#### COPULAR CLAUSES IN MODERN STANDARD ARABIC

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#### **Abstract**

This paper aims to provide an analysis of copular sentences in Modern Standard Arabic (MSA). I propose that the pronoun which appears in copular sentences is a copular pronoun. This copular pronoun accommodates the syntactic and semantic relationship between the subject and the predicate and acts as a linker in den Dikken's (2006) terminology. In section one, I will provide an introduction to copular sentences cross-linguistically, their schemata, and types. In section two, I will introduce copular sentences in Modern Standard Arabic and discuss their properties. In section three, I will evaluate the earlier studies offered for Modern Standard Arabic copular clauses. Section four will argue that copular sentences contain a functional element that accommodates the semantic and syntactic relation between the constituents in copular clauses. I will also propose that the pronoun which appears in copular sentences is a focus marker. This analysis will focus on Modern Standard Arabic data; however, cross-linguistic evidence from other languages will also be used to support the validity of the present proposal.

#### 1. Introduction

Moro (1997) identifies a copular clause as a clause in which the head verb is a form of the verb BE in English or similar items in other languages. Although copular clauses convey a cross-linguistically consistent range of meanings, copular elements differ in form. English, for example, requires a copula in finite sentences; see (1). On the other hand, many languages do not have copulas, such as Tagalog (2). Furthermore, copulas can be verbal in a language like English or nominal, e.g. Carnie (1995) shows that the demonstrative pronoun *èto* 'this' functions as a copula in Russian; see (3). However, these sentences in (1)-(3) are still considered copular clauses.

- (1) The girl is beautiful. (English)
- (2) Maestro ang lalaki. (Tagalog) teacher FOC man 'The man is a teacher.' (Schachter and Otanes 1972, p. 97)
- (3) Mark Twain \*(eto) Samuel Clemens. (Russian)
  Mark Twain-NOM this Samuel Clemens-NOM
  'Mark Twain is Samuel Clemens.' (Geist, 2007, p. 10)

## 1.1. Schemata of copular clauses

The basic structure of copular sentences consists of two phrases, separated by a copula, as illustrated in (4). This basic structure allows a wide range of copular clause types, as summarised by den Dikken (2017, p. 3) in (5).

#### (4) XP1 *be* XP2

a. XP1 = DP, XP2 = DP
Emily is the teacher.
b. XP1 = DP, XP2 = NP
My coworkers are friendly guys.
c. XP1 = DP, XP2 = AP
The hat is big.
d. XP1 = DP, XP2 = PP
The boy is under the bed.
e. XP 1 = PP, XP2 = DP
Above the closet is a good place to hide.
f. XP = PP, XP2 = AP
Easier than up the hill is down the mountain.
g. XP = AP, XP2 = DP
Bashful is a terrible thing to be.

Labelling copular sentence classes is not a simple process because different natural categories arise based on whether the emphasis is syntactic structure, semantic structure, or information structure. For example, Higgins (1979) proposed a four-way classification of copular clauses: predicational, specificational, identificational, and identity statement; (6) is illustrative.

(6) a. Tom is a very nice guy. (predicational)b. The doctor is Adam. (specificational)c. Your goal is my goal. (identificational/equative)

d. This (boy) is my son. (identity statement)

Higgins considers several parameters in his typology of copular sentences. He notes that in predicational sentences, the predicate assigns an attribute or property to the subject (7a). On the other hand, specificational sentences comprise two constituents: one presents a variable, i.e. a list of readings, and the other supplies a value for that variable. For example, in (7b), 'the student' represents the variable, and 'Adam' represents the value. Whenever the subject and predicate positions are inverted, specificational and predicational sentences are uniformly indistinct; see (8). In other words, the sentence in (8) is ambiguous between specificational and predicational readings. Information structure is what makes (8) specificational, i.e., Adam is the focus, and the student is the variable. In the predicational reading, Adam is a topic, and the sentence ascribes a property for Adam.

- (7) a. Tom is a very nice guy. b. The student is Adam.
- (8) Adam is the student.

Identificational (equative) sentences refer to constructions where two entities are equated with each other. For example, the sentence *Cicero is Tully* in (9) equates the two entities *Cicero* and *Tully*, i.e. they have the same reference. In identity copular sentences, XP1 consists of a

demonstrative element with an optional NP, while XP2 is identificational, i.e. descriptionally identifying XP1.

- (9) Cicero is Tully.
- (10) a. This (boy) is my son.

To summarize, this section provided an introduction to copular sentences. Then, I discussed the schemata of copular sentences and the types of copular sentences derived from these schemata. In section two, I will introduce copular sentences in MSA. Then, I will discuss their properties.

# 2. Copular Sentences in MSA

This section emphasizes the typology of MSA copular sentences. Excluding the predicational sentences, there is a lack of research on MSA copular sentences in the literature. Therefore, this section aims to present a complete overview of the categories of copular sentences available in MSA. Section 2.1 provides an overview of the classes of MSA copular clauses. Section 2.2 offers syntactic and semantic tests to characterize different types of copular sentences in MSA.

## 2.1. MSA copular clauses

In this subsection, I offer an analysis of copular clauses in MSA according to the taxonomy of Higgins (1979): specificational clauses (11), predicational clauses (12), identity clauses (13), and identificational clauses (14).

