THE SYNTAX OF OSTENSIBLE CATEGORIES IN ARABIC

by

© Saleem Abdel Hady

A thesis submitted to the
School of Graduate Studies
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Linguistics
Memorial University of Newfoundland

Date 2020

St. John’s Newfoundland

ABSTRACT

This dissertation examines the syntax of ostensible categories, categories whose surface form disguises their syntactic behavior, in Arabic, and whether Speech Act Projections (SAPs) impact their categorization. The study examines two types of ostensible categories: ostensible lexical categories (OLCs) and ostensible grammatical categories (OGCs). OLCs lexical categories include a set of lexical items that traditional Arab grammarians refer to as *ʔism ʔal-fiʕil* 'Names of Verbs' (NoVs). OGCs compromise functional items that have received little attention in syntactic investigations due to their multifunctional behavior. The study utilizes the Minimalist Program for data analysis.

The contributions of this dissertation are three-fold. First, it refines the previous categorization of ostensible categories and settles the debate regarding their syntactic category. Second, the dissertation presents evidence for the use of allocutivity and expressivity in the language. Despite their importance, these phenomena have not received sufficient attention in the literature. Third, the study offers a new mechanism for understanding how non-peripheral particles ground information syntactically.

Dedicated to OLCs, chapter three shows that the data requires that NoVs originate in a position appropriate for verbal roots, but that they move to a higher position where they are unlike from regular verbs. The high landing site is connected with allocutivity in the Arabic language and highlights its impact on categorization. The bottom-line that sets allocutivity as a vital component in categorization is that allocutive exponents do not have thematic roles.

Chapter four examines four types of OGCs: confirmatory particles, attitudinal particles, ostensible complementizers and call particles. By examining the function and syntactic position of those particles, the study provides evidence for their association with a Grounding Projection.

Given the nature of the first three types, I propose a mechanism for grounding valuation. I show that SAPs have unvalued but interpretable features of grounding. The unvalued grounding feature scans for a valued grounding goal, the syntax links grounding markers with the grounding layer, regardless of their linear distance. The fourth type highlights the impact of allocutivity on generating warning calls. The final chapter opens new areas of research.

ACKNOWLEDGMENTS

After the praises and thanks to Allah, I would like to express my appreciation to many people without whom this work would not have come into being.

My special thanks go to my supervisor, Dr. Phil Branigan, for his valuable and constructive comments during the development of this research. His willingness to give his time so generously is very much appreciated. Without his patience and continuous assistance, I could never have completed this work. I have been very fortunate to have Dr. Phil as my supervisor.

Special thanks go to my dissertation committee members, Dr. Nicholas Welch, Dr. Douglas Wharram, and Prof. Jila Ghomeshi, for their insightful comments and suggestions, which improved the quality of this dissertation. I appreciate all the time you spent on reading my work.

I am greatly indebted to Dr. Carrie Dyck for her support. I wish that my words of thanks and appreciation express how much I am grateful for her. Thank you, Dr. Carrie, for everything :)

I wish to thank all my professors at the Department of Linguistics for their teaching and assistance. I have significantly benefited from their teaching and lectures. Thanks to them all for sharing their knowledge and expertise with me over the past years.

Many thanks are to Dr. Sara Mackenzie and Dr. Gerard Van Herk for their supervision of my comprehensive exams.

I extend my appreciation to the reviewers of the 34th Western Conference on Linguistics, the 22nd Seoul International Conference on Generative Grammar, and the 56th Conference of the Linguistic Association of the South West, for their insightful comments on many parts of this work.

I would like to express my deepest gratitude to Dr. Osama Omari. Without his support, I would not have the courage to quit my job at Majmaah University and pursue my Ph.D.

Last but not least, many thanks are to my family who have had faith in me, supported me, and prayed for me. Special thanks are to my beloved Soumyia, who shared with me all the ups and downs of this journey. I love you all.

TABLE OF CONTENTS

List of Tables

List of Figures

Abbreviations

DET	DETERMINER
COMP	COMPLEMENTIZER
1,2,3	FIRST, SECOND, THIRD PERSON
ACC	ACCUSATIVE
ADDR	ADDRESSEE
ADV	ADVERB
AI	ANIMATE INTRANSITIVE
ALLOC	ALLOCUTIVE
AP	ATTITUDINAL PARTICLE
CAUS	CAUSATIVE
COP	COPULA
DIM	DIMINUTIVE
DM	DISCOURSE MARKER
DUR	DURATION
EMPH	EMPHATIC
F	FEMININE
FACT	FACTUAL MODE
FUT	FUTURE
GEN	GENITIVE
IMP	IMPERATIVE
INT	INTERJECTION
INV	INVERSE
JUS	JUSSIVE
LOC	LOCATIVE
M	MASCULINE
N	NEUTRAL
NEG	NEGATIVE
NOM	NOMINATIVE

