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## THE SYNTAX OF COPULAR CLAUSES IN ARABIC

by

Bader Alharbi

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

in Linguistics

at

The University of Wisconsin-Milwaukee

December 2017

#### ABSTRACT

#### THE SYNTAX OF COPULAR CLAUSES IN ARABIC

by

#### Bader Alharbi

#### The University of Wisconsin-Milwaukee, 2017 Under the Supervision of Professor Hamid Ouali

Copular clauses in several languages have received much attention in recent years, however in Arabic they have been largely overlooked. In general, copular clauses have been classified into four types: the predicational clause, the specificational clause, the identificational clause, and the identity clause. This thesis aims to characterize and analyze the various copular clause types in Arabic, and goes further to discuss the taxonomic status of the copular clause with a postcopular definite description and the nature of the pronominal element (PE) in Arabic copular clauses. The thesis then explores the predicational clause type in more depth, focusing specifically on the copula KWN, the subject NP, and agreement and case in this type of copular clause. I provide an analysis of Arabic copular clauses that condenses the four types of copular clauses into just two types: the predicational clause and the identity clause, which differ in the small clause they contain. The specificational clause, the identificational clause, and the clause with a postcopular definite description can all be considered subtypes of the identity clause. I claim that the PE, which appears in all Arabic copular clauses except the predicational clause, is a realization of the F head in the structure of the identity clause, and cannot be used in a predicational clause due to the presence of predicative expressions in this type of clause. I also claim that Arabic has a single copula KWN, which originates in the vP, however in the structure of the Arabic verbless sentence this vP does not project. Next, I suggest that the definiteness

constraint on the subject of Arabic predicational clauses follows from the referentiality and topicality requirements on the subject of a predicational clause. Finally, I provide an analysis for case and agreement in the predicational copular clause which suggests that the nominative case on subjects and their predicates in verbless sentences is obtained via Multiple Agree with T, whereas the accusative case on subjects and their predicates in clauses involving the copular verb results from Multiple Agree with *v*. However, the case on subjects may change in the course of a derivation by other mechanisms, such as presence of the complementizer *2inna* or by cyclic agreement.

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## إلى والديّ وزوجتي أطال الله في عمر هم

To my parents and my wife, may Allah prolong their lives

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## LIST OF ABBREVIATIONS

1, 2, 3	First, Second, Third Person
ACC	Accusative
CA	Classical Arabic
Du	Dual
EA	Egyptian Arabic
EPP	Extended Projection Principle
FCH	Functional Category Hypothesis
Fem	Feminine
FI	Full Interpretation
Fut	Future
GB	Government and Binding
Gen	Gender
GEN	Genitive
IND	Indicative
Indef	Indefinite
KWN	Copula in Arabic
LA	Lebanese Arabic
LF	Logical Form
MA	Moroccan Arabic
Masc	Masculine
MP	Minimalist Program
NA	Najdi Arabic
Neg	Negative
NOM	Nominative
Num	Number
PA	Palestinian Arabic
PE	Pronominal Element
Per	Person
PF	Phonetic Form
PIC	Phase Impenetrability Condition

Plural
Principles and Parameters
Present
Pronominal Copula
Past
Question Particle
Standard Arabic
Small Clause
Singular
Specifier Hypothesis
Subject
Subjunctive
Subject Verb Object
Tense
Topic
Universal Grammar
VP Ellipsis
Verb Subject Object

## LIST OF PHONETIC SYMBOLS USED IN GLOSSES OF DATA

Symbol	Phonetic Description
3	glottal stop
ħ	voiceless pharyngeal fricative
ç	voiced pharyngeal fricative
ť	voiceless dental stop (emphatic)
d <sup>ç</sup>	voiced dental stop (emphatic)
S <sup>ç</sup>	voiceless dental fricative (emphatic)
${\tilde 0}^{\varsigma}$	voiced interdental fricative (emphatic)
θ	voiceless interdental fricative
ð	voiced interdental fricative
q	voiceless uvular stop
Х	voiceless uvular fricative
R	voiced uvular fricative
dʒ	voiceless palatal affricate
ſ	voiceless palatal fricative

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#### **Chapter 1 Introduction**

#### **1.1 Introduction**

A copular clause is often defined as a clause that includes a copular element. For example, Moro (1997) defines the copular clause as "a sentence where the main verb is *be* or its equivalent in languages other than English" (p.23). However, the presence of a copular element is not always necessary. In some languages, such as Arabic, Russian, and Polish, a clause may lack a copular element but still be considered a copular clause. The study of the copular clause and its syntax and semantics has drawn the attention of many linguists. The outcome of this study is that the copular clause manifests itself in different clause types. According to Higgins (1979), the foundational work on this topic, copular clauses can be classified into four different clause types as shown in Table 1. Generally speaking<sup>1</sup>, the predicational clause provides information about the subject. The specificational clause specifies who the referent is. The identity clause expresses an identity relation between two expressions, and the identificational clause identifies the name of a person.

Clause Type	Example
Predicational Clause	John is a teacher
Specificational Clause	The winner is John
Identity Clause	She is Mary
Identificational Clause	That boy is John

 Table 1 Taxonomy of copular clauses

Linguists have been working to refine descriptions of these copular clauses since Higgins's work in 1979. In many languages, including English, Danish, French, Polish, Hebrew,

<sup>&</sup>lt;sup>1</sup> I have provided here a very rough description; Chapter 3 provides a more in-depth discussion.

and Russian, these copular clauses have received much attention; however in other languages, such as Arabic, they have been largely overlooked. This lack of a comprehensive study on Arabic copular clauses leaves a gap that this thesis attempts to fill. Specifically, this thesis aims to characterize and analyze the Arabic copular clause types with a special focus placed on the predicational clause type.

This introductory chapter consists of five main sections. Section (1.2) provides a short background on the language under investigation and on how my data were obtained for this study. Section (1.3) discusses the research questions specific to this thesis in more detail. Section (1.4) elaborates on the significance of this thesis. Section (1.5) presents an overview of the Minimalist Program, which is the syntactic model adopted in this thesis. Finally, the scope and organization of the thesis is shown in Section (1.6).

#### 1.2 Language and data

Arabic is a Semitic language, which belongs to a branch of the Afroasiatic language family. There are many varieties of Arabic, including Standard Arabic (SA), Najdi Arabic (NA), Moroccan Arabic (MA), Egyptian Arabic (EA), and Lebanese Arabic (LA). SA is used in over twenty Arab countries and is generally used in formal settings, such as writing, media, education, and formal speech, as well as in classical poetry. SA additionally serves as the best means of communication among speakers of different Arabic dialects. These Arabic dialects, including NA, MA, EA, and LA, are distinct local dialects spoken in different countries throughout the Arab world. In this thesis "Arabic" and "SA" will be used interchangeably, while local dialects will be referred to by their abbreviated names.

The data presented in this thesis were obtained from a number of different sources. The SA data were created based on the rules of SA grammar, which is well documented in the literature on traditional Arabic grammar. I provided the NA data since I am a native speaker of this dialect, but data from other Arabic dialects were obtained from the literature. To verify the data, experts in traditional Arabic grammar and native speakers of the various Arabic dialects were consulted.

#### **1.3 Research questions**

This thesis seeks to answer a number of questions regarding Arabic copular clauses. These questions are summarized below and will be described in more depth throughout the rest of this section.

- (i) What account can be provided to characterize the different types of Arabic copular clauses, i.e., predicational, specificational, identificational, and identity clauses?
- (ii) What is the taxonomic status of the copular clause with a postcopular definite description?
- (iii) What is the nature of the pronominal element found in all Arabic copular clause types but one: the predicational clause type?
- (iv) What is the nature and role of the copula KWN in the Arabic predicational clause?
- (v) What accounts for the definiteness constraint on the subject of Arabic predicational clauses?
- (vi) What is the nature of the small clause that hosts the predicational relation?
- (vii)What account can be provided to explain the agreement and unexpected case mismatch between a subject DP and its predicate in the predicational clause?

Using Higgins's (1979) taxonomy, provided in Table 1, Table 2 portrays examples of the four types of Arabic copular clauses.

Example	
?al-?awlaad-umumarid <sup>c</sup> -uunathe-boys-NOMnurse-Masc.Pl.NOM'The boys are nurses.'	
?al-faa?iz-uZayd-unthe-winner-NOMZayd-NOM'The winner is Zayd.'	
PanaaBader-unIBader-NOM'I am Bader.'	
haaðaa l-walad-u Zayd-un This the-boy-NOM Zayd-NOM 'This boy is Zayd.'	

 Table 2 Arabic copular clauses

Since the primary goal of this thesis is to characterize and analyze Arabic copular clauses, illustrated in Table 2, this thesis attempts first and foremost to provide an account that can accurately characterize these various types of Arabic copular clauses (i.e., Question (i)). As will be discussed in Chapter 2, various analyses have been introduced regarding the classification and structure of copular clauses (cf. Bondaruk, 2013; Carnie, 1995, 1997; Hedberg & Potter, 2010; Heggie, 1988; Heycock & Kroch, 1998, 1999; Higgins, 1979; Mikkelsen, 2005; Moro, 1997). Some of these works analyze the specificational clause as an identity clause, whereas others analyze it as an inverse predicational clause. Additionally, some analyze the identificational clause as an identity clause. This conflict over how best to classify copular clauses is the primary motivation guiding the first question of this thesis.

Another question this thesis seeks to answer pertains to the taxonomic status of the Arabic copular clause with a postcopular definite description (i.e., Question (ii)). An example of this kind of clause is shown in (1). Is it a predicational clause, an identity clause, or both?

(1) Ahmad-u **I-muSallim-u** Ahmad-NOM the-teacher-NOM 'Ahmad is the teacher.' Three different views have been proposed in the literature to classify this clause. The first view assumes that this clause is a predicational one, since the postcopular expression is predicative (of type  $\langle e,t \rangle$ ), and not referential (Heggie, 1988; Mikkelsen, 2005; Moro, 1997). The second view assumes that this clause is an identity (equative) clause, since the postcopular expression is referential (of type  $\langle e \rangle$ ), and not predicative (Carnie, 1995, 1997 & Roy, 2013). The third view assumes that this clause can be considered either a predicational clause or an identity clause, since the postcopular expression can be interpreted either as predicative or referential (Higginbotham, 1987; Higgins, 1979; Rothstein, 2004).

In addition, a pronominal element (PE henceforth) obeys different constraints across Arabic copular clause types. As demonstrated in Table 3, a PE cannot be used in the predicational clause, whereas it can be used in the other copular clause types, and *must* be used in the identity clause type.

Clause Type	Example	
Predicational Clause	Zayd-un(*huwa)tfaalib-unZayd-NOMhestudent.Masc.Sg-NOM'Zayd is a student.''Zayd is a student.'	
Specificational Clause	Pal-malik-u(huwa)Zayd-unthe-king-NOMheZayd-NOM'The king is Zayd.''	
Identity Clause	Michel Chalhoub *(huwa) Omar-u ∫-∫ariif Michel Chalhoub he Omar-NOM the-∫ariif 'Michel Chalhoub is Omar Asharif.'	
Identificational Clause	haaðihi l-bint-u (hiya) Hind-un This the-girl-NOM she Hind-NOM 'This girl is Hind.'	
Clause with a postcopular definite description	kaana Zayd-un (huwa) l-malik-a be.PST-3.Masc.Sg Zayd-NOM he the-king-ACC 'Zayd was the king.'	

 Table 3 PE in Arabic copular clauses

This finding leads to the third question this thesis seeks to answer, namely: What is the nature of the PE in Arabic copular clauses (i.e., Question (iii))? Is it a pronominal copular morpheme (Li & Thompson, 1977), an identity pronoun occurring in the copular verb position (Eid, 1991), a realization of the identity predicate as in Irish (Carnie, 1995, 1997), an auxiliary similar to the copular verb *KWN* base-generated in the Pred head and then raised to T (Ouhalla, 2013), or a linking element (Choueiri, 2016)? Why is it illicit in the predicational clause and licit in all other copular clause types? Why is it obligatory only in the identity clause?

The thesis then turns to discuss the predicational clause type in more depth, focusing specifically on the copula *KWN*, the subject NP, and the nature of the small clause. The Arabic predicational clause can be classified into two types based on the presence or absence of this copula *KWN*. The first type is known as a verbless sentence (or a copularless sentence) because it cannot include an overt copula, as shown in (2). The verbless sentence occurs only in the present tense. The second type is known as a verbal sentence (or a copular sentence) because it must include an overt copula, as shown in (3). This type of sentence occurs in the past and future tenses.

#### (2)

- a. ?al-?awlaad-u mumarid<sup>s</sup>-uuna the-boys-NOM nurse-Masc.Pl.NOM 'The boys are nurses.'
- b. Ahmad-u t<sup>s</sup>awiil-un Ahmad-NOM tall.Masc.Sg-NOM 'Ahmad is tall.'
- c. Ahmad-u fi d-daar-i Ahmad-NOM in the-house-GEN 'Ahmad is in the house.'

#### (3)

a. **sa-ya-kuun-u** Zayd-un muSallim-an Fut-3.Masc.Sg-be-IND Zayd-NOM teacher.Masc.Sg-ACC 'Zayd will be a teacher.'

b.	<b>kaan-a</b> be.PST-3.Masc.Sg 'The boy was happy.	l-walad-u the-boy-NOM		safiid-an happy.Masc.Sg-ACC
c.	kaan-a	l-walad-u	fi	l-mat <sup>s</sup> Sam-i

c. **kaan-a** I-walad-u fi I-mat<sup>4</sup>Sam-i be.PST-3.Masc.Sg the-boy-NOM in the-restiurant-GEN 'The boy was in the restaurant.'

This thesis also seeks to identify and describe the nature and role of the copula *KWN* in the predicational clause (i.e., Question (iv)). Does the copula *KWN* have semantic content, and thus participate in the predicational relation? Is it different from the copula that occurs with other Arabic copular clauses? Is it a verb base-generated in V (Alshamrani, 1994; Aoun, Benmamoun & Choueiri, 2010; Bahloul, 1994; Benmamoun, 2000), an auxiliary base-generated in  $v_b$  or v between T and Pred (Bondaruk, 2013 & Mikkelsen, 2005), an auxiliary base-generated in Pred (Ouhalla, 2013), or a realization of tense or morphological features in T (Choueiri, 2016 & Roy, 2013)? Why must it appear in the past and future tenses but is absent in the present tense?

Next, attention will be focused on the subject NP, as it is one of the main elements that constitute the predicational clause. In Arabic predicational clauses, the subject is constrained to always be a definite NP. This NP can be a common noun with a definite article, a proper noun, or a pronoun as illustrated by the examples in (4). Arabic never tolerates an indefinite NP (or a bare NP) as the subject of a predicational clause, as shown by the examples in (5).

(4)

- a. **?al-?awlaad-u** mumarid<sup>ç</sup>-uuna the-boys-NOM nurse-Masc.Pl.NOM 'The boys are nurses.'
- b. Ahmad-u t<sup>s</sup>awiil-un Ahmad-NOM tall.Masc.Sg-NOM 'Ahmad is tall.'
- c. **?anaa** fi l-madras-at-i I in the-school-Fem.Sg-GEN 'I am in the school.'

(5)

- a. \*radʒul-un mumarid<sup>s</sup>-un man-NOM nurse-NOM 'A man is a nurse.'
- b. \*kaan-a radʒul-un mariid<sup>s</sup>-an be.PST-3.Masc.Sg man-NOM sick-ACC 'A man was sick.'
- c. \*radʒul-un fi d-daar-i man-NOM in the-house-GEN 'A man is in the house.'

How we can account for this constraint (i.e., Question (v)) is one of the crucial issues addressed in this thesis. Why can only definite descriptions, proper nouns, and pronouns function as the subject of a predicational clause? Why is an indefinite NP not tolerated as the subject of a predicational clause?

Further investigation into the predicational clause leads to another interesting question what is the nature of the small clause (SC henceforth) that hosts the predicational relation (i.e., Question (vi))? Is it a lexical or functional category? In the literature, two hypotheses are provided for this SC. One is the Specifier Hypothesis (Stowell, 1981), which suggests that the subject is base-generated in the specifier of a lexical category, i.e., NP, AP, or PP. The other is the Functional Category Hypothesis (Bowers, 1993, 2001), which suggests that the subject is originated in the specifier of the functional head Pred, which takes the predicate as its complement. As will be shown in Section (2.3), all previous works on the Arabic predicational clause<sup>2</sup> adopt the Specifier Hypothesis.

The final question that this thesis aims to answer is associated with case and agreement in the predicational clause (i.e., Question (vii)). In Arabic, the predicate NP (and also the AP) agrees in number, gender, and case with its subject DP, as illustrated in (6).

<sup>&</sup>lt;sup>2</sup> See Alshamrani (1994), Aoun et al. (2010), Bahloul (1994), Benmamoun (2000), and Ouhalla (2013).

(6) ?al-?awlaad-u mumarid<sup>s</sup>-uuna The-boys-NOM nurse-Masc.Pl.NOM 'The boys are nurses.'

In the presence of the complementizer *Pinna* or the copula *KWN*, the predicate fails to agree in case with its subject DP, as shown in (7.a) and (7.b) respectively.

(7)

a. ?inna	1-?awlaad-a	mumarid <sup>ç</sup> -uuna
That	the-boys-ACC	nurse-Masc.Pl.NOM
'Certainl	y the boys are nurses.'	

b. k	aan-a	l-?awlaad-u	mumarid <sup>ç</sup> -iina
b	e.PST-3.Masc.Sg	the-boys-NOM	nurse-Masc.Pl.ACC
۲-	The boys were nurses.'		

However, when both the complementizer *?inna* and the copula KWN occur in a single clause, as

illustrated in (8), the predicate agrees in case with the subject DP.

(8)	?inna	l-?awlaad-a	kaan-uu	mumarid <sup>s</sup> -iina
	That	the-boys-ACC	be.PST-3.Masc.Pl	nurse-Masc.Pl.ACC
	'Certainly the boys were nurses.'			

In this thesis, I provide a new account that explains the agreement and the unexpected case mismatch between the predicate and its subject DP. As will be discussed in Section (2.3), previous analyses on case and agreement in the Arabic predicational clause have encountered some challenges.

To summarize, the present thesis aims to answer several important questions regarding Arabic copular clauses. Fully addressing all seven questions above will provide a comprehensive characterization and analysis of Arabic copular clause types.

#### **1.4 Significance**

This thesis is significant for a number of reasons. First, it is the first work that examines the syntax of all four types of Arabic copular clauses, and more specifically, the first work that explores in depth the Arabic predicational copular clause. As will be shown in Chapter 2, work on Arabic copular clauses has focused primarily on the structure of the verbless sentence and the status of the PE. Therefore, a single work that examines all Arabic copular clauses can be beneficial to identify syntactic facts that may have been previously overlooked.

Second, this thesis touches upon the semantics of Arabic copular clauses, which is largely ignored in earlier works. Third, case and agreement in the Arabic predicational clause have received little attention in the literature, especially in comparison with the amount of discussion subject-verb agreement has received. In this thesis, I provide an analysis of case and agreement in this type of clause under the assumption that all agreement should be obtained using the same mechanism. Another distinguishing feature of this thesis is that it discusses agreement and case on both NP predicates and AP predicates, while previous work has focused only on one type of predicate (i.e., either the NP or AP, but not both). Finally, the extensive research presented in this thesis contributes in particular to the theory of copular clauses, and to the study of Arabic syntax in general by adding to the literature a better understanding of Arabic copular clauses.

#### **1.5 Minimalist Program (MP)**

This section lays out the fundamentals of the MP framework introduced by Chomsky (1993, 1995), which builds on earlier models, namely the *Government and Binding* (GB) and *Principles and Parameters* (PP). According to Chomsky (1993, 1995, 2015), the MP takes the language faculty, a component of the human brain dedicated to language, as its object of inquiry. The MP assumes that the language faculty consists of two components: a lexicon and a computational system. The latter interacts with two other external systems, more specifically performance systems: the articulatory-perceptual system and the conceptual-intentional system.

The computational system selects items from the lexicon to generate derivations. Chomsky (2015) explains, "The derivation of a particular linguistic expression, then, involves a choice of items from the lexicon and a computation that constructs the pair of interface representations" (p.154). The linguistic expressions, i.e. the sound-meaning pairs, generated by the language faculty must meet the principle of *Full Interpretation* (FI)<sup>3</sup> at both the Phonetic Form (PF) and Logical Form (LF) interface levels.<sup>4</sup> That is, the PF representational level interfaces with the articulatory-perceptual system, whereas the LF representation level interfaces with the conceptual-intentional system. This means that a syntactic derivation converges at the interface levels if it yields legitimate PF and LF objects; otherwise it crashes. Chomsky (2015) writes:

The principle of FI is assumed as a matter of course in phonology; if a symbol in a representation has no sensorimotor interpretations, the representation does not qualify as a PF representation. This is what we called the "interface condition." The same condition applied to LF also entails that every element of the representation have a (language-independent) interpretation. (p.24)

Chomsky points out that in the MP the computational system proceeds by three basic derivational operations: Merge, Move, and Agree. In the following subsections, I discuss these three operations.

#### 1.5.1 Merge and Move

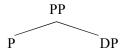
Merge is an operation of the grammar that takes two syntactic objects out of the lexicon, or more specifically out of the numeration which includes unordered lexical items selected from

<sup>&</sup>lt;sup>3</sup> Chomsky (2015) points out that the principle of *Full Interpretation* states that "there can be no superfluous symbols in representations ..... or superfluous steps in derivations" (p.24).

<sup>&</sup>lt;sup>4</sup> The other levels of representations known as Deep and Surface structures, which were used in the GB theory, were eliminated in the MP.

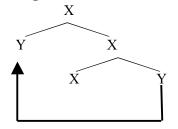
the lexicon, and groups them together to form a new syntactic object. Chomsky (2001) explains, "The indispensable operation of a recursive system is Merge (or some variant of it), which takes two syntactic objects  $\alpha$  and  $\beta$  and forms the new object  $\gamma = {\alpha, \beta}$ " (p.3). As illustrated in (9), the operation Merge combines a preposition P with a DP to form a complex PP, a projection of P.

#### (9) External Merge



Chomsky (2005) suggests two subcases of the operation Merge: External Merge and Internal Merge. The type of Merge I have just discussed in (9) is an example of external Merge. Internal Merge, which according to Chomsky is also called Move, is simply the movement or displacement of an element from its base-position into another position in the same structure, as illustrated in (10) where the element Y is moved (re-merged) into Spec-X. The moved element Y leaves behind a copy of itself which is generally deleted at the PF level.

#### (10) Internal Merge



In earlier versions of the MP (1993, 1995), Chomsky argues that external Merge "comes free of charge", i.e., it does not require justification like other operations. However, Chomsky argues that the operation Move, which is referred to as internal Merge<sup>5</sup> in recent works, is an

<sup>&</sup>lt;sup>5</sup> The status of internal Merge was not obvious in earlier versions of the MP.

apparent imperfection of natural language and must be "forced". It is considered a Last Resort<sup>6</sup> operation driven by feature checking requirements to ensure that the derivation converges at the interface levels. That is, feature checking mechanisms force the operation Move to apply.

In recent versions of the MP (2001, 2005, 2013), Chomsky argues that both operations of external and internal Merge "come free of charge". He also points out that the operation Move is the combination of Agree and Merge or preempted by both of these simpler operations. It is driven only by uninterpretable features, and more specifically by edge features such as the EPP-feature, on phase heads as a result of Probe-Goal matching. This means that the operation Agree is a prerequisite for Move to apply (Bošković, 2011).

#### 1.5.2 Agree

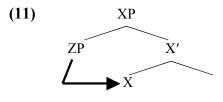
In the MP framework, features play a central role in syntactic representations. As discussed by Chomsky (2000, 2001), there are two types of inflectional features: uninterpretable features [uF] and interpretable features  $[F]^7$ . Uninterpretable features refer to formal features that have no semantic content, for example the  $\varphi$ -features of T, i.e., Gender (Gen), Number (Num), and Person (Per), the EPP feature of T, and the structural Case of a DP/NP. Interpretable features, on the other hand, have semantic content, for example the  $\varphi$ -features of DPs. Uninterpretable features enter a derivation unvalued, while interpretable features enter a derivation valued. This latter characteristic of valuation is primarily what distinguishes between these two types of features. For the derivation to converge at LF, Chomsky argues that the uninterpretable features must enter into an agreement relation with corresponding interpretable

<sup>&</sup>lt;sup>6</sup> According to Collins (2001), the condition of Last Resort can be defined as "An operation OP may apply only if the derivation would otherwise result in an ungrammatical representation (at PF or LF)" (p.46).

<sup>&</sup>lt;sup>7</sup> Chomsky (2001) states, "Interpretability of features is determined in the lexicon, by Universal Grammar (UG) we assume" (p.5).

features in order to get valued. They must then be deleted from the narrow syntax. Otherwise, the derivation will crash at LF since there are features that have no interpretations at this interface level. Chomsky (2001) says, "The obvious conclusion ... is that agreement relation removes the uninterpretable features from the narrow syntax, allowing derivations to converge at LF while remaining intact for the phonological component" (p.3).

In the literature of generative syntax, particularly in GB, early MP, and recent MP, several different analyses have been proposed to account for agreement (see relevant discussion in Ouali, 2011<sup>8</sup>). In this subsection, I review agreement only in the MP. In early versions of the MP (Chomsky, 1993, 1995) all forms of agreement, for example subject-verb agreement or object-verb agreement, were established under the Spec-head relation. As demonstrated in (11), ZP in Spec-XP, which can be a subject or object DP, enters into agreement with the head of the phrase X, which can be Agr<sub>s</sub>, Agr<sub>o</sub>, T or *v*.

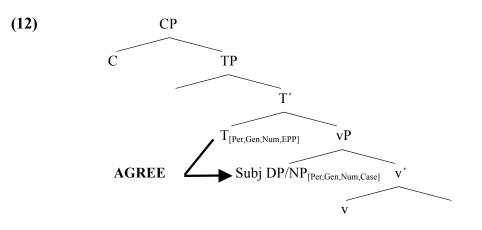


This account of agreement in the Spec-head configuration was broadly assumed in the literature. However, in recent versions of the MP (Chomsky, 2000, 2001, 2005, and references therein) agreement under the Spec-head relation was discarded and replaced by Agree.

Agree is an operation that establishes a relation, specifically a Probe-Goal relation, between two syntactic objects X (known as a *Probe*) and Y (known as a *Goal*). The Probe, which is a functional head (F) such as a head T, has uninterpretable inflectional features and the Goal, which is a maximal XP such as an NP, has corresponding interpretable ones. Under Agree, the

<sup>&</sup>lt;sup>8</sup> Ouali (2011) provides an overview of the different analyses proposed for agreement in the literature of genitive syntax from the GP era until the recent version of the MP.

uninterpretable features of the Probe are valued by matching them with the interpretable features of the Goal and then deleted from the narrow syntax. Structure  $(12)^9$  illustrates the typical subject-verb agreement under Agree, i.e., agreement between the head T, which bears EPP and uninterpretable  $\varphi$ -features, and the NP which bears an uninterpretable Case feature and interpretable  $\varphi$ -features.



For Agree to take place between a head F and a maximal XP, for example the head T and the subject NP in (12), four appropriate conditions must be met (Chomsky, 2000, 2001). Baker (2008) summarizes these four conditions in  $(13)^{10}$ .

(13)

- a. The c-command condition: F-commands XP.
- b. *The intervention condition*: There is no YP such that F c-commands YP, YP c-commands XP, and YP has φ-features.
- c. *The phase condition*: F and XP are contained in all the same phases.
- d. *The activity condition*: XP is made active for agreement by having an unchecked case feature.

The next few paragraphs will be devoted to the discussion of these four conditions. First, c-command (constituent-command)<sup>11</sup> is a structural relation holding among constituents. The principle of c-command can be defined as follows (where X, Y, and Z are different nodes):

<sup>&</sup>lt;sup>9</sup> This structure was adapted from Ouali (2011), page-25, with slight modifications.

<sup>&</sup>lt;sup>10</sup> See Baker (2008), specifically pages 40-48, for an extensive discussion on these conditions.

#### (14) C-command

A constituent X c-commands its sister constituent Y and any constituent Z which is contained within Y. (Radford, 2004: 91)

Notice that in structure (12) the c-command condition is satisfied as the head T c-commands the subject DP which is contained within its vP sister.

Next, the intervention condition (or the locality condition in Chomsky's terms) bars Agree from taking place between a Probe and a Goal if there is an intervening element with  $\varphi$ features. This intervening element will be closer to the Probe than the Goal. In structure (12), Agree takes place between the head T and the subject DP because there is no intervening element with relevant  $\varphi$ -features.

Additionally, the phase condition requires both the Probe and the Goal to be contained within the same phase in order for Agree to apply. So, what is a phase? Chomsky (2001) defines phases as " "propositional": verbal phrases with full argument structure and CP with force indicators, but not TP alone or "weak" verbal configurations lacking external arguments (passive, unaccusative)" (p.12). This means that only CPs and  $v*Ps^{12}$  are phases, whereas TPs and VPs are not. Chomsky also makes a distinction between *strong* and *weak* phases: CPs and v\*Ps are strong phases as they are potential targets for movement driven by an EPP feature, whereas vPs of passive and unaccusative are weak phases. When the derivation of the strong phase (CP or v\*P) is completed, the phase is handed over to the interface levels. This latter operation is known as Spell-Out, which applies cyclically (Chomsky, 2001). If the

<sup>&</sup>lt;sup>11</sup> Chomsky (2015) defines the concept of c-command in terms of dominance: " $\alpha$  c-commands  $\beta$  if  $\alpha$  does not dominate  $\beta$  and every  $\gamma$  that dominates  $\alpha$  dominates  $\beta$ " (p.31).

<sup>&</sup>lt;sup>12</sup> According to Chomsky (2001), the head  $v^*$  is a functional head with full argument structure (i.e., internal and external arguments).

uninterpretable features have not been assigned values upon Spell-Out, the derivation will crash at the interface. Chomsky (2001) writes:

Spell-Out seeks formal features that are uninterpretable but have been assigned values (checked); these are removed from the narrow syntax as the syntactic object is transferred to the phonology. (p.12)

Once the phase is sent to the interface levels, its domain/complement (e.g., TP or VP) becomes inaccessible to further syntactic operations. However, the phase head and its edge, which can be specifiers or adjoined elements, are still accessible to further syntactic operations. They are accessible up to the next strong phase. This is the so-called "Phase-Impenetrability Condition (PIC)", which can be formally stated as follows:

#### (15) Phase-Impenetrability Condition (PIC)

The domain of  $H^{13}$  is not accessible to operations outside HP; only H and its *edge* are accessible to such operations. (Chomsky, 2001: 13)

As an illustration, in structure (12) the phase condition is satisfied because both the head T, the Probe, and the subject DP, the Goal, are contained within the same strong phase, namely the CP phase. Notice that the subject DP is located in the edge of the vP phase and is accessible to operations in the CP phase under the PIC (15).

The last condition is the activity condition, which means that the Goal must be accessible to the Probe, and thus active, by having an uninterpretable feature in order for Agree to apply. For example, in structure (12) the subject NP, the Goal, is accessible to the head T, the Probe, by having an uninterpretable Case feature [uCase], which is valued as nominative under agreement with T. Chomsky (2001) argues that an NP "is active only when it has structural Case" (p.6). Once its Case feature is valued, the NP does not enter into other agreement relations because the

<sup>&</sup>lt;sup>13</sup> H here refers to a strong phase head such as C and  $v^*$ .

NP becomes inactive. Chomsky further points out that Case is not a feature of the Probe, but it is assigned a value under the matching of  $\varphi$ -features and then deleted from the narrow syntax. It is the Probe that determines the value of the Case feature of the Goal: nominative case results from Agree with the head T, whereas accusative case results from Agree with the head *v*.

This section has reviewed the basic architecture of the MP framework. To summarize, the MP assumes that the language faculty includes two components: a lexicon and a computational system. The computational system, which functions by the operations Merge, Move and Agree, selects items from the lexicon to generate a derivation. The derivation has to satisfy the principle of FI at both the PF and LF interfaces, otherwise it will crash.

#### 1.6 Scope and organization of the thesis

This thesis consists of six chapters. These chapters are structured as follows:

Chapter 2 presents the major relevant literature on copular clauses crosslinguistically and on copular clauses in Arabic. The relevance of the works presented to the present thesis is also discussed at the end of each work.

Chapter 3 focuses on the taxonomy of Arabic copular clauses by addressing the first three questions of the thesis. This chapter condenses the number of Arabic copular clauses into only two types, namely the predicational clause and the identity clause, and suggests an alternative analysis for the PE.

Chapter 4 takes a closer look at the predicational clause type by tackling the remaining three questions of the thesis. It is specifically concerned with the copula *KWN*, the subject NP, and the clause's syntactic configuration. The outcome of this chapter is a comprehensive analysis of the Arabic predicational clause.

Chapter 5 focuses on case and agreement in the predicational clause type in order to address the last question of the thesis. In this chapter, a new account is provided for case and agreement based on recent theories of agreement in the MP.

Chapter 6 concludes the thesis by summarizing the foregoing chapters, discussing some implications, and offering suggestions for future work.

#### **Chapter 2 Literature Review**

#### **2.1 Introduction**

This chapter provides an overview of the relevant literature and is composed of three main sections. Section (2.2) discusses the significant work that has already been done on copular clauses in several different languages. Section (2.3) reviews the major work that has been done specifically on Arabic copular clauses. Section (2.4) provides an overview of earlier work done on the PE in Arabic copular clauses. Section (2.5) summarizes this chapter. Each study presented in this chapter is followed by a discussion of its relevance to Arabic copular clauses. This chapter provides a critical evaluation of previous studies in order to strengthen the analyses provided in this thesis.

#### **2.2** Copular clauses crosslinguistically

#### 2.2.1 Heggie (1988)

Heggie (1988) proposes a unified analysis of all copular clauses, including predicational clauses as in (1.a), specificational clauses as in (1.b), and equative clauses<sup>14</sup> as in (1.c). Heggie claims that these copular clauses all derive from a single D-structure. The differences among them are a result of movement at S-structure.

(1)

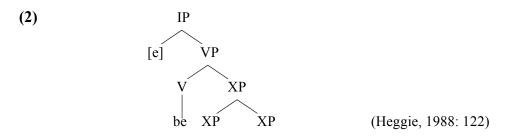
- a. John is the teacher.
- b. The teacher is John.
- c. That man is John.

Starting with the copula *be*, Heggie assumes that in all copular clauses the copula is a raising verb (i.e., the subject must raise to Spec-IP), as suggested by Stowell (1978) and

<sup>&</sup>lt;sup>14</sup> It is worth noting that Heggie treats the identificational clause here as an equative clause.

Couquaux (1982), and undergoes a syntactic movement to Infl if Infl is not lexically occupied. The copula selects for a SC consisting of predicate and subject and assigns neither a  $\theta$ -role nor case.

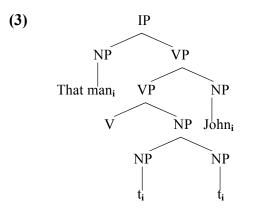
Heggie adopts the structure of the SC proposed by Stowell (1984). That is, the SC is the maximal projection of the predicate and the subject is adjoined to this projection. Accordingly, the D-structure in (2) is what Heggie suggests for all copular clauses.



In predicational and specificational clauses, the predicate assigns a  $\theta$ -role to the subject, which then raises to get case. Heggie argues that predicate NPs do not require case. Both predicational and specificational clauses have a subject-predicate relation. In other words, they have a predicative reading, where the property described by the definite NP predicates of the name.

Heggie points out that in specificational clauses the predicate NP moves at S-structure to a focus position (viz., Spec-CP). This movement is the result of a focus mechanism. She confirms that the definite NP that occurs in a precopular position is still predicative, and not referential, but it is fronted for focus reasons.

For the equative clause, which involves two referential NPs, Heggie provides the structure in (3). In this structure, the second NP (the postcopular NP) is adjoined to a VP at S-structure in a constructional focus position.



(Heggie, 1988: 148)

Heggie's account cannot be applied to Arabic copular clauses for two reasons. First, unlike Heggie, in this thesis I argue that in Arabic predicate NPs and APs do require case, and this case is a result of Multiple Agree. Second, in Arabic it is generally possible to raise a predicate to Spec-CP for focus reasons, as illustrated in (4). If a specificational clause results from a predicate raising to Spec-CP, how should we classify these types of clauses? Are they also specificational clauses<sup>15</sup>?