- (11) al-tabib hu Jacoub. the-doctor-NOM he Jacoub-NOM 'The doctor is Jacoub.'
- (12) Jacoub rayie
  Jacoub- NOM cool-NOM
  'Jacoub is cool.'
- (13) hadha (al-walada) hu abni. this (the-boy)-NOM he son-my 'This boy is my son.'
- (14) hadfak hu hadafay.
  goal-your-NOM he goal-my-NOM
  'Your goal is my goal.'

## 2.2. Properties of Arabic copular clauses

Many syntactic and semantic features have been proposed to differentiate between different types of copular sentences. This section uses these tests to explore the similarities and variations among different classes of copular sentences in Modern Standard Arabic. These characteristics

offer key evidence supporting the evaluation of Modern Standard Arabic copular sentences carried out in sections two and three.

# 2.2.1. The pronoun HU 'he' and the past copula KAN 'was'

In certain copular sentences in Arabic, a pronoun may occur between the subject and the predicate comprising the clause. The pronoun is recognized as a pronominal copula (PRON) in generative grammar literature. It is also limited to the third-person nominative case. This pronoun could be used to identify different forms of copular clauses. In particular, the pronoun is obligatory in the identity clause (15), identification clause (16), and the specificational clause (17). On the other hand, in predicational sentences, the pronoun is dropped, as illustrated in (18).

- (15) hadha (al-walada) \*(hu)/\*(kan) abni. this (the-boy)-NOM he/was son-my-NOM 'This boy is/was my son.'
- (16) hadfak \*(hu)/\*(kan) hadafay.
  goal-your-NOM he/was goal-my-NOM
  'Your goal is/was my goal.'
- (17) al-khasir \*(hu)/\*(kan) Jacoub the-loser-NOM PRON/was Jacoub 'The loser is/was Jacoub.'
- (18) al-tullab (\*hu)/\*(kan) adhkia the-students-NOM he/was clever 'The students are clever.'

In contrast to the pronoun hu 'he', the copula kan 'was' appears in all past tense copular clauses, as illustrated in (15)-(18) above. Furthermore, the pronoun hu 'he' and the copula kan 'was' are in complementary distribution.

#### 2.2.2. Reversibility

Reversibility is a syntactic process whereby the sequence of the two constituents in copular sentences is inverted. Reversibility can be used to differentiate between various forms of copular sentences (cf. Higgins, 1979; den Dikken, 2006). The predicational clause does not permit inversion, as illustrated in (19). Identity, identificational, and specificational sentences, on the other hand, allow inversion, as presented in (20)-(22) respectively. Inversion could be used as a defining characteristic between predication clauses and other forms of copular clauses based on these findings, such that reversibility is a feature of identity, identification, and specificational clauses.

- (19) a. Adam is a writer.
  - b. \*A writer is Adam.
- (20) a. Your teacher is my teacher.
  - b. My teacher is your teacher.

- (21) a.That (man) is my teacher.b. My teacher is that man.
- (22) a. The teacher is John.b. John is the teacher.

Similar patterns are found in Modern Standard Arabic copular sentences. In predicational sentences, reversibility is not permitted, as shown in (23). In specification, identification, and identity clauses, reversibility is grammatical, as illustrated in (24)-(31). Therefore, the reversibility test is completely validated in Arabic. It is one of the distinctive characteristics of copular sentences, excluding the predication clause, which does not permit reversibility between the two NPs.

- (23) a. al-tullab adhkia
  the-students-NOM clever-NOM
  'The students are clever.'
  b. \*adhkia al-tullab.
  clever-NOM the-students-NOM
  '\*Clever are the students.'
- (24) a. al-tabib hu Jacoub
  the-doctor-NOM he Jacoub-NOM
  'The doctor is Jacoub.'
  b. Jacoub hu al-tabib
  Jacoub-NOM he the-doctor-NOM
  'Jacoub is the doctor.'
- (25) a. hadha (al-walada) hu abni.
  This (the-boy)-NOM he son-my-NOM
  'This boy is my son.'
  b. abni hu hadha (al-walada).
  son-my-NOM he this (the-boy)-NOM
  '\*My son is this boy.'
- (26) a. hadfak hu hadafay.
  goal-your-NOM he goal-my-NOM
  'Your goal is my goal.'
  b. hadafay hu hadfak.
  goal-my-NOM he goal-your-NOM
  'My goal is your goal.'

#### 2.2.3. Extraction

The availability of A'-movement of the post-copular element is another variation among different classes of copular clauses. In predicational sentences, the *wh*-extraction of the post-verbal constituent is grammatical, as shown in (38). In specificational, identity, and identificational

clauses, on the other hand, the extraction of the post-verbal constituent is highly restricted, as shown in (28)-(30) respectively, from O'Neill (2015, p. 23).

- a. Whom<sub>i</sub> did she say it t<sub>i</sub> was?b. Cute<sub>i</sub>, Elizabeth was t<sub>i</sub>; wise<sub>i</sub>, she wasn't t<sub>i</sub>.
- (28) a. \*Whoi did she say the teacher was ti?b. \*[What kind of candidate]i did she say ti John was?
- (29) a. \*What<sub>i</sub> did he say t<sub>i</sub> was his favorite city? Her favorite city. b. \*What<sub>i</sub> did he say your goal was t<sub>i</sub>?
- (30) a.\*Whom<sub>i</sub> did you say that man was t<sub>i</sub>? b. \*Whom<sub>i</sub> did you say t<sub>i</sub> was your son?

A similar effect is available in Arabic copular sentences. In predicational sentences, extraction is grammatical, as illustrated in (31). On the other hand, in specificational, identity, and identificational clauses, the extraction of the post-copular constituent is restricted, as shown in (32) to (34) respectively.

