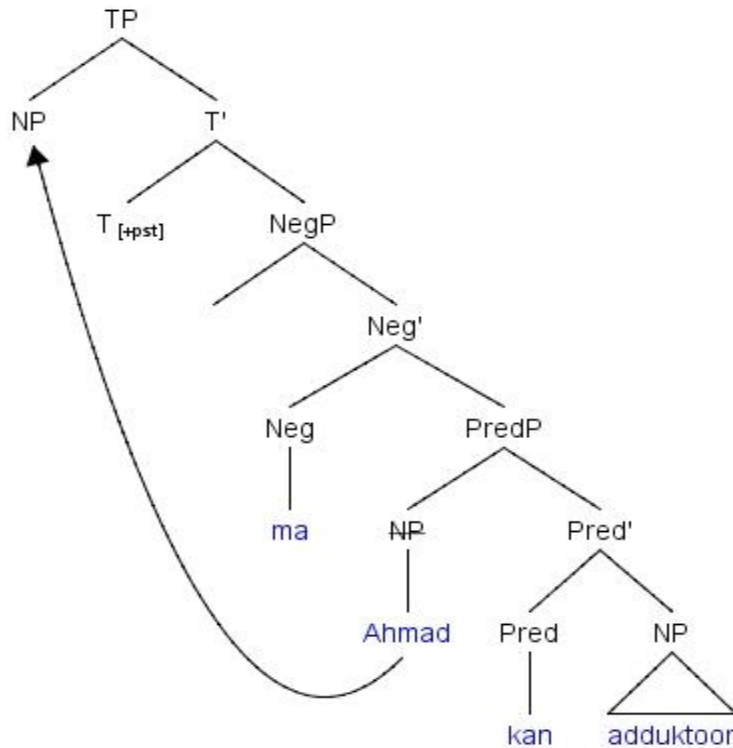
Ahmad ma **kan** ad-duktoor

Ahmad not COP def-doctor

“Ahmad was not the doctor”

(Thesis author)

(23)



Similar to the sentence and the structure in (19) and (21), if we delete the copula, we get an ungrammatical sentence in (22) and (23). This accounts for the complementary distribution between ‘huwa’ and ‘kana’ that is determined by the tense of the sentence. Another note, two possible movements can explain this structure. On the one hand, the subject cannot stay in its base-generated position in negated sentences. Therefore, the subject must rise to a position higher than the negative particle. If the subject stays between the negative particle and the copula, the result is an ungrammaticality judgment of the sentence by the speakers of this dialect. On the other hand, the copula must rise to the NegP to avoid any interference between them. This accounts for the strong relationship between the negative particle and the copula.

Interestingly, the obligatory role of the copula ‘huwa’ after the negative particle is not restricted to NPs predicates. The present tense copula ‘huwa’ is obligatory in negated sentences with APs and PPs. The sentences in (24) and (25) show negated present tense sentences with AP and PP predicates.

(24) السيارة ما هي قوية

As-sayaarah            ma    **hi(ya)**            qawiih

Def-car                not    COP                strong

“The car is not strong.”

(Thesis author)

(25) أحمد ما هو في البيت

Ahmad            ma    **hu(wa)**            fi    l-bait

Ahmad            not    COP                at    def-home

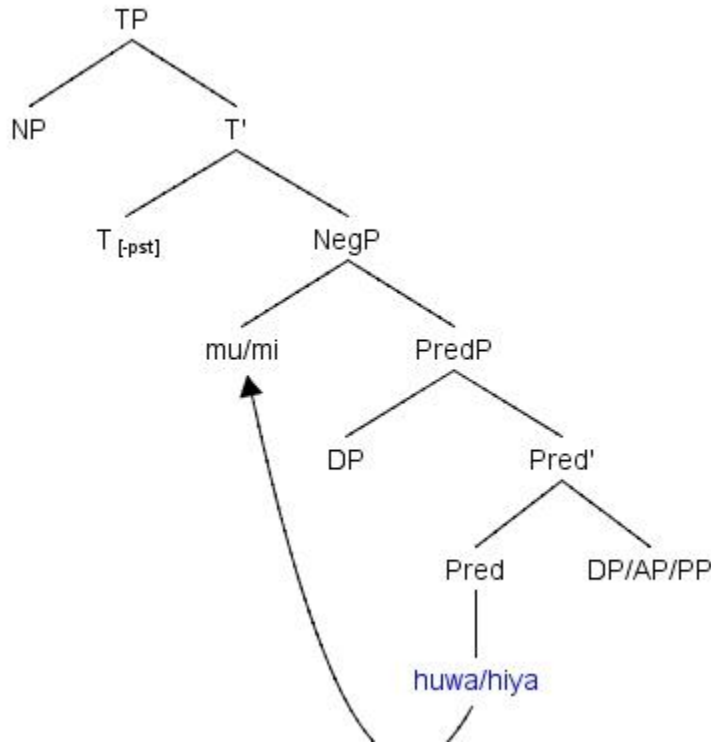
“Ahmad is not at home.”