(4)

- a. haarr-an kaan-a l-dʒaww-u hot-ACC be.PST-3.Masc.Sg the-weather-NOM 'The weather was hot.'
- b. mumarid<sup>c</sup>-an kaan-a Zayd-un nurse-ACC be.PST-3.Masc.Sg Zayd-NOM 'Zayd was a nurse.'

# 2.2.2 Carnie (1995 & 1997)

Carnie (1995 &1997) disputes the view that there is only one structure for copular clauses. Based on Modern Irish copular clauses, for example in (5) where (5.a) is a predicational clause and (5.b) is an equative clause, Carnie argues for two different structures in order to describe copular clauses: one for equative clauses and another for predicational clauses.

<sup>&</sup>lt;sup>15</sup> Rothstein (2004) points out that the Heggie's suggestion that the second DP in the specificational clause is focused is questionable.

(5)

 a. Is dochtúir (í) Máire COMP doctor (AGR) Mary 'Mary is a doctor.'

b. Is í Máire an captaen COMP AGR Mary the captain 'Mary is the captain.'

# (Carnie, 1997: 62)

Carnie points out that in the equative clause in (5.b) both NPs are arguments (referring expressions), whereas in the predicational clause in (5.a) the first NP is an argument and the other NP is a predicate (a non-referring expression). In both types of Irish clauses, Carnie analyzes the copula *Is* as a complementizer particle and not a verb.

Carnie proposes that the SC in the equative clause is COPP headed by an abstract null two place predicate (COP), as illustrated in structure (6). This predicate (equative verb) assigns the attribute  $\theta$ -role to the internal argument and the attribute recipient  $\theta$ -role to the external argument. The latter (the subject NP) is generated in Spec-COPP and the former (the attribute NP) functions as a complement of the head COP. Finally, he assumes that the obligatory agreement morpheme in the equative clause is a realization of the null equative head COP.

(6)  $[_{CP} Is [_{IP} INFL [_{COPP} subject [COP NP]]]]$  (Carnie, 1995: 248)

For predicational clauses, Carnie proposes that the predicate NP, which heads the SC, assigns its attribute property ( $\theta$ -role) to the subject NP, which is generated in Spec-SC. The structure in (7) illustrates his analysis of the predicational clause.

(7)  $[_{CP} Is [_{IP} INFL [_{SC} subject [NP]]]]$  (Carnie, 1997: 9)

In this thesis, I maintain Carnie's assumptions that predicational and equative copular clauses have syntactically different structures, and that the postcopular definite NP is an

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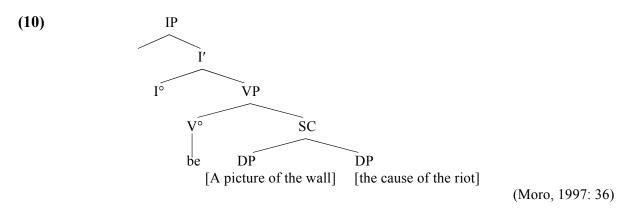
argument. Additionally, I argue that the PE, which is found in all Arabic copular clauses except predicational clauses, is a realization of the identity predicate.

## 2.2.3 Moro (1997)

Moro (1997) explores the structures of predicational and specificational clauses<sup>16</sup>, as shown in (8) and (9) respectively. He argues against the standard assumption that the subject of a predication always occupies the most prominent position within a clause structure (viz., Spec-IP), and instead proposes that the predicative DP can occupy this position while the subject remains *in situ*.

- (8) A picture of the wall was the cause of the riot.
- (9) The cause of the riot was a picture of the wall. (Moro, 1997: 2&3)

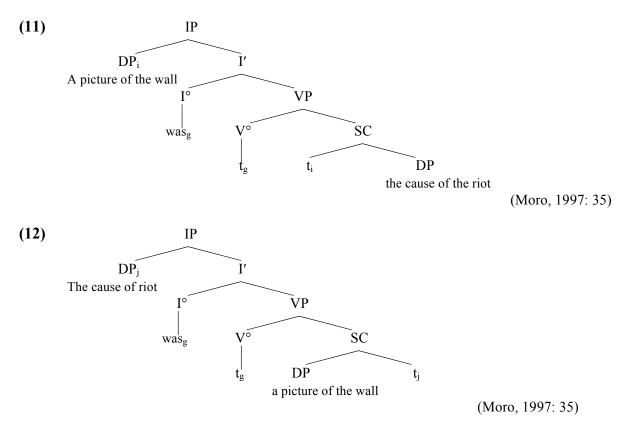
To illustrate, Moro proposes that both of these two copular clauses have the same underlying structure, as shown in (10), where the copula selects a SC and both the subject and predicative DPs are base-generated inside this SC.



In the predicational clause in (8), the subject DP raises to subject position in the matrix clause (Spec-IP) as illustrated in (11), whereas in the specificational clause in (9), the predicative DP raises to Spec-IP and the subject DP remains *in situ* as illustrated in (12). In both structures,

<sup>&</sup>lt;sup>16</sup> Moro refers to the predicational clause as a canonical clause and the specificational clause as an inverse clause.

the raising is triggered by a requirement that the DP has a case feature, as the copula is unable to assign accusative case, and in order to satisfy the EPP feature of I°.



With respect to the DP *in situ*, Moro assumes that when two DPs involve a predicational relation, they are assigned the same case as illustrated in (13.a) from Latin, where the DP *in situ* copies (agrees with) the case of the raised DP. However, when two DPs differ in case, the DP *in situ* obtains the default case as illustrated in (13.b) from English.

(13)

- a. Caesar dux/\*ducem est Caesar-nom leader-nom/\*-acc is 'Caesar is the leader.'
- b.  $[IP [DP the cause of the riot]_i is [SC me t_i]]$

(Moro, 1997: 41& 42)

As a clarification regarding the nature of the SC, Moro, like Heggie (1988), assumes that the SC is a kind of adjunction structure where the subject is adjoined to the maximal projection (SC) of the lexical head (the predicate). He argues that the SC is not a projection of a functional head (i.e., AgrP or PredP) because in some cases the agreement between subject and predicate cannot be realized, as shown in (14) from Russian. In languages where the AP agrees with the subject, the agreement should be considered a specific morphological requirement of APs.

(14) dom nov (house new –agreement) 'The house is new.'

(Moro, 1997: 54)

Unfortunately, Moro's theory does not sufficiently account for Arabic copular clauses. First, it is not clear what motivates the predicative DP, and not the subject DP, to raise to Spec-IP in specificational clauses. The subject DP is the closest DP to I°, and can satisfy the features of I°. Moro then argues that if D is an indefinite article, as in (15.a), the predicative DP cannot raise to Spec-IP, as illustrated in (15.b). He has not provided a full explanation for this argument since his work focuses only on predicative definite NPs. It is not obvious under his account what bars the other types of predicates (i.e., APs, NPs and PPs) from raising to Spec-IP.

(15)

a.  $[_{IP} [_{DP} John]_i [_{V^\circ} is] [_{SC} t_i [DP a fool]]]$ 

b.  $*[_{IP} [_{DP} a \text{ fool}]_i [_{V^\circ} is] [_{SC} John t_i]]$ 

(Moro, 1997: 44)

Additionally, as mentioned earlier, Moro claims that the SC should not be a functional projection (viz., AgrP or PredP) because in some languages the agreement between subject and predicate cannot be realized. Given that it is realized only in some languages but not in others, Moro claims, it should be considered a specific morphological requirement of the predicate. I believe this claim is inadequate and thus requires more of an explanation. What specifically is this specific morphological requirement? How can we account for the agreement between subject and predicate that occurs in many languages such as Arabic, Polish, and French? Contrary to Moro, in this thesis I argue that the SC is a functional projection, namely a PredP as suggested by

Bowers (1993, 2001). This functional projection helps significantly in providing an elegant account of case and agreement in Arabic. Finally, even though Moro suggests that two DPs involving a predicative relation are assigned the same case, his approach to explaining the mismatch in case between the two DPs is inadequate. In this thesis, I suggest that whenever two expressions in Arabic involve a predicational relation, they should have the same case via Multiple Agree.

#### 2.2.4 Heycock and Kroch (1998 & 1999)

Heycock and Kroch (1998, 1999) argue against the inversion analysis, which treats the specificational copular clause in (16) as an inverse predicational clause (cf. Bondaruk, 2013; Heggie, 1988; Mikkelsen, 2005; Moro, 1997). According to the inversion analysis, both the inverse clause and the non-inverse clause always involve a predicational relation. The initial NP of the inverse clause is predicative (not referential), whereas the second NP is referential.

(16) My only friend is my dog. (Heycock & Kroch, 1999: 371)

Heycock and Kroch argue that this type of analysis is untenable for several reasons. Firstly, the inversion analysis is based on the assumption that the predicative NP, not the referential NP, raises to Spec-IP. This is incorrect, as the subject position (viz., Spec-IP) in copular clauses is restricted to the subject of the SC complement of I, which is always referential. The subject of the SC acts as the subject of the VP complement of I. Secondly, the inversion analysis limits the interpretation of copular clauses to be always predicational. That is to say, copular clauses differ only in which NP functions as a predicate and which NP functions as an argument. Thirdly, in the examples provided by proponents of the inversion analysis, one NP is less referential than the other. Fourthly, contrary to Moro's proposal, Heycock and Kroch assume that in predicational clauses it is possible to raise a predicate to Spec-CP, but not to Spec-IP, even if the subject has already been raised. Arabic provides evidence with respect to this last argument. In Arabic, it is possible to raise the predicate (viz., to Spec-CP) even if the subject has already been raised (viz., to Spec-IP), as illustrated in (17). Finally, if the specificational clause is a result of predicate raising (inversion), then why is it impossible to raise other types of predicates such as NPs and APs as shown in (18)?

(17)

- a. haarr-un l-dʒaww-u hot-NOM the-weather-NOM 'The weather is hot.'
- b. mumarid<sup>§</sup>-un Zayd-un nurse-NOM Zayd-NOM 'Zayd is a nurse.'

(18)

- a. \*A doctor is John.
- b. \*Proud of his daughters is John.

(Heycock & Kroch, 1999: 379)

Alternatively, Heycock and Kroch propose that there are only two types of copular clauses: a predicational clause (19.a) and an equative clause (19.b). The specificational clause, as in (19.c), cannot be analyzed as an inverse predicational clause, and is a subtype of the equative clause.

(19)

- a. Your attitude toward Jones is a very serious problem.
- b. Your attitude toward Jones is my attitude toward Davies.
- c. The most serious problem is your attitude toward Jones.

(Heycock & Kroch, 1999: 381)

They argue that the distinction between predicational and equative clauses should not be attributed to the copula, as the copula in both clauses is always a semantically vacuous element. They claim instead that the distinction between the two types should be ascribed to the existence of two different types of small clauses, which are taken by the copula as its complement. Without delving into a comprehensive explanation<sup>17</sup>, Heycock and Kroch suggest that the equative copular clause contains an empty functional head, denoting equative semantics, which is absent in the predicational copular clause. The two expressions in the equative clause have the same syntactic category and the same semantic type  $\langle e \rangle$ . In this thesis, I argue that in all types of Arabic copular clauses the copula *KWN* is semantically vacuous and the PE, which occurs with all copular clause types except the predicational clause, is a realization of the identity (equative) predicate.

It appears that Heycock and Kroch are in accordance with Carnie (1995, 1997), Higginbotham (1987), Rothstein (2004), and Roy (2013) in that they all analyze equative copular clauses differently from predicational clauses. In this thesis, I also argue that the Arabic predicational clause should be analyzed differently from the other copular clause types, which should all be subsumed under the equative clause, for reasons to be mentioned in more detail in Chapter 3.

# 2.2.5 Mikkelsen (2005)

Mikkelsen (2005) investigates predicational and specificational copular clauses in English and Danish as shown in (20).

#### (20)

- a. Susan is a doctor (or the doctor).
- b. The winner is Susan.

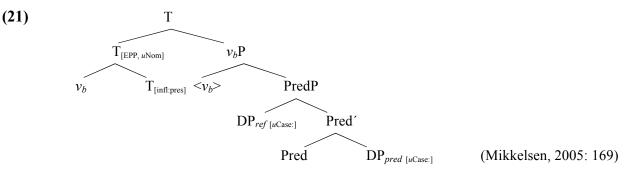
[Predicational Clause] [Specificational Clause] (Mikkelsen, 2005: 48)

She argues that both types are subject-initial clauses. They both have one predicative expression and one referential expression. The subject of the predicational clause is referential

<sup>&</sup>lt;sup>17</sup> Heycock and Kroch have not provided further details about the structures of these types of copular clauses.

(of type <e>) and the predicate complement is predicative (of type <e,t>). In contrast, the subject of the specificational clause is predicative and the predicate complement is referential.

Following Moro's (1997) analysis of raising predicates, Mikkelsen proposes that both predicational and specificational clauses are derived from the same core structure (21).

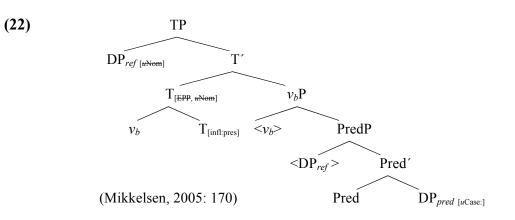


The Pred head, which is morphologically null, mediates the predication relation in that it takes the predicative expression as its complement and the referential expression as its specifier. The  $v_b$  is a subtype of unaccusative v since it does not assign a  $\theta$ -role or an accusative case, but they differ in the type of complement they take:  $v_b$  takes PredP as its complement, whereas v takes VP as its complement. The copula, which behaves as an auxiliary and which is semantically vacuous, projects in the  $v_b$  head and raises to T. Mikkelsen points out that the difference between languages that require a verbal copula in all copular clauses, such as English and Danish, and languages that allow copular clauses without a verbal copula, such as Hebrew, Arabic, Scottish Gaelic, and Irish, can be understood as a difference in the status of  $v_b$ . In the former set of languages,  $v_b$  must project because T cannot select for PreP directly, while in the latter set of languages  $v_b$  will not project because T can select for PredP directly.

Mikkelsen assumes that since T is finite, it has an interpretable inflectional feature [infl:pres], an uninterpretable nominative case feature [uNom], and an EPP feature. She also assumes that both DPs bear an uninterpretable case feature [uCase].

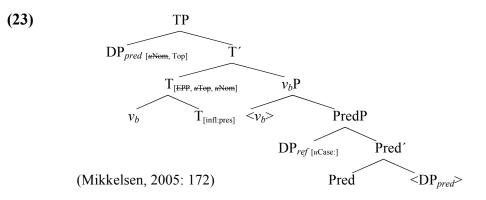
The two copular clauses differ in which DP moves to the subject position. In the predicational clause the referential DP moves to Spec-TP, whereas in the specificational clause the predicative DP moves to Spec-TP. Moro has not discussed under which conditions the raising occurs. Therefore, Mikkelsen integrates the information structure to determine which DP raises to the subject position. She points out that the specificational clause has a fixed topic-focus structure in which the subject is always topic and the predicate expression is always focus, whereas the predicational clause has a free topic-focus structure in which either DP can be topic and either DP can be focus. She suggests that the raising depends on the distribution of a Topic feature, which is uninterpretable on T and interpretable on DPs.

Structure (22) illustrates the derivation of a predicational clause. T undergoes Agree with the referential DP, which values all the uninterpretable features of T, thus valuing its case feature as nominative. Then, this referential DP raises to Spec-TP to satisfy the EPP feature. The predicative DP bears the default case (accusative in English) since the  $v_b$  and Pred do not assign case.



Structure (23) demonstrates the derivation of a specificational clause. In this clause, the predicative DP (as opposed to the referential DP) bears the interpretable Topic feature, and as such it can check all three uninterpretable features of T. It checks the EPP and Topic features of T and its unvalued case feature valued by T as nominative case. Mikkelsen points out that when

the referential DP cannot satisfy all uninterpretable features of T, T establishes an Agree relation with the predicative DP, which can satisfy all its uninterpretable features<sup>18</sup>.



As in the predicational clause, the referential DP that remains inside the PredP gets the default accusative case in English. Mikkelsen provides the example in (24) to support her claim that the DP which does not obtain its case from agreement with T is the one that gets the default case. The absence of the accusative case assigner in copular clauses correlates with the absence of the agentive v.

(24) The winner isn't  $\{HIM/*HE\}$ . (Mikkelsen, 2005: 172)

Mikkelsen assumes that the EPP feature requires T to enter Agree with a D feature, explaining the impossibility of a non-DP complement of the Pred head (particularly AP, PP, and NP) to raise to Spec-TP. Since the category feature of the other non-DP predicates is not a D feature, they cannot raise to Spec-TP to satisfy the EPP feature of T.

Even though her work is mainly about specificational clauses, Mikkelsen calls for the elimination of the identificational copular clause (25). She argues that this type of copular clause should instead be classified as an identity clause, since both of the DP expressions it contains are referential (individual-denoting).

<sup>&</sup>lt;sup>18</sup> Her analysis violates the intervention condition of Agree theory, wherein the specificational clause T enters Agree with the predicative DP while the referential DP intervenes between them. To solve this issue, Mikkelsen assumes that the intervention effects are not real. She states, "They are the result of other interactions, plausibly related to the properties of phases" (p.182). Consequently, specificational clauses are possible only when the referential DP cannot eliminate all features on T. This is still an issue with Mikkelsen's analysis.

(25) That woman is Susan.

(Mikkelsen, 2005: 48)

Having outlined the main parts of Mikkelsen's account, I will now briefly discuss why it cannot be maintained in Arabic. As will be shown in Chapter 3, I treat the clause containing a postcopular definite NP and the specificational clause as an identity clause, claiming that they both behave similarly to the identity copular clause in several respects (e.g., the PE, VP ellipsis, and coordination). Also, under the assumption of Longobardi (1994) that the D head is the locus of referentiality, I assume that the definite NP in copular clauses should be analyzed as referential. In addition, Mikkelsen provides examples of tag questions to show that the subject of the specificational clause is property-denoting and the subjects of predicational and identity clauses are referential. However, this argument cannot be supported in Arabic, as I will explain further in Section (3.3.9). Finally, examples from Arabic contradict her claim that the DP inside PredP, which does not obtain its case from agreement with T, gets the default case. As will be shown in Chapter 5, a postcopular expression in Arabic, whether it is an NP or an AP, can bear either nominative case or accusative case depending on the presence of the copula *KWN*.

## 2.2.6 Hedberg and Potter (2010)

Hedberg and Potter (2010) adopt the analysis of Heycock and Kroch (1998, 1999). They assume that there are two types of copular clauses, a predicational clause (26.a) and an equative clause (26.b), and that the specificational clause (26.c) is a subtype of the equative clause.

(26)

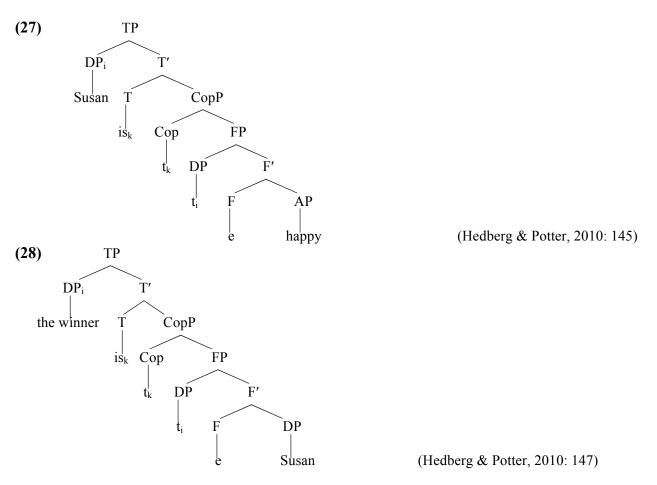
- a. Susan is happy.
- b. She is Susan.
- c. The winner is Susan.

(Hedberg & Potter, 2010: 144)

Their account differs from that of Heycock and Kroch in that they ascribe the differences between the two copular types to the copula *be*. As mentioned earlier, Heycock and Kroch argue

that the copula in both copular clauses is always semantically vacuous. However, Hedberg and Potter argue that the copula *be* is vacuous only in the predicational clause, whereas it is nonvacuous in the equative clause, as well as in the specificational clause. The latter two clauses have a special type of copula.

In their analysis of both copular clauses, they suggest that the copula projects in CopP and then raises to T. It selects for a FP, which is the SC in both clauses. The structures (27) and (28) for the predicational clause (26.a) and specificational clause (26.c) respectively demonstrate their analysis. The equative clause in (26.b) has the same structure as the specificational clause.



In both structures, the subject of the FP, not the predicate complement, always raises to Spec-TP to satisfy the EPP feature. This is generally the standard assumption for predicational clauses. In specificational and equative clauses, however, the element that is first merged in Spec-FP is the

one that raises to Spec-TP. For instance, in the equative clause *Susan is her*, which is the inverse clause of (26.b), the DP *Susan* is first merged in Spec-FP and then raises to Spec-TP.

In the structure of the predicational clause, the precopular expression is of type  $\langle e \rangle$ , the postcopular expression is of type  $\langle e,t \rangle$ , and the copula *be* is vacuous. In the structure of the specificational clause, as well as the equative clause, both expressions are of type  $\langle e \rangle$  and the equative semantics is associated with the copula *be*, which denotes  $\lambda y \lambda x[x=y]$ . Finally, without providing too much detail, Hedberg and Potter suggest that the identificational clause (29) should be subsumed under the equative clause, as it has a non-vacuous copula and the expressions it involves are of type  $\langle e \rangle$ .

# (29) That woman is Susan

# (Hedberg & Potter, 2010: 144)

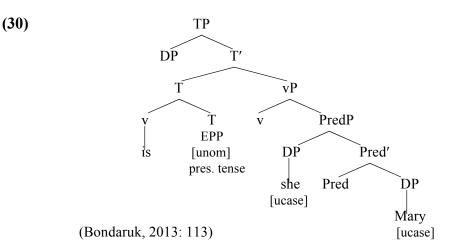
Overall, Hedberg and Potter's account is crucial for my analysis of Arabic copular clauses for three reasons. First, like them, I suggest that Arabic copular clauses are classified into two types, predicational and equative clauses, and that specificational and identificational clauses are subtypes of the equative clause. Second, the Arabic copula *KWN* should not project within the SC. The CopP that they suggest for the copula *be* seems to be identical to the *v*P and  $v_b$ P, which were suggested by Mikkelsen (2005) and Bondaruk (2013). Third, in Arabic copular clause structures, the subject of the SC always moves to Spec-TP.

However, my analysis differs from theirs in two respects. Following Heycock and Kroch (1998, 1999), I assume that the FP is absent in the structure of the predicational clause. Additionally, I claim the Arabic copula *KWN* is always semantically vacuous and the equative semantics is associated with the F head, which is present in the equative clause and absent in the predicational clause.

### 2.2.7 Bondaruk (2013)

Bondaruk (2013) examines copular clauses in English and Polish. She completely adopts Mikkelsen's (2005) analysis of predicational and specificational clauses for her analysis of English copular clauses. This section reviews her analysis of the English equative clause as well as Polish copular clauses.

Starting with the English equative clause, Bondaruk, like many other researchers (cf. Heggie, 1988; Mikkelsen, 2005; among others), assumes that the equative clause, such as *She is Mary*, involves two referential DPs (of type <e>). In her analysis of this type of copular clause, she suggests that both equative and predicational clauses are structurally identical, but they differ in semantics. She provides the structure in (30) for the English equative clause *She is Mary*, which is identical to Mikkelsen's analysis of the English predicational clause.



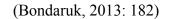
The DP *She* undergoes Agree with T, valuing its case as nominative, and then moves to Spec-TP to satisfy the EPP feature. Bondaruk argues that in the equative clause the subject of the SC always raises to Spec-TP. The DP *in situ, Mary,* obtains accusative case, which is the default case in English. The reversed order *Mary is her* results from a difference in the order of the DP merge within the SC. That is, in the reversed order the DP *Mary* is merged in Spec-PredP and the DP *her* functions as a complement of the Pred. Following Geist (2007), Bondaruk assumes that

the identity interpretation is derived from the rule of type shifting. This rule affects the copula, and thus the copula behaves similarly to a typical predicate in the predicational clause, i.e., it becomes the copula of identity. All in all, Bondaruk treats the English equative clause as a subtype of the predicational clause.

Moving now to her account of Polish copular clauses, Bondaruk points out that there are two classes of predicational clauses in Polish, one with only the copular verb  $by\dot{c}$  (31.a-b), and the other with both the pronoun *to* in addition to the copular verb  $by\dot{c}$  (31.c)<sup>19</sup>. Following Mikkelsen, she provides the structure in (32) for the predicational clause (31.a). The clauses in (31.b-c) have the same structure.

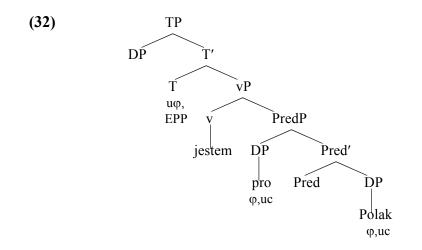
(31)

- a. Jestem Polak I-am Pole-nom 'I am a Pole.'
- b. Marek jest inteligentny Mark is intelligent-nom 'Mark is intelligent.'
- c. Warszawa jest to stolica Polski Warsaw-nom is TO capital-nom Poland 'Warsaw is the capital of Poland.'



(Bondaruk, 2013: 200)

(Bondaruk, 2013: 234)



<sup>(</sup>Bondaruk, 2013: 183)

<sup>&</sup>lt;sup>19</sup> You can observe that the pronoun *to* is licit in the Polish predicational clause. As Bondaruk points out, this pronoun can be found with all types of copular clauses.

To illustrate this structure, Bondaruk, like many others (see Baker, 2008; Bowers, 1993, 2001; Mikkelsen, 2005; Roy, 2013; among others), assumes that the predicational relation takes place within PredP. Bondaruk argues the Polish copula  $by\dot{c}^{20}$  should be placed in the head v in predicational clauses, as well as in all types of Polish copular clauses. It should not be placed in the Pred head, as there are many cases in which the predicational relation can be encoded without the presence of a verbal copula. Also, Bondaruk analyzes the Polish pronoun *to* in (31.c) as an overt predicator, which is generated in the Pred head.

Let us now see how the derivation proceeds. Bondaruk assumes that in this structure the Pred head, whether covert or overt with the pronoun *to*, is defective<sup>21</sup> (i.e., it has no  $\varphi$ -features nor case), and therefore it plays no role in the agreement relation. The DP *pro*, with an unvalued case feature, enters Agree with the DP predicate and this agreement results in both having the same unvalued case feature. Bondaruk argues that maximal projections with unvalued features, are like heads, can be probes as well. Then, T, with unvalued  $\varphi$ -features, probes its c-commanding domain to have its  $\varphi$ -features valued. It enters Agree with the DP *pro*, which is its closest goal with  $\varphi$ -features, and thus its  $\varphi$ -features are valued and the case feature of the DP *pro* is valued as nominative. The DP *pro* raises to Spec-TP to satisfy the EPP feature of T. Since the DP predicate shares the same case feature of the DP *pro*, it gets the same value of this feature (nominative). The same mechanisms can be applied to derive the clauses in (31.b) and (31.c). Bondaruk mentions that adjectives in Polish<sup>22</sup> are like nouns in that they all bear unvalued case features.

<sup>&</sup>lt;sup>20</sup> Bondaruk argues that the Polish copula  $by\dot{c}$  is semantically vacuous.

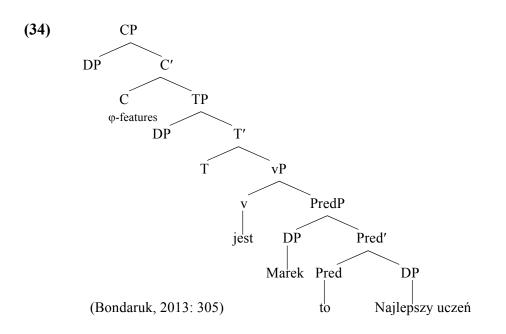
<sup>&</sup>lt;sup>21</sup> Bondaruk distinguishes two types of the Pred head: one is complete and the other is defective.

<sup>&</sup>lt;sup>22</sup> Bondaruk (2013) points out that the predicate APs in Polish differ from the predicate NPs in that they are always marked for nominative case.

With respect to specificational clauses, Bondaruk assumes that the Polish specificational clause, which includes both the pronoun *to* and the copula *być* as in (33), represents an inverse predicational clause. Like Heggie (1988), she suggests that this clause is derived by moving the postcopular element (the predicate) to a left periphery position, namely to Spec-CP. This is different from the approaches of Mikkelsen and Moro, who posit that the specificational clause is derived by raising the predicate to the subject position, namely to Spec-TP. The structure in (34) illustrates her analysis of the Polish specificational clause (33).

(33) Najlepszy uczeń to jest Marek best pupil-nom TO is Mark-nom 'The best pupil is Mark.'

(Bondaruk, 2013: 305)



Adopting Chomsky's (2008) feature inheritance model<sup>23</sup>, Bondaruk assumes that both C and T can function as probes. T establishes an Agree relation with the closest DP *Marek*, which then moves to Spec-TP to satisfy the EPP feature, while C enters Agree with the other DP *Najlepszy uczeń* 'The best pupil' and then moves to Spec-CP to delete the edge feature of C. The latter DP

 $<sup>^{23}</sup>$  In this model, T and V inherit  $\varphi$ -features from the phase heads C and v and thus function as probes.

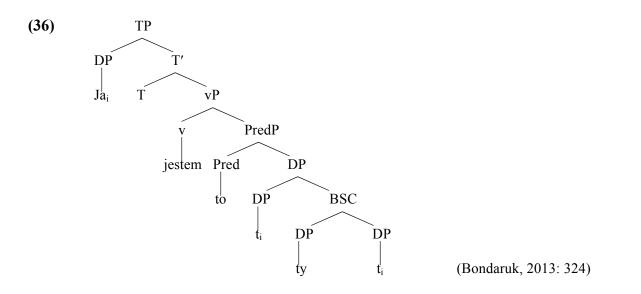
functions as a topic by virtue of its location in the final position of the structure. This is in line with Mikkelsen's argument that the precopular element in the specificational clause always functions as a topic (i.e., a discourse-old item). Finally, the subject final word order is a result of the remnant movement of T' to the outer Spec-TP (i.e., to the left of the subject).

Bondaruk suggests that the reason why the precopular DP (which acts as a topic) does not move to Spec-CP in predicational clauses is due to the differences between true and functional topics. The former always occupies Spec-CP because of its movement to check the topic feature, whereas the latter stays in Spec-TP and does not move higher.

The last clause type that Bondaruk discusses is the Polish equative clause. She analyzes it differently from other copular clause types, including the English equative clause. The structure in (36) demonstrates her account of the Polish equative clause (35).

(35) Ja to (jestem) ty I-nom TO am you-nom 'I am you.'

(Bondaruk, 2013: 314)



The SC in this structure is a bare SC (BSC) without a label. The merge of the DPs results in a symmetrical structure, which is broken up by the internal merge (movement) of either DP with

the BSC. This is supported by the fact that equative clauses are reversible. The consequence of the internal merge is that it supplies the BSC with its own label as a DP. In order to account for the case of the two DPs, Bondaruk points out that T establishes Agree with the DP, which is internally merged with the BSC. Consequently, the DP has its case valued as nominative and it values the  $\varphi$ -features of T. Then, this DP moves to Spec-TP to satisfy the EPP feature of T. The DP *in situ* obtains the default case.

Although Bondaruk has not discussed the identificational clause, she states that in Polish it might be subsumed under the specificational type as they behave analogously with respect to verb agreement. The copula agrees with the postcopular element in these types of clauses.

Having sketched out the key parts of Bondaruk's analysis, I will now elucidate why it cannot be applied to Arabic copular clauses. First, Arabic cannot treat the equative and specificational clauses as subtypes of the predicational clause. The tests exhibited in Chapter 3 provide supporting evidence that in Arabic the predicational clause behaves differently from the equative and specificational clauses. They also show that the Arabic equative and specificational clauses pattern in an analogous way. These tests suggest analyzing the predicational clause differently from the equative and specificational clauses and treating these latter types similarly. Second, Bondaruk has claimed that for reasons of economy, it is better to have one structure for all copular clause types rather than two distinct structures. This claim is not maintained throughout her entire analysis, however, as she analyzes the Polish equative clause differently from other copular clauses including the English equative clause. Third, Bondaruk argues against the analysis of a special functional projection in the structure of specificational and equative clauses, as this will yield two different types of the copula *to* in Polish: one found in the Pred head in the predicational clause, and the other found in this special functional head (e.g., Eq in

Reeve's 2010 analysis) in the specificational and equative clause. This is an unwelcome result as it will enlarge the inventory of Polish copulas. Different from Polish, adopting this type of analysis (special functional projection) for the Arabic specificational and equative clauses will not yield two different types of the Arabic PE, as the PE is illicit in the Arabic predicational clause. That is, Bondaruk's concern will not be problematic in our analysis of Arabic specificational and equative clauses. Finally, in her analysis of Polish predicational clauses, Bondaruk distinguishes two types of the Pred head: defective and complete. As demonstrated above, the former type has been posited to account for the nominative case on the Polish predicate. The latter type has been assumed to account for the instrumental case on the Polish predicate (i.e., the complete Pred licenses an instrumental case). Having one type of the Pred head is, in fact, much better than having two types. In my account of case on Arabic predicates, which can be either nominative or accusative, I assume that the Pred head is always defective.

Despite these issues, certain parts of Bondaruk's account will be employed in my analysis of Arabic copular clauses. I will utilize the syntactic structure of the predicational clause, which was originally proposed by Bowers (1993, 2001). Additionally, as in Polish, the Arabic copula *KWN* should be placed in the v head and the PE should be placed in a functional head. However, this functional head is not the Pred as suggested by Bondaruk. Finally, similar to Polish adjectives, predicate APs in Arabic are like predicate NPs in that they bear an unvalued case feature.

# 2.2.8 Roy (2013)

Roy (2013) adopts the view that posits that there are two versions of copula in English:(i) *be* of predication, occurring in predicational clauses as in (37.a), and (ii) *be* of equation (verb),

occurring in equative clauses as in (37.b). In certain languages, such as in English and French, the contrast between the two copulas is invisible, whereas it is visible in other languages, for example Spanish, which has two distinct forms of copula as shown in (38.a-b): one copula for predication and the other copula for equation.

(37)

- a. John is sick.
- b. John is Superman.

(Roy, 2013: 10)

[Predication]

[Equation]

- (38)
  - a. Juan está feliz. Juan ESTAR.3SG happy 'Juan is happy.'
  - b. Juan es el assessino. Juan SER.3SG the murderer 'Juan is the murderer.'

(Roy, 2013: 10)

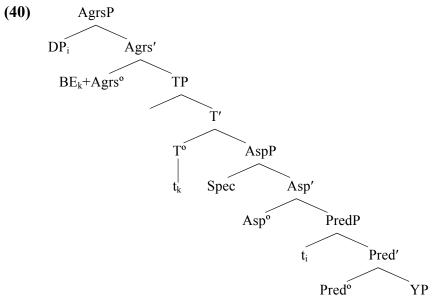
Without deep explanation, Roy assumes that the *be* of equation should be regarded as a transitive verb which takes two referential arguments of type  $\langle e \rangle$ . Its semantic function is the identity relation between its arguments. The logical form in (39) for the equative clauses in (37.b) and (38.b) explains the denotation of this type of *be* as equivalent to "=".

**(39)** λxλy [(x=y)]

(Roy, 2013: 10)

With respect to the copula of predication, Roy argues that it is not a lexical verb and hence does not have semantic properties (i.e., it is a semantically null element). It is not a requirement for the predication relation and its presence is only needed to bear tense features. Consequently, she proposes that the copula is inserted directly in T in order to support the realization of tense in the predicational clause, and then moves to Agrs to check agreement features as demonstrated in structure (40). She points out that since the copula is not a lexical verb, it does not assign case.