- (31)  $madha_iqult$  ean adam  $t_i$ ? what i say about Adam  $t_i$ ? 'What did you say about Adam?'
- (32) \* $min_i$  qalat adhkaafataan fi-al-fisl kan  $t_i$ ? who is say-she clever boy in-the-class was  $t_i$ ? \* $t_i$ \* Whom did she say the cleverest boy in the class was?'
- (33) \*min<sub>i</sub> qul-t sadiquk kan t<sub>i</sub>? who<sub>i</sub> say-you friend-your was t<sub>i</sub>? 
  \*Whom did you say your friend was?'
- (34) \*min<sub>i</sub> qult hadha al-fataa hu t<sub>i</sub>? who<sub>i</sub> say-you this boy he t<sub>i</sub>? 
  \*Whom did you say that boy was?'

#### 2.2.4. Non-restrictive modification

Rothstein (1995) and Heycock and Kroch (1999) claim that specificational and equative copular sentences allow non-restrictive modification of both constituents comprising these copular sentences. They argue that this modification is compatible with the denotational referential status of these forms of copular sentences in (35a). On the other hand, predicational clauses are not compatible with non-restrictive modifications because the predicate is non-referential in (35b).

(35) a. The duty nurse, who is very efficient, is Rina, who I am very fond of. (Rothstein, 1995, p. 45.)

b. \*I consider Rina the duty nurse, who is very efficient. (Heycock and Kroch, 1999, p. 374.)

Similar behavior can be found in Arabic copular sentences. Non-restrictive modification is grammatical in specificational, identity and identificational sentences, as shown in (36)-(38). The predicate in predicational sentences, on the other hand, can not be modified by a non-restrictive clause, as can be seen in (39).

- (36) al-les<sup>s</sup>, al-adhisaraq al-bank, hu Adam (specificational) the-thief, that robbed the-bank, he Adam 'The thief, who robbed the bank, is Adam.' (Khatatneh, 2020)
- (37)hadafay, al-adhi 'atmah 'iilayh, hu hadfak,al-adhi tatamah' *iilayh*. (identity) goal-my, which ambitious-I it-for, goal-your which youhe ambitious it-for 'My goal, which I am ambitious for, is your goal, which you are ambitious for.'
- (38) al-walad al-adhi yaqif hunak hu abnay aldhy yadrus fi aljamieat. (identificational) the-boy that stand there he son-my that study in the university 'The boy, who is standing there, is my son, who studies at the university.'
- (39) \*al-walad al-aldiy yaemal fi al-mutajar, dhaki, al-aldhi maejib bih (predicational) the-boy, that works in the-shop, clever, that like-I him 'The boy, who works at the shop, is clever, who I have a crush on.'

To summarize, in this section, I investigated numerous features and characteristics employed to differentiate between various types of copular sentences. To be specific, I have shown that specificational, identificational, and identity clauses share the same properties. Predicational sentences, on the other hand, act differently from the other types of copular clauses. Table 1 summarizes these properties. These properties offer a systematic overview and evidence for the analysis of copular sentences carried out in the following sections.

T-11. 1. Th		1	N/ - J C4-	
Table 1: The	properties of co	pular sentences in	i Modern Sta	ındard Arabic.

	Predicational	Specificational	Identificational	Identity
Reversible	×	✓	✓	✓
Pronoun	×	✓	✓	✓
Non-restrictive modification	×	<b>√</b>	<b>√</b>	✓
Extraction	✓	×	×	×

## 3. Previous analyses of copular structures in Arabic

Analyses of Arabic copular clauses are mainly concentrated on two issues: first, the nature of predicational (verbless) sentences, and second, the characteristics of the pronoun which appears in other types of copular sentences. This section aims to introduce the significant examinations that have been conducted on Arabic copular sentences.

#### 3.1. Bahloul (1994)

Bahloul (1994) aims in his study to explain the difference between verbless copular sentences, shown in (40), and verbal copular sentences, shown in (41). However, Bahloul does not take into account different types of copular sentences. Specifically, his study was concerned with what I label as predicational sentences in section two. I have illustrated that these sentences show predicational sentence properties such as irreversibility and the non-referential status of the post-copular elements. Bahloul ascribes the variation between these two classes to the availability of the tense feature on the head I. He claims that the copula is required to support these features. In verbless sentences, on the other hand, the tense feature is not available; therefore, the head I can select any complement other than the VP, e.g. NP, AP, or PP.

- (40) al-tullab (\*hum) adhkia the-students-NOM-(3.M.PL) they clever-NOM-(3.M.PL) 'The students are clever.'
- (41) *al-tullab kanu adhkia* the-students-NOM-(3.M.PL) were clever (3.M.PL) 'The students were clever.'

However, Bahloul offers no explanation for the fact that copular sentences should only be perceived in the present tense, not in the future or past. In other words, why does the sentence have a present tense interpretation if we suppose that it does not include a tense feature? In fact, the ungrammaticality of sentence (42), in which the verbless sentence is modified by a past tense adverb *ams* 'yesterday', provides evidence for tense features on the head I.

(42) \*al-tullab nashitun bial'ams
the-students-NOM-(3.M.PL) energetic-NOM-(3.M.PL) yesterday
'\* The students were energetic yesterday.'