NONAFF	NONAFFIRMATIVE
NoV	Name of Verb
NUN	NUNATION
O	OBJECT
OBV	OBVIATIVE
PAR	Particle
PL	PLURAL
PRES	PRESENT
PROG	PROGRESSIVE
PROX	PROXIMATE
PUNC	PUNCTUAL
Q	QUESTION PARTICLE
RSP	RESPECT
S	SUBJECT
SG	SINGULAR
SUBJ	SUBJUNCTIVE
TI	TRANSITIVE INANIMATE
TOP	TOPIC
V	VERB
VN	VERBAL NOUN
VNT	VENITIVE
VOC	VOCATIVE
WH	WH-WORD
PAST/PST	PAST

Chapter One

Background

1.1 Introduction

The study of a language begins with defining its parts of speech. This calls grammarians to set tools and define properties to distinguish those parts. Ibn Malik in his *Alfiyya*, a one thousand-rhymed poem of Arabic grammar composed in the 13th century and Aḍud Addain Alʾaġī in his *Risalat Al-waḍ*, commentaries composed in 1355, cited in Weiss (1976) and Owens (1989), have developed a three-fold classification system to distinguish the categories of the Arabic language. Their classification system operates upon three major categories: noun (*ism*), verb (*fiaʿil*), and particle (*ḥarf*). This system is comparable with those approaches that consider verbs and nouns as basic categories (Chomsky, 1970; Baker, 2003). However, those systems leave a class of items opaque because of their behavior.

For example, across several varieties of the Arabic language (e.g., Classical Arabic, Standard Arabic, Jordanian Arabic, Egyptian Arabic, Algerian Arabic, Tunisian Arabic, Iraqi Arabic, Omani Arabic, and others), *xuð* 'take' (1a) and *hāk* 'take' (1b) are synonymous. Those words are similar in ordering someone to take something. However, those words are syntactically different. That is, it is acceptable to negate the command of *xuð* 'take' (2a), but negating the command of *hāk* 'take' (2b) leads to ungrammatical structure.

1)

a. *xuð* *ʔal-kitāb-a.*
take DEF-book-ACC
'Take the book.'

b. *hāk* *ʔal-kitāb-a.*
take DEF-book.ACC
'Take the book.'

2)

a. *lā* *t-ʔxuð* *ʔal-kitāb-a.*
NEG.PAR 2-take DEF-book-ACC
'Do not take the book.'

b. **lā* *t-hāk* *ʔal-kitāb-a.*
NEG.PAR 2-take DEF-book.ACC
'Do not take the book.'

The syntactic behavior of *hāk* (1b) compels us revisit the categorization system of the Arabic language. This leads to this complication: parts of speech cannot be determined from their surface forms or meanings.

This dissertation explores such opaque categories. This includes two classes of parts of speech. The first class of words shows properties of nouns, verbs and interjections. Grammarians (e.g., Owens, 1989; Alshawa, 2006; Hasan, 2012; Levin, 2011) refer to this class as *ʾism alfiʿil* 'Name of the Verb' or *alḳālfa* 'the uncategorized' because of their apparent mixed properties. This class of words appears in Classical Arabic and Standard Arabic. It also appears in spoken varieties of Arabic such as Jordanian Arabic, Algerian Arabic, Palestinian Arabic and others. The example in (1b) illustrates this class of words in the Arabic language and its spoken varieties[1]. The second class of parts of speech includes particles in spoken varieties of Arabic. This class of words is prominent in language use. Such items contribute to discourse and reflect speakers' interaction or show their intentions, beliefs or attitudes. This dissertation refers to those classes as Ostensible Categories (OCs), categories that do not fit well in the system of the language.

This chapter is designed as follows. Section 2 presents a general overview of parts of speech in the Arabic language. This section presents two categorization systems in the Arabic language. Introducing those systems clarifies the nature of categories in this language and forms a base for introducing OCs. Section 3 defines *ostensible categories*. This section introduces two classes of

[1] Note that spoken varieties of Arabic do not inflect for case.

parts of speech that fit this domain: *ʾism alfiʿil* 'Name of the Verb' or *alḳālfa* 'the uncategorized' (ostensible lexical categories) and particles (ostensible grammatical categories). The section presents those properties that make those categories opaque for earlier categorization systems. Based on those properties, section 4 introduces the problem of the study, section 5 presents its significance, and section 6 highlights the questions that guide my analysis. Section 7 introduces generative models that qualify for data analysis. The section introduces the Minimalist Program (Chomsky, 1995) and its extension at the syntax-pragmatics interface. The section also introduces the Universal Spine Model (Wiltschko, 2014) and its expansion at this interface. Those programs help in forming a base for analyzing parts of speech from a generative perspective and they enable introducing the literature in subsequent chapters. In section 8, I set the assumptions that will guide this research. Section 9 describes the data of the study. Section 10 presents areas that this study will not cover. The final section presents the structure of this dissertation.