43



(Roy, 2013: 164)

As for the syntactic structure of a predicational clause, Roy assumes that it is similar to the syntactic structure of verbal predicates in that both project functional projections which license external arguments (i.e., *v*P for verbal predicates and PredP for nonverbal predicates). Building on Bowers (1993, 2001), and similar to Bondaruk (2013) and Mikkelsen (2005), she assumes a single syntactic configuration, as in (40) above, for all types of nonverbal predicates (NP, AP and PP). The head of the small clauses is the predicational head Pred, which introduces an external argument. The subject, the external argument, is base-generated in Spec-PredP and then moves to Spec-AgrsP for case or EPP feature, while the nonverbal predicate is generated as a complement of the Pred head. The Pred head mediates the predicational relation between a nonverbal expression and its subject. According to Roy, the major advantage of the occurrence of the predication in a single syntactic configuration is to provide a tight connection between meaning and structure.

As a matter of fact, Roy's proposal for the structure of predicational clauses with nonverbal predicates will be assumed for the Arabic predicational clause explored in this thesis. However, it is not clear what motivates the occurrence of the AgrsP when one takes into account that the T head is responsible for agreement. Additionally, it appears that Roy, like Carnie (1995, 1997), assumes that the clause with a postcopular definite NP, as in (38.b), is equative, and not predicational as assumed by Heggie (1988), Moro (1997) and Mikkelsen (2005). Indeed, she states that the definite NP in the postcopular position, as in *Paul is the teacher*, is an argument rather than a predicate. In this thesis, I follow this assumption and assume that this clause is a subtype of an equative clause in Arabic.

Finally, unlike Roy, in this thesis I assume that there is only one type of the copula *KWN* in Arabic that occurs in all copular clause types. It is always semantically empty, and in the equative clause the equative relation is obtained by a different functional head, not by the copula. I also assume that the copula *KWN* does not project in T, and it must be placed in a position between T and Pred for reasons to be mentioned later in Section (4.2).

# 2.2.9 Higginbotham (1987)

Higginbotham (1987) investigates the nature of nominal expressions in the postcopular position. On the one hand, he argues that when nominals are indefinite, as in (41), they must be predicative (i.e., unsaturated elements). That is to say, they do not denote objects, but do have a place for objects to go.

(41) John is a lawyer.

#### (Higginbotham, 1987: 46)

On the other hand, when nominals are proper nouns, pronouns or definite descriptions, they have different functions. Nouns and pronouns are always referential, while definite descriptions, as in (42), can be either predicative or referential. When a definite description is predicative the clause is predicational, but when it is referential the clause is an identity clause. That is, the copular clause in (42) is ambiguous and can take either of the two readings.

(42) John is the man. (Higginbotham, 1987: 49)

Accordingly, this copular clause has two different syntactic structures. In the identity clause, the copula expresses the identity relation between the two referential DPs *John* and *the man*. To illustrate, the copula in the identity clause behaves like a two-place predicate whereby it takes its complement NP *the man* to form a VP, which is then predicated of the subject *John*. However, in the predicational clause, the copula is present for merely syntactic purposes, and the definite description *the man* is predicated of the subject *John*.

All in all, this work of Higginbotham provides significant insights to the nature of nominal expressions in the postcopular position of Arabic copular clauses. Like Higginbotham, I assume that the indefinite nominals in this position are always predicative as they display certain properties of their subject DPs. I also assume that the proper nouns and pronouns in this position are always referential as they refer to certain individuals. However, in Chapter 3 I assume that the definite description in the postcopular position is referential (see Carnie, 1995, 1997; Roy 2013), therefore, the copular clause in which it is involved is an identity clause. This argument is supported by the tests provided in more detail in Chapter 3.

Lastly, Higginbotham's assumption that predication and identity clauses have different syntactic structures is very crucial to my analysis of these copular clause types in Arabic (see also Carnie, 1995, 1997; Hedberg & Potter, 2010; Heycock & Kroch, 1998, 1999 Rothstein, 2004), but I do not concur with his assumption that the copula in the identity clause resembles a two-place predicate expressing the identity relation. In this thesis, I argue that a copula in an identity clause, as well as in a predication clause, is always semantically vacuous, and it is the special FP in the structure of an identity clause that expresses the identity relation between the two referential arguments. All the details pertaining to this proposal are fully articulated in Chapter **3**.

To summarize, this section reviews the relevant work that has been conducted on copular clauses crosslinguistically. It can be presumed that the analysis that I provide in this thesis for Arabic copular clauses favors treating the predicational clause differently from the identity clause, and favors treating the specificational and identificational clauses, as well as the clause with a postcopular definite NP, as subtypes of the identity clause. The subsequent section reviews the major literature conducted specifically on Arabic copular clauses.

# 2.3 Copular clauses in Arabic

As mentioned earlier, work on Arabic copular clauses has focused primarily on the structure of predicational clauses (verbless vs. verbal sentences) and the status of the PE. None of these works have discussed Arabic copular clause types. The goal of this section is to present the major studies that have been conducted on the Arabic predicational clause, specifically with respect to the structure of the predicational clause and case and agreement in this type of clause. The subsequent section, Section (2.4), reports the earlier work that has been proposed for the PE in Arabic copular clauses.

# 2.3.1 Bahloul (1994)

Bahloul (1994) attributes the contrast between the SA verbal (copular) sentence, as in (43.a), and the verbless (copularless) sentence, as in (43.b), to the functional features of the I head, which can select for NP, VP, AP or PP.

(43)

a. kaana al-walad-u fi al-madiinat-i bi-al-?amsi was the-boy-NOM in the-city-GEN in-the-yesterday 'The boy was in the city yesterday.' b. al-walad-u fi al-bayt-i the-boy-NOM in the-house-GEN 'The boy (is) at home.'

(Bahloul, 1994: 209 & 210)

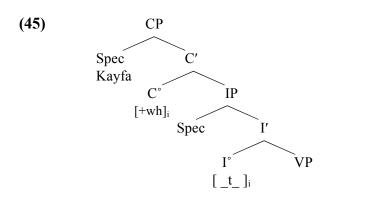
According to his proposal, the presence of both TNS (tense) and WH features in the I head forces I to select for a VP complement, whereas the absence of these features forces I to select for any complement (NP, AP or PP) other than a VP. To illustrate, in the verbless sentence where the copula *KWN* is absent, the I head is featureless (i.e., it has neither TNS nor WH features) and thus can select for any complement other than a VP. In the verbal sentence, the I head contains these features and thus the copular verb is required in order to support them. In SA both tense and verb are bound morphemes and hence cannot stand by themselves. This fact explains the required verbal movement from V to I.

His proposal does not provide an explanation for the fact that the SA verbless sentence is always interpreted in the present tense, and not in the past or future tense. If the I head in the verbless sentence does not contain a TNS feature, how can we account for this fact?

Then, Bahloul attempts to account for certain situations with an obligatory copula in the present tense. For example, *Kayfa* 'How' that does not carry the TNS feature requires an obligatory verbal copula in the present tense as in (44). Bahloul explains this by suggesting that both TNS and WH features originate in the I head, as demonstrated in structure (45). Thus, the I head selects for a VP complement, and both TNS and WH features in the I head trigger verb movement.

(44) kayfa \*(yakuunu) aD-DuSf-u quwwat-an fi baSDi al-ahyaani
How is the-weakness-NOM strength-ACC in some the-cases
'How weakness is a strength sometimes?'

(Bahloul, 1994: 218)



(Bahloul, 1994: 219)

However, this latter argument seems to contradict his main claim that the I head is always featureless in the present tense. In this case, Bahloul argues that the I head has these two features with *Kayfa* 'How' in the present tense. Additionally, as illustrated in (46), it is not always true that the verbal copula is obligatory in the SA present tense with *Kayfa* 'How'. The example in (44) that Bahloul uses to support his argument is more idiomatic than an example of regular usage. Therefore, it is not clear how Bahloul's analysis would account for the optional usage of the verbal copula with *Kayfa* 'How'.

# (46)

a. kayfa ?ab-uu-ka How father-NOM-your 'How is your father?'

b. kayfa l-dʒaww-u fi l-Xaardʒ-i How the-weather-NOM in the-outside-GEN 'How is the weather outside?'

# 2.3.2 Benmamoun (2000)

Benmamoun (2000) investigates the structure of Arabic predicational copular clauses, focusing specifically on the verbless sentence. He disputes the proposal put forward by Mouchaweh (1986), which treats the Arabic verbless sentence as a SC without any functional projection, as well as the proposals of Bakir (1980) and Fassi-Fehri (1993), which posit that the Arabic verbless sentence contains a null copula. In particular, he argues that it is not clear why the covert copula assigns a different case from the overt copula, and why the copula must be overt in the context of past and future tenses and covert in the present tense.

Benmamoun thus adopts the approach of Jelinek (1981), which proposes that the Arabic verbless sentence does have a functional projection, but does not have a verbal projection (VP). This functional projection is a TP dominating a nonverbal predicate (NP, AP or PP). It is possible to account for the absence of accusative case on the nonverbal predicate in the verbless sentence under the assumption that there is no copula (VP) in the Arabic verbless sentence.

The primary conclusion of Benmamoun's analysis is that the categorical features of the elements in T vary depending on tense type. In the past and future tenses the head T is specified for [+D, +V] features, whereas it is specified only for [+D] feature in the present tense. Thus, in the past and future tenses, the verbal copula must be present to check for [+V] on the head T, whereas in the present tense there is no need for the verbal copula, since T does not have the [+V] feature. In all three tenses, the feature [+D] must be checked by the subject.

Benmamoun's analysis of VPs in the Arabic verbless sentence structure is similar to Bahloul's analysis (1994), however they differ with respect to the features in T or I that select for a VP or non-VP complement. For Bahloul this feature is the [TNS] feature, whereas it is the [+V] feature for Benmamoun. Benmamoun also points out that the verbless sentence is always in the present tense, which is the default tense in Arabic. As mentioned in Section (2.3.1), Bahloul has not explained the fact that the Arabic verbless sentence is always interpreted in the present tense, and not in the past or future tenses.

# 2.3.3 Aoun, Benmamoun and Choueiri (2010)

Aoun, Benmamoun and Choueiri (2010) also discuss the structure of the Arabic verbless sentence as in (47). Their analysis elaborates on Benmamoun (2000).

(47)

a. Somar muSallim-un Omar teacher-NOM 'Omar is a teacher.'

b. al-bayt-u kabir-un the-house-NOM big-NOM 'The house is big.'

(Aoun et al., 2010: 35)

They first point out that the behavior of modals in the Arabic verbless sentence can be taken as counter-evidence against other analyses of a null copula. It is assumed in the Arabic verbless sentence that the modal head selects a verbal complement, and thus a modal cannot be used unless the imperfective form of the copular verb is also used, as shown in (48) from Moroccan Arabic (MA). Along these lines, if there is a null copula in the Arabic verbless sentence, then the occurrence of a modal should be allowed. But this is not the case. The use of the modal in the Arabic verbless sentence without the use of an imperfective copula is ungrammatical, as shown in (49) from MA. This fact also supports the argument that the structure of the Arabic verbless sentence does not contain a null copula and thus does not have a VP layer.

#### (48)

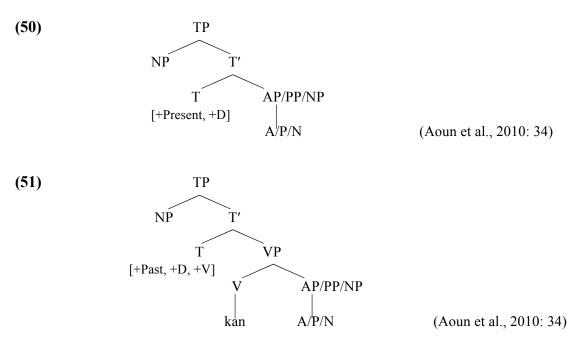
a. Somar lazəm y-kun muSəllim	
Omar must 3-be teacher	
'Omar must be a teacher.'	(MA)
b. d-dar lazəm t-kun kbira the-house must 3-be big	
'The house must be big.'	(MA)

(Aoun et al., 2010: 40)

(49)

a. *Somar Omar		muSəllim teacher	(MA)	
b. *d-dar the-hou	lazəm ise must		(MA)	(Aoun et al., 2010: 39)

To this effect, Aoun et al. assume that the Arabic verbless sentence, which is always in the present tense, is a full tensed clause (TP) without a VP layer, as given in (50). Like Benmamoun, they assume that the absence of a VP layer is due to the absence of the categorical feature [+V] in the head T, whereas the obligatory presence of the VP layer in the past and future tenses is due to the presence of the categorical feature [+V] in the head T, whereas the obligatory presence of the VP layer in the past and future tenses, the copula *KWN* must be present in order to check this categorical feature.



In both structures, Aoun et al. assume that the subject DP obtains its nominative case from T. In the structure of the verbless sentence (50), the predicate receives the default nominative case, whereas it receives accusative case from the copula *KWN* in structure (51).

In this thesis, I adopt Aoun et al.'s proposal that the structure of the Arabic predicational copular clause in the present tense is a full tensed clause without a VP layer. However, my analysis departs from theirs, as well as from Bahloul's (1994), in the nature of the SC and with respect to predicate case. As shown above, they all assume that the SC that hosts the predicational relation is the maximal projection (specifically the lexical projection) of the nonverbal predicate. However, in this thesis I assume that the SC hosting the predicational relation is a functional projection (viz., the PredP following Bowers, 1993, 2001). In recent theories, particularly the predication theory of Bowers, it is hypothesized that predicates (both verbal and nonverbal) always project functional projections that license external arguments, which always occur in the specifier of these functional projections (i.e., v\*P for verbal predicates).

Furthermore, my analysis departs from theirs with respect to the case of the predicate. Resorting to the default case form, which on the predicate in the verbless sentence they assume to be nominative case, has to be the last solution if nothing in the structure is able to license case, i.e., in the lack of any case assigner (Schütze, 2001). In Chapter 5, I argue that the case on the predicate, regardless of whether it is in a verbless or verbal sentence, always results from Multiple Agree.

### 2.3.4 Ouhalla (2013)

Ouhalla (2013) provides an analysis of predicative adjectival agreement in SA through the derivational process, Agree. Consider, for instance, the sentences in (52) and (53) that involve predicative APs. Ouhalla first claims that in the past tense the sentence must include the copula *KWN*, as shown in (52), whereas in the present tense the PE is optionally used in the sentence, as displayed in (53).

- (52) kaan-at Zaynab-u jamiil-at-an be.PST-3-Fem.Sg Zaynab-NOM pretty-Fem.Sg-ACC.Indef 'Zaynab was pretty'
- (53) Zaynab-u (hiyya) jamiil-at-un Zaynab-NOM (3.Fem.Sg) pretty-Fem.Sg-NOM.Indef 'Zaynab is pretty'

(Ouhalla, 2013: 322)

Ouhalla starts his analysis by addressing the syntactic configuration of the SA predicative AP. According to him, there is a functional phrase (FP) in the structure of the predicative adjective. The head F[Agr] selects for an AP, which takes the subject DP as its specifier. Ouhalla assumes that the predicative AP in SA is essentially a DP, as suggested by the fact that it bears both Indefiniteness (Indef) and case features. The head D[Agr], specified for valued Indef and unvalued case features, selects for the FP. That is, the AP must occur within a DP. This DP functions as a complement of the Pred (i.e., the copula *KWN* or the pronominal element PE) which is a complement of T. The PredP is required since the DP cannot function on its own as a predicate. The structures in (54) for sentence (52) and the structures in (55) for sentence (53) represent Ouhalla's proposal for the syntactic configuration of the SA predicative AP.

(54)

- a. [TP T[Agr] [PredP BE [DP D[Indef, uCase] [FP F[Agr] [AdjP [DP Zaynab] [Adj', jamiilat ......

#### (55)

- a. [TP T[Agr] [PredP PRON [DP D[Indef, uCase] [FP F[Agr] [AdjP [DP Zaynab] [Adj', jamiilat .....

These structures also illustrate Ouhalla's proposed analysis of predicative agreement. First, the subject DP enters Agree with F[Agr] resulting in the valuation of Gen and Num features on F[Agr], but does not value case on the subject DP which remains active for further agreement. Since the definiteness feature of D[Agr] enters the derivation valued as Indef, the subject does not undergo Agree with D[Agr] in definiteness. Next, the subject enters Agree with T[Agr] which results in the valuation of the Gen, Num and Per features on T and the case feature on the subject DP. Then, the subject DP moves to Spec-PredP, and optionally to Spec-TP, through Spec-DP[Agr]. The predicate adjective raises to the head F[Agr], and the auxiliary (the copula *KWN* or the PE) raises to the head T.

With respect to the predicative AP, Ouhalla argues its case depends on the nature of the auxiliary. To illustrate, an adjective bears accusative case when the copula *KWN* is the auxiliary as in (52), whereas it bears nominative case when the auxiliary is the PE as in (53). Based on his analysis, the unvalued case feature of the D[Agr] in (54) is valued as accusative by the head Pred (the copula *KWN*). On the contrary, Ouhalla argues that the case feature of the head D[Agr] in (55) cannot be valued by the head Pred (PE) because PE lacks the ability to value case features. He instead suggests that this unvalued case feature is valued as nominative by the head T, as demonstrated in (55). In this scenario, the Probe T enters Agree with two Goals: the adjective DP and the subject DP.

While Ouhalla's analysis is convincing at first glance, it still presents a number of issues. Notably, Ouhalla's main claim that the use of the PE is optional in present tense sentences seems to be flawed or altogether inaccurate. In Chapter 3, I argue that the PE cannot be used in the Arabic predicational clause, and the pronoun *hiyya* in (53) is the subject of the sentence, as opposed to the PE that appears in other Arabic copular clauses. I expand this point further in Section (2.4.3). Furthermore, the PredP proposed by Bowers (1993, 2001) is required to mediate the predicational relation between a predicate and its subject. That is, the Pred takes the subject DP as its specifier and the predicate as its complement. From his analysis, it is not clear why the subject DP is base-generated in Spec-AP, despite the presence of PredP. Also, given the assumption that the copula is semantically null in the predicational clause and does not participate in the predicational relation, as suggested by several researchers (cf. Heycock & Kroch, 1998, 1999; Heggie, 1988; Mikkelsen, 2005; Roy, 2013), it is not obvious what motivates Ouhalla to assume that the copula *KWN* and the PE are generated in the head Pred. Since they do not play any role in the predication relation, they should not originate in PredP.

Ouhalla's argument that the SA predicative AP is basically a DP because it bears both Indef and case features is also questionable. If we consider every constituent that could bear both of these two features a DP, then the Arabic adverbs which also bear these two features, for example<sup>24</sup> *Gaadzil-a-n* 'urgently-ACC-Indef', must be DPs as well. That is, all Arabic adjectives and adverbs would be structurally analyzed as DPs, and not as APs and AdvPs.

Finally, in Ouhalla's proposal the accusative case on the predicative adjective is obtained from the copula *KWN*, while nominative case is obtained from agreement with T. Ouhalla was not explicit about the capability of the copula *KWN* and the failure of the PE to value case features. He also has not explained how the copula *KWN* values the predicative adjective as accusative case. Does he mean to say that the copula *KWN* has a lexical accusative case? Contrary to Ouhalla, in Chapter 5 I provide my new account of case and agreement in the Arabic predicational clause. Specifically, I argue that case on predicative elements (either nominative or accusative) is always obtained from Multiple Agree.

<sup>&</sup>lt;sup>24</sup> More examples displaying that the Arabic adverbs can bear these two features:  $\varkappa ad$ -a-n 'tomorrow-ACC-Indef' and *musrif*-a-n 'fast-ACC-Indef'.

To recap, this section reviews the major work that has been conducted on the Arabic predicational clause, specifically regarding the structure of predicational clauses (verbless vs. verbal sentences) and case and agreement. Throughout this section, it can be presumed that the analysis I attempt to provide in this thesis posits that there is no VP layer in the structure of the verbless sentence in Arabic predicational clauses, and that predicate case results from Multiple Agree. The following section reviews the work that has been done on the PE in Arabic copular clauses.

# **2.4 The Pronominal Element (PE)**

# 2.4.1 Li and Thompson (1977)

Li and Thompson  $(1977)^{25}$  examine the PE in Palestinian Arabic (PA) equational sentences, which consist of two NPs. They claim that the PE is obligatory in PA equational sentences, as shown in (56).

#### (56)

a.	il-bint	hiyye	le-mSalme		
	the-girl	Cop.	the-teacher (fem)		
	'The gir	l is the to	eacher.'	(PA)	
1	<u> </u>	1	0.1		

b. \*il-bint le-mSalme the-girl the-teacher (fem) 'The girl is the teacher.' (PA) (Li & Thompson, 1977: 431)

Li and Thompson analyze the PE in PA, as well as in other languages such as Hebrew, Chinese, and Wappo, as a copular morpheme, similar to the copular verb. It functions as a link between the two NPs involved in an equational sentence. Their analysis implies that the PE, which is a copula in their view, does not co-occur with the Arabic copular verb *KWN*. However in SA as illustrated in (57), and in other Arabic dialects such as Najdi Arabic (NA), it is possible

<sup>&</sup>lt;sup>25</sup> To the best of my knowledge, Li and Thompson were the first people to have worked on the pronominal copula in Arabic, as well as in some other languages.

to have both the copular verb *KWN* and the PE in one clause. If we assume that the PE in (57) is a copular morpheme as they suggest, then it is not clear how we will account for the copular verb *KWN* in the same clause. Is it possible to claim that a single simple clause can have multiple copulas?

(57) kaan-at l-bint-u (hiya) l-mudarris-at-a be.PST-3.Fem.Sg the-girl-NOM she the-teacher-Fem.Sg-ACC 'The girl was the teacher.'

In addition, Li and Thompson were not explicit about how they were defining equational sentences. In other words, what exactly do they mean by proposing that the equational sentence consists of two NPs? They should have provided a clear and precise definition for this type of sentence. As a final point, it can be seen from the SA example in (57) that the PE is not always obligatory in Arabic equational sentences. Therefore, we need to have a more detailed account of the use of the PE in Arabic copular clauses.

### 2.4.2 Eid (1991)

Eid (1991) provides an account of the PE in Egyptian Arabic (EA) equative sentences (58). She first claims that the use of the PE in the equative sentence is obligatory when the subject is not pronominal (58.a) and optional when the subject is pronominal (58.b).

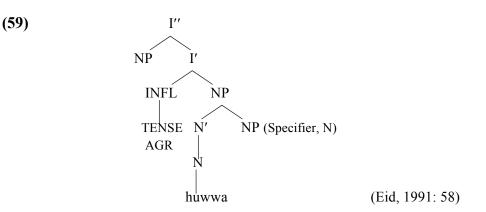
#### (58)

va∕*Ø il-m	udarris	
the-	teacher	
eacher.'		(EA)
her.'	the-teacher	(EA)
	the- eacher.' huwwa/Ø he	huwwa/Ø il-mudarris he the-teacher

(Eid, 1991: 41 & 42)

Eid argues that the obligatory use of the PE is to force a sentential interpretation of the structure in (58.a). Without it, the sentence would be interpreted as a phrase. When the subject of an equative sentence is a pronoun, however, a phrasal interpretation is impossible, and thus use of the PE becomes optional. The sentence (58.b) has only a sentential interpretation.

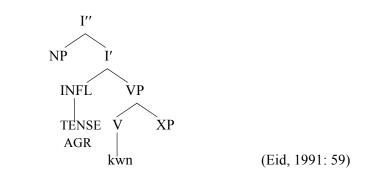
Eid analyzes the PE as an identity pronoun given that it expresses an identity relation between two arguments. Structurally it occurs in the position of the copular verb *KWN*, but it is not a verb. Eid provides the structure in (59) for the PE in EA equative sentences. It heads the NP argument located in the predicate position. It assigns its theme-role to its sister NP, and the whole predicate NP assigns a  $\theta$ -role to the subject.



Eid points out that the obligatory agreement in gender and number between the PE and the NP occurs within the predicate NP. The features of the PE are checked through agreement with its sister NP, which is located in Spec-NP.

Her analysis associates the PE with the copula verb *KWN*. Both the PE and the copula verb are heads of maximal projections in predicate positions. The sentence that includes the copula verb *KWN* has the structure in (60), where *KWN* heads a VP, not an NP.

(60)



Although I generally agree with the major conclusion of Eid's analysis – that the PE is an identity predicate (or more specifically a realization of the identity predicate as I suggest in this thesis) – her analysis still has some flaws. Eid does not present a detailed account of the use of the PE in all Arabic copular clause types, such as identificational and specificational clauses. This is necessary in order to attain a more plausible analysis of the PE in Arabic. Additionally, in SA and other Arabic dialects such as NA, the use of the PE in equative sentences such as (61), which are parallel to her example in (58.a), is, in fact, optional and not obligatory. These sentences still have sentential interpretations even without a PE.

(61)

- a. ?ar-radʒul-u (huwa) l-mudarris-u wa l-mar?at-u (hiya) l-mudiir-at-u the-man-NOM he the-teacher-NOM and the-woman-NOM she the-principal-Fem.Sg-NOM 'The man is the teacher and the woman is the principal.' (SA)
- b. ?ar-ridʒaal (huw) l-mudarris wa l-marah (hiy) l-mudiir-ah the-man he the-teacher and the-woman she the-principal-Fem.Sg 'The man is the teacher and the woman is the principal.' (NA)

Eid claims that in EA the PE and the copula *KWN* are in complementary distribution and cannot co-occur in the same sentence as in (62). According to her, the PE occurs only in present tense sentences, while the copula *KWN* occurs only in past and future tense sentences.

(62)

a.	 kaan was	•	(EA)	
b.	huwwa he	zariif nice	(EA)	(Eid, 1991: 34)

This claim is not supported by SA and other Arabic dialects. As mentioned previously, the PE can co-occur with the copular verb *KWN*, as illustrated in (63) from SA and (64) from NA. The examples that Eid provides in (62) are ungrammatical because the PE cannot be used in Arabic predicational clauses, not because of its co-occurrence with the copula *KWN*.

(63)

a. kaan-a l-faa?iz-u (huwa) Zayd-an be.PST-3.Masc.Sg the-winner-NOM Zayd-ACC he 'The winner was Zayd.' Zayd-un l-malik-a b. kaan-a (huwa) be.PST-3.Masc.Sg Zayd-NOM the-king-ACC he 'Zayd was the king.' c. kaan-a ðaalika r-radzul-u (huwa) Zayd-an be.PST-3.Masc.Sg the-man-NOM Zayd-ACC that he 'That man was Zayd.' 1-mudarrisiin (64) Ahmad wa Khalid kaan-uu hum Ahmad and Khalid be.PST-3.Masc.Pl the-teachers they 'Ahmad and Khalid are the teachers.' (NA)

It is also unclear how the whole predicate NP assigns a  $\theta$ -role to the subject NP given Eid's analysis. In other words, Eid is not very explicit about the relation under which the  $\theta$ -role assignment occurs. Finally, unlike Eid, in Section (3.4) I suggest that the PE is generated in a FP that denotes an identity relation between two referential NPs.

### 2.4.3 Ouhalla (2013)

As mentioned previously, Ouhalla (2013) claims that while the use of the copula *KWN* is obligatory in Arabic copular sentences in the past tense (65), the use of the PE is normally optional in present tense Arabic copular sentences. Consider, for instance, the copular sentence in (66) from Moroccan Arabic (MA) and the copular sentences in (67) from SA presented by Ouhalla to illustrate the use of the PE.

(65)	kaan-at be.PST-3.Fem.Sg	Zaynab-u Zaynab-NOM	jamiil-at-an pretty-Fem.Sg-ACC.Indef	(011- 2012, 222)
(66)	'Zaynab was pretty. l-wlad ( <b>huma</b> ) the-kids (PRON:3 'The kids were sick	mraD .Pl) sick.Pl	(MA)	(Oualla, 2013: 322) (Oualla, 2013: 320)

(67)

a. Zaynab-u (hiyya) jamiil-at-un Zaynab-NOM (3.Fem.Sg) pretty-Fem.Sg-NOM.Indef 'Zaynab is pretty.'
b. Zaynab-u (hiyya) mudarris-at-un Zaynab-NOM (PRON:3.Fem.Sg) teacher-Fem.Sg-NOM.Indef 'Zaynab is a teacher.'

(Oualla, 2013: 321 & 322)

Ouhalla analyzes the PE as an auxiliary similar to the copula *KWN*. As demonstrated in (68), the PE is base-generated in the Pred head and then raised to T. It differs from the copula *KWN* in that it lacks the ability to value case features on postcopular expressions.

- (68)
  - a. [TP T[Agr] [PredP PRON [DP D[Indef, uCase] [FP F[Agr] [AdjP [DP Zaynab] [Adj<sup>7</sup> jamiilat ...
  - b. [<sub>TP</sub> [<sub>DP</sub> Zaynab] [<sub>T</sub><sup>'</sup> [PRON] + T[Agr] [<sub>PredP</sub> ...... [<sub>DP</sub> D[Indef, Nom] [<sub>FP</sub> [<sub>Adj</sub> jamiilat] + F[Agr] [<sub>AdjP</sub> ...... [<sub>Adj</sub><sup>'</sup> ....... (Ouhalla, 2013: 323)

As a matter of fact, Ouhalla's analysis poses both empirical and theoretical issues. To start with, based on the examples in (66) and (67), Ouhalla seems to assume that the PE can be used in Arabic predicational clauses. Unlike Ouhalla, in Sections (3.3.1) and (3.4) I argue that the PE cannot be used in the Arabic predicational clause at all. So, a question arises as to the nature of this pronoun occurring in his examples. I assume that the pronoun in his examples is not the PE that occurs in other Arabic copular clauses, but is instead just a regular pronominal subject (i.e., the subject of a predicate). The DP *Zaynab* is a topic that is base-generated in the left-dislocated position, such as Spec-TP or Spec-CP. If we change the topic to a first or second person pronoun as shown in (69), the sentences become ungrammatical because the pronominal subject does not agree with the left-dislocated element in  $\varphi$ -features (see also Rothstein, 2004). Also, there appears to be a short pause after the pronunciation of the left-dislocated DP. These facts support the idea that the PE cannot be used in Arabic predicational clauses.

(69)

a. *?antii	G	hiya	dʒamiil-at-un
You.Fe	m.Sg	she	pretty-Fem.Sg-NOM
'You ar	e pretty.'		
b *?anaa	huwa	t <sup>s</sup> a:	alib-un

U.	ranaa	nuwa	t'aano-un
	Ι	he	student.Masc.Sg-NOM
	'I am a	student.'	

Moreover, Ouhalla's claim that the copula *KWN* is used in Arabic past tense sentences and the PE is used in Arabic present tense sentences implies that both the copula and the PE cannot co-occur in a single sentence. This is also clear from his analysis, which suggests that they are both auxiliaries. As pointed out earlier, the co-occurrence of the copula and the PE in Arabic copular clauses is possible on empirical grounds. Rather, co-occurrence is intolerable in the predicational copular clause because the use of the PE is disallowed in the predicational clause.

Finally, Ouhalla has not explained in sufficient detail why the PE needs to be basegenerated in Pred. If the PE is an auxiliary like the copula *KWN*, as he proposes, then it should not be generated in Pred, since both the copula and the PE do not participate in the predicational relation. In Section (3.4), I show that the PE is not similar to the copula *KWN*. It is, in fact, very different from the copula *KWN* from both syntactic and semantic perspectives.

## 2.4.4 Choueiri (2016)

Choueiri (2016) provides a new account to explain the PE in Lebanese Arabic (LA). At first, she claims that the PE is restricted to equational sentences, which involve two elements of the same category – specifically two DPs. The second DP in an equational sentence, the predicate, is a definite NP (i.e., a name, a pronoun, a demonstrative NP, or a definite description

as illustrated in (70)). She adds that a PE cannot be used in a predicational clause, as shown in

(71).

- (70) Amal Alamuddin hiyya Amal Clooney/ hayde l-mara/ l-muħaamiyye Amal Alamuddin she Amal Clooney/ this.fem.Sg the-woman/ the-lawyer.fem.Sg 'Amal Alamuddin is Amal Clooney/ this woman/ the lawyer.' (LA)
- (71) l-bornayta \*hiyye meškle / ħəlwe / b-l-beet the-hat.Fem.Sg \*she problem / nice / in-the-house 'The hat is a problem / nice / at home.' (LA) (Choueiri, 2016: 102)

Choueiri argues that the PE is not an identity pronoun, as suggested by Eid (1991), because it is not always necessary in equational sentences. This is shown in (72), where the precopular expression is a demonstrative NP.

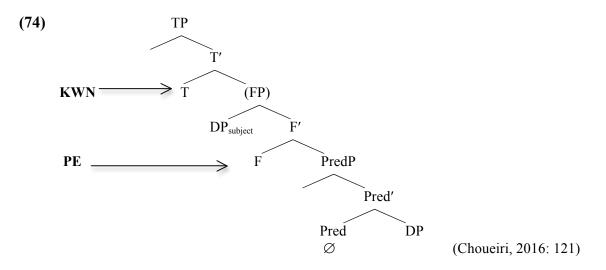
(72) hayde 1-mara Samia this the-woman Samia 'This woman is Samia.'
(LA) (Choueiri, 2016: 114)

She also argues that the PE cannot be analyzed as a copula, since in LA the copula *KWN* and the PE can co-occur as shown in (73). They are not in complementary distribution, as suggested by other researchers (see Eid, 1991; Li & Thompson, 1977; Ouhalla, 2013). This co-occurrence is a strong argument against analyzing the PE as a copula.

(73) yimkin ma ykun ħada huwwe l-meškle
be.possible Neg be.imp. someone he the-problem
'It is possible that no one is the problem.'
(LA)
(Choueiri, 2016: 122)

Choueiri proposes that the equational sentence whose predicate is a definite NP has a more complex structure than the predicational sentence whose predicate is an NP, AP, or PP. To demonstrate, the structure of the equational sentence involves an extra functional phrase (FP) located between TP and PredP, as depicted in (74), whereas the structure of the predicational sentence does not. The PE projects in the head F that functions as a linker, an independent head

marking the syntactic (thematic) relation between the subject and predicate DPs. The impossible use of the PE in the predicational clause follows from the absence of this FP in its structure.



Choueiri assumes that the subject DP, or sometimes the predicate DP when it is a first or second person pronoun as in (75), must move to Spec-FP in order to save the derivation. If both subject and predicate DPs of the same category remain within PredP, then the two DPs cannot be linearized and hence the derivation will crash.

(75) ana \*huwwa/hiyya il-muškila
I \*he/she the-problem.Fem.Sg
'I am the problem.' (LA) (Choueiri, 2016: 119)

As it can be observed in structure (74), Choueiri assumes that the copula *KWN*, which can co-occur with the PE, is generated in T. It is a realization of the verbal morphology features on the head T. Finally, in terms of agreement, Choueiri assumes that the head F, which bears the features [3 Per, Num and Gen], always agrees with the subject of the predication (i.e., the DP in the Spec-PredP). In example (75) the predicate, a first-person pronoun, moves to Spec-FP, and the head F agrees with the subject *in situ*. That is, the PE seems to be the phonological exponent of the features in F.

Although this account of Choueiri's departs from previous works by concluding that the PE is neither an identity pronoun nor a copula, it too faces some challenges. First, she does not examine the use of the PE in all Arabic copular clause types. This may be because she does not distinguish the various clause types and instead treats them all as equational sentences. She also does not discuss the optionality of the PE in all Arabic copular clause types. The outcome of this shortfall is her argument that the optional use of the PE in example (72) can be taken as evidence that the PE is not an identity predicate. As a matter of fact, the copular clause in (72) is an identificational clause. I argue that the use of the PE in the Arabic identificational clause is always optional (see Sections (3.3.1) and (3.4)).

Second, if the projection of the FP marks the syntactic relation between the two DPs in an equational sentence, why do we need to project the PredP (SC)? In the literature, it has been assumed that PredP mediates the predicational (syntactic) relation between a subject and a predicate (see. Bowers, 1993, 2001; Mikkelsen, 2005; among others). In Chapter 3, I suggest that in the structure of the identity (equative) clause the SC is a FP, not a PredP. That is, the SC in an identity clause is different from the SC in a predicational clause. Also, it is not obvious why Choueiri assumes that there is a PredP and hence a predicational relation between the two referential DPs in equational sentences. Throughout her work, referential DPs occurring in the postcopular position, such as proper nouns *Amal Clooney* and *Samia*, and a personal pronoun *ana* 'I', are referred to as predicates, not as arguments. If they are predicates, how is the identity (or equative) relation derived?