## 3. 2. Benmamoun (2000)

Benmamoun (2000) focuses his study on Arabic verbless predicational copular sentences. Specifically, he tries to explain why the copula must be visible in the future and past tenses and absent in the present tense. Benmamoun proposes that verbless sentences in Arabic (predicational sentences) have functional projections but lack verbal projections (VP). In other words, the nonverbal predicate (NP, AP or PP) is governed by a functional projection (TP) but without a (VP) projection. He also claims that the nominative case assigned to the predicate, not the accusative case, results from the lack of verbal projection; see (43).

(43) *al-tullab adhkia* the-students-NOM-(3.M.PL) clever-NOM-(3.M.PL)

'The students are clever.'

The main claim of Benmamoun's approach is that the tense of the copular clause affects features in T. The head T is defined for [+D, +V] features in the past and future tenses. Hence, the verbal copula is able to check the [+V] feature on the head T. On the other hand, in the present tense, the head T is only defined for the [+D] feature. Therefore, the copula is not needed because the [+V] feature is missing.

Benmamoun further explains that the verbless (predicational) sentence is always interpreted in the present tense because it is the default tense in Arabic. Benmamoun's and Bahloul's (1994) studies are similar. However, they contrast concerning whether (T or I) chooses verbal or non-verbal complements. This feature is the [TNS] feature for Bahloul, while for Benmamoun, it is the [+V] feature.

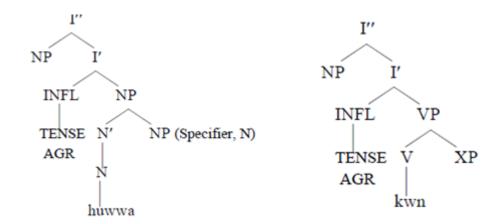
#### 3.3. Eid (1991)

Eid (1991) provides an analysis of equative copular sentences in Egyptian Arabic (EA). She argues that the PRON is optional in equative sentences when the subject is a pronoun (44a). Otherwise, the pronoun is optional (44b). Eid believes that the pronoun's obligatoriness is to force the structure to be perceived as a sentence. Specifically, she claims that the sentence will be understood as a phrase without the PRON. She also claims that phrasal interpretation is not available when the subject is a pronoun. Therefore, the PRON is optional.

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(44) a. ana/inta (huwwa) il-mudarris
I/you he the-teacher(M.SG)
'I am/You are the teacher.' (EA)
b. il-raagil *(huwwa) il-mudarris
the-man he the-teacher (M.SG)
'The man is the teacher.' (EA) (Eid, 1991, pp. 41 and 42)
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Eid treats the PRON as an identity pronoun, i.e. the pronoun reflects an identification relationship between the two arguments in the clause. The function of the copula and the pronoun, according to Eid, is an anti-ambiguity device as it forces sentential interpretation. She also claims that the PRON is a thematic-role assigner. She argues that the PRON assigns a thematic role to its sister NP (the predicate), then the entire predicate NP assigns the thematic role to the subject. Eid contends that the form of agreement found in these constructions is not a subject-predicate agreement but an agreement within the noun phrase; see (45a) below. When the copular clause includes the copula verb *kan* 'was', the copula occupies the VP head, not the NP, as illustrated in (45b).

(45) a. Present tense copular sentences b. Past tense copular sentences



However, there are some flaws in Eid's analysis described above. First, Eid does not provide a comprehensive account of the pronoun usage in all classes of copular clauses in Arabic, such as identity, identification, and specificational clauses. Such an account is essential to obtain a convincing investigation of the pronoun in Modern Standard Arabic. Second, Eid argues that the form of agreement found in equative structures is not a subject-predicate agreement but an agreement within a noun phrase in (45a) above. This claim is falsified by the fact that XP1 rather than XP2 determines the gender and number of PRON; see (46).

(46) al-muazifun hummail-muedila the employees (M.PL) they the-dilemma (M.PL) 'The employees are the dilemma.'

# 3.4. Ouhalla (2013)

Ouhalla discusses predicational sentences with adjective phrases (AP) in them (47). He offers an analysis based on Bowers's (1993, 2001) predicational shell framework (PredP). To be specific, he proposes a predicational phrase (PredP) that mediates the syntactic and semantic relationship between the subject and the predicate. He notes that the sentence must contain the copula *kan* in the past tense, while in the present tense the PRON is optional; see (47). Ouhalla follows Fassi Fehri's (1993) and Bakir's (1980) propositions that the PRON is an auxiliary, just like the copula *kan* 'was'. He also argues that there is a null copula in verbless (predicational) clauses in Arabic.

(47) Zaynab-u (hiyya)/kanat amiil-at-un Zaynab-NOM (F.SG) (she)/was pretty-NOM (F.SG) 'Zaynab is pretty.' (Ouhalla, 2013, p. 322)

Ouhalla further suggests that predicative adjective clauses include a functional phrase (FP). The head [F] chooses a subject DP in its specifier position and an adjective phrase in its complement position. Furthermore, he proposes that adjective phrases are DPs in Modern Standard Arabic as evidenced by the observation that adjective phrases show indefiniteness and case features. These adjective phrases or DPs are in the complement position of the PredP, which is occupied by the PRON in the present tense and the copula in the future and past tenses. The (PredP)

is needed because the DP cannot act as a predicate on its own. The syntactic configuration proposed by Ouhalla for the sentences in (47) is presented in (48).