(Thesis author)

Similar to sentence (19), the sentences in (24) and (25) must have Pred ‘hiya’ or ‘huwa’ depending on the gender of the subject. If the copulas are deleted from these sentences, the result is ungrammatical sentences. In addition, they are in complementary distribution with ‘kana’ in non-present tense.

It is argued here that the combination of ‘ma’ and ‘huwa’ or ‘hiya’ is the renewal for the loss of the negative copula ‘laysa.’ Similarly, the renewal goes through a phonological process called elision resulting in ‘mu’ for masculine and ‘mi’ for feminine subjects. In this stage, the renewal is still used specifically before nonverbal predicates. This is represent in (26) below.

(26)



This change was accompanied by the loss of the number feature. This is clearly shown in (42) in the previous chapter, repeated here as (27).

(27) إحنا مو في البيت

Ihna      **mu**            fi    l-bait

We        not.COP        at    def-home

“We are not at home”

(Thesis author)

As indicated in the gloss, ‘mu’ is supposed to be originated from the negative particle ‘ma’ and the singular masculine inflection on the copula ‘huwa.’ The fact that this sentence is grammatical indicates that the number feature on ‘mu’ is lost. Furthermore, there is a tendency in the Hijazi dialect to use the negative copula ‘mu’ in both gender



dialects that employ the negative copula ‘mu,’ such as Gulf and Levantine Arabic, use ‘mu’ before verbs. This indicates that ‘mu’ in these dialects is becoming a negative particle on its own and the copula is no longer present. It also means that there is a chance that this negative particle will become weak and disappear, and then the cycle continues.

Questions can be structured by the rise of the copula, or negative copula, in the CP. This will result in a question feature on the copula. The sentence in (47) from the previous chapter, repeated here as (30), accounts for this movement.

(30) هي أمك نايمه

**Hiya** ummik                      naaimah

Q        your.mother.2fs        asleep

“Is your mother asleep?”

(Thesis author)

The sentence in (30) indicates a gender agreement between the subject and the copula in CP position. However, this may not be the case, since other sentences do not show such agreement between the subject and the copula, such as (46) from the previous chapter, repeated here as (31).

(31) هو انتي في البيت

**Huwa**        anti        fi        l-bait

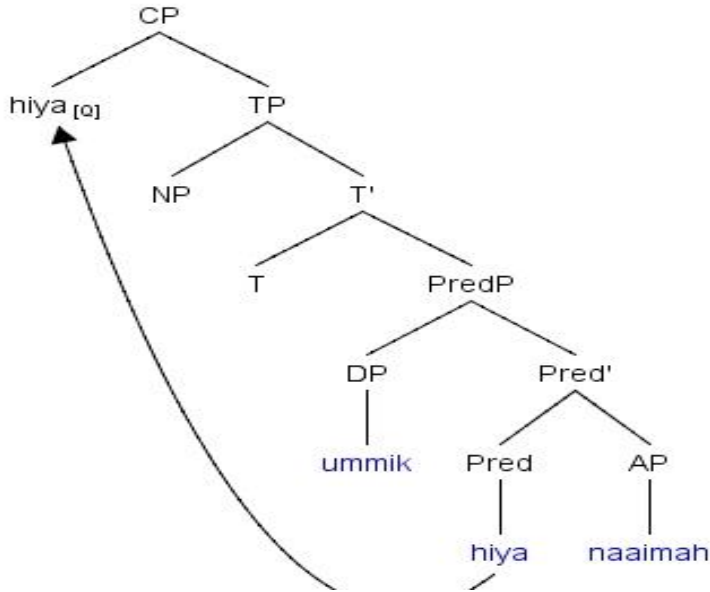
Q            you.fs        at        def-home

“Are you at home?”

(Thesis author)

Clearly, the sentence in (31) is often uttered on the phone. The structure of sentence (30) is represent in (32).