Third, Choueiri ascribes the impossible use of the PE in predicational clauses to the absence of an FP in its structure. Under her analysis, it is not obvious what bars the FP from projecting in the predicational clause involving nonverbal predicates (NPs, APs and PPs) and

thus a PredP. In Chapter 3, instead, I ascribe the impossibility of the PE in the predicational clause to SC type, which is different from the SC in the structure of the identity clause.

Finally, Choueiri has not elaborated on how agreement takes place between the head F and the subject of the predication (i.e., the DP in Spec-PredP). Choueiri argues that the head F always agrees with the subject DP in Spec-PredP even when the subject remains *in situ* and the predicate raises to Spec-FP, giving the example in (75). However, this cannot be supported in SA and other Arabic dialects. In SA, as shown in (76), the head F always agrees with the first DP in gender and number, but not in person. Choueiri's account of PE agreement needs to be reconsidered and is something I address in Chapter 3.

(76)

, а.		huwa/*hiya he/*she em.'	v	kil-at-u roblem-Fe	m.Sg-NOM	
b.	?al-muſkil-at-u the-problem-Fe 'The problem is	•	??huwa ??he/sl	2	?anaa I (Masc.Sg)	
c.	?anta you (Masc.Sg) 'You are the pr			u∫kil-at-u -problem-]	Fem.Sg-NOM	
d.	Zaynab-u	hiya/*	huwa	qaa?id-u		t <sup>s</sup> -t <sup>s</sup> aa?ir-at-i

d. Zaynab-u hiya/\*huwa qaa?id-u t-t'aa?ir-at-i Zaynab (Fem)-NOM she/\*he captain (Masc)-NOM the-plane-Fem.Sg-GEN 'Zaynab is the captain of the plane.'

To sum up, this section has examined the major work already done on the PE in Arabic copular clauses. It is shown that researchers have provided different analyses for this PE: a copular morpheme, an identity pronoun, an auxiliary, and a linker. I have pointed out that all of these analyses have both theoretical and empirical issues. Throughout this section, it can be presumed that the analysis that I attempt to provide in this thesis departs from these works in two

respects: I examine the PE in all Arabic copular clause types and I do not associate the PE with the copular verb *KWN*.

### 2.5 Summary

This chapter presents much of the major relevant literature. Section (2.2) begins by reviewing the significant work that has been conducted on copular clauses crosslinguistically. I have shown that my analysis of Arabic copular clauses, which will be provided in more detail in Chapter 3, tend to support analyses which treat the predicational clause differently from the identity clause and consider the other types of copular clauses as subtypes of the identity clause. Section (2.3) reports the major work that has been done on Arabic copular clauses, specifically on the structure of the predicational clause (verbless vs. verbal sentences) and case and agreement. My analysis, which will be elaborated on in Chapter 4 and Chapter 5, assumes that there is no VP layer in the structure of the verbless sentence, and that the predicate case results from Multiple Agree. Finally, Section (2.4) reviews the earlier work that has been put forward on the PE in Arabic copular clauses. I introduce my analysis of the PE, which will be explained in more detail in Sections (3.3.1) and (3.4) and which departs from these works by examining the PE in all Arabic copular clause types and not associating the PE with the copular verb *KWN*.

### **Chapter 3 Copular Clauses in Arabic**

### **3.1 Introduction**

This chapter focuses primarily on the taxonomy of Arabic copular clauses. With the exception of the predicational clause, research on Arabic copular clause types is lacking in the literature. It is thus the purpose of this chapter to present a detailed analysis of Arabic copular clause types. Section (3.2) begins with an overview of Arabic copular clause types, followed by Section (3.3) which provides the syntactic tests (or properties) that can be used to distinguish the various types of Arabic copular clauses from each other. Having laid out these crucial distinctions, Section (3.4) then presents my analysis, which aims to condense all of the Arabic copular clause types into two well-defined types, namely the predicational clause and the identity (or equative) clause. Section (3.5) concludes this chapter.

#### **3.2 Arabic copular clause types**

In this section I present a concise description of the various copular clause types in Arabic using Higgins's (1979) taxonomy, in addition to a number of influential works presented by several other linguists (see Section (2.2)). This section paves the way for the tests and analysis provided in Section (3.3) and Section (3.4) respectively. The most commonly discussed copular clause type, the predicational clause<sup>26</sup>, is a clause that tells us something about the subject. To clarify, the predicational clause contains a nonverbal predicate, either an NP, AP, or PP, which resembles a verbal predicate in that it predicates a certain property about the subject. Consider, for instance, the copular clauses in (1). In (1.a) the NP *mufallim* 'teacher' tells us Zayd's job, in

<sup>&</sup>lt;sup>26</sup> Bondaruk (2013) says, "In the literature, a lot of attempts have been made to reduce the number of classes of copular clauses proposed by Higgins to either two or three, and, actually, only the existence of predicational clauses has been found to be unquestionable" (p.35).

(1.b) the AP *sasiid* 'happy' tells us the state of the boy at a certain moment in the past, and in (1.c) the PP *fi l-matsGam* 'in the restaurant' tells us the boy's location. Rothstein (2004), as well as Higginbotham (1987) and Mikkelsen (2005), point out that APs and indefinite NPs are typically predicative, and PPs are predicative if P is a lexical head and not only a case-marker.

a.	kaan-a be.PST-3.Masc.Sg 'Zayd was a teacher.'	Zayd-un Zayd-NOM	muʕalliı teacher.l	n-an Masc.Sg-ACC
b.	kaan-a be.PST-3.Masc.Sg 'The boy was happy.	l-walad-u the-boy-NOM	saSiid happ	l-an y.Masc.Sg-ACC
c.	kaan-a be.PST-3.Masc.Sg 'The boy was in the re	l-walad-u the-boy-NOM estaurant.'	fi in	l-mat <sup>c</sup> Cam-i the-restaurant-GEN

Next is the specificational clause, a clause that informs, or specifies, who or what a referent is. The first NP in this clause is analogous to the head of a list, with the second NP functioning as an item or entry on that list (Higgins, 1979). Consider, for example, the copular clauses in (2) where (2.a) specifies who the king is, (2.b) specifies who the teacher is, and (2.c) specifies who the winner is. It can be noted that in each of these examples the second element may be a proper noun, pronoun or definite description, whereas the first element is always a definite description. This is supported by Mikkelsen (2005), who asserts that the predicate complement in a specificational clause may be a name, pronoun, or definite description, and by Higgins (1979) who asserts that the subject of a specificational clause is always a definite description.

(2)

(1)

a. ?al-malik-u Zayd-un the-king-NOM Zayd-NOM 'The king is Zayd.'

- b. ?al-muSallim-u ?anta/?anaa the-teacher-NOM you/I 'The teacher is you/me.'
- c. ?al-faa?iz-u l-mu\$allim-u the-winner-NOM the-teacher-NOM 'The winner is the teacher.'

As discussed in Section (2.2), there is a great deal of debate on the status of this type of copular clause. As a result, two different analyses of the specificational clause have been put forward. Some linguists analyze it as an inverse predicational clause (Bondaruk, 2013; Heggie, 1988; Mikkelsen, 2005; Moro, 1997), whereas others analyze it as an identity clause (Hedberg & Potter, 2010; Heycock & Kroch, 1998, 1999; Rothstein, 2004). In Section (3.4), I discuss why the Arabic specificational clause favors the latter analysis.

The third type of copular clause, the identity (equative) clause, is a clause that expresses an identity relation between two expressions. Specifically, the identity clause equates the referents of two DPs. As pointed out by Higgins (1979), the identity clause is typically composed of two definite NPs, two proper NPs, two pronouns, or an amalgamation of these items, as illustrated in (3). Each of these examples signals an identity relation between two referential DPs. That is, the two DPs in each clause both denote the same individual, hence the reason these clauses are called identity clauses.

- (3)
- a. nad3mat-u ş-şubħ-i hiya nad3mat-u l-layal-i star-NOM the-morning-GEN she star-NOM the-evening-GEN 'The morning star is the evening star.'
- b. Michel Chalhoub huwa Omar-u ſ-ſariif Michel Chalhoub he Omar-NOM the-ſariif 'Michel Chalhoub is Omar Asharif.'

c. ?anaa (huwa) ?anaa, wa ?anta (huwa) ?anta<sup>27</sup> I he I and you he you 'I am me and you are you.'

d. ?anaa (huwa) Zayd-un I he Zayd-NOM 'I am Zayd.'

Next is the identificational clause, a clause that tells (identifies) the name of a person or thing (Higgins, 1979). It typically consists of demonstrative<sup>28</sup> and nominal expressions, as shown in (4). In (4.a), the identificational clause tells who this girl is, and in (4.b) it tells who that man

is.

(4)

- a. haaðihi l-bint-u (hiya) Hind-un this the-girl-NOM she Hind-NOM 'This girl is Hind.'
- b. ðaalika r-radʒul-u (huwa) Zayd-un that the-man-NOM he Zayd-NOM 'That man is Zayd.'

Unlike the preceding types, the identificational clause has received little attention in the literature. As discussed in Section (2.2), some linguists have treated this type as an identity clause (cf. Hedberg & Potter, 2010; Heggie, 1988; Higgins, 1979; Mikkelsen, 2005). Higgins explicitly states that the identificational clause can be analyzed as an identity clause if one takes referentiality as a property of expressions themselves rather than a function of their usage. For example, Bondaruk (2013) treats the Polish identificational clause in (5) containing a

(i) Ja to ty, a ty to ja. I-nom. TO you-nom. and you-nom. TO I-nom. 'I am you and you are me.'

(Bondaruk, 2013: 136)

<sup>&</sup>lt;sup>27</sup> Bondaruk (2013) cites also an identical example in Polish that involves two pronouns as in (i):

 $<sup>^{28}</sup>$  It should be noted that demonstratives in Arabic inflect for gender, number, and sometimes case. Below are some forms of the demonstratives in SA:

<sup>(</sup>i) haaðihi: feminine singular demonstrative.

<sup>(</sup>ii) haaðaa: masculine singular demonstrative.

<sup>(</sup>iii) haaðaani: masculine dual nominative demonstrative.

<sup>(</sup>iv) haatein; feminine dual accusative demonstrative.

<sup>(</sup>v) ?ulaa?ika: plural demonstrative.

demonstrative NP located in the postcopular position as an identity clause, even though in other examples she suggests this type may be subsumed under the specificational clause type<sup>29</sup>. In Section (3.4), I discuss why this type of copular clause in Arabic can be analyzed as an identity clause.

(5) Ja jestem ten człowiek I-nom am this man-nom 'I am this man.'

(Bondaruk, 2013: 335)

The last Arabic copular clause type on which I will shed some light is the copular clause with a definite description (i.e. a postcopular definite NP), as in (1) in Chapter 1 repeated here as (6) for convenience.

(6) Ahmad-u l-muSallim-u Ahmad-NOM the-teacher-NOM 'Ahmad is the teacher.

As pointed out in Section (1.3) and Section (2.2), it is not obvious whether the clause in this example is better classified as a predicational or identity clause. Some people consider it a predicational clause, where the NP *lmuSallim* 'The teacher' predicates a property of the subject NP *Ahmad* (Heggie, 1988; Mikkelsen, 2005; Moro, 1997), whereas others prefer to classify it as an identity clause, where the NP *lmuSallim* denotes the same individual *Ahmad* (Carnie, 1995, 1997 & Roy, 2013). Still others consider this clause ambiguous (Higginbotham, 1987; Higgins, 1979; Rothstein, 2004). In Section (3.4), I discuss this clause as it relates to other clause types in Arabic.

This section has broadly defined and described the various copular clause types found in Arabic; these are the predicational, specificational, identity, and identification clause types. I

<sup>&</sup>lt;sup>29</sup> As a matter of fact, Bondaruk has not clearly discussed the identificational clause in Polish, but does suggest treating this type as a specificational clause as both types of clauses behave analogously with respect to certain properties, for example verb agreement. This is also why she sometimes considers the identificational clause a specificational clause and sometimes considers it an identity clause.

have also mentioned a special type of Arabic copular clause, one with a definite description in the postcopular position, which has yet to be classified. This succinct overview lays the groundwork for the following sections, which will discuss the properties of various copular clause types and provide a unified analysis of copular clauses in Arabic.

### 3.3 Properties of Arabic copular clauses

Several syntactic and semantics tests have been put forward in the literature to distinguish copular clause types from each other. In this section, I make use of these tests and provide others in order to clearly establish the differences and similarities among the various types of copular clauses in Arabic. These tests provide crucial evidence to support the analysis of Arabic copular clauses provided in Section (3.4).

#### 3.3.1 The PE

As mentioned in Section (1.3), the  $PE^{30}$ , which is identical to a third-person nominative pronoun in Arabic, provides a major distinction among the Arabic copular clause types. The analysis of Arabic copular clauses articulated in Section (3.4) hinges on this significant diagnostic, and as such I present a detailed description of this distinction here. As an illustration, the PE obeys different constraints across the different Arabic copular clause types. It can be used in the specificational clause (7), the identificational clause (8), and the identity clause (9). It can even be used in a copular clause containing a postcopular definite NP as shown in (10).

(7)

a. ?al-malik-u (**huwa**) Zayd-un the-king-NOM he Zayd-NOM 'The king is Zayd.'

<sup>&</sup>lt;sup>30</sup> In traditional Arabic grammar, the PE is known as  $d^{s}amiir 2alfas^{s}l$  'a pronoun of separation', whereas it is known as a pronominal copula *PRON* in the literature of generative grammar. In this thesis, I use the term PE as the nature of this kind of pronoun is not yet clear.

b. ?al-muSallim-u	(huwa)	?anta/?anaa
the-teacher-NOM	he	you/I
'The teacher is you	/me.'	-

(8) haaðihi l-bint-u (hiya) Hind-un This the-girl-NOM she Hind-NOM 'This girl is Hind.'

(9)

- a. Michel Chalhoub \*(huwa) Omar-u ∫-ʃariif Michel Chalhoub he Omar-NOM the-ʃariif 'Michel Chalhoub is Omar Asharif.'
- b. ?anaa (**huwa**) Zayd-un I he Zayd-NOM 'I am Zayd.'
- c. ?anaa (huwa) ?anaa, wa ?anta (huwa) ?anta I he I and you he you 'I am me and you are you.'
- (10) Zayd-un (huwa) l-malik-u Zayd-NOM he the-king-NOM 'Zayd is the king.'

Two observations need to be made regarding the above data. First, the PE is obligatory only in an identity clause consisting of proper nouns as in (9.a), but is otherwise always optional. Second, the PE can only be found with clauses that allow a definite NP, a proper NP, a pronoun, or a demonstrative NP in the precopular and postcopular positions.

In contrast, the PE cannot be used in an Arabic predicational clause as shown in (11),

where the predicates are an NP in (11.a), an AP in (11.b), and a PP in (11.c).

(11)

'Zayd is tall.'

a.	Zayd-un Zayd-NOM 'Zayd is a stud	(* <b>huwa)</b> he dent.'	t <sup>s</sup> aalib-un student.Masc.Sg-NOM
b.	Zayd-un	(* <b>huwa)</b>	t <sup>s</sup> awiil-un
	Zayd-NOM	he	tall.Masc.Sg-NOM

c.	Zayd-un	(*huwa)	fi	d-daar-i
	Zayd-NOM	he	in	the-house-GEN
	'Zayd is in the	e house.'		

Thus, I argue that the PE serves as a distinguishing feature among Arabic copular clause types. It can be found in nearly all copular clause types, including specificational, identificational, and identity clause types, as well as in a clause with a postcopular definite description. The PE is obligatory only in identity clauses consisting of proper nouns and is otherwise optional. However, it cannot be used in a predicational clause in Arabic.

In Section (2.4), I argue that the PE is not a copular morpheme like the copular verb *KWN* (Li & Thompson, 1977), not an identity pronoun occurring in the copular verb position (Eid, 1991), and not an auxiliary like the copular *KWN* base-generated in the Pred head and raised to T (Ouhalla, 2013). I also argue that the PE is not a linker marking the syntactic relation between subject and predicate DPs (Choueiri, 2016). These analyses all pose both theoretical and empirical issues, for example the possible co-occurrence of the PE with the copular verb *KWN*, or of the PE with the future auxiliary *sawfa* and the copula *KWN*. In Section (3.4), I present my analysis of the PE as a tool used to distinguish between Arabic copular clause types. I will explain the nature of this PE, including why it is illicit in the predicational clause and licit in all other types, and why it is obligatory only in the identity clause consisting of proper nouns.

Before proceeding to the following section, I want to comment very briefly on the PE in other languages. As a matter of fact, it is not only Arabic that uses a PE in its copular clauses; there are other languages that use an extra pronoun in their copular clauses as well. For instance, Rothstein (2004) points out that in Hebrew the  $PE^{31}$  is optional in the predicational clause as in (12), but obligatory in the identity clause as in (13).

<sup>&</sup>lt;sup>31</sup> Rothstein uses the term PRON, not PE, in her work on Hebrew copular clauses.

(12) dani (hu) rofe dani m.sg doctor 'Dani is a doctor,'

(Rothstein, 2004: 206)

(13)

- a. dani \*(hu) mar yosef dani m.sg. mr yosef 'Dani is Mr Yosef.'
- b. ha-mora Selanu \*(hi) Rina the-teacher our f.sg rina 'Our teacher is Rina.'

(Rothstein, 2004: 207)

Furthermore, Roy (2013) reports that in the Russian identity clause, specifically in the present tense, two DPs are separated by the deictic pronoun *eto* 'this/that' as shown in (14.a), whereas in the predicational clause the predicate appears immediately after the subject as shown in (14.b).

(14)

- a. Utrennaja zvezda \*(eto) večernaja zvezda. [morning star].NOM eto [evening star].NOM 'The morning star is the evening star.'
- b. Puškin velikij poèt.
  Pushkin [great poet].NOM
  'Pushkin is a great poet.'

(Roy, 2013: 138)

Finally, Carnie (1995, 1997) states that in Irish the agreement morpheme is optional in the predicational clause (15.a), but obligatory in the identity clause (15.b).

(15)

- a. Is dochtúir (í) Máire COMP doctor (AGR) Mary 'Mary is a doctor'
- b. Is í Máire an captaen COMP AGR Mary the captain 'Mary is the captain'

(Carnie, 1997:62)

# 3.3.2 VP ellipsis

VP ellipsis<sup>32</sup> (VPE) refers to the syntactic process in which one or more constituents are elided from a clause. The ellipted constituents are understood based on elements in the antecedent (i.e., the first clause). The example in (16) illustrates this process where the VP *Pakala tuffaaħatan* 'ate an apple' is omitted in the second clause.

(16) ?akal-a Zayd-un tuffaaħ-at-an wa Haatim-un ?ayd<sup>s</sup>an ate-3.Sg.Masc Zayd-NOM apple-Fem.Sg-ACC and Haatim-NOM too 'Zayd ate an apple and Haatim too.'

The VPE has also been viewed as one of the distinguishing features among copular clause types, specifically between predicational clauses, which allow the VPE, and specificational clauses, which do not (Heller & Wolter, 2008; Mikkelsen, 2005; Rothstein, 2004). The examples in (17) show that the VPE can target the predicate complement (i.e., the postcopular expression) in the predicational clause, regardless of whether the complement is an NP (17.a), an AP (17.b), or a PP (17.c). However, the examples in (18) show that in the specificational clause<sup>33</sup> the VPE cannot target the predicate complement, in this example a proper NP.

#### (17)

- a. Rosa is a doctor and Matilda is too. (Heller & Wolter, 2008: 228)
- b. You aren't crazy, but he might be

c. You aren't in the mood, but he might be\_\_\_\_.

(Mikkelsen, 2005: 100)

### (18)

a. \*My next-door neighbor is Rosa and your next-door neighbor is too.

(Heller & Wolter, 2008: 228)

b. #The duty nurse tonight is Rina. And the duty pharmacist is too.

(Rothstein, 2004: 65)

<sup>&</sup>lt;sup>32</sup> Rothstein (2004) has called this process "Predicate Ellipsis".

<sup>&</sup>lt;sup>33</sup> Rothstein treats the specificational clause as an identity clause.

According to Rothstein (2004) and Mikkelsen (2005), the VPE can target the predicate complement in the predicational clause because it is semantically predicative (of type  $\langle e,t \rangle$ ), just like the regular verbal predicate presented in (16). Conversely, the VPE cannot target the predicate complement in the specificational clause because it is semantically referential (of type  $\langle e \rangle$ ). Based on this fact, they conclude that the VPE is characteristic of the predicational clause.

Using this test on all Arabic copular clause types yields further effects. The VPE can target the predicate complement in the Arabic predicational clause, as demonstrated in (19), (20), and (21). The ellipted constituents are a predicative NP in (19), a predicative PP in (20), and a predicative AP in (21).

(19)

- a. maa kaan-a Zayd-un muðiis-an dʒayyad-an walaakin Zayd-NOM be.PST-3.Masc.Sg announcer-ACC good-ACC but no Fahad-un kaan Fahad-NOM be.PST 'Zayd was not a good announcer, but Fahad was
- b. kaan-a Zayd-un muðii\$-an wa kaan-a Fahad-un kaðaalik be.PST-3.Masc.Sg Zayd-NOM announcer-ACC and be.PST-3.Masc.Sg Fahad-NOM too 'Zayd was an announcer and Fahad was too.'

# (20)

- a. Zayd-un min s-suudaan-i wa Suθmaan-u ?ayd<sup>s</sup>an Zayd-NOM from the-Sudan-GEN and Othman-NOM too 'Zayd is from Sudan and Othman is too.'
- b. maa kaan-at Hind-un fi l-dʒaamiS-at-i ?aθnaa?a no be.PST-3.Fem.Sg Hind-NOM at the-university-Fem.Sg-GEN during
   l-ħaadiθ-i walaakin Zayd-un kaan the-accident-GEN but Zayd-NOM be.PST

'Hind was not at the university during the accident, but Zayd was\_\_\_\_\_.'

### (21)

a. Zayd-un lat<sup>s</sup>iif-un wa Fahad-un kaðaalik Zayd-NOM kind-NOM and Fahad-NOM too 'Zayd is nice, and Fahad is too.' b. maa kaan-a Zayd-un ?anaaniy-an walaakin Fahad-un kaan no be.PST-3.Masc.Sg Zayd-NOM selfish-ACC but Fahad-NOM be.PST 'Zayd was not selfish, but Fahad was\_\_\_\_\_.'

In contrast, the VPE cannot target the predicate complement in all other types of Arabic copular clauses. Consider, for instance, the specificational clause in (22), the identity clause in (23), the identificational clause in (24), and (25) containing a copular clause with a postcopular definite description. As can be seen, all of these instances are ungrammatical in Arabic because the VPE is not allowed in these copular clause types.

(22) \*maa kaan-a l-muSallim-u Zayd-an ball kaan-a no be.PST-3.Masc.Sg the-teacher-NOM Zayd-ACC but be.PST-3.Masc.Sg l-mudiir-u the-principal-NOM '\*The teacher was not Zayd, but the principal was .

- (23) \*lays-a Michel Chalhoub huwa Ahmed-a Halmi walaakin Michel Chalhoub huwa Neg-3.Masc.Sg Michel Chalhoub he Ahmed-ACC Halmi but Michel Chalhoub he '\*Michel Chalhoub is not Ahmed Halmi, but Michel Chalhoub is \_\_\_\_\_.'
- (24) \*maa kaan-a ðaalika l-walad-u Zayd-an ball kaan-a no be.PST-3.Masc.Sg that the-boy-NOM Zayd-ACC but be.PST-3.Masc.Sg ðaalika l-walad-u that the-boy-NOM

"That boy was not Zayd, but that boy was\_\_\_\_\_\_

(25) \*kaan-a Zayd-un l-muSallim-a wa kaan-a Fahad-un kaðaalik bePST-3.Masc.Sg Zayd-NOM the-teacher-ACC and bePST-3.Masc.Sg Fahad-NOM too '\*Zayd was the teacher, and Fahad was too.'

In accordance with Rothstein and Mikkelsen, I assume that the VPE is allowed in the Arabic predicational clause because the predicate complement in this clause type, regardless of whether it is an NP, an AP or a PP, is predicative (property-denoting). However, it is not allowed in all other types of Arabic copular clauses because in these clause types the predicate complement, which is a proper NP or a definite description, is referential (individual-denoting). Consequently, it can be concluded that the presence of a VPE distinguishes the predicational

clause from all other types of Arabic copular clauses. It also provides evidence with respect to the semantic types of predicate complements in all Arabic copular clauses. These two points are significant for the analysis of Arabic copular clauses provided in Section (3.4).

### 3.3.3 Complements of the verb *consider*

One of the prominent tests that has been provided in the literature to distinguish between copular clause types is based on the complement of the verb *consider* (see Bondaruk, 2013; Mikkelsen, 2005; Partee, 2010; Rothstein, 2004). It has been observed in several languages that certain types of copular clauses cannot function as SC complements of the verb *consider*. To illustrate this test, let us first consider the examples (26)-(29) from English.

(26)

<ul><li>a. I consider Mary very clever / a clever woman.</li><li>b. They considered Mary English.</li></ul>	(Rothstein, 2004: 235) (Bondaruk, 2013: 101)
	(Donuaruk, 2015. 101)
(27)	
a. *They considered Cicero Tully.	(Partee, 2010: 29)
b. *They considered Mary Dr Johnson.	(Bondaruk, 2013: 101)
(28) *I consider the best cook in the country Susan.	(Mikkelsen, 2005: 179)
(29) I consider John the Mayor.	(Rothstein, 2004: 250)

The examples above demonstrate that copular clauses in English differ in their acceptability as a SC complement of the verb *consider*. While the predicational clause, as in (26), can be used as a SC complement of the verb *consider*, the identity and specificational clauses, as in (27) and (28) respectively, cannot be used as SC complements of the verb *consider*. The copular clause with a postcopular definite description, as in (29), can also be used as a SC complement of the verb *consider*.

It has also been noted that Polish behaves in a way analogous to English with respect to this diagnostic. Bondaruk (2013) points out that in Polish only the predicational clause, as in

(30.a), can be found as a complement of the verb *consider*, whereas the other copular clause types, specifically the identity clause as in (30.b) and the specificational clause as in (30.c), cannot. Bondaruk states that this test has been taken by many people to argue that the different copular clause types have different syntactic structures.

- (30)
  - a. Uważam Marka za geniusza I-consider Mark for genius 'I consider Mark a genius.'
  - b. \*Uważam Jana Pawła II za Karola Wojtyłę I-consider John Paul II for Karol Wojtyła 'I consider John Paul II to be Karol Wojtyła.'
  - c. \*Uważam mojego kolegę za Marka I-consider my colleague for Mark 'I consider my colleague to be Mark.'

(Bondaruk, 2013: 142)

Rothstein (2004) and Partee (2010) justify the possible use of the predicational clause as a SC complement of the verb *consider* based on the presence of predicates, of type  $\langle e,t \rangle$ , in the SC. Rothstein also adds that a copular clause with a postcopular definite description can be used as a SC complement of the verb *consider* because definite descriptions can sometimes be used predicationally. Higginbotham (1987) points out that when the definite description is used referentially<sup>34</sup>, the clause containing it cannot function as a SC complement of the verb *consider*, as in (31).

(31) \*I consider John the man over there. (Higginbotham, 1987: 49)

As for identity and specificational clauses, Rothstein and Partee argue that these clauses cannot be used as SC complements of the verb *consider* due to the absence of predicates of type

<sup>&</sup>lt;sup>34</sup> Like Rothstein, Higginbotham also points out that the copular clause can function as a SC complement of the verb *consider* when the definite description is used predicationally, as shown in (i):
(i) I consider John the man for the job. (Higginbotham, 1987: 49)

 $\langle e,t \rangle$  in a SC, given that both of the DPs in these types of clauses are referential of type  $\langle e \rangle^{35}$ . In order for these clauses to function as SC complements of the verb *consider*, Rothstein suggests that the English copula *be*, which is an identity function, must be used as shown in (32), to derive the identity relation<sup>36</sup>.

(32) I consider Mary \*(to be) Dr. Smith. (Rothstein, 2004: 235)

Applying this test to Arabic copular clauses yields almost the same effects found in English and Polish copular clauses with only slight differences. As an illustration, the predicational clause, as in (33) where the predicate in (33.a) is an AP and in (33.b) is an NP, can function as a SC complement of the verb *fadad* 'considered'. This could be ascribed to the fact that the predicational clause functioning as a SC complement of the verb *fadad* contains a predicate of type <e,t> (e.g., AP and NP), as suggested by Rothstein and Partee.

(33)

a.	Sadad-tu	Zaynab-a	saSuudiyy-at-an
	consider.PST-1.Sg	Zaynab-ACC	Saudi-3.Fem.Sg-ACC
	'I considered Zaynab	Saudi.'	

b. Sadad-tu Zayd-an muSallim-an consider.PST-1.Sg Zayd-ACC teacher.Masc.Sg-ACC 'I considered Zayd a teacher.'

In contrast to English and Polish, it seems that all other copular clause types in Arabic can function as SC complements of the verb *fadad*, as shown in examples (34) for the specificational clause, (35) for the identity clause, (36) for the identificational clause, and (37) for the copular clause with a postcopular definite NP.

<sup>&</sup>lt;sup>35</sup> Mikkelsen (2005) argues that the specificational clause cannot function as a SC complement of the verb *consider* (i.e., PredP) because this clause type requires a TP, which bears a Topic feature, in order to move the predicative DP to Spec-TP. As pointed out in Section (2.2.5), Mikkelsen has analyzed the specificational clause as an inverse predicational clause.

<sup>&</sup>lt;sup>36</sup> Similarly, Rothstein argues that PRON in the SC of Hebrew identity clauses is obligatory to derive the identity relation.

(34)

- a. Sadad-tu l-faa?iz-a Zayd-an consider.PST-1.Sg the-winner-ACC Zayd-ACC '\*I considered the winner Zayd.'
- b. Sadad-tu ?afd<sup>s</sup>al-a laaSib-in fi s-saSuudiyy-at-i Saami-an consider.PST-1.Sg best-ACC player-GEN in the-Saudia-Fem.Sg-GEN Saami-ACC '\*I considered the best player in Saudi Arabia Saami.'
- (35) Sadad-tu Michel Chalhoub Omar-a ∫-fariif consider.PST-1.Sg Michel Chalhoub Omar-ACC the-fariif '\*I considered Michel Chalhoub Omar Asharif.'
- (36) Sadad-tu ðaalika r-radʒul-a Zayd-an consider.PST-1.Sg that the-man-ACC Zayd-ACC '\*I considered that man Zayd.'
- (37) Sadad-tu Zayd-an l-faa?iz-a consider.PST-1.Sg Zayd-ACC the-winner-ACC 'I considered Zayd the winner.'

Based on this data, one may conclude that Arabic copular clauses differ from their English and Polish counterparts in their acceptability as SC complements of the verb *consider*. However, this is not entirely accurate. I suggest instead that these types of Arabic copular clauses – specifically the specificational, identificational, and identity clauses, as well as the copular clause with a postcopular definite description<sup>37</sup> – can function as SC complements of the verb *Gadad* because they involve a covert identity predicate in their SCs, specifically the PE discussed in Section (3.3.1) and which will be discussed further in Section (3.4). As mentioned earlier, this PE is almost always optional (covert) in these types of copular clauses. The examples in (34)-(37), repeated here as (38)-(41) with the optional PE, also demonstrate the possible use of these clause types as SC complements of the verb *Gadad*.

 $<sup>^{37}</sup>$  Following Rothstein (2004) and Higginbotham (1987), it may also be suggested that the copular clause with a postcopular definite description can function as a SC complement of the verb *fadad*, since the definite description is interpreted predicationally, not referentially. In Section (3.4), I discuss the taxonomic status of the Arabic copular clause with a postcopular definite NP.

- (38) Sadad-tu l-faa?iz-a (huwa) Zayd-an consider.PST-1.Sg the-winner-ACC he Zayd-ACC 'I considered the winner to be Zayd.'
- (39) Sadad-tu Michel Chalhoub (huwa) Omar-a ∫-fariif consider.PST-1.Sg Michel Chalhoub he Omar-ACC the-fariif 'I considered Michel Chalhoub to be Omar Asharif.'
- (40) Sadad-tu ðaalika r-radʒul-a (huwa) Zayd-an consider.PST-1.Sg that the-man-ACC he Zayd-ACC 'I considered that man to be Zayd.'
- (41) Sadad-tu Zayd-an (huwa) l-faa?iz-a consider.PST-1.Sg Zayd-ACC he the-winner-ACC 'I considered Zayd to be the winner.'

Now it is evident that Arabic copular clauses exhibit the same effects found in English and Polish copular clauses with respect to their acceptability as a complement of the verb *consider*. In all these languages, only the predicational clause can function as a SC complement of the verb *consider*, while all other clause types cannot. The PE, which is used in all Arabic copular clause types except the predicational clause, licenses the use of these clauses as SC complements of the verb *Gadad*. The PE in Arabic is similar to the English identity copula *be*, which is required when these types of clauses function as SC complements of the verb *consider* (see Partee, 2010 & Rothstein, 2004).

In short, testing acceptability as a complement of the verb *consider* is one of the significant diagnostics that distinguishes copular clause types. Only the predicational clause can function as a SC complement of the verb *consider*. I have argued that the other types of Arabic copular clauses function as SC complements of the verb *Gadad* under the assumption that there is a covert PE (an identity predicate) in their SCs.

#### 3.3.4 Question types

In the literature, it has been found that copular clauses differ with respect to the types of questions they may answer (cf. Bondaruk, 2013; Declerck, 1988; Higgins, 1979; Mikkelsen, 2005; Williams, 1983; Roy, 2013). In particular, the predicational clause answers a question with *WHAT*, as in (42), but the other types of copular clauses answer a question with *WHAT*, as in (43), (44), and (45) for the specificational, identificational, and identity clauses respectively.

- (42)
  - a. Q: What nationality is the tallest girl in the class?A: She is Swedish. (Mikkelsen, 2005: 76)

(Higgins, 1979: 251)

(Mikkelsen, 2005: 76)

- b. Q: What is John<sup>38</sup>? A: He's lazy.
- (43) Q: Who is the tallest girl in the class?A: That is Molly.
- (44) Q: Who is that man? A: He is John.
- (45) Q: Who is she?<br/>A: She is Molly Jacobson.(Mikkelsen, 2005: 76)

Higgins (1979) and Roy (2013) argue that *WHAT* asks for a property, whereas *WHO* asks for an entity. This argument indicates that the postcopular element in the predicational clause is predicative (property-denoting), whereas it is referential in the other types of copular clauses. Accordingly, question type is one of the tests that distinguish copular clause types.

In Arabic, copular clauses behave in a way analogous to English copular clauses with respect to question types. To explain, all Arabic copular clause types, excluding the predicational clause, answer a question with *Man* "*WHO*" as illustrated in examples (46) for the specificational

<sup>&</sup>lt;sup>38</sup> Higgins (1979) states that there is a tendency to use the question *What is John like*? more than the question *What is John*?. The latter is very rare.

clause, (47) for the identificational clause, and (48) for the identity clause. The examples in (49) and (50) reveal that the predicational clause does not answer a question with *Man "WHO*", but instead answers a question with *Maaðaa "WHAT"*.

(46)	Q: Man l-faa?iz-u? Who the-winner-NOM	A: Zayd-un Zayd-NOM
	'Who is the winner?'	'Zayd'
(47)	Q: Man haaðaa l-walad-u?	A: Zayd-un
	Who this the-boy-NOM	Zayd-NOM
	'Who is this boy?'	'Zayd'
(48)	Q: Man huwa Michel Chalhoub?	<b>A</b> : Omar-u ∫-∫ariif
	Who he Michel Chalhoub	Omar-NOM the-∫ariif
	'Who is Michel Chalhoub?'	'Omar Asharif'

a. **Q**: Man huwa Ahmad-u? Who he Ahmad-NOM 'Who is Ahmad?'

(49)

b. **Q**: Man huwa Ahmad-u? Who he Ahmad-NOM 'Who is Ahmad?'

(50) Q: Maaðaa kaan-a Ahmad-u?
What be.PST-3.Masc.Sg Ahmad-NOM 'What was Ahmad?'