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a. [TP T[Agr] [PredP PRON [DP D[Indef, uCase] [FP F[Agr] [AdjP [DP Zaynab] [Adj' jamiilat ......
b. [TP [DP Zaynab] [T' [PRON] + T[Agr] [PredP ...... [DP D[Indef, Nom] [FP [Adj jamiilat] +F[Agr] [AdjP ....... [Adj' ....... (Ouhalla, 2013, p. 323)
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The structure in (48), additionally, highlights his analysis for agreement. He proposes the subject DP enters the derivation with unvalued case feature and valued Gen and Num features. The subject DP then values the Gen and Num features on [F]. At this stage, the case feature on the subject remains intact. Next, the subject values Gen, Num, and Per on T and receives the nominative case from T. The subject then moves to Spec-TP. On the other hand, the predicate rises to the PredP head while the auxiliary (the copula *kan*' was'/PRON) raises to the head T.

Ouhalla's analysis raises several issues. First, Ouhalla's claim that the PRON in present tense copular clauses is optional tends to be incorrect. The preceding section demonstrated that the PRON is absent in predicational clauses and obligatory in specificational, identity, and identificational sentences. In addition, even if the PRON was optional, Ouhalla does not provide any explanation for this optionality. In this regard, I claim that the pronoun in (47) is different from the one in specificational, identity, and identificational sentences. Specifically, the pronoun in (47) is the subject of the predicate *jamiilat* 'beautiful', and *Zaynab* is the topic. For example, if we modify the topicalized constituent *Zaynab* to a second-person pronoun like *Panta* 'you.Mas', the sentence will be ungrammatical because the Per features on the PRON disagree with Per features on the topicalized element, as illustrated in (49). Besides, there is a brief pause after the topicalized DP's. These results support the hypothesis that using the PRON is ungrammatical in Arabic prediction clauses.

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(49) *?ant hu jamiil
You he pretty-NOM (M.SG)
'You are pretty.'
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To recap, this section introduced the significant examinations that have been carried out on copular sentences in different varieties of Arabic. It also investigates the previous research that attempted to analyze the pronoun which appears in copular sentences in Arabic.

## 4. Predicate inversion

#### 4.1. Introduction

I have shown in section two that specificational, identificational, and identity copular clauses share the same properties, e.g. reversibility, the availability of the pronoun, non-restrictive modification, and the ungrammaticality of extraction. On the other hand, predicational sentences behave differently, e.g. they are non-reversible, non-restrictive modification is ungrammatical, and they allow extraction. See Table (1) above.

These properties have motivated three main approaches to analyzing copular clause syntax. The first approach takes the view that specificational sentences are similar to predicational sentences, but the subject and the predicate, in specificational sentences, are base-generated

(Williams 1983; Heggie 1988) or moved (Moro 1997; Mikkelsen 2005; den Dikken 2006) in reverse order. The second approach considers specificational sentences and equative sentences as being similar to each other but different from predicational clauses (Heycock and Kroch 1999). The third approach claims that each class of copular sentences has its own unique structure (Akmajian 1979; Higgins 1979).

I follow the first approach in this paper. Specifically, I classify copular sentences in Arabic into two categories: specificational sentences and predicational sentences. The variations between the two types are the direct consequence of both syntax and information structure. In this paper, I advocate a syntactic-semantic framework that derives copular clauses from small predicational clauses. I summarise the arguments supporting the predicate inversion approach (Mikkelsen 2005; Heggie 1988; Moro 1997; den Dikken 2006), as it offers the fundamental principles for my analysis of copular clauses in Modern Standard Arabic.

#### 4.2. Predicate inversion

According to the predicate inversion approach, a deep distinction between predictional and specificational sentences does not need to be preserved. The variations between the two forms of sentences were analyzed due to information structure and syntax intervention (Mikkelsen 2005; Heggie 1988; Moro 1997; den Dikken 2006). They believe that specificational clauses are predicational sentences while the predicate occupies the pre-copular position in specificational sentences. However, they draw multiple hypotheses concerning the derivation of copular clauses.

Heggie (1988) claims that both the subject and the predicate originate in a small clause. The predicate, then, inverts around the subject and occupies an A' position, i.e. Spec-Top. Because the predicate occupies the topic position, specificational sentences exhibit frozenness; see (50). Amovement is also unlikely because there is no possible landing site above Spec-Top that does not lead to conflicts with the information structure.

# (50) \*Who<sub>i</sub> did she say the teacher was t<sub>i</sub>? (Heggie, 1988)

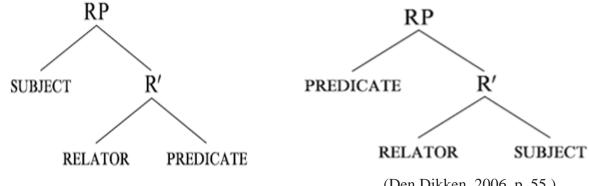
Den Dikken (2006) and Mikkelsen (2005) claim that the inverted predicate holds an A-position in specificational sentences. In particular, they show that Heggie's (1988) database is doubtful and that many of the allegations that facilitate the A'-movement framework to predicate inversion are wrong. For example, Mikkelsen presents significant word order data from Danish that distinguished predicate inversion instances from predicate topicalization instances in specificational sentences. She demonstrates that A-movement patterns with predicate inversion while A'-movement patterns with predicate topicalization. I will address the key points of den Dikken's (2006) framework in section 4.3 below.