(32)



Presented, so far, is the agreement paradigm of both copulas and the verb ‘akal,’ which means ‘ate,’ to show the morphosyntactic similarities between them in the matter of their agreement and position after the negative ‘ma.’ The change in the old negative particle ‘laysa’ as a linguistic cycle has been explained. It was concluded that the combination of the negative particle ‘ma’ and the present tense copula ‘huwa’ or ‘hiya’ is a renewal for the loss of ‘laysa.’ The strong relationship between the negative particle and the copula in the syntactic structure was shown. Furthermore, the phonological elision on the present tense copula ‘huwa’ when it attaches to the negative particle ‘ma’ structurally and in terms of features has been explained. The relationship between the negative particle and the copula can be explained through the loss of number and gender features of the copula. The negative copula ‘mu’ is still in complementary distribution with the combination of the copula ‘kana’ and the negative particle. Since the case is lost in the Hijazi dialect, ‘kana’ does not assign an accusative case to its complement. The change



from the pronoun with interpretable phi-features on the specifier position to a present tense copula with only gender and number features, and possibly location flavor on head position of PredP has been explained. This copula then attaches to the negative particle and loses number and gender features on the head position of NegP. The need for a copula in CP position for questions and with negatives is similar to the do-support phenomenon in English.

### **Summary**

This chapter presented a structural and feature-based analysis for the grammaticalization of the non-present tense ‘kana’ in Classical Arabic. The loss of semantic features of the verb resulted in the development of the copula ‘kana’ from the verb ‘kwn.’ Classical Arabic has no present tense copula. In addition, a structural and feature-based analysis was presented for the loss of the person feature on the demonstrative third person pronoun in Standard Arabic. The feature loss resulted in the reanalysis of the pronoun from specifier to head position in PredP. Feature Economy and Head Preference Principle have driven this process. It was explained that the new present tense copula is in complementary distribution with the non-present tense copula ‘kana.’ The ability, in ‘kana,’ to assign case is attributable to the fact that it was originally grammaticalized from a verb. Some of the verb characteristics may have remained in the copula.

Finally presented was a structural and feature-based analysis for the support of the copula in negating present-tense nominal sentences and in making questions in Hijazi Arabic. This process is similar to the do-support in English. The phonological process, elision, contributes to the loss of number and gender feature agreements on the copula, resulting in negative copula ‘mu’ or ‘mi.’ The generalized use of the negative copula with

verbal sentences accounts for its development to a negative particle, a similar path to the old negative copula 'laysa' from Classical Arabic. Both negative copulas can be explained in the linguistic cycle's minimalist framework.

## CHAPTER 5

### SUMMARY AND CONCLUSION

#### Summary

In the first chapter of this thesis, the linguistic cycle and the notions of grammaticalization and reanalysis were introduced. In Chapter 2, definitions of the term copula were synthesized from different sources. In addition, typological studies from different languages accounting for the grammaticalization of demonstrative pronouns to copula were provided. This grammaticalization was explained in relation to linguistic cycles. Some of these languages show similarities with Arabic in terms of tense, negation, and question formation.

Also in chapter 2, the framework of this thesis was presented following Bowers (1993), Baker (2004), and van Gelderen (2004, 2011, forthcoming). The analysis was based on Generative Grammar and the Minimalist Program. The structural representation of the analysis was explained by PredP and the reanalysis from Specifier to Head position, driven by the Head Preference Principle was discussed. The feature-based analysis explained this grammaticalization through the loss of features driven by Feature Economy.

Furthermore, Classical Arabic was introduced in Chapter 2, and it was explained that it is a highly synthetic language. Classical Arabic is the language of the Holy Quran and poetry. It is an archaic language and has not been the first tongue for anyone for centuries. Also introduced was the Standard Arabic, which is a less synthetic language. Standard Arabic is known for its simplicity of structures in comparison with Classical Arabic. Standard Arabic is inflected for case on nouns and adjectives, and shows full agreement on verbs. On the other hand, the Hijazi dialect is more analytic than Standard

and Classical Arabic in that it employs grammatical words for aspect and tense. It is not inflected for case except on pronouns in most cases.

In Chapter 3, the distribution of pronouns and copula in Classical Arabic was presented. The first stage of the linguistic cycle, namely the full pronoun in Classical Arabic was explained. In this stage, the only copula involved is the non-present tense ‘kana.’ The demonstrative third person pronoun did not undergo any changes. It is added to nominal sentences to put more emphasis on the subject. It is also used as anaphoric to full phrases and sentences as subjects for PredPs. It was argued that this function of the pronoun makes it possible for it to be grammaticalized as a copula in the next stage.