A: \*t<sup>c</sup>awiil-un tall.Masc.Sg-NOM '\*tall'

A: \*muSallim-un teacher-NOM '\*A teacher'

A: muSallim-an teacher-ACC 'A teacher.'

However, the Arabic copular clause with a postcopular definite description behaves differently

from the other Arabic copular clauses as it can answer both the question with Man "WHO" and

the question with Maaðaa "WHAT", as demonstrated in (51).

<b>(51)</b> a.	-			Ahmad-u?		A: l-muSallim-u
		/ho h Who is		Ahmad-NOM Id?'		the-teacher-NOM 'The teacher'
b.	•	laaðaa			Ahmad-u?	A: l-muSallim-a
	V	Vhat	be.P	ST-3.Masc.Sg	Ahmad-NOM	the-teacher-ACC
	"	What v	vas Ah	imad?'		'The teacher.'

It can be concluded that testing with respect to question types is substantiated in Arabic. It is, in fact, one of the distinctions among the various Arabic copular clause types. Specifically, it distinguishes the predicational clause from the other copular clause types, as the predicational clause is the only Arabic copular clause type that does not answer a question with Man "WHO". While questions with Man "WHO" ask for an entity, the predicational clause answers questions with Maaðaa "WHAT", which asks for a property. Based on this fact and in accordance with the researchers (e.g., Bondaruk, 2013; Higgins, 1979; Roy, 2013; among others), I argue that the second element in the Arabic predicational clause is predicative, whereas it is referential in all other types of Arabic copular clauses. Since Man "WHO" always asks about referential NPs, the second element in the predicational clause, which is predicative, cannot constitute a felicitous answer to this type of question. As a final point, the fact that the Arabic copular clause with a postcopular definite description can answer both types of questions, as in (51), suggests that this clause is ambiguous between predicational and identity readings as assumed by Higginbotham (1987), Higgins (1979), and Rothstein (2004). This ambiguity contributes to the analysis that I provide in Section (3.4).

#### 3.3.5 Coordination

Coordination, which is the process of joining words, phrases, or clauses, is another notable diagnostic that has been suggested in the literature to differentiate copular clause types (Heller & Wolter, 2008; Higginbotham, 1987; Higgins, 1979). It has been observed that the various copular clauses exhibit different patterns in terms of coordination. More specifically, Heller and Wolter, as well as Higginbotham and Higgins, notice that only the predicational clause allows the coordination (conjunction) of a predicate with another predicate as in (52). However, coordination is not allowed in the identificational and specificational clauses as in (53.a) and (53.b) respectively. This is because predicative expressions may not be mixed with non-predicative (i.e., referential) expressions.

(52) Rosa is a doctor and is very smart.

- (53)
  - a. \*That is Rosa and is very smart.
  - b. \*My next-door neighbor is Rosa and is very smart.

(Heller & Wolter, 2008: 229)

These examples from English clearly indicate that the predicational clause differs from other copular clause types, specifically the identificational and specificational clause types, with respect to coordination. Only the predicational clause allows the coordination of two predicative expressions; the other types do not.

The coordination test thus seems to be well supported in Arabic. The examples in (54) illustrate that the second NP in a predicational clause can be conjoined with other predicates, for example a PP as in (54.a) or an AP as in (54.b), but cannot be conjoined with referential expressions, as illustrated in (55) where the second conjunct is a proper noun.

### (54)

- a. kaan-a Haatim-un doctor-an wa fi dʒaami\$-at-i l-qaşiim-i be.PST-3.Masc.Sg Haatim-NOM doctor-ACC and in university-Fem.Sg-GEN the-Qassim-GEN 'Haatim was a doctor and (was) at Qassim University.'
- b. kaan-a Haatim-un muSallim-an wa ðakiyy-an dʒidd-an be.PST-3.Masc.Sg Haatim-NOM teacher-ACC and smart-ACC very-ACC 'Haatim was a teacher and (was) very smart.'

# (55)

a.	*huwa	muSallim-un	wa	Zayd-un
	he	teacher-NOM	and	Zayd-NOM
	'*He is	s a teacher and Z	-	

b. \*kaan-a huwa muSallim-an wa Zayd-an be.PST-3.Masc.Sg he teacher-ACC and Zayd-ACC '\*He was a teacher and Zayd. In contrast, the second NPs in the specificational clause (56.a), the identificational clause (57.a), and the identity clause (58.a) cannot be conjoined with a predicative expression, such as an AP, but can be conjoined with a referential expression such as a proper noun, as illustrated in (56.b) for the specificational clause, (57.b) for the identificational clause, and (58.b) for the identity clause.

### (56)

- a. \*kaan-a l-faa?iz-u Zayd-an wa ðakiyy-an dʒidd-an be.PST-3.Masc.Sg the-winner-NOM Zayd-ACC and smart-ACC very-ACC '\*The winner was Zayd and very smart.'
- b. kaan-a l-faa?iz-aani Zayd-an wa Fahad-an be.PST-3.Masc.Sg the-winner-Du.NOM Zayd-ACC and Fahad-ACC 'The (two) winners were Zayd and Fahad.'

# (57)

- a. \*kaan-a ðaalika r-radʒul-u Zayd-an wa ðakiyy-an dʒidd-an be.PST-3.Masc.Sg that the-man-NOM Zayd-ACC and smart-ACC very-ACC '\*That man was Zayd and very smart.'
- b. kaan-a ?ulaa?ika r-ridʒaal-u Zayd-an wa Fahad-an wa Haatim-an be.PST-3.Masc.Sg those the-men-NOM Zayd-ACC and Fahad-ACC and Haatim-ACC 'Those men were Zayd, Fahad and Haatim.'

# (58)

- a. \*Michel Chalhoub huwa Omar-u ∫-ʃariif wa ðakiyy-un dʒidd-an Michel Chalhoub he Omar-NOM the-ʃariif and smart-NOM very-ACC '\*Michel Chalhoub is Omar Asharif and very smart.'
- b. humaa Zayd-un wa Fahad-un They (Du.3) Zayd-NOM and Fahad-NOM 'They are Zayd and Fahad.'

In addition, the second definite NP (or the postcopular definite description) in Arabic

copular clauses cannot be coordinated with a predicative expression, as shown in  $(59)^{39}$  where

<sup>&</sup>lt;sup>39</sup> These clauses can be grammatical in Arabic if we assume that there is a *pro* functioning as a subject of the second conjunct, the AP  $\delta akiyyun dziddan$  'very smart' or the PP *fi dzaamisati lqaşiimi* 'in Qassim University'. Under this assumption, we are conjoining clauses, rather than phrases. This is very different from what I want to point out in this section.

the predicate is an AP in (a) and a PP in (b), but can be coordinated with a referential expression as demonstrated in (60).

(59)

- a. \*Haatim-un l-?ustaað-u wa ðakiyy-un dʒidd-an Haatim-NOM the-teacher-NOM and smart-NOM very-ACC '\*Haatim is the teacher and very smart.'
- b. \*kaan-a Haatim-un d-doctor-a wa fi dʒaamiS-at-i l-qaṣiim-i be.PST-3.Masc.Sg Haatim-NOM the-doctor-ACC and in university-Fem.Sg-GEN the-Qassim-GEN '\*Haatim was the doctor and at Qassim University.'
- (60) huwa l-2ustaað-u wa Zayd-un (fi l-waqt-i nafsih) he the-teacher-NOM and Zayd-NOM (at the-time-GEN self) 'He is the teacher and Zayd (at the same time).'

The main conclusion we obtain from the data and discussion in this section is that the predicational clause behaves differently than the other copular clauses with respect to coordination. In other words, this diagnostic points out that the second NP in a predicational clause is predicative, so it can be conjoined with another predicative expression but not with a referential expression. However, in all other copular clause types, the second NP is referential, so it can be conjoined with another referential expression.

# 3.3.6 Agreement

Agreement between a copular verb and DPs within copular clauses has also been regarded as one of the ways to make distinctions among copular clause types. In certain languages, it has been noted that copular clauses show different patterns with respect to copular-verb agreement. Take, for instance, copular clauses in Polish. According to Bondaruk (2013), in Polish specificational clauses as in (61.a), identificational clauses as in (61.b), and predicational clauses as in (61.c), the copular verb agrees in  $\varphi$ -features with the postcopular element, whereas in identity clauses as in (61.d) the copular verb agrees with the precopular element. Bondaruk uses these agreement facts to differentiate the various copular clause types in Polish.

(61)

- a. Przyczyna wypadku to były zepsute hamulce cause-3sg.fem. of-accident TO were-3pl. broken brakes.<sup>2</sup>
  <sup>4</sup> 'The cause of accident was the broken brakes.<sup>2</sup>
  <sup>4</sup> (Bondaruk, 2013: 145)
- b. Ta metropolia to był Nowy York that-nom. metropolis-nom.fem. TO was-3sg.masc. New York-nom.masc 'That metropolis was New York.' (Bondaruk, 2013: 145)
- c. Suchocka to był dobry Premier Suchocka-nom.3sg.fem TO was-3sg.masc good Prime-Minister-nom.3sg.masc 'Suchocka was a good Prime Minister.' (Bondaruk, 2013: 288)
- d. Ty jesteś ja you-NOM are I-NOM 'You are me.' (Bondaruk, 201: 315)

In contrast, the agreement test cannot be applied in Arabic. The agreement test does not distinguish the copular clause types in Arabic because the copular verb *KWN* will always agree in  $\varphi$ -features with the first DP, and not the second DP, in all Arabic copular clauses. The examples in (62) for the predicational clause, (63) for the specificational clause, (64) for the identificational clause, (65) for the identity clause, and (66) for the copular clause with a postcopular definite NP illustrate that all Arabic copular clauses exhibit the same patterns with respect to copular-verb agreement. In each of these examples, the copula *KWN* agrees with the first DP, but not the second DP, in gender and person but not in number<sup>40</sup>.

(62)

a. kaan-a
 be.PST-3.Masc.Sg
 'Zayd was a teacher.'

muSallim-an teacher.Masc.Sg-ACC

Zayd-un

Zayd-NOM

 <sup>&</sup>lt;sup>40</sup> In SA, the verb always agrees with the postverbal subject in gender and person but not in number, as illustrated in (i). This is the so-called "Partial Agreement in SA". In the literature, various analyses have been provided to account for the partial agreement phenomenon (cf. Aoun & Benmamoun, 1999; Aoun et al., 1994; Benmamoun, 2003; Fassi-Fehri, 1993; Mohammad, 1989, 2000; Ouhalla, 1994a, 2013; Soltan, 2007).
 (i) katab-a t<sup>c</sup>-t<sup>c</sup>ullaab-u r-risaal-at-a

wrote-3.Masc.Sg the-student.Masc.Pl-NOM the-letter-Fem.Sg-ACC 'The students wrote the letter.'

b.	kun-tu	?anaa	muSallim-an
	be.PST-1.Sg	Ι	teacher.Masc.Sg-ACC
	'I was a teacher	.'	

c. kun-ta ?anta muSallim-an be.PST-2.Masc.Sg you teacher.Masc.Sg-ACC 'You were a teacher.'

## (63)

- a. kaan-a l-faa?iz-u ?iyaaya be.PST-3.Masc.Sg the-winner-NOM me 'The winner was me.'
- b. kaan-a sabab-u l-muſkil-at-i t<sup>c</sup>-t<sup>c</sup>ullaab-a be.PST-3.Masc.Sg cause.3.Masc.Sg-NOM the-problem-Fem.Sg-GEN the-student.Masc.Pl-ACC 'The cause of the problem was the students.'

## (64)

- a. kaan-a ðaalika r-radʒul-u ?iyaaya be.PST-3.Masc.Sg that the-man-NOM me 'That man was me.'
- b. kun-tu ?anaa ðaalika r-radʒul-a be.PST-1.Masc.Sg I that the-man-ACC 'I was that man.'

# (65)

- a. fi l-masraħiyy-at-i kun-ta ?anta Zayd-an in the-play-Fem.Sg-GEN be.PST-2.Masc.Sg you Zayd-ACC 'In the play, you were Zayd.'
- b. kun-tu ?anaa ?iyaahu be.PST-1.Sg I him 'I was him.'

# (66)

- a. kun-tu ?anaa l-muSallim-a be.PST-1.Masc.Sg I the-teacher.Masc.Sg-ACC 'I was the teacher.'
- b. kun-ta ?anta ?anta l-mu\$allim-a be.PST-2.Masc.Sg you the-teacher.Masc.Sg-ACC 'You were the teacher.'

Thus, the Arabic copular clause types cannot be distinguished based on copular-verb agreement. It is always the first DP in all Arabic copular clauses that determines the  $\varphi$ -feature agreement on the copula *KWN*.

#### **3.3.7 Intensive reflexive**

The intensive reflexive is another test used in the literature to differentiate copular clauses involving a definite description (definite NP) in either the precopular or postcopular position (cf. Bondaruk, 2013; Heggie, 1988; Rothstein, 2004). It may only be used to distinguish between the predicational clause, the specificational clause, and the copular clause with a postcopular definite NP, since these are the only copular clause types that include a definite description. As was first pointed out by Heggie, and adopted later by Bondaruk, the intensive reflexives can attach to (or modify) only referential NPs, but not predicate NPs, as illustrated in (67).

(67)

- a. John<sub>i</sub> himself<sub>i</sub> is the organizer of the group.
- b. John<sub>i</sub> is the organizer of the group himself<sub>i</sub>.
- c. \*The organizer of the group<sub>i</sub> himself<sub>i</sub> is John.
- d. The organizer of the group is John<sub>i</sub> himself<sub>i</sub>.

# (Heggie, 1988: 72)

In sentences (67.a), (67.b), and (67.d), the intensive reflexive *himself* attaches to the referential NP *John*. Heggie states that the intensive reflexive in (67.b), which modifies *John*, is extraposed. However, the sentence in (67.c) is ungrammatical because the intensive reflexive *himself* attaches to the predicative definite NP *The organizer of the group*. Heggie and Bondaruk argue that the ungrammaticality of (67.c), which is a specificational clause, indicates that the definite

description is not a subject, but rather a raised predicate<sup>41</sup>. Based on these facts, Heggie concludes that the definite description in either the precopular or postcopular position is a predicate, and not referential, as the intensive reflexive fails to modify it.

Heggie and Bondaruk show with this diagnostic that the precopular expression in predicational clauses, as in (67.a) and (67.b), is referential, whereas the precopular expression in specificational clauses, which is typically a definite description as in (67.d), is a raised predicate. The definite description that occurs in the postcopular position, as in (67.a) and (67.b), is also a predicate.

On the other hand, Rothstein (2004) argues that the argument presented by Heggie and Bondaruk does not hold up for two reasons. First, the sentence in (67.c) is infelicitous rather than ungrammatical because in other contexts, where the identification process is reversed (i.e., identifying a proper noun as opposed to the referent of a definite NP), the intensive reflexive can be adjoined to the definite NP as illustrated in  $(68)^{42}$ .

(68) A: I had a letter to get to John Smith, and I gave it to the leader of the group. Do you think he'll get it OK?B: Absolutely. The leader of the group himself is John.

(Rothstein, 2004: 112)

Second, in the identity sentence<sup>43</sup> where both NPs are definite descriptions, the intensive reflexive can attach to either NP as shown in (69).

(69) The leader of the group (himself) is the treasurer (himself). (Rothstein, 2004: 256)

<sup>&</sup>lt;sup>41</sup> As mentioned in Section (2.2.1) and Section (2.2.7), Heggie (1988) and Bondaruk (2013) argue that the specificational clause is an inverse predicational clause.

<sup>&</sup>lt;sup>42</sup> Rothstein also argues that the use of intensive reflexives has pragmatic effects and should not be considered as evidence on the predicate status of the definite description. It is attached to the most prominent discourse referent. In other words, in the identity sentences (67) and (68), the intensifier tells us that the denotation of the NP modified by the intensifier is known and the second NP is the same individual. That is, the two NPs in these sentences denote the same individual.

 $<sup>^{43}</sup>$  Rothstein (2004) analyzes the specificational clause as an identity clause since both of its DPs are referential.

In Arabic copular clauses, the intensive reflexive can attach to proper NPs as well as definite descriptions so long as they are referential. Consider the examples in (70), which illustrate the use of the intensive reflexives in Arabic copular clauses.

- (70)
  - a. Fahad-un<sub>i</sub> nafsahu<sub>i</sub> (huwa) l-muna $\delta^{\varsigma}\delta^{\varsigma}$ im-u li l-mad3muuS-at-i Fahad-NOM himself he the-organizer-NOM of the-group-Fem.Sg-GEN 'Fahad<sub>i</sub> himself<sub>i</sub> is the organizer of the group.'
  - b. Fahad-un<sub>i</sub> l-munað<sup>ç</sup>ð<sup>ç</sup>im-u li l-madʒmuuS-at-i<sub>j</sub> nafsahu<sub>i/j</sub> Fahad-NOM the-organizer-NOM of the-group-Fem.Sg-GEN himself 'Fahad<sub>i</sub> is the organizer of the group himself<sub>i</sub>.'
  - c. ?al-munað<sup>c</sup>ð<sup>c</sup>im-u li l-madʒmuuS-at-i l-?uulaa<sub>i</sub> nafsahu<sub>i</sub> (huwa) Fahad-un the- organizer-NOM of the-group-Fem.Sg-GEN the-first himself he Fahad-NOM '\*The organizer of the first group<sub>i</sub> himself<sub>i</sub> is Fahad.'
  - d. ?al-munað<sup> $\delta$ </sup><sup> $\delta$ </sup><sup>i</sup>im-u li l-mad $_{3}$ muu $_{-at-i}$  l-?uulaa<sub>i</sub> nafsahu<sub>i</sub> (huwa) the- organizer-NOM of the-group-Fem.Sg-GEN the-first himself he

l-munað<sup>ς</sup>ð<sup>ς</sup>im-u li l-madʒmuu<code>S-at-i</code> θ-θaaniy-at-i the- organizer-NOM of the-group-Fem.Sg-GEN the-second-Fem.Sg 'The organizer of the first group<sub>i</sub> himself<sub>i</sub> is the organizer of the second group.'

e. ?al-munað<sup>s</sup>ð<sup>s</sup>im-u li l-madʒmuuS-at-i (huwa) Fahad-un<sub>i</sub> nafsahu<sub>i</sub> the-organizer-NOM of the-group-Fem.Sg-GEN he Fahad-NOM himself 'The organizer of the group is Fahad<sub>i</sub> himself<sub>i</sub>.'

The intensive reflexive *nafsahu* in (70.a) and (70.e) is attached to the proper NP *Fahad*, which is consistent with the argument presented by Heggie and Bondaruk since the proper NP is referential. In (70.b), I assume that the intensive reflexive *nafsahu* is ambiguous. It could be assumed that the intensive reflexive *nafsahu* modifies the proper NP *Fahad* under the assumption that the definite description in this clause is predicative and not referential, but it is extraposed as suggested by Heggie. It could also be assumed that the intensive reflexive *nafsahu* modifies the definite description or the proper NP under the assumption that this is an identity clause and both NPs denote the same individual. However, the intensive reflexive *nafsahu* in

(70.c) and (70.d) is attached to the definite description, and the clauses are grammatical. This indicates that the definite descriptions in these clauses are referential NPs and not predicative NPs. In addition, following Rothstein, in other contexts where the identificational process is reversed, the intensive reflexive is clearly attached to the definite description in Arabic copular clauses as demonstrated in (71) from NA (modeled on examples from Rothstein, 2004).

(71)

- A: riħ-t 1-1-mistaſfaa ?a-dawwir waaħid ?ism-ih Fahad-Ali, laakin to-the-hospital 1.Sg-looking for someone name-his Fahad-Ali, but went-1.Sg maa ligay-t ?illaa mudiir l-muuwað<sup>s</sup>ð<sup>s</sup>afiin Neg found-1.Sg except head the-personnel 'I went to the hospital looking for someone named Fahad-Ali, but I did not find anyone except the head of personnel'.
- B: kaif! ?al-mudiir<sub>i</sub> nafsih<sub>i</sub> (huu) Fahad-Ali how! the-head himself he Fahad-Ali 'How could that be! The head himself is Fahad Ali.' (NA)

Furthermore, in other contexts where the Arabic copular clause contains two definite descriptions, as in (72), the intensive reflexive can attach to either NP, as pointed out earlier by

Rothstein in English.

(72)

- a.  $a_i$ - $a_i$ - $a_i$  nafsahu<sub>i</sub> (huwa) l-muhaad<sup>c</sup>ir-u the-dean-NOM himself he the-instructor-NOM 'The dean<sub>i</sub> himself<sub>i</sub> is the instructor.'
- b. ?al-Samiid-u (huwa) l-muħaad<sup>s</sup>ir-u<sub>i</sub> nafsahu<sub>i</sub> the-dean-NOM he the-instructor-NOM himself 'The dean is the instructor<sub>i</sub> himself<sub>i</sub>.'

Based on the Arabic data and Rothstein's observations, it can be concluded that the intensive reflexive test does not actually distinguish between the predicational clause, the specificational clause, and the copular clause with a postcopular definite NP. The intensive reflexive test fails to show that the definite description, regardless of whether it is in a precopular

or postcopular position, is always a predicate. As I have pointed out, in Arabic copular clauses the intensive reflexive can attach to the definite description in either position. Therefore, if Heggie and Bondaruk's argument that the intensive reflexive is attached only to referential NPs is correct, then it can be argued that the subject of the specificational clause is referential, and not a raised predicate as they suggest, and that the definite description in the postcopular position can be either predicative or referential. Thus, while this test does not support their argument, it does provide strong evidence for people who suggest that the subject of the specificational clause is referential (cf. Hedberg & Potter, 2010; Heller, 2005; Heycock & Kroch, 1998, 1999; Rothstein, 2004), and for those who suggest that a definite description in the postcopular position is ambiguous between predicational and identity readings (Higginbotham, 1987; Rothstein, 2004).

### 3.3.8 Inversion

Inversion is a syntactic process whereby the order of two NPs in a copular clause is reversed. It is one of the common tests used to distinguish copular clause types (cf. Bondaruk, 2013; Higgins, 1979; Roy, 2013). It has been noted that not all types of copular clauses allow inversion. Bondaruk (2013) and Roy (2013) have pointed out that in several languages the inversion of two NPs is not allowed in predicational clauses, as shown in (73), (74) and (75). The clauses in (b), which are the inverse variants of the predicational clauses in (a), illustrate that the inversion is illicit in the predicational clause in English, French, and Polish.

(73)

- a. Paul is a doctor.
- b. \*A doctor is Paul<sup>44</sup>.

(Roy, 2013: 53)

<sup>&</sup>lt;sup>44</sup> Rothstein (2004) has pointed out that such sentences occur in English as stylistically marked, and seem to be a form of predicate topicalization, which is different from predicate raising.

(74) a. Paul est un médecin Paul is a doctor 'Paul is a doctor.'	
<ul> <li>b. *Un médecin est Paul</li> <li>a doctor is Paul</li> <li>'*A doctor is Paul.'</li> </ul>	(Roy, 2013: 54)
<ul> <li>(75)</li> <li>a. Marek to jest dobry lekarz. Mark-nom. TO is good-nom. doctor-nom. 'Mark is a good doctor.'</li> </ul>	(Bondaruk, 2013: 128)
b. #Dobry lekarz to jest Marek <sup>45</sup> . good doctor-nom. TO is Mark-nom. '#A good doctor is Mark.'	(Bondaruk, 2013: 141)

On the contrary, inversion of two NPs is allowed in other types of copular clauses, specifically the specificational, identificational, and identity clauses (Bondaruk, 2013). Consider, for instance, the clauses in (76), (77), and (78) that demonstrate inversion in both English and Polish specificational, identificational, and identity clauses respectively. As can be observed in the clauses in (b), which are the inverse versions of the clauses in (a), the inversion is licit in the English and Polish specificational, identificational, and identity clauses.

(76) a. Marek to (jest) mój kolega. Mark-nom. TO is my-nom. colleague-nom.	
'Mark is my colleague.'	(Bondaruk, 2013: 140)
<ul> <li>b. Mój kolega to (jest) Marek.</li> <li>my-nom. colleague-nom. TO is Mark-nom.</li> <li>'My colleague is Mark.'</li> </ul>	(Bondaruk, 2013: 137)
(77) a. To miasto to (jest) Londyn. this-nom. city-nom. TO is London-nom. 'This city is London.'	(Bondaruk, 2013: 139)

<sup>&</sup>lt;sup>45</sup> Bondaruk (2013) states that this clause can be acceptable in Polish if it is interpreted specificationally (i.e., it tells who a good doctor is).

b. Londyn to (jest) to miasto London-nom. TO is this-nom. city-nom. 'London is this city.'

(Bondaruk, 2013: 140)

(78)

- a. Ja to Andrzej I-1Sg.nom. TO Andrew-3Sg.nom. 'I am Andrew.'
- b. Andrzej to ja Andrew-3Sg.nom. TO I-1Sg.nom. 'Andrew is me.'

(Bondaruk, 2013: 263)

Based on this data from English, Polish, and French, inversion can be used as a distinguishing feature between predicational clauses and other copular clause types. While the predicational clause does not allow inversion of the two NP members it involves, all other copular clause types do. That is, inversion, or reversibility, is a property of specificational, identificational, and identity clauses.

Applying the inversion test to Arabic copular clauses yields similar effects. The example in (79), where the clause in (b) is the inverse version of the predicational clause in (a), demonstrates that the inversion of the two NPs is not allowed in the Arabic predicational clause. It is important to notice that (b) is grammatical in Arabic under the assumption that that the predicate NP *muGalliman* 'teacher' is fronted or topicalized. This latter assumption of topicalization is different from the inversion process, which does not lead to a change in the meaning of the clause.

(79)

- a. kaan-a Zayd-un muSallim-an be.PST-3.Masc.Sg Zayd-NOM teacher.Masc.Sg-ACC 'Zayd was a teacher.'
  b. # kaan-a muSallim-an Zayd-un
- b. # Kaan-a huranni-an Zayd-un be.PST-3.Masc.Sg teacher.Masc.Sg-ACC Zayd-NOM '\*A teacher was Zayd.'

In contrast, inversion of two NP members is allowed in the other types of Arabic copular clauses, as shown in (80) for the specificational clause, (81) for the identificational clause, and (82) for the identity clause. As can be observed in the clauses in (b), which are the inverse variants of the clauses in (a), these clause types do allow the inversion of two NPs.

### (80)

- a. kaan-a Fahad-un l-faa?iz-a be.PST-3.Masc.Sg Fahad-NOM the-winner-ACC 'Fahad was the winner.'
- b. kaan-a l-faa?iz-u Fahad-an be.PST-3.Masc.Sg the-winner-NOM Fahad-ACC 'The winner was Fahad.'

# (81)

- a. haaðihi l-madiin-at-u (hiya) London this the-city-Fem.Sg-NOM she London 'This city is London.'
- b. London (hiya) haaðihi l-madiin-at-u London she this the-city-Fem.Sg-NOM 'London is this city.'

# (82)

- a. Michel Chalhoub huwa Omar-u ∫-fariif Michel Chalhoub he Omar-NOM the-fariif 'Michel Chalhoub is Omar Asharif.'
- b. Omar-u ſ-ſariif huwa Michel Chalhoub Omar-NOM the-ſariif he Michel Chalhoub 'Omar Asharif is Michel Chalhoub.'

The inversion test is thus fully supported in Arabic. It is one of the distinguishing features among the Arabic copular clause types, as all copular clauses, with the exception of the predicational clause, allow the inversion of two NPs. The standard assumption that inversion is a common syntactic property of specificational, identificational, and identity clauses is sustained in Arabic.

# **3.3.9 Tag questions**

One of the important tests that has been used to distinguish copular clause types is the tag question. To illustrate, Mikkelsen (2005) observes that the pronoun *it* is used in a tag question with an English specificational clause as shown in (83.a), whereas with predicational and identity clauses the pronoun always depends on the subject as demonstrated in (83.b) and (83.c) respectively. Mikkelsen points out that the pronoun in a tag question used with a specificational clause refers to a property, but it refers to an individual in tag questions used with the other clause types. She uses this fact to argue that the subject of a specificational clause is propertydenoting (i.e., an inverse predicate) while the subjects of the other copular clauses are referential.

(83)

- a. The tallest girl in the class is Molly, isn't it?
- b. The tallest girl in the class is Swedish, isn't she?
- c. She is Molly Jacobson, isn't she?

(Mikkelsen, 2005: 72)

On the other hand, Heycock (2012) notices that the pronoun *it* in a tag question, which Mikkelsen uses to argue that the subject of the specificational clause is an inverse predicate, can refer to plural predicates of the predicational clause as in (84.a), but cannot refer to plural subjects of the specificational clause as in (84.b). Heycock uses this evidence to argue that the subject of the specificational clause is not actually an inverse predicate (property-denoting).

(84)

- a. Justin and Sarah are her greatest friends, even if they don't look it.
- b. \*Her greatest friends are Justin and Sarah, {isn't/aren't}it?<sup>46</sup>

(Heycock, 2012: 228)

However, in several languages, such as Polish and Najdi Arabic (NA), the tag question

cannot be tested as these languages have different types of tags. Bondaruk (2013) points out that

<sup>&</sup>lt;sup>46</sup> According to Professor N. Fleisher (personal communication, November 29, 2016), when the subject of the specificational clause is plural, a plural pronoun is used in the tag question as illustrated in (i) below.

<sup>(</sup>i) The tallest girls in the class are Mary and Maria, aren't they?

this test "cannot be applied to Polish, as the types of tags the language uses, i.e. *nieprawdaż* 'isn't it true', czy(z)nie 'or not', do not contain any pronoun" (p.143). Similarly, in NA the question tag has a fixed form that does not include any pronoun. NA uses the tag *willa laa* 'or not' with all types of copular clauses. Thus, the tag question test does not function as a means to distinguish among copular clause types in Polish and NA.

This test cannot be applied in SA either. SA uses two types of tags, one type is a fixed form tag and the other type is a tag which contains a pronoun. The first type of tag question, *Palaysa kaðaalik* 'isn't it so?', can be used with all types of Arabic copular clauses, as shown in (85.a) in the predicational clause, (85.b) in the identity clause, (85.c) in the specificational clause, and (85.d) in the identificational clause. It can be seen from these examples that this type of tag does not reveal any distinction among the Arabic copular clauses. I assume this type of tag asks about the proposition of the clause, and not about the subject of the clause.

#### (85)

5)					
-,	?al-walad-aani the-boy-Du.NOM 'The (two) boys are	nurse-Du.NOM	?a-lays-a Q-Neg-Sg.Masc.3	kaðaalik? so	
b.	hiya Hind-un she Hind-NOM 'She is Hind, isn't it	?a-lays-a Q-Neg-Sg.Masc.3 so?'	kaðaalik? so		
C.			Zaynab-u ?a-la Zaynab-NOM Q-N , isn't it so?'	2	kaðaalik? so
d.	•	IOM Zayd-NOM	5	aðaalik? o	

The other type of tag that involves a pronoun is illustrated in (86.a) in the predicational clause, (86.b) in the identity clause, (86.c) in the specificational clause, and (86.d) in the identificational clause. In all of these examples it can be observed that the subject of a copular

clause determines the pronoun that is used in the tag question. Notice that the pronoun in Arabic

tag questions can sometimes be dropped.

(86)

- a. ?al-walad-aani mumarid<sup>§</sup>-aani ?a-lays-aa (**humaa**) kaðaalik? the-boy-Du.NOM nurse-Du.NOM Q-Neg-Du.Masc.3 they (Du.3) so 'The (two) boys are nurses, aren't they?'
- b. hiya Hind-un ?a-lays-at (hiya) kaðaalik? she Hind-NOM Q-Neg-Sg.Fem.3 she so 'She is Hind, isn't she?'
- c. ?al-faa?iz-aani Hind-un wa Zaynab-u ?a-lays-aa (humaa) kaðaalik? the-winner-Du.NOM Hind-NOM and Zaynab-NOM Q-Neg-Du.Masc.3 they (Du.3) so 'The (two) winners are Hind and Zaynab, aren't they?'
- d. ðaalika r-radʒul-u Zayd-un ?a-lays-a (**huwa**) kaðaalik? that the-man-NOM Zayd-NOM Q-Neg-Sg.Masc.3 he so 'That man is Zayd, isn't he?'

Based on the second type of tag in SA, we have no clear-cut evidence that the pronoun in the tag question of the specificational clause is different from the pronouns in the tag questions of the other copular clauses. To put it differently, we have no way to argue that the pronoun in the tag question of the Arabic specificational clause refers to a property, while the pronoun in the other copular clause types refers to an individual. Also, Arabic does not have a specific neuter pronoun, like the English pronoun *it*, that could be understood as referring to a property. Therefore, the tag question test is not a reliable way to distinguish among copular clause types as it fails to be fully supported in several languages including SA, NA, Polish, and perhaps even in English<sup>47</sup>.

To sum up, in this section I have presented several tests used to establish various differences and similarities among the Arabic copular clause types. Nearly all of them show that the predicational clause behaves differently from the other copular clause types. They also show

<sup>&</sup>lt;sup>47</sup> As argued above by Heycock (2012).

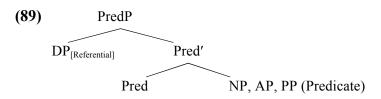
that the other types of Arabic copular clauses, in particular the specificational, identificational, and identity clauses, as well as the copular clause with a postcopular definite description, behave similarly. These tests present supporting evidence for the analysis of Arabic copular clauses that I offer in the subsequent section. In particular, these tests suggest treating the predicational clause differently from the other copular clause types. They also indicate that the other types of copular clauses bear affinity with the identity clause, and as such can all be subsumed under this clause type.

#### 3.4 Two copular clauses in Arabic: predicational and identity clauses

Before presenting my analysis of copular clauses in Arabic, let me very briefly reiterate the assumptions on which this analysis is based. First, the specificational clause is a subtype of the identity clause. Both of the two expressions it contains have the same syntactic category (DP) and the same semantic type (<e>), which is to say that they are both referential (cf. Hedberg & Potter, 2010; Heller, 2005; Heycock & Kroch, 1998, 1999; Rothstein, 2004). Second, the identificational clause should be classified as an identity clause, as both of its DPs are referential (of type <e>) (cf. Hedberg & Potter, 2010; Heggie, 1988; Higgins, 1979; Mikkelsen, 2005). Third, the copular clause with a postcopular definite description is an identity clause, since its definite description is referential (Carnie, 1995, 1997; Roy, 2013). Last, as shown in the preceding section, a number of tests indicate that the predicational clause behaves differently from the other copular clause types. They also indicate that the specificational clause, the identificational clause, and the copular clause with a postcopular definite description all behave similarly to the identity clause. In the light of the above assumptions, I suggest that Arabic copular clauses can be classified into two well-defined types: the predicational clause as in (87), and the identity clause as in (88).

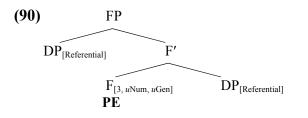
- (87) kaan-a Zayd-un muSallim-an be.PST-3.Masc.Sg Zayd-NOM teacher.Masc.Sg-ACC 'Zayd was a teacher.'
- (88) Michel Chalhoub \*(huwa) Omar-u ∫-fariif Michel Chalhoub he Omar-NOM the-fariif 'Michel Chalhoub is Omar Asharif.'

I assume, following Heycock and Kroch (1998, 1999), Carnie (1995, 1997) and Rothstein (2004), that these two clauses differ in the type of SC selected by the copula in a *v*P or by the TP. The SC in a predicational clause is a PredP, as demonstrated in (89), (see Baker, 2008; Bondaruk, 2013; Bowers, 1993, 2001; Mikkelsen, 2005; Roy, 2013). The Pred head, which is morphologically null, mediates the predicational relation between the nonverbal predicate (NP, AP, or PP) of type <e,t> and its subject DP, which is of type <e>. It takes the nonverbal predicate as its complement and the subject DP as its specifier. That is, the predicational relation takes place within the SC, namely the PredP. In Chapter 4, I elaborate on the structure of the predicational clause in more detail.