#### 4.3. Den Dikken (2006): relators and linkers

Den Dikken claims that each predicational relation is occupied by a functional head that "mediates the syntactic relationships between the predicate and the subject". He labels this functional head as a RELATOR. The RELATOR may appear as a copula in nominal predications in (51a), or as a null element in (51b). One of the main claims by den Dikken is that predicational relationships are asymmetrical and non-directional. These predicational relations can be realized as a predicate-complement structure in (52a) or predicate-specifier structure in (52b). The relator,

according to den Dikken, is a placeholder for any head in a syntactic structure (T, D, 'be', 'as', 'for'). The RELATORS can also introduce Top and Foc noun phrases.

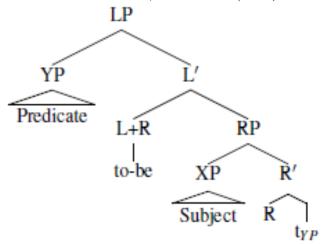
- (51)a. Imogen is beautiful.
  - [RP [Imogen] [relator = be [beautiful]]]
  - b. We have an idiot doctor.
  - [DP an [RP [NP idiot] [relator = Ø [NP doctor]]]] (Den Dikken, 2006, p. 29.)
- (52)a. Predicate-complement structure
- b. Predicate-specifier structure



(Den Dikken, 2006, p. 55.)

Den Dikken also claims that specificational copular sentences are the products of reversing the relator phrase construction. In this approach, the predicate is capable of rising around the subject in an obvious violation of Relativized Minimality (Rizzi, 1990). He proposes that the relator may re-emerge as an event of a domain-extending head movement and provide a new external specifier. The predicate can, then, be raised locally across the subject to the A-position. (53) is illustrative of this. The existence of the extra projection is indicated by LINKER, an overt form of the copula.

#### (53)Specification clause structure, den Dikken (2006)



A further central aspect of den Dikken's (2006) proposition is that the predicate inversion charges the information structure. Comparing specificational sentences and predicational sentences, den Dikken notes that a heavy stress may occur on the last item of the predicate. This stress may rise to higher elements in the predicate in (54a). This is not the case in specificational sentences (54b). He further notices that the A'-extraction of the post-verbal subject in specificational constructions is ungrammatical, as shown in (55).

- (54) Imogen considers Brian to be the best candidate.
  - a. She does not consider him to be the [DEVIL INCARNATE].
  - b.\*She does not consider the best candidate to [have been LYING]. (Den Dikken, 2006, p.
- 82.)
- (55) a. I think the best candidate is this man.
  - b.\*Which man do you think the best candidate is?

(Den Dikken, 2006, p.

83.)

Den Dikken explains these restrictions mentioned above using the Phase Impenetrability Constraint (Chomsky, 2001). Specifically, he claims that when the RELATOR rises around the subject, the subject will be stuck in the RP phase. Therefore, the subject acquires a narrow focus interpretation by default (Selkirk, 1995) because it is the most deeply rooted item of the clause. This explains why the focus does not project upwards in the syntactic tree as it does in predicational sentences (c.f. (54a) and (54b)). As a result, the subject is a focus, and the raised predicate is a topic, and the predicate is prevented from performing any further syntactic operations that would land it in a focus position. This is why specificational sentences are commonly limited when it comes to A'-movement operations. Den Dikken also notes that the predicate is not entirely forbidden from moving, anti-Heggie's (1988) A'-fronting model. He notes that the long topicalization of the raised predicate is grammatical, as illustrated in (56). This demonstrates that the predicate emerged in the A-position.

(56) The principal<sub>i</sub>, nobody said, t<sub>i</sub> is John.

(O'Neill, 2015, p. 32.)

A further significant issue is that once the RELATOR of the small clause is moved to the external functional head (linker), the linker deletes the boundaries of the lower phrase which makes the predicate and the subject equally distant (equidistant) from the landing site outside the small clause. He calls this movement a phase-extension movement. The phase-extending movement locks the subject of the small clause inside the newly extended phase. Consequently, the subject will not be accessible to any external probes; therefore, the subject would not be capable of creating an Agree relation with external probes. This explains why, in English specificational sentences, the copula always agrees with the raised predicate, not with *in situ* subjects (57a). Therefore, the subject is simply invisible from T and cannot check the nominative case directly against T either. As a result, it surfaces with the default accusative case, as in (57b).

- (57) a. The main issue is/\*are boys.
  - b. The main actor is him.

# 4.4. The pronoun and copulas in Modern Standard Arabic as linkers

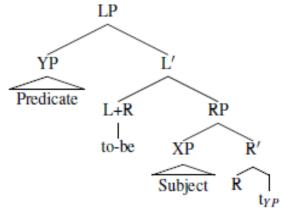
In this paper, I adapt den Dikken's (2006) framework, which derives the copular clause from a predicational small clause. I propose that the subject and the predicate are base-generated in a small clause in their underlying syntactic structure with a relator accommodating the subject

and the predicate in its minimal domain. In predicational sentences, the subject then moves to Spec-TP to satisfy the EPP feature on T. Extraction facts about these sentences can prove this. Specifically, the extraction of the subject is grammatical; see (58).

(58) *Min<sub>i</sub> t-aetaqid anah t<sub>i</sub> dhaky*? who<sub>i</sub> you-think that t<sub>i</sub> clever? 'Whom do you think is clever?'

In equative and specificational sentences, on the other hand, I assume along with den Dikken (2006) for English, that the subject and the predicate are base-generated in a small clause with the relator accommodating both in its minimal domain. The relator is then raised to an external functional head (linker) outside of the small clause (RP). This process (the phase-extending movement) deletes the borders of the lower phase and makes the predicate and the subject of the small clause equidistant (equally distant) to the landing sites outside the small clause. The predicate can then be inverted around its subject. Then, the EPP-specified feature on T attracts the small clause predicate to its specifier position, i.e. Spec-TP; see (59).