In the second stage, Standard Arabic shows a loss in the person feature of the pronoun in copular sentences with first- and second-person subjects. In the analysis, this is considered as one way for grammaticalization and reanalysis of this pronoun. The result is a copula head for present tense nominal sentences. It was shown that the copulas ‘huwa’ and ‘kana’ are in complementary distribution, but only ‘kana’ assigns the accusative case to the predicate. Two possible reasons for the inability to assign an accusative case by copula ‘huwa’ were provided. Standard Arabic still employs case but not in writing, only intuitively.

In the third stage, the Hijazi dialect lost case, except in pronouns in most cases. The copula ‘huwa’ was grammaticalized more and lost gender and number features when it was attached to the negative particle ‘ma’ to form a negative copula ‘mu,’ a phonological process called elision. This negative copula is similar to the negative copula in Egyptian and Moroccan dialects, which may have gone through the same stages. The copula is also used as a question particle in Hijazi, by movement.

In Chapter 4, a structural and feature-based analysis for the data in Chapter 3 was provided. Following van Gelderen (2004, 2011, forthcoming), the loss of the semantic features of the verb ‘kwn’ in Classical Arabic was explained. The loss of the semantic features led the verb to be grammaticalized as a copula for non-present tense. The structural property of this copula was explained and the head of PredP as its locus was suggested. Finally, it was explained that the ability of the non-present tense copula to assign an accusative case to its complement is due to its development from a verb; some of the verbal characteristics remained in the copula ‘kana.’

Furthermore, a structural and feature-based analysis was presented for the loss of person feature on the demonstrative third person pronoun in Standard Arabic. The feature loss resulted in the reanalysis of the pronoun from specifier to head position in PredP, a process that was driven by Feature Economy and the Head Preference Principle. It was explained that the new present tense copula ‘huwa’ or ‘hiya’ is in complementary distribution with the non-present tense copula ‘kana.’ The inability, of ‘huwa’ or ‘hiya,’ to assign the accusative case to its complement is attributable to the fact that it was originally grammaticalized from a demonstrative pronoun, which does not have the ability to assign case. Another possible reason is that speakers started to lose interest in case, so ignored assigning new case to the predicate of present tense copula.

Finally, a structural and feature-based analysis for the support of the copula in negating present tense nominal sentences and in generating questions in Hijazi Arabic was presented. This process is similar to the do-support phenomenon in English. The phonological process, elision, accompanied the loss of number and gender feature agreements on the copula that resulted in the negative copula ‘mu’ for masculine and ‘mi’

for feminine subjects. The result is the salient negative copula ‘mu’ in both genders of subjects and any number. The present tense copula ‘huwa’ can rise to CP position with a [Q] feature. This accounts for the use of this copula as a question particle.

### **Conclusion**

In conclusion, it has been shown that Arabic went through the linguistic cycle stages in the pronoun to copula change (i.e., the copula cycle). First, the pronoun is grammaticalized as a copula, and then the copula weakens and disappears, as with the negative copula ‘mu.’ The next step is looking for a renewal to strengthen the proposition. The generalized use of the negative copula with verbal sentences accounts for its development into a negative particle. This negative particle is predicted to look for a copula to be used in nonverbal sentences, a path similar to the old negative copula ‘laysa’ from Classical Arabic. Both negative copulas can be explained in the linguistic cycle’s minimalist framework as explained in Chapter 1 by van Gelderen (2013). This framework underlines the change that is driven by Feature Economy and the Head Preference Principle.

Hodge (1970) introduced the linguistic cycle as a change in language from the Synthetic stage to the Analytic stage and back to the Synthetic stage. Hodge used the terms ‘sM’ for Synthetic languages and Sm for Analytic languages. The term ‘sM’ means that the language is predominantly morphological, while the term ‘Sm’ means that the language is predominantly syntactic. He argued that Proto-Indo-European is ‘\*Sm,’ or Analytic by ‘\*’ reconstruction, and Classical languages are ‘sM,’ or Synthetic. The final stage for present day English is back to ‘Sm.’ This cycle is argued by many linguists to be unidirectional in its change.

It was argued here that Classical Arabic showed a copula cycle from verb ‘kwn’ to copula ‘kana’ in nominal sentences. Standard Arabic shows a copula cycle from the pronoun ‘huwa’ to the present tense copula in nominal sentences. In addition, Hijazi Arabic shows the negative cycle from the single negative particle ‘ma’ to the negative copula ‘mu’ and eventually as pure negative particle. The three cycles can be seen as a development of Arabic from the more synthetic language, in Classical Arabic, to less synthetic, in Standard Arabic, and to recently more analytic language in the Hijazi dialect. This represents a partial cycle, only from Synthetic to Analytic. There might be other instances in Hijazi Arabic that account for the change back towards a synthetic level but this was out of the scope of this thesis.

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