On the other hand, the SC in an identity clause is a FP, as demonstrated in (90), (cf. Carnie, 1995, 1997; Hedberg & Potter, 2010; Heycock & Kroch, 1998, 1999; Reeve, 2010). Both of the two DPs in the identity clause are referential (of type <e>), and thus none of them is a predicate of the other. The identity (or equative) relation is associated with the F head, the

identity predicate. The F head denotes  $\lambda y \lambda x[x=y]$ , or more particularly *"identical with"*, (see Hedberg & Potter, 2010; Higginbotham, 1987; Roy, 2013 for the equative copula in English). This FP in the structure of the identity clause is similar to the COPP or the EqP proposed by Carnie (1995, 1997) and Reeve (2010) respectively.



In English, and perhaps other languages as well, the F head is always empty (see Hedberg & Potter, 2010; Heycock & Kroch, 1998, 1999). However, in Arabic I suggest that the PE, for example *huwa* 'he' in (88), which occurs in all Arabic copular clause types but never in the predicational type as pointed out in Section (3.3.1), is a realization of the F head, the identity predicate. Adopting Baker's (2008) theory of agreement<sup>48</sup>, which suggests that the F head in the structure of nonverbal predicates, specifically predicate APs, can probe upward for an XP to agree with on the condition that XP c-commands F, I assume that the F head here in (90), which has the features [3, *u*Num, *u*Gen], enters Agree with the DP in its specifier. This agreement results in the valuation of gender and number features of the F head. Note that the F head here is specified for the third-person feature as the PE that occurs in Arabic copular clauses always bears a third person-feature<sup>49</sup>. This is in line with Carnie's (1995, 1997) assumption that the obligatory agreement morpheme in the Irish identity clause is a realization of the null identity head COP. However, this proposal reveals that it is not the case that the PE always agrees with

<sup>&</sup>lt;sup>48</sup> Baker (2008) proposes that in the structure of predicate APs there is a FP located between the AP and the PredP, as demonstrated in (i). This FP mediates the agreement between the subject and its predicate AP.
(i) [PredP [DP subj] [Pred' [FP [F] [AP]]]]
<sup>49</sup> Fassi-Fehri (1993) and Mohammad (2000) point out that in MSA the pronoun of separation, which is a

<sup>&</sup>lt;sup>49</sup> Fassi-Fehri (1993) and Mohammad (2000) point out that in MSA the pronoun of separation, which is a PE in this thesis, agrees with the first DP in gender and number but not in person.

the postcopular DP as suggested by Eid (1991) or with the DP in Spec-PredP as suggested by Choueiri (2016) (see Sections (2.4.2) and (2.4.4) for more details).

Furthermore, I suggest that the illicit use of the PE in the predicational clause follows from the presence of predicative expressions (NP, AP, or PP), which are of type <e,t>, in this type of copular clause. These expressions predicate properties of their subjects. Consequently, the PE in Arabic copular clauses can be taken as empirical evidence supporting the presence of the FP in the structure of the identity clause and for its absence in the structure of the predicational clause (see also Heycock & Kroch, 1998, 1999; Reeve, 2010). This proposal is different from Choueiri (2016)'s analysis, which suggests that the predicational and equational clauses have the same SC, namely the PredP, but differ in that the equational clause projects an extra FP above the SC to host the PE. On the other hand, this proposal is close to Rothstein's (2004) analysis for the PRON in Hebrew copular clauses, although not identical. Rothstein analyzes the PRON in Hebrew copular clauses as a realization of agreement features in Infl. She argues that the PRON is optional in the Hebrew predicational clause because the predicate can be directly predicated of the subject, but it is obligatory in the Hebrew identity clause because this clause does not contain a predicate. Later in this section, I discuss the issue of the optionality and obligatoriness of the PE in Arabic copular clauses.

With respect to the specificational clause in (91), the identificational clause in (92), and the copular clause with a postcopular definite description in (93), I consider these clauses as subtypes of the identity clause because they express an identity relation (see Hedberg & Potter, 2010; Heller, 2005<sup>50</sup>; Heycock & Kroch, 1998, 1999; Rothstein, 2004 for the specificational clause, Hedberg & Potter, 2010; Heggie, 1988; Higgins, 1979; Mikkelsen, 2005 for the

<sup>&</sup>lt;sup>50</sup> Rothstein (2004) and Heller (2005) conclude that the specificational clause is an identity clause, and not an inverse predicational clause. The two expressions around the copula denote the same kind of entity.

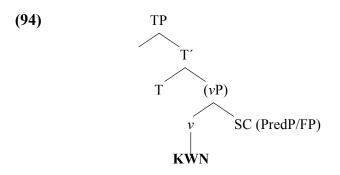
identificational clause, and Carnie, 1995, 1997; Roy, 2013 for the copular clause with a postcopular definite description).

- (91) ?al-malik-u (huwa) Zayd-un the-king-NOM he Zayd-NOM 'The king is Zayd.'
- (92) ðaalika r-radʒul-u (huwa) Zayd-un that the-man-NOM he Zayd-NOM 'That man is Zayd.'
- (93) Zayd-un (huwa) l-malik-u Zayd-NOM he the-king-NOM 'Zayd is the king.'

There are two reasons motivating this proposal. First, the DPs each of these clauses contains are referential (of type <e>). They refer to the same individual, which is the main characteristic of the identity clause. Second, almost all the tests presented in the preceding section indicate that these clauses behave similarly to the identity clause. Consequently, I suggest that these three clauses have the same SC in (90), which is provided for the identity clause. Following Hedberg and Potter (2010) and Bondaruk (2013) for the English identity clause, I assume that these three clause types and the identity clause type differ in the order in which the two DPs have been merged. That is, either DP can project in Spec-FP or as a complement of F. This is supported by the fact, mentioned earlier in Section (3.3.8), that all Arabic copular clauses, excluding the predicational clause, allow inversion of the two DPs. The PE, which is optional in these three copular clauses as illustrated in (91), (92) and (93), is also a realization of the F head that denotes the identity relation.

The two different SCs, FP and PredP, are selected by *v*P, which hosts the copula *KWN* in Arabic, or directly by TP in Arabic verbless sentences as demonstrated in (94). I assume, following Heycock and Kroch (1998, 1999), Heggie (1988), Mikkelsen (2005), and many others,

that the copula *KWN* in all Arabic copular clauses is semantically vacuous, as it does not participate in predicational or identity relations. As we have just seen, predicational and identity relations are obtained within the SC without the presence of the copula *KWN*. That is why I suggest that it should project outside the SCs, specifically in the *v*P. In Chapter 4, I discuss in more detail the nature and role of the copula *KWN* in Arabic copular clauses.



As mentioned in Section (2.4), the copula *KWN* and the PE can co-occur in one clause, as shown in (95). This fact presents additional evidence that the PE is located within the SC, particularly in the F head as I propose.

(95) kaan-a Zayd-un (huwa) l-malik-a be.PST-3.Masc.Sg Zayd-NOM he the-king-ACC 'Zayd was the king.'

In addition, I assume that whatever locates in the specifier of the SC must raise to Spec-TP. In other words, the DP in Spec-FP or in Spec-PredP raises to Spec-TP to satisfy the EPP feature of T. By now, I have provided my account of Arabic copular clause types that condenses them into two types: the predicational clause and the identity clause. The specificational clause, the identificational clause, and the clause with a postcopular definite description are all subsumed under the identity clause. I have also shown that the PE, which occurs in all Arabic copular clause types but never occurs in the predicational clause, is a realization of the F head (i.e., the identity predicate). The illicit use of the PE in an Arabic predicational clause should be attributed to the presence of predicative expressions (NP, AP, or PP) in this type of clause. Before proceeding and addressing the issue of the optionality and obligatoriness of the PE, I want to remark on the clause with a postcopular definite description. As shown in Section (3.3), the Arabic copular clause with a postcopular definite description occasionally behaves similarly to the predicational clause with respect to certain tests, particularly question types and intensive reflexives. To clarify, in Section (3.3.4), it is shown that the postcopular definite description can answer a question containing *Man* "*WHO*", which asks for an entity, as well as a question containing *Maaðaa* "*WHAT*", which asks for a property. Also, in Section (3.3.7) it is shown that the intensive reflexive *nafsahu* 'himself' in (70.b), repeated here as (96), which is attached to the postcopular definite description, is ambiguous. It could be assumed that the intensive reflexive modifies *Fahad* under the assumption that the definite description in this clause is predicative, not referential, but it is extraposed as suggested by Heggie (1988). It also could be assumed that the intensive reflexive reflexive modifies the definite description or the proper NP under the assumption that this is an identity clause, and both NPs denote the same individual.

(96) Fahad-un<sub>i</sub> l-munað<sup>c</sup>ð<sup>c</sup>im-u li l-madʒmuuʕ-at-i<sub>j</sub> nafsahu<sub>i/j</sub> Fahad-NOM the-organizer-NOM of the-group-Fem.Sg-GEN himself 'Fahad<sub>i</sub> is the organizer of the group himself<sub>i</sub>.'

These two tests indicate that the Arabic copular clause with a postcopular definite description is not categorically an identity clause (i.e., the postcopular definite description is always referential). In some cases, it may be analyzed as a predicational clause (i.e., the postcopular definite description is predicative) on the condition that it does not include a PE. If it includes a PE, it can have only an identity reading. This is in line with Rothstein's (2004) assumption<sup>51</sup> that the Hebrew copular clause with a postcopular definite description is an identity clause when it includes a PRON and a predicational clause when it lacks a PRON. It is also consistent with the

<sup>&</sup>lt;sup>51</sup> Rothstein (2004) points out that the definite description "is in principle ambiguous between a referential and a predicative reading" p.253.

analyses of Higginbotham (1987) and Higgins (1979) that suggest that a copular clause with a postcopular definite description is ambiguous between identity and predicational clauses.

With respect to the optionality and obligatoriness of the PE, I argue that whenever it is used in Arabic copular clause types the PE is almost always optional. It is obligatory only in an identity clause consisting of proper nouns, as in (88) repeated here as (97) and as in (98) to avoid ambiguity. Without the presence of the PE, the proper nouns in (97) and (98) could be interpreted as a single constituent (i.e., it looks as if a speaker lists names of certain people). To put it differently, the proper nouns could be interpreted as a phrase, and not as a clause. This assumption is close, though not identical, to Eid's (1991) assumption that the PE is always obligatory in EA equational sentences in order to force a sentential interpretation, rather than a phrasal interpretation (see Section (2.4.2) for more details on Eid's analysis).

- (97) Michel Chalhoub \*(huwa) Omar-u ∫-fariif Michel Chalhoub he Omar-NOM the-fariif 'Michel Chalhoub is Omar Asharif.'
- (98) Ahmad-u \*(huwa) Zayd-un Ahmad-NOM he Zayd-NOM 'Ahmad is Zayd.'

In SA, proper nouns differ in morphological case in the presence of the copula *KWN*, as illustrated in (99) where *Ahmad* bears a nominative case and *Zayd* bears an accusative case. In this example, the use of the PE becomes optional, as there is no possibility of interpreting the two proper nouns as a single constituent. That is, the morphology here serves to remove the ambiguity.

(99) fi l-masraħiyy-at-i kaan-a Ahmad-u (huwa) Zayd-an in the-play-Fem.Sg-GEN be.PST-3.Masc.Sg Ahmad-NOM he Zayd-ACC 'In the play, Ahmad was Zayd.' Additionally, sometimes morphological case does not show up on certain proper nouns, such as *Yahya* and *Eisaa*, for purely morphological reasons in Arabic. In this case, the use of the PE becomes obligatory even in the presence of the copula *KWN*, as shown in (100), as there is a possibility of interpreting the two proper nouns as a phrase rather than a clause.

(100) fi l-masraħiyy-at-i kaan-a Yahya \*(huwa) Eisaa in the-play-Fem.Sg-GEN be.PST-3.Masc.Sg Yahya he Eisaa 'In the play, Yahya was Eisaa.'

Therefore, it can be concluded that the use of the PE is nearly always optional in Arabic copular clause types. It is obligatory only in the identity clause consisting of proper nouns, specifically when they do not differ in morphological case markers, in order to explain ambiguity. Without the PE, proper nouns could be interpreted as a phrase rather than a clause.

To summarize, my analysis thus reduces the Arabic copular clause types into two types: the predicational clause and the identity clause. The two clauses differ in the type of SC selected by *v*P or directly by TP in Arabic verbless sentences. These SCs are a PredP for the predicational clause and a FP for the identity clause. The specificational clause, the identificational clause, and the clause with a postcopular definite description are all subsumed under the identity clause as they express an identity relation. They have the same SC as is suggested for the identity clause. The PE, which occurs in all Arabic copular clause types except the predicational clause, is a realization of the F head (the identity predicate). The illicit use of the PE in the predicational clause is attributed to the presence of predicative expressions in this type of clause. Also, it is shown that the PE is obligatory only in an identity clause involving proper nouns in order to avoid ambiguity, and is otherwise optional. As a final point, it is shown that the Arabic copular clause with a postcopular definite description is not categorically an identity clause, but it may be analyzed as a predicational clause provided that it does not involve a PE.

# 3.5 Summary

This chapter focuses on the various types of Arabic copular clauses by addressing the first three questions of this thesis. An overview of Arabic copular clause types is presented using Higgins's (1979) taxonomy as well as the works of several other linguists. This is followed by a discussion outlining the tests (or properties) that distinguish the Arabic copular clause types from each other. These tests indicate that the predicational clause behaves differently from all other copular clause types. They also indicate that the specificational clause, the identificational clause, and the copular clause with a postcopular definite description bear affinity with the identity clause. These tests provide supporting evidence for my analysis of Arabic copular clauses which classifies them into two types, specifically the predicational clause and the identity clause. The two clauses differ in the type of SC they contain, with a PredP in the predicational clause and a FP in the identity clause. The specificational clause, the identificational clause, and the clause with a postcopular definite description are all considered subtypes of the identity clause. I suggest that the PE which appears in nearly all Arabic copular clauses, except the predicational clause, is a realization of the F head in the structure of the identity clause. The impossibility of the PE in a predicational clause is attributed to the presence of predicative expressions in this type of clause. Also, it is shown that the PE is obligatory in order to avoid ambiguity only in an identity clause consisting of proper nouns, and is otherwise optional. Finally, it is assumed that the Arabic copular clause with a postcopular definite description is not categorically an identity clause, but could rather be interpreted as a predicational clause on the condition that it does not include a PE. This chapter paves the way for the discussion of the Arabic predicational clause in the following chapter.

## **Chapter 4 Predicational Clause in Arabic**

#### 4.1 Introduction

This chapter takes a closer look at the Arabic predicational clause, focusing specifically on two of the elements that form it: the copula *KWN* and the subject DP. The chapter is composed of four main sections. Section (4.2) discusses the nature and role of the copula *KWN* in addition to its syntactic position. Section (4.3) deals with the subject of the predicational clause and its constraint. The syntactic configuration of the predicational clause is discussed in more detail in Section (4.4). Section (4.5) summarizes this chapter.

# 4.2 The copula KWN

This section begins by discussing the nature and role of the Arabic copula *KWN*. Then, it examines the position of the copula *KWN* in the predicational clause in Arabic, i.e., its base and final positions. The section ends by discussing verbless (copularless) sentences in Arabic.

#### 4.2.1 Single KWN

In the literature, two different views have been introduced regarding the nature and role of the copula, specifically the English copular verb *be*. The first view suggests that there are two kinds of *be* in English copular clauses (see e.g., Higginbotham, 1987; Roy, 2013; Russell, 1919<sup>52</sup>). One *be* functions as a two-place identity predicate in identity copular clauses. In particular, it expresses an identity relation between two referential DPs. The other *be* occurs in predicational copular clauses and does not have semantic content. It is a grammatical *be* which is needed merely for syntactic reasons such as tense.

<sup>&</sup>lt;sup>52</sup> See Rothstein (2004: 213) for more discussion on Russell's view.

The second view suggests that there is a single *be* in all copular clauses (Heggie, 1988; Heycock & Kroch, 1998, 1999). As mentioned in Section (2.2.4), Heycock and Kroch (1998, 1999) argue that the copula in all copular clauses is semantically vacuous. They postulate that the SC, specifically the empty FP or the COPP as it is referred to in Carnie (1995, 1997), in the structure of identity clauses derives the identity relation between two referential DPs.

In the preceding chapter I argued that the copula *KWN* in all Arabic copula clauses is semantically vacuous, as it does not participate in either predicational or identity relations. The predicational and identity relations can be obtained within the SC, a PredP in the predicational clause or a FP in the identity clause, without the presence of the copula *KWN*. The absence of the copula *KWN* in Arabic verbless sentences, i.e., copular clauses in the present tense as shown in (1), can be taken as clear evidence that the copula *KWN* is not necessary to derive either type of relation.

(1)

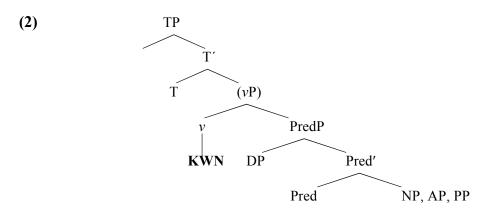
a. ?al-?awlaad-u	mumarid <sup>ç</sup> -uuna
the-boys-NOM	nurse-Masc.Pl.NOM
'The boys are nurses.'	

b. ?al-malik-u Zayd-un the-king-NOM Zayd-NOM 'The king is Zayd.'

This indicates that Arabic has a single copula *KWN*. Its function is to provide grammatical information such as tense or aspect. This assumption is in line with Heggie (1988) and Heycock and Kroch (1998, 1999), who suggest that there is a single *be*, not two distinct types of *be*, in all sorts of copular clauses. It is also consistent with Bondaruk (2013), who states "it is certainly more economical to have one verb *be* rather than two, and therefore any analysis that manages to avoid postulating two distinct copulas is preferable to the one that cannot do so" (p.112). In the subsequent section, I discuss the position of the copula *KWN* in Arabic sentences.

#### 4.2.2 The position of KWN

In the preceding chapter I suggest that, in the Arabic predicational clause, the SC hosting the predicational relation is the PredP, which is selected by the vP or directly by the TP in the Arabic verbless sentence, as demonstrated in (2). Here I discuss the base-position of the copula *KWN* as well as its final position. In the subsequent section I discuss the Arabic verbless sentence which lacks the copula *KWN*.



As can be observed in structure (2), I assume that the Arabic copula *KWN* is an auxiliary base-generated in a *v*P, as suggested by Bondaruk (2013) for Polish and Mikkelsen (2005) for English. This assumption is also in line with Aoun et al. (2010), Bahloul (1994), and Benmamoun  $(2000)^{53}$ . There are five principal pieces of evidence supporting this assumption. First, the copula *KWN* has the properties of a typical verb in Arabic. Similar to verbs in declarative clauses, the copula *KWN* may precede and follow the subject as shown in (3). It is also inflected for  $\varphi$ -features like other Arabic verbs. This is why in Arabic traditional grammar the copula *KWN* is referred to as "a defective verb".

(3) (kaan-a) Zayd-un (kaan-a) muSallim-an be.PST-3.Masc.Sg Zayd-NOM be.PST-3.Masc.Sg teacher.Masc.Sg-ACC 'Zayd was a teacher.'

<sup>&</sup>lt;sup>53</sup> The difference is that they all suggest that the copula is base-generated in a VP following the approach of PP.

Second, the Arabic complementizer 2an, which is a weak version of the complementizer 2anna and which introduces an embedded non-finite clause<sup>54</sup> (see Mohammad, 2000; Soltan, 2007), must be followed by a verb as shown in (4.a). According to Mohammad, the only way for this complementizer to occur in Arabic copular clauses is if the copular verb *KWN* is inserted as in (4.b). This indicates that the copula *KWN* behaves similarly to Arabic verbs and thus should be treated as a verb.

(4)

a.	0	ya-naam-a 3.Masc-sleep-SUBJ leeps early.'		mubakkir-an early-ACC
b.	?axšā	1 2	?aħmad-u ma	adʒnūn-an

fear.1Sg that 3.Masc.be-SUBJ Ahmad-NOM crazy-ACC 'I fear that Ahmad is crazy.' (Mohammad, 2000: 25)

Third, the SA morphemes *sawfa* and /sa-/, as well as the NA morpheme /b-/, that mark future tense in both varieties subcategorize for *v*Ps. In copular clauses, these future morphemes force the occurrence of the copula *KWN* as illustrated in (5) from SA and (6) from NA. Given the assumption that the future morphemes are tense markers located in T (Ouhalla, 1994a), the copula *KWN* should be generated in a position lower than a TP. I assume this position is a *v*P. This also indicates that the copula *KWN* is not base-generated, or merged directly, in T as recently proposed by Choueiri (2016) and Roy (2013).

(5)

a. sawfa	ya-kuun-u	Zayd-un	muSallim-an
will	3.Masc-be-IND	Zayd-NOM	teacher.Masc.Sg-ACC
'Zavd	will be a teacher.'	-	_

b. sa-ya-kuun-u Zayd-un muSallim-an Fut-3.Masc-be-IND Zayd-NOM teacher.Masc.Sg-ACC 'Zayd will be a teacher.'

<sup>&</sup>lt;sup>54</sup> The other Arabic complementizers, such as *Panna and Pinna*, introduce finite clauses.

(6) b-yi-kuun Fahad ba l-bait
Fut-3.Masc-be Fahad in the-house
'Fahad will be in the house.' (NA)

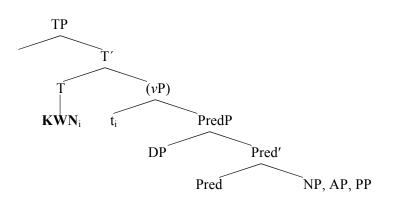
Fourth, as mentioned in the preceding chapters, the copula *KWN* and the PE can co-occur in one clause as shown in (95) in Chapter 3 repeated here as (7) for convenience. If the PE is a realization of the head of the SC as I propose in this thesis, then this indicates that the copula *KWN* should not be placed within the SC. Instead, it should be placed in a position higher than the SC. I assume this position is a *v*P. This evidence argues against Ouhalla's (2013) analysis, which suggests that the copula *KWN* is located within the SC, namely in the Pred head.

(7) kaan-a Zayd-un huwa l-malik-a be.PST-3.Masc.Sg Zayd-NOM he the-king-ACC 'Zayd was the king.'

Fifth, as already pointed out in the preceding subsection (4.2.1), the predicational relation is obtained within the SC (viz., the PredP) without the actual presence of the copula *KWN*, specifically in Arabic verbless sentences as shown in (1.a) above. This presents an argument that the copula *KWN* does not necessarily need to be located within the PredP. When it is present in a clause, it may project outside the PredP. Finally, the occurrence of the copula *KWN* in a vP, located between TP and PredP, is essential as it provides a clear explanation for the accusative case on predicates in Arabic. In Chapter 5, I discuss the predicate case in further detail.

Having shown that the copula *KWN* is an auxiliary base-generated in a *v*P, I then assume that the copula *KWN* raises to T (i.e., head-to-head movement), as demonstrated in (8).

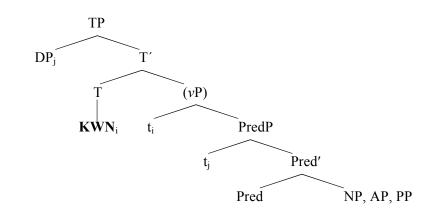




The future particles /sa-/ and /b-/ in examples (5.b) and (6) provide empirical evidence on the raising<sup>55</sup> of the copula *KWN* to T. These future particles, located in T, are bound morphemes. Thus, the raising of the copula *KWN* is obligatory in order to support these affixal morphemes.

With respect to the subject DP, I assume that it must raise from Spec-PredP to the subject canonical position, specifically Spec-TP as illustrated in (9), in order to satisfy the EPP feature on T. In Section (4.3), I discuss another motivation behind this obligatory raising. For the moment, it is sufficient to observe that by raising the subject DP to Spec-TP and the copular verb to T, we can derive the subject-verb (SV) order where the copular verb *KWN* follows the subject DP. This assumption is compatible with Aoun and Benmamoun (1999), Aoun et al. (2010), Aoun, Benmamoun and Sportiche (1994), who postulate that the subject DP in Arabic always raises to Spec-IP<sup>56</sup>. It is also compatible with the assumption that the subject of a predicational copular clause raises from Spec-PredP to Spec-IP (cf. Hedberg & Potter, 2010; Heggie, 1988, Mikkelsen, 2005; Moro, 1997; Rothstein, 2004; Roy, 2013).

(9)



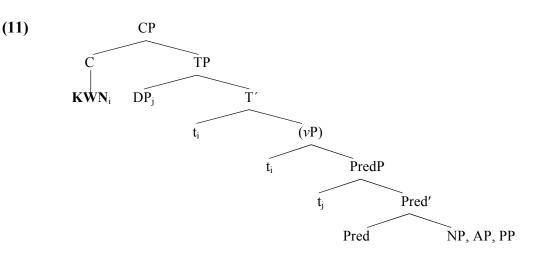
<sup>&</sup>lt;sup>55</sup> The raising is also required in order to support tense and agreement in T as they are bound morphemes. Morphologically speaking, vowels in Arabic verbs signify a grammatical function, such as aspect or voice, whereas consonants signify a lexical function (McCarthy, 1985). This fact explains why the copular verb *KWN* needs to raise to T. The long vowels /aa/ in the copular verb *kaana* indicate the perfective aspect or past tense while the final vowel /a/ indicates agreement. A number of people suggest that verbs in Arabic must always raise to T or I (e.g., Fassi-Fehri, 1993; Mohammad, 1989, 2000; Ouhalla, 1994a).

<sup>&</sup>lt;sup>56</sup> Other researchers suggest that the raising of the subject DP to Spec-IP in Arabic is optional (cf. Fassi-Fehri, 1993; Mohammad, 1989, 2000; Ouhalla, 1994a, 2013). In other words, the subject DP raises to Spec-IP in SVO order, whereas in VSO order the subject DP remains in its thematic position. However, Soltan (2007) proposes that the subject DP in Arabic does not raise to Spec-IP at all.

As mentioned previously, the copular verb *KWN* behaves similarly to other Arabic verbs in that it may precede the subject, as shown in (3) repeated here as (10).

(10) (kaan-a) Zayd-un (kaan-a) muSallim-an be.PST-3.Masc.Sg Zayd-NOM be.PST-3.Masc.Sg teacher.Masc.Sg-ACC 'Zayd was a teacher.'

This fact indicates that the copula *KWN* may raise further to a functional position higher than the subject DP in Spec-TP. According to Aoun and Benmamoun (1999), Aoun et al. (2010), Aoun et al. (1994), the verb-subject (VS) word order in Arabic is obtained by raising a verb from I/T to a functional head position. They postulate that this position could be the head C or a functional head  $(F)^{57}$  located between the heads C and I. I assume, following these researchers, that the copula *KWN*, similar to other Arabic verbs, may raise to C in order to derive VS word order, as depicted in  $(11)^{58}$ . This assumption is consistent with Roberts's (2001) analysis, which proposes that VS word order, specifically in Welsh and Irish, is derived by raising the verb to C while the subject remains in the specifier position of IP.



<sup>&</sup>lt;sup>57</sup> Aoun and Benmamoun (1999) assume that this functional phrase may be the Focus Phrase suggested by Ouhalla (1994b).

<sup>&</sup>lt;sup>58</sup> Also, it could be assumed that the copula *KWN* may raise to a functional head at the left-periphery position given Rizzi's (1997) assumption of Split-CP.

While it is not exactly obvious what triggers copula raising in Arabic, at least it can be said that the optionality of this raising is due to the general fact that Arabic has two word orders, both a VS order and a SV order. One should note that if the head C is lexically filled with complementizers, such as *2inna*, *2anna*, or *2an*, then the raising of the copular verb to C is not allowed, as seen in (12). The sentences in (12.a) and (12.b) are ungrammatical because the copular verb raises from T to C, which is already filled with lexical complementizers. In the embedded clause in (12.c), the copular verb remains in T and does not raise higher to C because C is already filled with the complementizer *2an*, which introduces an embedded non-finite clause. Given the fact that this embedded clause is non-finite, the subject of the embedded clause remains in its base-position. According to Mohammad (2000), subject to subject raising is not allowed in Arabic embedded non-finite clauses.

(12)

<b>4</b> )								
a.	*?inna	kaan-a	L	1-?aw	laad-a	mum	arid <sup>ç</sup> -iin	a
	That	be.PS7	-3.Masc	.Sg the-be	oys-ACC	nurse	e-Masc.I	Pl.ACC
	<b>'Certain</b>	ly, the b	oys were	nurses.'	-			
			2					
b	*ya-bd-u		?anna	kaan-a		l-?awlaa	ıd-a	mumarid <sup>s</sup> -iina
	5		that	be.PST-3.N	Aase Sø			nurse-Masc.Pl.ACC
	•			ere nurses.'	1450.58	009	01100	
	it seem	s that th		ere nurses.				
C	?axšā	?an	ya-kuu	n_9	?aħma	ad_u	mad3n	บิท_จท
U.			2				•	
	fear.1Sg			e.be-SUBJ	Ahma	d-NOM	crazy-A	
	'I fear tha	ıt Ahma	d is crazy	<i>'</i> .'				(Mohammad, 2000: 25)

# 4.2.3 Verbless (copularless) sentences

The Arabic verbless<sup>59</sup> (or copularless) sentence is a copular clause that lacks the copular verb *KWN* in the present tense, as shown in (13). However, in the past and future tenses, the copular verb *KWN* must be used as shown in (14).

<sup>&</sup>lt;sup>59</sup> Some researchers use the term *nominal sentence/clause* for this type of sentence.

- (13) (\*ya-kuun-u) Zayd-un muSallim-un 3.Masc-be-IND Zayd-NOM teacher.Masc.Sg-NOM 'Zayd is a teacher.'
- (14)
  - a. \*(kaan-a) Zayd-un muSallim-an be.PST-3.Masc.Sg Zayd-NOM teacher.Masc.Sg-ACC 'Zayd was a teacher.'
  - b. sawfa **\*(ya-kuun-u)** Zayd-un muSallim-an will 3.Masc-be-IND Zayd-NOM teacher.Masc.Sg-ACC 'Zayd will be a teacher.'

The verbless sentence is not found only in Arabic. A number of languages, such as Hebrew, Russian, Illongo, Bambara, Burmese, Hungarian, Boumaa Fijian, and Luiseno, do not have an overt copula in the present tense, but they have it in other past and future tenses (cf. Aikhenvald & Dixon, 2004; Eid, 1991; Heggie, 1988; Li & Thompson, 1977; Matushansky, 2008; Roy, 2013). Some other languages, e.g., many Austronesian and Australian languages specifically KonKow and Nisenan, do not have a copula in any tense (Li & Thompson, 1977).

In Section (4.2.2), I have shown that the copula *KWN* is an auxiliary base-generated in a vP, which selects for the PredP. This subsection addresses the status of the vP in the structure of the Arabic verbless sentence. As a matter of fact, the status of the vP in the structure of the Arabic verbless sentence has been the subject of considerable debate. Two predominant analyses have been proposed with respect to the vP layer. According to one analysis, the verbless sentence contains a null copular verb (Bakir, 1980 & Fassi-Fehri, 1993). To put it another way, this type of analysis suggests that there is a null V in the structure of the verbless sentence. A second analysis proposes that the verbless sentence does not have a verbal projection (VP) (Aoun et al., 2010; Bahloul, 1994; Benmamoun, 2000)<sup>60</sup>. The TP/IP immediately dominates the SC. As pointed out in Section (2.3), the absence of the VP layer in the present tense, as shown in (13), is

 $<sup>^{60}</sup>$  See Section (3.3) for more discussion on the analyses of the Arabic verbless sentence provided by these people.

due to the absence of the categorical feature [+V] in T/I, whereas the obligatory presence of the VP layer in the past and future tenses, as shown in (14), is due to the presence of the categorical feature [+V] in T/I. The categorical features<sup>61</sup> in T/I vary based on tense type. In the past and future tenses, the copula *KWN* must raise to T to check this categorical feature. This latter assumption presents a further explanation for the raising of the copula *KWN* from *v* to T, which was discussed in Section (4.2.2).

In this thesis, I adopt the second type of analysis, specifically that the vP layer is absent in the structure of the Arabic verbless sentence. It is more plausible, and less problematic, than the analysis which suggests a null copula for a number of reasons. First, this analysis is compatible with the analyses provided for verbless sentences in various other languages. For instance, it has been proposed that in Hebrew and Irish verbless sentences there is no VP layer and the SC is merged directly to IP/TP (Carnie, 1995, 1997 & Hazout, 2010). Also, it has been suggested that in Russian verbless sentences, as in (15), the SC is merged to IP/TP without a VP layer (Bailyn, 2001; Bailyn & Citko, 1999; Matushansky, 2008). That is, this analysis becomes universal rather than language-particular.

(15) Vera assistent. Vera assistant<sub>NOM</sub> 'Vera is an assistant.'

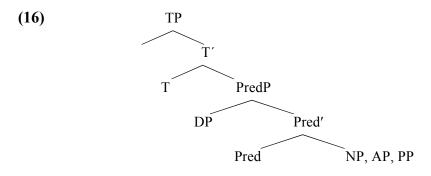
#### (Matushansky, 2008: 216)

Next, as discussed in Section (2.3.2), Benmamoun (2000) pointed out that it is possible to account for the absence of accusative case on the predicate in the Arabic verbless sentence, as shown in (13) above, under the analysis which suggests the absence of the vP layer. It is not clear why the covert copula assigns a different case from the overt copula under the analysis suggesting a null copula. Benmamoun, in addition to other researchers, assumes that the

<sup>&</sup>lt;sup>61</sup> For Bahloul (1994), the categorical feature in the head I is the tense feature [TNS].

predicate in the verbless sentence receives the default nominative case. In Chapter 5, I argue against this latter assumption. As a final point, the presence of the vP layer in the structure of the Arabic verbless sentence is not necessarily required. This is supported by my analysis in this thesis that the copula *KWN* does not participate in the predicational relation and its presence is needed only for grammatical information. It is also supported by the fact that the present tense is the default or unmarked tense in Arabic (cf. Benmamoun, 2000; Fassi-Fehri, 1993; Ouhalla, 1994a), i.e., the copula *KWN* in the present tense does not necessarily need to project in order to mark the present tense.

The main conclusion we obtain from the discussion in this subsection is that the PredP can be merged directly to the TP without a vP layer, as illustrated in (16). This conclusion supports the analysis provided in this thesis that the SC is selected by the vP or directly by the TP in the structure of the Arabic verbless sentence.



We can thus conclude that Arabic has a single copula *KWN*, which is needed only for grammatical information. This copula *KWN* is an auxiliary which is base-generated in a vP and then raises to T. It may raise to C if C is not lexically occupied. Finally, this thesis adopts the analysis that postulates the absence of the vP layer in the structure of the Arabic verbless sentence, since it is more plausible and less problematic than the analysis suggesting a null copula.

# 4.3 Subject of the predicational clause

The subject is one of three main elements, in addition to the predicate and the copula *KWN* in non-verbless sentences, that form the predicational clause. In Arabic, the subject of a predicational clause is constrained to always be definite. It can be a common noun with an obligatory definite article (a definite NP) as in (17), a proper noun as in (18), or a pronoun as in

(19).

- (17)
  - a. **l-?awlaad-u** mumarid<sup>s</sup>-uuna the-boys-NOM nurse-Masc.Pl.NOM 'The boys are nurses.'
  - b. kaan-at **s-siyaar-at-u** dʒamiil-at-an be.PST-3.Fem.Sg the-car-Fem.Sg-NOM beautiful-Fem.Sg-ACC 'The car was beautiful.'

(18)

- a. **Ahmad-u** t<sup>s</sup>awiil-un Ahmad-NOM tall.Masc.Sg-NOM 'Ahmad is tall.'
  - b. **Zayd-un** fi d-daar-i Zayd-NOM in the-house-GEN 'Zayd is in the house.'

#### (19)

- a. **?anta** mumarid<sup>s</sup>-un you nurse-Masc.Sg-NOM 'You are a nurse.'
- b. **hum** fi l-madras-at-i They in the-school-Fem.Sg-GEN 'They are in the school.'

Arabic never tolerates an indefinite NP (or a bare NP as suggested by Fassi-Fehri,

2012<sup>62</sup>) as the subject of a predicational clause. The examples in (20) from SA and in (21) from

NA illustrate this fact.