# (59) Specification clause structure (den Dikken, 2006)



Furthermore, I also argue that the pronoun which appears in specificational sentences is a realization of the functional element (linker) based on extraction, agreement, and case - starting with extraction. The extraction of XP2 in Modern Standard Arabic specificational sentences is ungrammatical in (60). This behavior can be explained using the phase-extending movement, which traps the subject inside the small clause. Therefore, XP2 is limited regarding A'-movement operations.

(60) \*min<sub>i</sub> qalat adhkaafataan fi-al-fis kan t<sub>i</sub>?
who<sub>i</sub> she-say clever boy in the-class was t<sub>i</sub>
'Whom did she say the cleverest boy in the class was?'

In addition, the properties associated with equative and specificational sentences are similar to those displayed by subject-verb constructions in Modern Standard Arabic. To be specific, Spec-TP, in Modern Standard Arabic, shows A'-dependencies. Consider, for instance, extraction across pre-verbal (SV) vs post-verbal subject (VS) in (61a) and (61b), respectively. In (61a), the extraction of the object across the subject is ungrammatical in SV word order, just like equative and

specificational sentences. On the other hand, the extraction of the object across the post-verbal subject 'Adam' in VS word order is possible in (61b).

(61) a.\* madha adam kasr? (SV)
what Adam broke
'What did Adam break?'
b. madha kasr adam (VS)
what broke Adam
'What did Adam break?'

Furthermore, both the pronoun and the copula in Arabic copular sentences must agree with the inverted predicate, not the small-clause subject (c.f. (62a-b). This could be explained if we assume the subject is trapped inside the small clause because of phase-extending movement (den Dikken, 2006). Specifically, the subject became invisible to any outside probes, and consequently, the pronoun or the copula must agree with the inverted predicate.

(62)makan hu al-galea a. ajmal most-beautiful place-NOM(M.SG) the-castle-NOM (F.SG) he 'The most beautiful place is the castle.' b. *al-qalea* hi ajmal makan the-castle-NOM (F.SG) she most-beautiful place-NOM (M.SG) 'The castle is the most beautiful place.'

This also explains the nominative case which appears on the *in-situ* subject; see (62a). The *in-situ* subject in specificational sentences is invisible from T because of the phase-extending movement (den Dikken, 2006) and cannot check the accusative case. As a result, the subject checks the nominative case because it is the default case in Arabic (see Fassi Fehri, 1993; and Soltan, 2007, among others).

However, an important question should be raised. If we suppose following den Dikken (2006) that relators and linkers should accommodate the subject and predicate in all types of copular sentences in Modern Standard Arabic, then why is the relator absent in Arabic predicational sentences and present as a pronoun in specificational sentences? From a cross-linguistic perspective, this phenomenon is not unique to MSA as different lexical items have been reported to appear in copular sentences other than the copula, such as personal pronouns in Hebrew (see (63)) and demonstrative pronouns in Russian (see (64)). Unfortunately, the behavior of these lexical items is not identical in all languages. In Hebrew, for example, Rothstein (2004) shows that the pronoun is mandatory in the identity clause (63a), and optional in the predicational clause (63b). For Russian, on the other hand, Geist (2007) points out that the pronoun is obligatory in identity clauses as in (64a) and dropped in specificational and predicational, as in (64b) and (64c), respectively.

(63) a. dani \*(hu) mar yosef. (Hebrew identity clause)
dani he mr yosef
'Dani is Mr Yosef.'
b. Dani(hu) nexmad.
Dani (M.SG) he nice
'Dani is nice.' (Rothstein, 2004)

```
(64)
       a. Mark Twain
                             *(eto) Samuel Clemens (Russian equative clause)
                                   Samuel Clemens NOM
       Mark Twain NOM
                            this
       'Mark Twain is Samuel Clemens.'
       b. Ubijca staruxi
                                   (*eto)/*(byl) Raskolnikov (Russian specificational clause)
                                   (*ėto)/*(byl) Raskolnikov
       murderer-NOM of-old-lady
       'The murderer of the old lady is Raskolnikov.'
       c. Mark Twain (*eto)/*(byl) pisatel' po professii (Russian predicational clause)
                            this/was
                                           writer-NOM by profession
       Mark Twain-NOM
       'Mark Twain is a writer by profession.' (Geist, 2007, p. 10)
```

One might be tempted to think that the pronoun is needed because of some semantic properties. In fact, this behavior led many scholars to argue that these elements are identity pronouns (they reflect an identification relationship between the two arguments in the clause), Geist (2007) for Russian, Rothstein (2001) for Hebrew, and Eid (1991) for Arabic. To better understand the function of the pronoun and the copula in Arabic, I will demonstrate the semantic contribution of these elements in copular sentences.

In this paper, I follow the one-BE modal (Williams 1983; Heggie 1988; Moro 1997, 2000; Mikkelsen 2005; den Dikken 2006). The copula, according to this approach, is vacuous. However, it has different semantic functions according to the class of the copular sentence. In predicational sentences, the copula passes the denotation of the predicate to the subject, as illustrated in (65). In specificational sentences, on the other hand, the copula passes the denotation of the predicate to the subject in the exact opposite order. This predicational relation may be established when the copula is overt or covert, with no significant change in the interpretation of the relation.

# (65) $\lambda P \lambda x[P(x)]$ (O'Neill, 2015, p. 34)

Regarding equative sentences, there seems to be some controversy over whether the copula itself represents identity (Higgins 1979; Akmajian 1979; Mikkelsen 2005; Eid 1991 for Arabic), or whether the equative meaning involves a functional head which applies the denotation of the subject to the predicate. Specifically, Partee (1987) suggests that the copula in equative sentences is a type-shifter that combines two referential expressions and resolves the type mismatch between them. However, this proposal is impossible to prove in English since copulas appear in all types of copular sentences.

Geist (2007) extends Partee's type-shift proposition to Russian. She claims that the pronominal copula *eto* 'this' that appears only in equatives performs this function. She also notes that the pronominal copula *eto* 'this' is not available in predicational and specificational copular sentences in Russian. She explains this by arguing that XP1 is non-referential in specificational sentences, and XP2 is non-referential in predicational sentences in Russian. Therefore, the type-shift operation is not available in these types of sentences.

Arguing that the pronoun performs the 'type-shift' operation between the two NPs can correctly explain why the pronoun appears in Arabic specificational and equative sentences if we consider that the two NPs in these sentences are referential (see section 2.2.5 above). It can also explain why the pronoun is absent in predicational sentences, given that the predicate is non-referential in these sentences.

However, such a proposal seems problematic if we take into account copular sentences with "Honorary NPs"; see (66) for English and (67) for Arabic. These sentences are similar to equative

and specificational sentences in the availability of the pronoun. If the hypothesis regarding referentiality as a condition for the pronoun to appear overtly is correct, this means that both XP1 and XP2 in these sentences are referential. However, such a claim is refuted because neither of them is referential.

- (66) Down the hill is easier than up the hill.
- (67) afdal makan lilaikhtiba' hu taht al-sarir best place to-hide he under the-bed 'The best place to hide is under the bed.'

But what do all of these constructions, namely specificational, equative, identity, identificational, and Honorary NPs have in common? And what separates them from predicational sentences? The answer is that the post-copular constituent in these structures is focused, and it always receives a heavy stress (68). The interpretation which they receive is the only entity in the universe of discourse for which the property denoted by the predicate holds. Recall that in specificational and equative clauses, the heavy stress on the last item of the predicate does not rise to higher nodes in the syntactic tree; see (68a). The predicate in predicational sentences, on the other hand, is not focused, and the stress may rise to higher nodes in the syntactic tree; see (68b). Therefore, I propose that the pronoun is a linker and a realization of the focus feature on the predicate. This explains the pronoun's obligatory presence in specificational and equative sentences, given that the post-copular XP is a focused constituent.

- (68) The best candidate is BRIAN.
  - a.\*She does not consider the best candidate to [have been LYING].
  - b. She does not consider him to be the [DEVIL INCARNATE]. (Den Dikken, 2006, p.

82)

In fact, the argument that the pronoun is a linker and a focus marker is supported cross-linguistically. For example, Frascarelli and Ramaglia (2009) claim that copulas in many languages have lost their verb-like role and have developed differently across languages through a grammaticalization path whereby some languages kept the copula form and others merged it with a (3SG) pronoun creating Focus Markers (Somali (91)), and others have dropped it completely (Tagalog (97)); see also Frascarelli, 2010. In this perspective, copulas, pronouns, and focus markers must be simply considered as different expressions of the same linker function.

- (69) CALI baa soomaali ah (SOMALI)
  Cali FM Somali be.REL
  'CALI is Somali.' (Frascarelli & Puglielli, 2005)
- (70) LIBRO ang ibinigay ng titser sa studiante (TAGALOG) book DET.TRIG TH.give.PERF DIR teacher OBL student 'The teacher gave A BOOK to a/the student.' (Frascarelli, 2010)

It is assumed that the pronoun which appears in specificational and equative sentences is a linker and a focus marker provides a uniform structure for copular sentences despite the tense of the sentence. Furthermore, assuming a null relator in Arabic present tense predicational copular

sentences makes Arabic resemble English and minimizes the difference between them as to whether the relator has phonological content or not. This is to say that the copula passes the denotation of the predicate to the subject in all types of copular sentences. In present tense equative and specificational sentences, the pronoun hu 'he' performs this semantic operation overtly. On the other hand, in present tense predicational sentences, a null version of the relator passes the denotation of the predicate to the subject. In past tense copula sentences, the copula kan 'was' performs this semantic operation.

This proposition is similar in essence to Bakir (1980), Fassi Fehri (1993) and Ouhalla (2013) in arguing the PRON is an auxiliary, just like the copula *kan* 'was'. This analysis overcomes some problematic issues, such as the fact that the pronoun *hu* 'he' and the past copula *kan* 'was' are in complementary distribution. It also explains why the pronoun is available in specificational and equative sentences and not available in predicational sentences.

#### 5. Conclusion

This paper has provided an analysis of copular sentences in Modern Standard Arabic. I have proposed that the pronoun which appears in present tense specificational and equative sentences is a copular pronoun. This copular pronoun accommodates the syntactic and semantic relationship between the subject and the predicate or a linker in den Dikken's (2006) terminology. In the first section, I provided an introduction to copular sentences, their schemata, and types. In section two, I introduced copular sentences in Modern Standard Arabic. Then, I discussed their properties. After that, I classified Arabic copular clauses into two types: predicational clauses and specificational clauses. In section three, I discussed the previous analysis provided for copular sentences in Arabic. In section four, I argued that the pronoun which appears in specificational and equative sentences is a linker and a focus marker.

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