<sup>&</sup>lt;sup>62</sup> In the literature, two different approaches have been introduced regarding the syntactic nature of indefinite NPs in Arabic. The first approach holds that the suffix/-n/ is an indefinite marker (Choueiri, 2005;

(20) a.	•	umarid <sup>s</sup> -un Irse-NOM		
b.	*kaan-a be.PST-3.Masc.Sg 'A man was sick.'	radʒul-un man-NON	mariid <sup>s</sup> -an A sick-ACC	
C.	*radʒul-un fi man-NOM in 'A man is in the hou	the-house-C	EN	
d.	*kaan-a be.PST-3.Masc.Sg 'A man was in the h			EN
(21) a.	*radʒaal mumarið <sup>s</sup> man nurse 'A man is a nurse.'			(NA)
b.	*kaan be.PST.3.Masc.Sg 'A man was sick.'	radʒaal man	mariið <sup>ç</sup> sick	(NA)
c.	*radʒaal b-l-bai man in-the- 'A man is in the hou	house		(NA)
d.	*kaan be.PST.3.Masc.Sg 'A man was in the h		b-l-bait in-the-house	(NA)

Additionally, Mohammad (1998) points out that in Palestinian Arabic (PA) predicational clauses, specifically verbless sentences, the subject is never an indefinite NP as shown in (22). This constraint is not limited to Arabic predicational clauses; Italian, for example, is similar. According to Moro (1997), the precopular expression in an Italian predicational clause has to be a full DP, and cannot be a bare NP as seen in (23).

Bardeas, 2009; Kremers, 2003; Ouhalla, 2013); the other approach holds that indefiniteness is marked by bareness and the suffix /-n/ is not an indefinite determiner (Fassi-Fehri, 2012).

(2	2)
·-	-,

a. *walad gaşiir boy short 'A boy is short.'	(PA)	
<ul> <li>b. *mara daktoora</li> <li>woman doctor</li> <li>'A woman is a doctor.'</li> </ul>	(PA)	
c. *walad be-d-daar boy in-the-house 'A boy is in the house.'	(PA)	(Mohammad, 1998: 6&9)
(23) a. *[NP ragazze] sono la causa de (Girls are the cause of the rio		

b. [<sub>DP</sub> le [<sub>NP</sub> ragazze]] sono la causa della rivolta (The girls are the cause of the riot)

(Moro, 1997: 24)

This section deals with the definiteness constraint on the subject of Arabic predicational clauses. Why can a definite noun, a proper noun, and a pronoun function as the subject of a predicational clause? Why is an indefinite NP not tolerated as the subject of a predicational clause?

I suggest there are two reasons that account for this constraint. The first reason follows from a referentiality condition on the subject of a predicational clause. As previously argued in this thesis, the subject of a predicational clause has to be referential. Definite nouns, proper nouns, and pronouns are all referential items. As pointed out by Bondaruk (2013) and Higgins (1979), proper nouns, pronouns, and definite nouns are intrinsically referential. They refer to a well-defined entity. Since these three items are strongly referential, they are allowed to function as the subject of an Arabic predicational clause. This argument also explains why indefinite NPs are relatively less referential, they cannot function as the subject of an Arabic predicational clause.

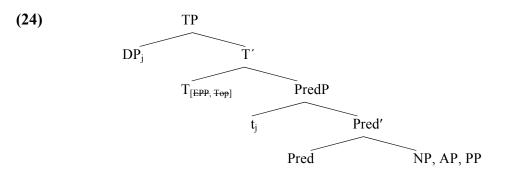
Thus, the referentiality condition on the subject of a predicational clause provides an explanation for the definiteness constraint on the subject of Arabic predicational clauses.

Another reason that explains the definiteness constraint follows from the requirement that the subject of the Arabic predicational clause must be a topic. Pragmatically speaking, Bondaruk and Mikkelsen (2005) argue that only discourse-old items, expressing discourse-old information, can function as topics<sup>63</sup>, whereas discourse-new items, such as indefinite NPs without any modification, cannot function as topics. Based on this reasoning, I assume that definite nouns, proper nouns, and pronouns are all discourse-old items as they typically refer to well-defined entities in discourse. Therefore, they can function as topics. However, indefinite NPs are discourse-new items as they usually provide new, previously undiscussed, information. Thus, they cannot function as topics. The requirement that the subject of an Arabic predicational clause must always be a topic provides another explanation for the definiteness constraint. Indefinite NPs cannot occur as the subject of an Arabic predicational clause because they cannot function as topics.

To explain the topicality argument in more detail, Mikkelsen suggests that the subject position (viz., Spec-TP) normally prefers topics, which is why she assumes that there is a Topic feature [Top] in T. I have previously argued that the subject of the Arabic predicational clause raises from Spec-PredP to Spec-TP in order to satisfy the EPP feature on T. Following Mikkelsen, I assume that there is a Topic feature [Top] in T and the raising of the subject DP to Spec-TP is also needed to check the Topic feature on T, as demonstrated in (24). That is, only items that can be topics raise to this topic position. Since definite nouns, proper nouns, and

<sup>&</sup>lt;sup>63</sup> Rizzi (1997) also points out that the topic expresses old information available from previous discourse.

pronouns can be topics, they can raise from Spec-PredP to Spec-TP in order to check the features on T.



In contrast, if the subject of a predicational clause is an indefinite NP, then a problem arises. Indefinite NPs cannot be topics, so they do not target this topic position (Spec-TP) because they cannot satisfy the Topic feature [Top] on T. This indicates that the derivation crashes, i.e. it does not converge at the LF level because T has uninterpretable features. Thus, the requirement that the subject of an Arabic predicational clause must always be a topic presents an additional explanation for the definiteness constraint. This explanation is compatible with the standard assumption that topics in Arabic are always definite and cannot be indefinite (Fassi-Fehri, 1993 & Ouhalla, 1994b). It is also consistent with Soltan's (2007) analysis, which suggests that in Arabic topics are located in Spec- $TP^{64}$ .

In existential sentences<sup>65</sup>, and under the classical approach<sup>66</sup> that treats the existential construction as a copular SC (see Chomsky, 2015; Moro, 1997; Stowell, 1978), a structure, similar to (24), that contains an indefinite NP in Spec-PredP can be saved by inserting an

<sup>&</sup>lt;sup>64</sup> It is crucial to note that Soltan (2007) analyzes the Arabic preverbal subject as a topic base-generated in

Spec-TP. <sup>65</sup> McNally (2011) states "The term 'existential sentence' is used to refer to a specialized or non-canonical in the substance or the presence of someone or something" (p.1830).

<sup>&</sup>lt;sup>66</sup> Other approaches treat existential sentences differently from copular clauses. To explain, some approaches analyze codas, expressions following pivot NPs such as PPs, as a VP adjunct (McNally, 2011) or as a nominal modifier of the pivot NP, which is the main predicate and the subject is the expletive (Cruschina, 2012; Hazout, 2004).

expletive NP directly in Spec-TP, specifically with a predicate  $PP^{67}$ . This is exemplified by inserting the expletive NP *hunaaka/θammata* in SA (25) or *fiih* in NA (26.a) and in PA (26.b). These expletive NPs<sup>68</sup> license the occurrence of indefinite NPs in Spec-PredP (see Mohammad, 1998).

# (25)

a.	there	radʒul-un man-NOM a man in the ho	in	ır-i ouse-GEN			
b.	there	radʒul-un man-NOM a man in the ho	in				
<b>(26)</b> a.		fiih Masc.Sg the as a man in the	re mar	b-l-bait in-the-hor	use	(NA)	
b.	there bo	lad be-d-daar y in-the-hou a boy in the ho			(PA)		(Mohammad, 1998: 19)

In existential sentences, there is usually a definiteness restriction on the pivot (or the associate in Chomsky's terms, 2015), i.e. the NP that follows the expletive (cf. Bentley, Ciconte, & Cruschina, 2013; Kim, 2013; McNally, 2011; Moro, 1997). The restriction states that pivot nominals must be indefinite as exemplified in (27) from English and (25) above from Arabic. Definite NPs, proper nouns, and pronouns are unacceptable as pivots, as shown in (28) and (29) from English and Arabic respectively.

(27) There is a book on the table.

# (28)

- a. ??There is the neighbor's dog barking.
- b. ??There are them/Anna and Bob waiting outside.

<sup>(</sup>McNally, 2011:1833)

<sup>&</sup>lt;sup>67</sup> In existential constructions in most languages, the subject of the predicate PP may remain *in situ* and the empty subject position is filled by an expletive NP (Roy, 2013).

<sup>&</sup>lt;sup>68</sup> Chomsky (2015) states, "There must have an NP associate" (p.142).

c. \*There is John in this garden.

#### (29)

- a. \*hunaaka r-radʒul-un fi d-daar-i there the-man-NOM in the-house-GEN '??There is the man in the house.'
- b. \*hunaaka Zayd-un/hum fi d-daar-i there Zayd-NOM/They in the-house-GEN '??There is Zayd/are they in the house.'

Pivots cannot serve as topics because they are discourse-new items, i.e., they introduce a novel referent into discourse (Cruschina, 2012; Kim, 2013; McNally, 2011). Since pivots cannot be topics, they do not target the specifier position of TP, which is a topic position. In short, indefinite NPs occur in Spec-PredP only in Arabic existential sentences under the assumption of a definiteness restriction and the assumption of expletive NP licensing.

We now consider another issue related to the definiteness constraint on the subject of Arabic predicational clauses. In SA, there is a general assumption that an indefinite NP can function as the subject of a predicational clause if it is preceded by a PP predicate, as seen in (30).

(30) fi d-daar-i radʒul-un in the-house-GEN man-NOM 'In the house, there is a man.

As a matter of fact, the clause in (30) is not a regular predicational clause, but rather an existential sentence. It denotes that *in the house, there is a man*, as shown in its translation in (30). In this existential construction, the locative coda *fi ddaari* 'in the house' is topicalized. The topicalization of a locative coda occurs in several languages such as Brazilian Portuguese (31.a), Italian (31.b), and English (Bentley et al., 2013 & Cruschina, 2012).

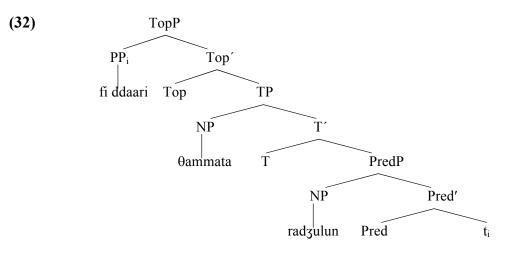
- (31)
  - a. No centro da cidade tinha um engarrafamento enorme in-the center of-the city had a traffic jam big 'There was a big traffic jam in downtown.' (Bentley et al., 2013: 2)

(Moro, 1997: 131)

b. Nel sistema solare, ci sono otto pianeti in-the system solar ci are eight planets 'In the solar system, there are eight planets.'

(Cruschina, 2012: 88)

Building on Cruschina (2012), I assume that the locative coda in (30) moves to Spec-TopP in the left-periphery. As pointed out by Cruschina, locative codas represent the aboutness topic of the clause in which they occur. They differ from referential topics in that locative codas introduce new information, whereas referential topics introduce old information. In addition, I assume that there is a null expletive NP in Spec-TP which licenses the occurrence of the indefinite NP (the pivot) *radʒulun* 'a man' in Spec-PredP. (32) illustrates the derivation of the existential sentence in (30).



The assumption that there is a null expletive NP in sentence (30) is supported by the fact that the expletive NP may sometimes be overt, as shown in (33.a). It is also supported by the fact that in other Arabic dialects the expletive NP must be overt in similar existential sentences, as illustrated in (33.b) from NA.

b. b-l-bait fiih radʒaal<sup>69</sup> in-the-house there man 'In the house, there is a man.' (NA)

Detailed discussion of the existential sentence extends beyond the scope of this thesis, but I briefly mention it in order to explain the definiteness constraint on the subject of an Arabic predicational clause. Indefinite NPs can occur as the subject of a SC only in Arabic existential sentences under the approach that analyzes the existential construction as a copular SC. The definiteness restriction on the pivots in existential sentences and the assumption that this indefinite NP is licensed by an expletive NP explain the occurrence of indefinite NPs in Spec-SC. Also, I have discussed existential sentences to show that the sentence in (30) with a fronted PP is not a regular predicational clause, but rather an existential sentence with a null expletive NP. The overtness issue of the expletive NP<sup>70</sup> in Arabic existential sentences is actually a significant topic deserving of more research.

To summarize, in this section I have discussed the definiteness constraint on the subject of Arabic predicational clauses. Why can a definite noun, a proper noun, and a pronoun function as the subject of Arabic predicational clauses while an indefinite noun cannot? I have argued that the definiteness constraint follows from the referentiality and topicality requirements on the subject of a predicational clause. Definite nouns, proper nouns, and pronouns are strongly referential and thus can function as the subject of an Arabic predicational clause. Indefinite nouns, however, are less referential and hence are not allowed as the subject of an Arabic predicational clause. Additionally, indefinite nouns are disallowed as the subject of an Arabic

<sup>&</sup>lt;sup>69</sup> As a native speaker of NA, this sentence is much preferred to me than the one without the expletive.

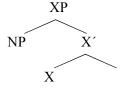
 $<sup>^{70}</sup>$  It may be assumed that in Arabic existential sentences the expletive NP must always be overt, specifically if the PP (the locative coda) remains in its base-position. Without the overt expletive NP, the clause *\*radʒulun fi d-daari* 'A man is in the house' may be interpreted as a bare NP with a PP modifier. However, if the PP is fronted, then the clause cannot be interpreted as a bare NP with a PP modifier because modifiers in Arabic are usually postnominal.

predicational clause because they cannot serve as a topic, whereas the other items can occur as the subject of an Arabic predicational clause because they can be topics. Finally, I have pointed out that in Arabic existential sentences, and under the approach that analyzes the existential construction as a copular SC, indefinite NPs can occur as the subject of a SC, Spec-PredP. The definiteness restriction on the pivots in existential sentences and the assumption that this indefinite NP is licensed by an expletive NP explain the occurrence of these indefinite NPs in Spec-PredP.

# 4.4 On the structure of the predicational clause

In the literature, two hypotheses are provided to account for the syntactic representations of predication. The first hypothesis is the Specifier Hypothesis (SH)<sup>71</sup>. It posits that the subject originates in the specifier position of a predicative expression XP, which can be an NP, AP, or PP, as depicted in (34). According to this hypothesis, the SC is a projection of a lexical head. The SH was proposed by Stowell (1981) and adopted by many linguists (e.g., Alshamrani, 1994; Aoun et al., 2010; Bahloul, 1994; Benmamoun, 2000; Carnie, 1995, 1997; Heggie, 1988; Ouhalla, 2013; Moro, 1997).

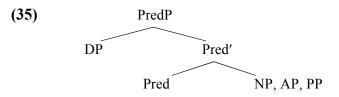
(34)



The other hypothesis is the Functional Category Hypothesis (FCH), which was suggested by Bowers (1993, 2001) and supported by Bailyn (2001), Bailyn and Citko (1999), Baker (2008),

<sup>&</sup>lt;sup>71</sup> Bowers (2001) refers to this hypothesis as the Specifier Hypothesis.

Bondaruk (2013), Mikkelsen, (2005), Svenonius (1994), and Roy (2013). It posits that the  $Pred^{72}$  head, which is a functional category, relates a subject to a predicate. It takes the predicative expression XP as its complement and the subject DP as its specifier, as depicted in (89) in Chapter 3, repeated here as (35) for convenience.



As mentioned in Chapter 3, I adopt the FCH. In other words, I assume that the SC in the structure of the Arabic predicational clause is a PredP, as shown in (35) above. In this section, I elaborate in more detail why I have chosen the FCH, or more specifically the PredP. First, the PredP structure is widely accepted in the literature. It is used in most recent works on copular clauses within the approach of the MP (see Section (2.2) for further details). Second, the PredP clearly defines the syntactic and semantic predicational relation between two constituents, namely a subject and a predicate. Bowers and Bailyn point out that the PredP provides a structural explanation of the predicational relation between the complement of the Pred head and the argument in its specifier. It also explains the semantic notion of predication. A nonverbal predicate, either an NP, AP, or PP, predicates a certain property of the subject DP. This predicational relation takes place within the PredP<sup>73</sup>. Bowers asserts that the PredP contains the propositional content of sentences.

Third, the PredP is consistent with other functional categories. To clarify, it is similar to the standard functional category (vP) (Chomsky, 1995, 2001, 2015) in the structure of Arabic

<sup>&</sup>lt;sup>72</sup> Note that Bowers, in both of his works (1993, 2001), uses the term Pr, not the term Pred, to refer to this functional category.

<sup>&</sup>lt;sup>73</sup> See Bowers (1993), Mikkelsen (2005), Rothstein (2004), and Roy (2013) for more details about the semantic analysis of predication. Each one of these works presents a different analysis of predication, but they all agree that predicational relation occurs within the SC.

sentences involving verbal predicates. The functional heads Pred and little *v* are both mediators in that they relate subjects in their specifiers to predicates in their complements. In recent proposals such as those by Bowers (1993, 2001), Chomsky (1995, 2001, 2015), Kratzer (1996), and Svenonius (1994), it is suggested that predicates, both verbal and nonverbal, always project functional projections that license external arguments. Subject DPs are generated in specifiers of functional heads (e.g., Spec-vP, Spec-VoiceP, Spec-TP, and Spec-PredP).

Fourth, the PredP provides a unified structure for all nonverbal predicates. To put it another way, all nonverbal predicates from different lexical categories, including NPs, APs, and PPs, will have a single syntactic configuration, namely the PredP. They differ only in what occurs in the complement position of the Pred head. Roy (2013) states that this hypothesis allows a structural unification of the subject-predicate relation. Fifth, as will be seen in the following chapter, the existence of the PredP helps significantly in providing an elegant account of case and agreement in Arabic based on recent theories of agreement within the MP.

Finally, the FCH, or more specifically the PredP, is less problematic than the SH. A number of problems associated with the SH have been provided in the literature<sup>74</sup>. According to Bowers (1993, 2001), the SH cannot explain the conjunction of predicative expressions that have different lexical categories in SCs, as shown in (36). Under this hypothesis, it is not clear what the category of the conjunction is (i.e., Is it an AP or a DP?). However, this problem can be explained under the FCH as a conjunction of the category Pred'.

(36) I consider Fred [ $_{AP}$  crazy] and [ $_{DP}$  a fool]. (Bowers, 2001: 307)

<sup>&</sup>lt;sup>74</sup> Bowers (1993, 2001) and Williams (1983) present many issues with the SH, most of which are irrelevant to this thesis.

This problem is also more evident in Arabic verbless sentences. In Section (3.3.5), I have shown that one of the properties of predicational clauses in Arabic is that they allow the conjunction of predicative expressions of different lexical categories, as exemplified in (37).

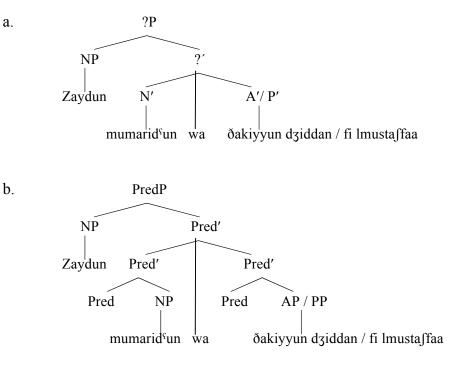
(37)

a.	Zayd-un Zayd-NOM 'Zayd is a nurse	[NP mumarid <sup>s</sup> -un] nurse-Masc.Sg-NOM and is very smart.'	wa and	-	tiyy-un art-NOM	dʒidd-an] very-ACC
b.	Zayd-un Zayd-NOM	[ <sub>NP</sub> mumarid <sup>s</sup> -un] nurse-Masc.Sg-NOM	wa and	[ <sub>PP</sub> fi in	l-musta∫f the-hosp	-

'Zayd is a nurse and is in the hospital.'

In accordance with Bowers' argument, the nature of the category of conjunction in these verbless sentences is not obvious under the SH, as demonstrated in  $(38.a)^{75}$ . Additionally, the nature of the SC that hosts the predicational relation is not clear. However, this issue can be easily accounted for under the FCH by assuming the conjunction of the category Pred', as illustrated in (38.b).

(38)



<sup>&</sup>lt;sup>75</sup> The structures in (38) were adapted from the structures in Bowers (2001) on page (308).

The other problem the SH encounters comes from Wh-movement. To illustrate, Williams (1983) observes that the SC predicate is a maximal projection and thus can undergo Wh-movement, as in (39).

## (39)

- a. John considers Bill Bob's friend.
- b. What does John consider Bill?

(Williams, 1983: 297)

This observation can also be clearly seen in Arabic predicational clauses, as shown in (40) whereby the main predicative NP undergoes Wh-movement.

(40)

- a. kaan-a Zayd-un muSallim-an be.PST-3.Masc.Sg Zayd-NOM teacher.Masc.Sg-ACC 'Zayd was a teacher.'
- b. Maaðaa kaan-a Zayd-un? What be.PST-3.Masc.Sg Zayd-NOM 'What was Zayd?'

Svenonius (1994) argues that under the SH the predicate of the SC is an X', which is universally inert for movement. This indicates that predicate movement poses a serious problem to the SH. Following Svenonius, I assume that the FCH can easily account for this observation. Under the FCH, the predicate is a maximal projection originating as a complement of the functional head (Pred). Like all other complements, it can undergo Wh-movement.

Before concluding this section, I would like to comment very briefly on the morphological realization of the Pred head. Bowers argues that the Pred head is lexically realized in several languages, such as English, Russian, Norwegian, Welsh, Korean, and Japanese. He particularly argues that in English SC constructions the particle *as*, as in (41), is a lexical realization of the Pred head. Bondaruk (2013) also argues that the morpheme *za* in Polish predicational clauses, as in (42), is located in the Pred head.

(41)

a. I regard b. I regard			(Bowers, 2001: 310) (Bowers, 1993: 596)	
) Manalı	iast		V:	

(42) Marek jest za Kierowcę Mark-nom is as driver-acc 'Mark acts as a driver.'

# (Bondaruk, 2013: 243)

In my analysis of Arabic predicational clauses in Section (3.4), I have assumed that the Pred head is morphologically null. However, in some instances, specifically in Arabic SC constructions, the Pred head may be lexically realized. For example, the particle *ka* in Arabic SC constructions in (43) may be considered a lexical realization of the Pred head.

(43)

a.	?iStabar-tu	Zaynab-a	ka-?uxt-ii
	regard.PST-1.Sg	Zaynab-ACC	as-sister-my
	'I regarded Zaynab a	s my sister.'	
b.	?iStabar-tu	Zayd-an	<b>ka-</b> zamiil-in
	regard.PST-1.Sg	Zayd-ACC	as-friend-GEN
	'I regarded Zayd as a	friend.'	

While the lexical realization of the Pred head is still a hot topic in the literature (see Matushansky, 2015 for a different view<sup>76</sup>), the point that I want to make from this short discussion is that the Pred head may have a morphological realization in Arabic. I will leave the details of this issue for future work, as it requires a thorough understanding of Arabic SC constructions.

In summary, this section has elaborated on the structure of predicational clauses. I have presented several reasons explaining the use of the FCH, and not the SH, in my analysis of Arabic predicational clauses. The PredP has been used in most recent works on copular clauses. It is similar to other functional categories such as vP. It provides a clear definition of the syntactic and semantic predicational relation and provides a unified structure for all nonverbal

<sup>&</sup>lt;sup>76</sup>Matushansky (2015) argues against the FCH. She specifically argues that there is no empirical evidence for the existence of the Pred head.

predicates. It also helps in providing an elegant account of case and agreement in Arabic. I have also outlined the problems encountered by the alternative SH which can be easily accounted for under the FCH. I have also indicated that the Pred head may have a morphological realization in Arabic.

#### 4.5 Summary

This chapter explores the Arabic predicational clause in more depth. It began by showing that Arabic has a single copula KWN, which originates in a vP and then raises to T. The copula may also raise to C if C is not lexically occupied. In this thesis, I assume the absence of the vP layer in the structure of the Arabic verbless sentence. Next, I argue that the definiteness constraint on the subject of Arabic predicational clauses follows from the referentiality and topicality requirements on the subject of a predicational clause. Definite nouns, proper nouns, and pronouns can function as subjects of Arabic predicational clauses because they are referential and can be topics. However, indefinite nouns are not allowed as the subject of an Arabic predicational clause because they are less referential and cannot serve as a topic. The chapter concludes with justification for the use of the FCH, and not the SH, in my analysis of Arabic predicational clauses. The FCH is less problematic than the SH for a number of reasons. Additionally, the PredP has been used in many recent works on copular clauses. It is similar to other functional categories. It also clearly defines the syntactic and semantic predicational relation between a subject and its predicate and provides a unified structure for all nonverbal predicates. Finally, I have briefly discussed that the Pred head may be lexically realized in Arabic. This chapter, together with the preceding chapter, paves the way for my account of case and agreement in Arabic which will be fully articulated in the subsequent chapter.

# Chapter 5 Case and Agreement in the Predicational Clause

# **5.1 Introduction**

Having laid out in the preceding chapters the properties and syntactic configuration of the Arabic predicational copular clause, the current chapter focuses specifically on case and agreement. As mentioned earlier, case and agreement in this type of clause have received little attention in the literature and have been only trivially accounted for. In this chapter, I provide a new analysis based on recent theories of agreement in the MP. The chapter is composed of five sections. Section (5.2) presents an overview of case and agreement in the Arabic predicational clause. Section (5.3) outlines the major theoretical assumptions required for my analysis. Section (5.4) provides the analysis, and Section (5.5) discusses the merits of this analysis. Section (5.6) concludes this chapter.

#### **5.2 Overview**

As in several other languages, for example French and Russian, an Arabic<sup>77</sup> nonverbal predicate<sup>78</sup>, namely the NP and AP, agrees in number (Num), gender (Gen), and case with the subject DP of which it is a predicate. This can be seen in the verbless sentences in (1). Note that the predicative element and the subject DPs in (1) are both marked for nominative case.

(1)

a.	?al-?awlaad-u	mumarid <sup>ç</sup> -uuna
	the-boys-NOM	nurse-Masc.Pl.NOM
	'The boys are nurses.'	

b. ?al-walad-u saSiid-un the-boy-NOM happy.Masc.Sg-NOM 'The boy is happy.'

<sup>&</sup>lt;sup>77</sup> Case and agreement are more evident in SA than in other Arabic dialects, which have lost case.

<sup>&</sup>lt;sup>78</sup> It is well known that prepositions in Arabic do not inflect for agreement.

However, in the presence of the complementizer *Pinna* or the copula *KWN*, the predicate NP and AP fail to agree in case with the subject DP, as illustrated in (2) and (3) respectively. In (2) where the complementizer *Pinna* is present, the subject is marked for accusative case and the predicate is marked for nominative case. In (3) where the copula *KWN* is present, the subject is marked for nominative case and the predicate is marked for accusative case.

(2)

(-)						
	a.	?inna	l-?awlaad-	-a	mumarid <sup>ç</sup> -ı	iuna
		That	the-boys-A	ACC	nurse-Mase	c.Pl.NOM
		'Certainly th	e boys are n	urses.'		
	b.	?inna	l-walad-a		safiid-un	L
		That	the-boy-AC	CC	happy.M	asc.Sg-NOM
		'Certainly th	e boy is hap	ppy.'		
(3)						
	a.	kaan-a		l-?awlaa	d-u	mumarid <sup>ç</sup> -iina
		be.PST-3.Ma 'The boys w	0	the-boys	-NOM	nurse-Masc.Pl.ACC
	b.	kaan-a	1	-walad-u		saSiid-an
		be.PST-3.Ma	asc.Sg t	he-boy-No	DM	happy.Masc.Sg-ACC

When both the complementizer *2inna* and the copula KWN occur in the same clause, as shown in

(4), the predicate NP and AP agree in case with the subject DP. They are both marked for

accusative case.

'The boy was happy.'

(4)

- a. ?inna l-?awlaad-a kaan-uu mumarid<sup>ç</sup>-iina That the-boys-ACC be.PST-3.Masc.Pl nurse-Masc.Pl.ACC 'Certainly the boys were nurses.'
- b. ?inna l-walad-a kaan-a saSiid-an That the-boy-ACC be.PST-3.Masc.Sg happy.Masc.Sg-ACC 'Certainly the boy was happy.'

Given that the main aim of this thesis is to provide a comprehensive analysis of Arabic

copular clauses, these facts about case and agreement in the predicational copular clause must be

explained. This is the goal of the current chapter. Before proceeding to the analysis section, I present in the following section the theoretical assumptions required for the analysis.

#### **5.3 Theoretical assumptions**

In this section I lay out the theoretical foundation on which my analysis of case and agreement in the Arabic predicational copular clause is based. The first two assumptions involve features and the operation Agree as defined by Chomsky (2000, 2001, 2005), which I summarized in Chapter 1. For the sake of clarity, I repeat only the most relevant parts in this section. As argued by Chomsky, there are two types of features: uninterpretable features [uF] such as  $\varphi$ -features of T and interpretable features [F] such as  $\varphi$ -features of DPs/NPs. The uninterpretable features enter the derivation unvalued, while the interpretable features enter the derivation valued. Under the operation Agree, which establishes a Probe-Goal relation, the uninterpretable features of the Probe are valued by matching them with the interpretable features of the Goal. Four conditions must be satisfied in order for Agree to take place: the c-command condition, the intervention condition, the phase condition, and the activity condition.

The third assumption follows the theory of Multiple Agree, which was suggested by Hiraiwa (2001) as a process of multiple feature-checking. Hiraiwa writes:

MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point *derivationally simultaneously*. (p.69)

In this theory, a Probe enters into an Agree relation with more than one matching Goal, as demonstrated in (5) where  $\alpha$  is a Probe and both  $\beta$  and  $\gamma$  are matching Goals for  $\alpha$ . The Probe

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continues to search down for the next closest Goal within its c-command domain because its features are [+ multiple].

(5) MULTIPLE AGREE as a single simultaneous operation  $\alpha > \beta > \gamma$ (Hiraiwa, 2001: 70)

Hiraiwa points out that under the theory of Multiple Agree, deletion of the Probe's uninterpretable features takes place whenever the operation Multiple Agree is completed because it is a single simultaneous syntactic operation. He also points out that the intervention effect is not triggered under this theory since the closer Goal,  $\beta$  in (5), is not yet inactive when the Probe  $\alpha$  is merged, i.e., the closer Goal has not yet entered into an Agree relation with another Probe.

The fourth assumption is that all verb phrases, not only transitive verb phrases, are phases (see Legate, 2003, 2005; Lohndal, 2006; Platzack, 2006; Richards, 2007). In the recent literature, specifically Legate<sup>79</sup> and Richards, it has been argued that passive/unaccusative *v*Ps are phases as they behave similarly to transitive *v*P\*s in several respects, e.g., they are full argument structures at LF and thus they are propositional. To clarify, Legate (2005) argues that in the unaccusative construction (6) the DP *Ten trains* moves to the edge of the *v*P phase in order to move higher to Spec-TP given the PIC<sup>80</sup>. Following the standard assumption, this raising is motivated by the EPP feature on the phase edge. Consequently, the head T enters into an Agree relation with the DP in Spec-*v*P before raising to Spec-TP.

(6) Ten trains arrive into the station today. (Legate, 2005: 153)

The fifth assumption is the theory of Multiple Case, which was suggested by Bejar and Massam (1999) and assumed by Baker (2015). According to this theory, case assigned to a

<sup>&</sup>lt;sup>79</sup> See Legate (2003, 2005) for an extensive discussion on phases.

<sup>&</sup>lt;sup>80</sup> As pointed out earlier, PIC stands for the Phase Impenetrability Condition.

DP/NP in a lower position does not prevent further case assignment. In other words, the copy of a moved DP/NP, i.e., the chain head, may have different case from its lower copy, i.e., the chain tail<sup>81</sup>. Baker explicitly states that in some languages "the members of an NP chain do not share the same case value, but each link of the chain gets its own distinct case feature" (p.275). Morphology realizes only the latter (outer) case, whereas the former (inner) case is deleted at PF, i.e., the case assigned on the lower copy is not pronounced. As an illustration, Bejar and Massam provide the examples in (7) and (8) from Hungarian and Latin respectively as supporting evidence for their theory. In (7) the wh-word *Kiket* receives two cases; it first receives ECM accusative case from the intermediate verb on the way to its final A-bar position. However, in (8) the DP *Homerus* receives two cases; it first receives accusative case and then gets nominative case after raising.

- (7) **kiket**<sub>i</sub> mondtad hogy szeretnél ha eljönnének **who-ACC** you-said that you-would-like if came(3pl) 'Who did you say that you would like it if they came?'
- (8) Homerus traditur caecus fuisse H (NOM) is-said blind (NOM) to-be (PER) 'Homer is said to have been blind.'

(Bejar & Massam, 1999: 66&72)

Baker also provides the example in (9) from Japanese to explain this theory. In this example, the genitive case always associated with the possessor in Japanese changes to nominative after movement.

(9) John-ga [ \_\_\_\_\_ otoosan]-ga sin-da John-MNOM father-MNOM die-PAST 'It is John whose father died.' (Baker, 2015: 280)

<sup>&</sup>lt;sup>81</sup> Babby (1984), McCreight (1988), and Yoon (2004) have also argued that a DP can have multiple cases, if it is raised from one case-marked position to another case-marked position, and not all of these multiple cases can surface (as cited in Richards, 2007, p.2).

The last assumption is the abandonment of the activity condition (Nevins, 2004 & Asarina, 2011). As argued by Nevins and Asarina, the activity condition, which states that inactive elements must be inaccessible for further syntactic operations, is not an essential constraint on derivations and thus must be abandoned. It appears to be not operative and it is not part of UG. This assumption is crucial in order for a DP/NP to have multiple cases, as already pointed out in the previous assumption of Multiple Case. As an illustration, Asarina provides the examples in (10) from Faroese, i.e., a North Germanic language spoken in the Faroe Islands. In these examples, the quirky dative case on the object DP fails to preserve in the passive construction. It is assigned, but the latter case, i.e., the nominative case, that the DP receives after raising is what surfaces morphologically. This occurs only if the activity condition is dispensed with, otherwise the DP will be inactive as it does not have an unvalued Case feature.

(10)

a.	Politið	steðgaði	honum/*hann.
	police-the	stopped	him.DAT/*him.ACC
	'The police st	topped him.'	

b. **Hann** varð steðgaður. **he.NOM** was stopped.NOM.sg.masc 'He was stopped.'

(Asarina, 2011: 128)

In summary, this section has laid out the major theoretical assumptions on which my analysis of case and agreement in the Arabic predicational copular clause is based. These assumptions include features, Agree, Multiple Agree, phases, Multiple Case, and the abandonment of activity condition.

# 5.4 Analysis

Having presented in the preceding section the theoretical assumptions that will be employed in my analysis of case and agreement in the Arabic predicational clause, we can now proceed to the analysis itself. In subsection (5.4.1) I discuss agreement and case on predicate NPs and APs, whereas in subsection (5.4.2) I discuss case on subject DPs.

# 5.4.1 Agreement and case on predicates

At first, I assume that NPs differ from APs with respect to inflectional features. The standard assumption is that all NPs, both predicates and arguments, have their own  $\varphi$ -features, i.e., they have the intrinsic  $\varphi$ -features Gen, Num, and Per<sup>82</sup> (Bailyn, 2001; Bailyn & Citko, 1999; Baker, 2008; Chomsky, 2000, 2001; Matushansky, 2008). They enter derivations with interpretable  $\varphi$ -features and an uninterpretable Case feature [*u*Case], which needs to be valued in the course of derivation. Unlike NPs, APs have no intrinsic  $\varphi$ -features (Baker, 2008; Maling & Sprouse, 1995). They enter derivations with uninterpretable Case and  $\varphi$ -features, which obtain their values via agreement. I assume that APs in Arabic bear [*u*Case] features because Arabic, namely SA, has a rich case system. APs in Arabic, whether predicative, superlative, comparative or attributive, must bear a morphological case. As mentioned in Section (2.2.7), Bondaruk (2013)<sup>83</sup> also argues that APs in Polish are like NPs in that they all bear [*u*Case] features. Note that APs only bear Gen and Num. They do not bear a Per feature because APs in Arabic do not normally inflect for Per, as illustrated in (11) where the form of the AP *saSiidun* does not change according to the Per feature of the subject DP. This is consistent with Baker's (2008)

<sup>&</sup>lt;sup>82</sup> These abbreviations stand for Gender, Number, and Person.

<sup>&</sup>lt;sup>83</sup> Matushansky (2008) argues that APs may bear unvalued Case features in some languages.

generalization which states that adjectives do not reflect first or second person agreements across most of world languages such as Swahili, Spanish, and Hindi<sup>84</sup>.

(11)

- a. huwa saSiid-un he happy.Masc.Sg-NOM 'He is happy.'
- b. ?anta sa\$iid-un you happy.Masc.Sg-NOM 'You are happy.'
  c. ?anaa sa\$iid-un I happy.Masc.Sg-NOM 'I am happy.'

The conclusion we can obtain from this short discussion on inflectional features is that NPs, both predicates and arguments, enter derivations with valued  $\varphi$ -features [Gen, Num, and Per] and an unvalued Case feature [*u*Case], whereas APs enter derivations with unvalued Case and  $\varphi$ -features [*u*Gen, *u*Num, and *u*Case].

Let me now provide my account for agreement and nominative case on predicate NPs and APs in the Arabic verbless sentences (1) and (2), repeated here as (12) and (13). These are the only situations where predicate NPs and APs bear nominative case in Arabic.

(12)

a.	?al-?awlaad-u	mumarid <sup>s</sup> -uuna
	the-boys-NOM	nurse-Masc.Pl.NOM
	'The boys are nurses.'	

b. ?al-walad-u saSiid-un the-boy-NOM happy.Masc.Sg-NOM 'The boy is happy.'

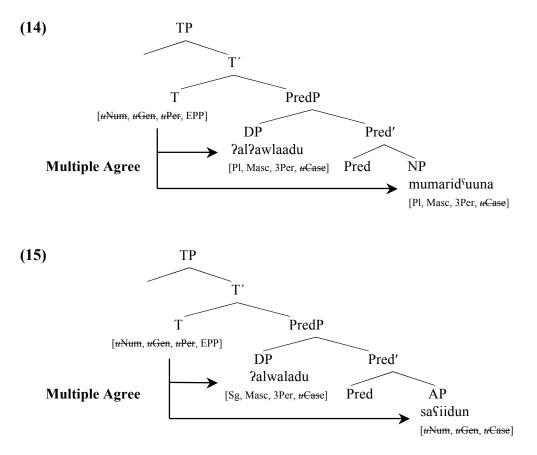
# (13)

a. ?inna l-?awlaad-a mumarid<sup>c</sup>-uuna That the-boys-ACC nurse-Masc.Pl.NOM 'Certainly the boys are nurses.'

<sup>&</sup>lt;sup>84</sup> Danon (2011) also argue adjectives do not agree in person in many languages.

b. ?inna l-walad-a sa\$iid-un That the-boy-ACC happy.Masc.Sg-NOM 'Certainly the boy is happy.'

As demonstrated in (14) and (15), once the head T, which has the unvalued  $\varphi$ -features [*u*Gen, *u*Num, and *u*Per], is merged in the derivations, it starts probing down for the closest DP within its c-commanding domain. Given the theory of Multiple Agree, T in structure (14) establishes Multiple Agree relations with two Goals: the subject DP *2al?awlaadu*, which has the features [Pl, Masc, 3Per, and *u*Case], and the predicate NP *mumarid<sup>c</sup>uuna*, which has the features [Pl, Masc, 3Per, and *u*Case]. Similarly, in structure (15) T establishes Multiple Agree relations with two Goals: the subject DP *2al?awlaadu*, and *u*Case], and the predicate AP *saSiidun*, which has the unvalued features [*u*Gen, *u*Num, and *u*Case].



As a by-product of these Multiple Agree relations with T in structures (14) and (15), the subject DPs and the predicate NP and AP get their Case features valued as nominative. Also, the predicate AP has its  $\varphi$ -features valued as a result of the Multiple Agree relation with T and the subject DP. This is because Multiple Agree, as proposed by Hiraiwa (2001), is a single simultaneous syntactic operation applied to all Goals at the same derivational point; it is not multiple instances of the operation Agree. Accordingly, it can be observed that by using the operation Multiple Agree, we can account for agreement and nominative case on predicate NPs and APs in Arabic verbless sentences. Note that the case on the subject DPs in (13) is accusative, not nominative. In the following subsection, I argue that the case on subject DPs may change later in the course of a derivation by other mechanisms, such as the presence of the complementizer *2inna*.

Let us now consider the agreement and accusative case on predicate NPs and APs in the predicational clauses (3) and (4), repeated here as (16) and (17), which include the copular verb *KWN*. The only situations where predicate NPs and APs bear accusative case in Arabic are in the presence of the copular verb  $KWN^{85}$ .

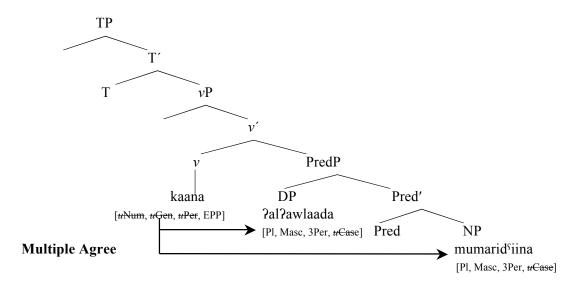
á	. kaan-a be.PST-3.M 'The boys w	asc.Sg the	awlaad-u e-boys-NOM	mumarid <sup>s</sup> -iina nurse-Masc.Pl.ACC	
b	<ul> <li>kaan-a</li> <li>be.PST-3.M</li> <li>'The boy wa</li> </ul>	U	ad-u oy-NOM	saSiid-an happy.Masc.Sg-ACC	
(17) a	. ?inna That 'Certainly th	l-?awlaad-a the-boys-ACC he boys were nur	kaan-uu be.PST-3.Mas ses.'	mumarid <sup>©</sup> -iina sc.Pl nurse-Masc.Pl.ACO	С

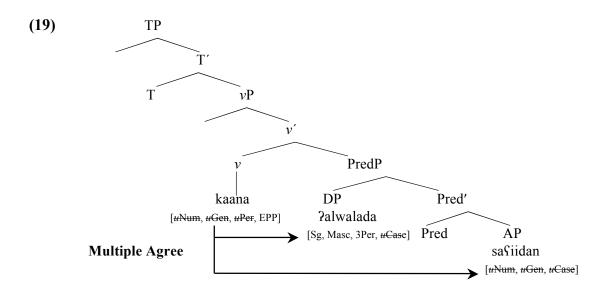
<sup>&</sup>lt;sup>85</sup> That is, in the matrix clause. Indeed, predicate NPs and APs in embedded clauses bear accusative case as well.

b. ?inna l-walad-a kaan-a saSiid-an That the-boy-ACC be.PST-3.Masc.Sg happy.Masc.Sg-ACC 'Certainly the boy was happy.'

The same mechanism, namely Multiple Agree, can be also used to account for agreement and accusative case on predicate NPs and APs differing only in the type of functional head. As can be seen in structures (18) and (19), as soon as the head v, which has the unvalued  $\varphi$ -features [*u*Gen, *u*Num, and *u*Per], is merged in the derivations, it searches down its c-commanding domain for the closest DP with which it can agree. Considering the theory of Multiple Agree, v in structure (18) establishes Multiple Agree relations with two Goals: the subject DP *PalPawlaada*, which has the features [Pl, Masc, 3Per, and *u*Case], and the predicate NP *mumarid<sup>c</sup>iina*, which has the features [Pl, Masc, 3Per, and *u*Case]. Likewise, in structure (19) v enters into Multiple Agree relations with two Goals: the subject DP *Palwalada*, which has the features [Pl, Masc, 3Per, and *u*Case]. Likewise, in structure (19) v enters into Multiple Agree relations with two Goals: the subject DP *Palwalada*, which has the features [Pl, Masc, 3Per, and *u*Case]. Likewise, in structure (19) v enters into Multiple Agree relations with two Goals: the subject DP *Palwalada*, which has the features [NB mumarid<sup>c</sup>iina, which has the features [Pl, Masc, 3Per, and *u*Case]. Likewise, in structure (19) v enters into Multiple Agree relations with two Goals: the subject DP *Palwalada*, which has the features [NB mumarid<sup>c</sup>iina, which has the features [NB mumarid<sup>c</sup>iina], which has the unvalued features [NB mumarid<sup>c</sup>iina], which has the unvalued features [*u*Gen, *u*Num, and *u*Case].

(18)





As a by-product of the Multiple Agree relations with v in structures (18) and (19), the subject DPs and the predicate NP and AP in these structures get their Case features valued as accusative. The predicate AP also has its  $\varphi$ -features valued as a result of the Multiple Agree relation with v and the subject DP under the assumption that Multiple Agree is a single simultaneous syntactic operation applied to all Goals at the same derivational point. Note that the case on the subject DPs in (16) is nominative, not accusative. In the following subsection I discuss the mechanisms that change the subject case.

My account for accusative case agreement on predicate NPs and APs in Arabic rests on two assumptions. First, given the assumption that all vPs including unaccusative vPs are phases as stated by Legate (2003, 2005), Lohndal (2006), Platzack (2006), and Richards (2007), the vP in structures (18) and (19) is a phase and thus its presence blocks any agreement between T and any element in its domain. We will notice the importance of this assumption when we discuss the subject case in the subsequent subsection. Second, this vP is responsible for the accusative case on predicate NPs and APs<sup>86</sup>, as suggested by Lohndal (2006)<sup>87</sup> for copular clauses in

 $<sup>^{86}</sup>$  Matushansky (2008) argues that "If a Case-assigning v° is present, nominative cannot be assigned below it" (p.221).

Scandinavian languages. According to his proposal, the Case feature on predicate NPs, as in (20.a) from Norwegian, is valued as accusative by the Probe  $v^{88}$ . However, Lohndal argues that the *v*P does not project in languages that have nominative case on predicate NPs such as in (20.b) from Swedish. In these languages, the head T values the Case feature on predicate NPs as nominative. Lohndal has not spelled out how such long-distance agreements take place in these Scandinavian languages. However, in my account I have shown that these agreements in Arabic are obtained via Multiple Agree.

(20)

b. Det är jag it COP I.NOM

#### (Lohndal, 2006: 48&49)

This subsection has discussed agreement and case on predicate NPs and APs in Arabic predicational clauses. I suggested that the agreement and nominative case on predicate NPs and APs in Arabic verbless sentences are obtained via Multiple Agree relations between the Probe T and two Goals, specifically the subject DP and the predicate NP or AP. However, the agreement and accusative case on predicate NPs and APs in other clauses, namely predicational clauses involving the copular verb *KWN*, result from Multiple Agree relations between the Probe v and two Goals, specifically the subject DP and the predicate NP or AP.

<sup>&</sup>lt;sup>87</sup> Lohndal (2006) argues that this vP is similar to the vP in Norwegian unaccusative constructions which assigns accusative case to the DP.

<sup>&</sup>lt;sup>88</sup> This is different from Heggie (1988), Mikkelsen (2005), and Moro (1997) who suggest that the  $v_b$ P or VP that hosts the copula does not assign accusative case.

## 5.4.2 Case on subject DPs

This subsection is concerned with case on subject DPs in Arabic predicational copular clauses. The key argument of this subsection is that the case on a subject DP is not always preserved throughout a derivation. It may sometimes change in the course of a derivation by some other mechanisms. As an illustration, let us consider first the case on the subject DPs in the Arabic verbless sentences (12.a) and (13.a), repeated here as (21.a) and (21.b)<sup>89</sup>.

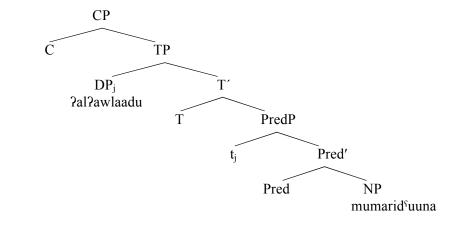
(21)

a.	?al-?awlaad-u	mumarid <sup>s</sup> -uuna
	the-boys-NOM	nurse-Masc.Pl.NOM
	'The boys are nurses.'	

b.	?inna	l-?awlaad-a	mumarid <sup>s</sup> -uuna
	That	the-boys-ACC	nurse-Masc.Pl.NOM
	'Certainly the	e boys are nurses.'	

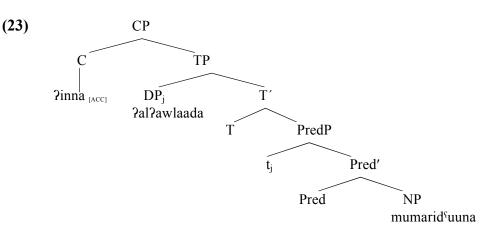
In the preceding subsection, I argued that the nominative case on the subject DPs in these verbless sentences is obtained via Multiple Agree with the head T. The subject DPs in both sentences then raise to Spec-TP in order to satisfy the EPP feature, as depicted in (22). Recall that in Chapter 4, I argue that the subject DP in an Arabic predicational clause must raise to Spec-TP. This argument is in line with Chomsky's (2000, 2001) assumption that the DP establishing an Agree relation with T raises to Spec-TP in order to satisfy the EPP feature on T.

(22)



<sup>&</sup>lt;sup>89</sup> For the sake of brevity, in this subsection I am repeating only the examples that involve nominal predicates. The same analysis can be extended to adjectival predicates without any further issues.

The structure in (22) explains the nominative case on the subject DP *?al?awlaadu* in (21.a) as the DP retains its nominative case after raising. However, this structure does not explain the accusative case on the subject DP *?al?awlaada* in (21.b). In this example, the subject DP does not retain its nominative case throughout the derivation. This issue raises the question: what is it that changes the nominative case already assigned to the DP? In fact it is the complementizer *?inna*, which has a lexical<sup>90</sup> accusative case. As is well known among Arab syntacticians<sup>91</sup> (e.g., Alshamrani, 1994; Fassi-Fehri, 1993; Mohammad, 2000; Ouhalla, 1994a), the complementizer *?inna* assigns accusative case to the subject DP. To clarify, I assume that when the complementizer *?inna* is merged in derivation, its accusative Case feature is checked by the subject DP which is located in Spec-TP and is the closest DP in its c-commanding domain, as demonstrated in (23). This mechanism is called *Check-on-Merge* as suggested by Bailyn (2001) in order to account for the lexical instrumental case on Russian predicates within the MP.



However, this proposal poses another problem, which is that the DP *?al?awlaada* already has a valued nominative case via Multiple Agree with T. Following the theory of Multiple Case

<sup>&</sup>lt;sup>90</sup> Bailyn (2001) defines lexical case as "morphological marking determined by features of a particular lexical item. ... it depends crucially on idiosyncratic case assignment properties of a particular head" (p.3 &7). Woolford (2006) provides the same definition.

<sup>&</sup>lt;sup>91</sup> Alshamrani (1994) and Fassi-Fehri (1993) have suggested that this accusative case is assigned to a DP under a government relation, whereas the others have not explained how this lexical case is assigned.

suggested by Bejar and Massam (1999) and assumed by Baker (2015), as well as the assumption of Matushansky (2008) which states that more than one Case feature may be assigned to a given category, I argue that the DP *?al?awlaada* in (23) has multiple cases: nominative case via Multiple Agree with T and accusative case from the complementizer *?inna*. Since morphology realizes only the outer/latter case, it is the accusative case that gets expressed at the PF.

Up to this point, I have shown that nominative case on the subject DP in the Arabic verbless sentence is obtained via Multiple Agree with T. In the presence of the complementizer *Pinna*, this nominative case changes to accusative case as assigned by the complementizer *Pinna* at Merge given the assumption of Multiple Case.

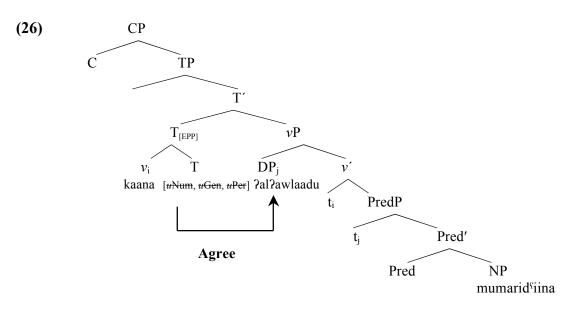
Let us at this juncture consider the case on the subject DPs in the predicational clauses (16.a) and (17.a), repeated here as (24) and (25), which include the copular verb *KWN*.

(24)	kaan-a be.PST-3.Masc.Sg 'The boys were nurses.'	l-?awlaad-u the-boys-NOM	mumarid <sup>c</sup> -iina nurse-Masc.Pl.ACC
			. 10

(25)	Zinna	l-?awlaad-a	kaan-uu	mumarid <sup>e</sup> -iina	
	That	the-boys-ACC	be.PST-3.Masc.Pl	nurse-Masc.Pl.ACC	
	'Certainly the boys were nurses.'				

As argued in the previous subsection, when predicational clauses, as in (24) and (25), include the copular verb *KWN*, both the subject DP and the predicate NP have their Case features valued as accusative as a by-product of Multiple Agree with the head v. In these two clauses it can be observed that all elements, subjects and predicates, bear accusative case, with the exception of the subject DP *l?awlaadu* in (24) which bears nominative case. This issue raises the question: what is it that changes the accusative case already assigned to the DP? The answer is the cyclic agreement between this DP and the head T, but how this cyclic agreement works. Recall that in the preceding subsection, I assume that the vP, whose head is responsible for the accusative case,

is a phase as suggested by Legate (2003, 2005), Lohndal (2006), Platzack (2006), and Richards (2007). Given the standard assumption that phase heads carry an edge feature, i.e., an EPP feature (see Chomsky, 2001; Legate 2003, 2005), the EPP feature on the head *v* triggers the subject DP *l?awlaadu* in (24) to raise from Spec-PredP to Spec-*v*P (the edge of the *v*P phase) as demonstrated in (26). This raising is required in order for the subject DP to be accessible for the subsequent movement to Spec-TP.

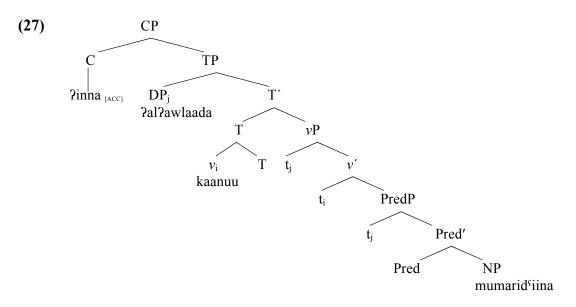


As shown in (26), once the head T, which has the unvalued  $\varphi$ -features [*u*Gen, *u*Num, and *u*Per], is merged in the derivation, it establishes an Agree relation with the DP *l?awlaadu* in Spec-*v*P given the assumption that abandons the activity condition (Nevins, 2004 & Asarina, 2011). This latter agreement represents the morphological agreement between the subject DP and the copular verb *KWN* in Arabic<sup>92</sup>. As a by-product of this Agree relation, the DP *l?awlaadu* obtains nominative case and then raises to Spec-TP to satisfy the EPP feature on T. In view of the theory of Multiple Case, the DP *l?awlaadu* has multiple cases: accusative case via Multiple Agree with

<sup>&</sup>lt;sup>92</sup> See footnote (40) above.

v and nominative case via cyclic Agree with T. Nominative case gets expressed at the PF since morphology realizes only the outer/latter case<sup>93</sup>.

In light of this proposed analysis, it can be assumed that the subject DP *l?awlaada* in (25) also has multiple cases: accusative case via Multiple Agree with *v*, nominative case via Agree with T, and lexical accusative case from the complementizer *?inna*, as illustrated in (27). Each of these cases is assigned to the DP in a different position. That is, the first accusative case is assigned to the DP in Spec-PredP, then nominative case is assigned to the DP in Spec-*v*P, and finally lexical accusative case is assigned to the DP in Spec-TP. As always, morphology realizes only the latter case, which is accusative in this clause.



To summarize, this section has shown my analysis for case and agreement in the Arabic predicational clause. I suggested that in verbless sentences the agreement and nominative case on subject DPs and their predicate NPs or APs are obtained via Multiple Agree relations with T. However, in predicational clauses that include the copular verb *KWN*, the agreement and

<sup>&</sup>lt;sup>93</sup> In Legate's (2005) analysis of cyclic agreements in unaccusative constructions, i.e., agreements between unaccusative v and finite T with a DP, she argues that the feature values of the DP are updated as a result of these cyclic agreements.

accusative case on subject DPs and their predicate NPs or APs result from Multiple Agree relations with v. I then suggested that the case on subject DPs may change in the course of a derivation by other mechanisms. One of these mechanisms is the complementizer *?inna*, which assigns its lexical accusative case to a DP upon Merge. The other mechanism is the cyclic agreement between a DP located in Spec-vP (the phase edge) and T, which results in nominative case on this DP. These two mechanisms explain the case mismatch between subject DPs and their predicate NPs or APs and are based on the assumptions of Multiple Case and the abandonment of the activity condition.

## 5.5 Discussion

This section discusses several merits of the analysis of case and agreement in the Arabic predicational clause provided in this chapter. In this analysis, case and agreement in the Arabic predicational clause can be explained without the stipulation of additional functional phrases in the derivations. This is different from the analyses of Ouhalla (2013) and Baker (2008) which suggest the presence of a functional phrase within the PredP in order to account for agreement. Another virtue of my analysis is that Multiple Agree, as proposed by Hiraiwa (2001), is a single simultaneous syntactic process affecting two elements, i.e., subjects and predicates, at once. As seen in the previous section, this process clearly explains the agreement in case and  $\varphi$ -features between subject and predicate in the Arabic predicational clause.

Moreover, in standard Case Theory (Chomsky, 1981), every phonetically realized NP must have Case. This is the so-called "Case Filter". It is concerned with, or more specifically

restricted to, case<sup>94</sup> on arguments; it has little to say about case on predicates. As argued by Rothstein (2004), precopular DPs in English copular clauses are assigned nominative case by Infl, whereas postcopular elements are not case-marked, as Case Filter applies only to thematic arguments. However, my analysis suggests that predicates, both NPs and APs, which share the feature [+N] are like NP arguments in that they all require case. Several linguists, e.g., Bailyn (2001), Bailyn and Citko (1999), Lohndal (2006), Maling and Sprouse (1995), and Matushansky (2008), have proposed that predicates in a number of languages such as Russian, Norwegian, Danish, and German all require case. Also, my analysis shares the basic assumption of the analyses proposed by these aforementioned researchers that case on predicates is assigned via the same mechanism as argument case. In other words, case on predicates is obtained in the same way as argument NPs, such as subject and object DPs.

Another merit of the analysis is that it does not resort at all to the less-explanatory assumption of the default case either on subject DPs or their predicates. In the literature of Slavic and Scandinavian languages (see Bailyn, 2001; Bailyn & Citko, 1999; Maling & Sprouse, 1995; Roy, 2013), it has been convincingly argued that the case on predicates in these languages is not the default case<sup>95</sup>. As argued by Schütze (2001), the basic assumption of default case is that it has to be the last solution if the structure lacks case assignors. However, in the Arabic literature most analyses propose that the nominative case on subject DPs and their predicates in Arabic predicational copular clauses is the default nominative case (see Alshamrani, 1994; Aoun et al., 2010, Benmamoun, 2000; Fassi-Fehri, 1993; Ouhalla, 1994).

<sup>&</sup>lt;sup>94</sup> Ura (2001) says, "Case continues to be one of the hottest topics in the theory of syntax, and the importance of Case theory in studying human languages will be increasing in the future inquiries of linguistic theory" (p.367).

<sup>&</sup>lt;sup>95</sup> Mikkelsen (2005) and Moro (1997) have argued that the case on predicates in English and some Scandinavian languages is the default case (see Section (2.2) for further details).

Finally, the proposed analysis explains that the accusative case on predicates results from Multiple Agree with the head v. In the previous works on Arabic predicational clauses, e.g., Aoun et al. (2010) and Ouhalla (2013), it is not clear how predicates obtain accusative case. They assume that it is assigned by the copular verb *KWN*, but were not very explicit about the exact mechanism that underlies the case assignment, i.e., is it agreement or valuation? Is the accusative case on predicates a lexical case? As a related point, my analysis does not suggest that the head Pred assigns any case, or more specifically accusative case, to its complement predicates. This is because case on Arabic predicates, which are complements of the head Pred, is not always constant, but rather changes based on the presence of the copular verb *KWN*. This is different from the analyses which suggest that the head Pred may assign case to predicates in some languages, such as the instrumental case on Russian predicates<sup>96</sup>. If we assume that the head Pred assigns case to its complement predicate in Arabic predicational clauses, then we must ask: what is this case? Is it nominative or accusative? All in all, this assumption is undesirable, as we will have two types of the head Pred, one which assigns case while another does not.

This section has outlined several virtues of the analysis provided in this chapter for case and agreement in the Arabic predicational clause. Among these virtues is that agreement in  $\varphi$ features and case between subjects and predicates can be explained via Multiple Agree without the assumption of further functional phrases. The analysis suggests that predicates are like arguments in that they require case other than the default case. It also suggests that the accusative case on predicates is obtained via Multiple Agree with the head v, while the head Pred does not assign case.

<sup>&</sup>lt;sup>96</sup> It has been proposed that the instrumental case on Russian predicates is a lexical case checked by the head Pred at Merge, whereas the nominative case is a structural case checked by the head T after predicate raising to Spec-TP under the assumption of multiple specifiers (Bailyn, 2001; Bailyn & Citko, 1999; Roy, 2013).

# 5.6 Summary

This chapter provides an analysis for case and agreement in the Arabic predicational copular clause based on agreement theories in the MP. It starts by presenting an overview of case and agreement facts about the Arabic predicational clause and by outlining the major theoretical tools on which the analysis is based. Next, it shows my analysis, which suggests that the agreement and nominative case on subject DPs and their predicates in verbless sentences are obtained via Multiple Agree with T. In contrast, the agreement and accusative case on subject DPs and their predicates in predicational clauses involving the copular verb KWN result from Multiple Agree with v. I suggest that the case on subject DPs may change in the course of a derivation by other mechanisms, such as the complementizer *2inna*, which assigns a lexical accusative case to a DP upon Merge, and the cyclic agreement between a DP in Spec-vP and T, which results in nominative case on this DP. These two mechanisms are based on the assumptions of Multiple Case and the abandonment of the activity condition. The chapter ends by discussing several merits of the analysis, such as predicates require case other than the default case, the head Pred does not assign case, and agreement in φ-features and case between subjects and predicates can be explained via Multiple Agree without further functional phrases.

## **Chapter 6 Conclusion**

This chapter concludes the thesis by summarizing the conclusions reached in the foregoing chapters. I also discuss some implications of the analyses provided in this thesis and offer suggestions for future research.

# **6.1 Conclusions**

The main goal of this thesis has been to characterize and analyze the various Arabic copular clause types. Specifically, the thesis has examined the predicational, specificational, identificational, and identity copular clauses in Arabic. It also has examined the taxonomic status of the copular clause with a postcopular definite description and the nature of the PE in Arabic copular clauses. The thesis then has taken a closer look at the predicational clause type, focusing specifically on the copula *KWN*, the subject NP, the nature of the SC, and the agreement and case in this type of copular clause. The next few paragraphs summarize the preceding chapters.

In Chapter 3, I have provided an analysis of Arabic copular clauses that classifies them into two types: the predicational clause and the identity clause. The two clauses differ in the type of SC they contain, with a PredP in the predicational clause and a FP in the identity clause. The specificational clause, the identificational clause, and the clause with a postcopular definite description are all considered subtypes of the identity clause. This analysis is supported by several distinguishing properties, including the PE, VP ellipsis, complements of the verb *consider*, and coordination. Close examination of all of these features indicates that the predicational clause behaves differently from the other copular clause types and that the specificational clause, the identificational clause, and the copular clause types and that the specificational clause, the identificational clause, and the copular clause with a postcopular definite definite description bear affinity with the identity clause. I have suggested that the PE, which

appears in nearly all Arabic copular clauses except the predicational clause, is a realization of the F head in the structure of the identity clause. The impossibility of the PE in a predicational clause is attributed to the presence of predicative expressions in this type of clause. The PE is obligatory only in an identity clause consisting of proper nouns in order to avoid ambiguity, and is otherwise optional. Finally, I have argued that the Arabic copular clause with a postcopular definite description is not categorically an identity clause, but could rather be interpreted as a predicational clause on the condition that it does not include a PE.

In Chapter 4, I have argued that Arabic has a single copula KWN, which originates in the head v and then raises to T. It may also raise to C if C is not lexically occupied. However, in the structure of the Arabic verbless sentence, which lacks the copular verb KWN, I have assumed the absence of the vP layer. Next, I have suggested that the definiteness constraint on the subject of Arabic predicational clauses follows from the referentiality and topicality requirements on the subject of a predicational clause. Definite nouns, proper nouns, and pronouns can function as subjects of Arabic predicational clauses because they are referential and can be topics. However, indefinite nouns are not allowed as the subject of an Arabic predicational clause because they are less referential and cannot serve as topics. Finally, I have presented some justifications for the use of the FCH (specifically the PredP), and not the SH, in my analysis of Arabic predicational clauses. The FCH is less problematic than the SH because it can explain the conjunction of predicative expressions of different lexical categories and the fact that predicates can undergo Wh-movement. Additionally, the PredP has been used in many recent works on copular clauses and is similar to other functional categories. The PredP also clearly defines the syntactic and semantic predicational relation between a subject and its predicate and provides a unified structure for all nonverbal predicates.

In Chapter 5, I have provided a new analysis for case and agreement in the Arabic predicational copular clause based on agreement theories in the MP. My analysis suggests that the agreement and nominative case on subject DPs and their predicates in verbless sentences are obtained via Multiple Agree with T. In contrast, the agreement and accusative case on subject DPs and their predicates in predicates in predicational clauses involving the copular verb *KWN* result from Multiple Agree with *v*. The analysis also suggests that the case on subject DPs may change in the course of a derivation by other mechanisms, such as the complementizer *2inna* which assigns a lexical accusative case to a DP upon Merge, or the cyclic agreement between a DP in Spec-*ν*P and T, which results in nominative case on the DP. These two mechanisms are based on the assumptions of Multiple Case and abandonment of the activity condition. This proposed analysis of case and agreement in the Arabic predicational copular clause has several virtues. For one, predicates in Arabic require case other than the default case, the head Pred does not assign case, and agreement in φ-features and case between subjects and predicates can be explained via Multiple Agree without further functional phrases.

# 6.2 Implications and future work

The analyses of Arabic copular clauses provided in this thesis have several implications; some of which have already been stated. Here I elaborate on some of these implications. First, by classifying Arabic copular clauses into only two types, specifically the predicational clause and the identity clause, I have attained one of the main goals of recent works on copular clauses which have all attempted to condense the number of copular clause types in various ways. That is, my analysis is compatible with the analyses that have treated specificational and identificational clauses as an identity clause. Second, the analysis I provide of the PE as a

realization of the identity predicate, i.e., a realization of the F head in the structure of the identity clause, is more universal than previous analyses. In recent literature, the extra pronoun found in copular clauses in other languages, for example Irish and Hebrew, has also been reexamined and reanalyzed as a realization of an identity predicate.

Third, I assume that the copula *KWN* originates in the verbal head *v*. This assumption rests on several pieces of evidence, which at the same time dispute other analyses that treat the copula as an auxiliary base-generated in the heads Pred or T. Also, this assumption maintains the basic notion of traditional Arabic grammar, which describes the copula as a defective verb, and the standard assumption in generative syntax, which treats the copula as a verb. Fourth, the explanation I provide for the definiteness constraint on the subject of Arabic predicational clauses is based on semantic and pragmatic conditions, i.e., it follows from the referentiality and topicality requirements on the subject of a predicational clause. As we have seen, these semantic and pragmatic conditions interact with syntax to explain this constraint. I believe that syntax alone is not sufficient to account for this complex constraint.

Fifth, the use of the FCH, specifically the PredP, in my analysis of Arabic predicational clauses has some advantages over use of the SH. As stated earlier, it is less problematic than the SH and is similar to other functional categories. Use of the FCH also provides a unified structure for all nonverbal predicates, including NPs, APs, and PPs. Finally, the new analysis I provide for case and agreement phenomena in the Arabic predicational copular clause via the Multiple Agree operation has several merits. As discussed previously, it treats predicates, both NPs and APs, as arguments which all require case. This case, however, should not be the default case. This analysis also does not require an additional functional phrase in order to explain case and agreement in the Arabic predicational clause.

In the rest of this subsection, I provide a few suggestions for future research on the Arabic copular clauses which were not covered in this thesis due to limitations on space, time, and scope. First, the identificational copular clause in Arabic, as well as in other languages, may consist of a demonstrative pronoun and a nominal expression, as shown in (1).

(1) haaðihi Hind-un this Hind-NOM 'This is Hind.'

In the literature, the status of this type of copular clause has not yet been made clear. To illustrate, Higgins (1979) classifies it as an identificational clause. He mentions that it may be treated as an identity clause since both of a deictic phrase and a proper noun are referential. In contrast, Mikkelsen (2005) analyzes this copular clause as a specificational clause because it behaves similarly to the specificational clause in several respects such as with tag questions. In fact, the status of this copular clause is a topic I would like to explore in future research.

Next, in my account of the definiteness constraint on the subject of Arabic predicational clauses, I have briefly discussed the existential sentence in Arabic. The Arabic existential sentence and its syntax and semantics is a significant topic that deserves a complete study. It may be that existential sentences differ from locative predication in Arabic, and thus should be analyzed differently, i.e., they should not be analyzed as copular SCs.

Another point deserving of more research is the possible occurrence of quantificational DPs as the subject of Arabic predicational clauses, as shown in (2). Quantificational DPs cannot be considered of type <e>, i.e., they do not refer to particular individuals. This fact raises a question for the referentiality condition which I have provided to explain the definiteness constraint on the subject of Arabic predicational clauses. Why are quantificational DPs, which are not referential, allowed as the subject of Arabic predicational clauses?

(2) ba<sup>c</sup>d<sup>c</sup>-u r-ridʒaal-i ?aððkiiyaa?-un some-NOM the-men-GEN smart.Masc-Pl-NOM 'Some men are smart.'

To answer this question, we need to have a detailed study of quantification in Arabic. In the literature, the behavior of quantifiers in Arabic, specifically their syntax and semantics, has not yet been made clear. One of the apparent issues associated with Arabic quantifiers is that their restrictor NPs, i.e., NPs that normally follow quantifiers, must be definite. They can be indefinite but have to be restricted in any other way, (see Hallman, 2009), for example by modification as shown in (3). The investigation of this issue, as well as many others with Arabic quantifiers, may help us to provide a better answer to this question.

(3) ba\dfi u t\u00edullab-i l-d\u00edullaami\u00ed-at-i sa\u00edully-uuna some-NOM student.Masc.Pl-GEN the-university-Fem.Sg-GEN Saudi-Masc.Pl.NOM 'Some university students are Saudi.'

Additionally, it has been argued in the literature that the Pred head in the structure of a predicational clause is lexically realized in several languages, including English, Russian, Norwegian, Welsh, Korean, Polish, and Japanese. In this thesis, I have briefly shown that in Arabic, specifically in SC constructions, the Pred head may be lexically realized, but I have not discussed this point in detail, as it requires a thorough understanding of Arabic SC constructions. I assume that predicational clauses in Arabic dialects may provide examples that explain the lexical realization of the Pred head. The realization of the Pred head is a current topic in the literature.

Finally, in this thesis I have adopted the stance of Aoun and Benmamoun (1999), Aoun et al. (2010), and Aoun et al. (1994) and assume that the copular verb *KWN* may raise from T to C, or to any functional head higher than the subject DP in Spec-TP, in order to derive VS word

order. This raising needs further explanation as it is not exactly obvious what triggers copula raising. This is one of the significant topics that I would like to explore in future research.

In short, the present thesis has provided a comprehensive characterization and analysis of Arabic copular clause types by addressing several important questions regarding Arabic copular clauses. The conclusions that have been reached in this thesis contribute in particular to the theory of copular clauses by adding to the literature a better understanding of the taxonomy of copular clauses, which was suggested by Higgins (1979). They also contribute in general to the study of Arabic syntax by adding to the literature a better understanding of Arabic copular clauses.

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