1.2 Parts of Speech in Arabic

Traditional Arab grammarians (Ibn Malik in his *Alfiyya* and Aḍud Addain Alʾaǧī in his *Risalat Al-waḍ*, cited in Weiss (1976) and Owens (1989)) have established two related categorization systems to define the categories of their language.

Ibn Malik in his *Alfiyya*, cited in Weiss (1976) distinguishes three parts of speech in the Arabic language: nouns, verbs, and particles. This system is descriptive and depends on *ʿalāmāt* 'observed features.' Based on an inductive examination of words, Ibn Malik sets descriptive features for those categories. The descriptive features of a noun are: "the genitive case, the nunation, the vocative, the definite article, the presence of a predicate (*musnad*) in relation to which a noun is a subject" (Weiss, 1976, p.23). The descriptive aspects of a verb are: "the suffixal *tāʾ* (as

in *faʿalta* ‘you did’) and the energetic *nūn*, [a suffix appears with verbs for emphasis]” (ibid). In his system, words that do not match features of nouns or verbs are classified as particles.

Table 1. Illustration of Ibn Malik’s description of nouns

Input	**Features**	**Output**
	Genitive Case	*fi ʾal-kitāb-i*
		in DEF-book-GEN
kitāb ‘book’	Definite Article	*ʾal-kitāb*
		DEF-book
	Nunation	*kitāb-un*
		book-NUN
	Diminutive Form	*kutayib*
		booklet.DIM
	Object	*qara ʾ-tu ʾal-kitāb-a*
		read-1SG DEF-book-ACC
	Subject	*ʾal-kitāb-u ʿala ʾal-kursi*
		DEF-book-NOM on DEF-chair.GEN

Table 1 shows that the input *kitāb* ‘book’ fits all pre-set features of nouns. In a similar way, Ibn Malik, cited in Weiss (1976, p. 23) defines verbs. To illustrate his definition of verbs, consider the following example.

Table 2. Illustration of Ibn Malik's description of verbs

Input	**Features**	**Output**		
	Feminine suffixes	*kataba-t*		
		wrote-3F.SG		
katab 'write'	Energetic suffix	*ʾaktuba-na*		
		write-EMPH		
	Perfective particle	*qad*	*ktab*	
		PFV.PAR	wrote	
	Negative particle	*lam*	*ya-ktub*	
		NEG.PAR	PRES-write	
	Subject	*kataba*	*ʾal-walad-u*	*ʾad-dars-a*
		wrote	DEF-boy-NOM	DEF-lesson-ACC
	Tense	*kataba*	*/ya-ktub*	*/s-yaktub*
		wrote	/PRES-write	/FUT-write

In Table 2, the input katab 'write' fits all pre-set features of verbs and contrasts with those of nouns. Therefore, Ibn Malik's system categorizes such a word a verb. Ibn Malik's system labels inputs that do not fit the specifications of nouns and verbs (i.e., what is left over) as particles. For example, qad is a particle because it does not fit those features of nouns or verbs.

Aḍud Addain Alʾaġī in his *Risalat Al-waḍ*, cited in Weiss (1976), enhances Ibn Malik's categorization system. His system does not depart from Ibn Malik's classification of nouns, verbs and particles. However, he depends on a rational description of categories rather than a descriptive one. Weiss (1976, p. 24) describes this approach as a "non-empirical and non-investigative." In this approach, a noun "is [a part of speech] which signifies a meaning in itself and does not qualify this

meaning as to time (i.e. past, present and future)" (ibid), a verb "is that [part of speech] which signifies a meaning in itself and qualifies the meaning as to time" (ibid) and a particle is that [part of speech] "which signifies a meaning in something else" (ibid) (the reader is invited to read Weiss (1976) for a thorough description of those features). In addition to verbs and particles, this approach includes seven classes of nouns: *ʾism al-jins* 'the generic noun'(3a), *ʾism al-masdar* 'verbal noun'(3b), *ʾism al-maštq* 'the derived noun'(3c), the proper noun (3d), the personal pronoun (3e), the demonstrative pronoun (3f), and the relative pronoun (3g) (Weiss, 1976, p. 25).

3) Seven types of nouns

a. *rajul*
a.man

b. *waḍūʾ*
ablution

c. *sāmiʿ*
person.listening

d. *salim*
Saleem

e. *huwa*
he

f. *hāḏā*
this

g. *al-laḏī*
DEF-that

(Based on Aḍud Addain Alʾaġī's description)

As we note, the two classification systems propose that nouns, verbs and particles are the only parts of speech of the Arabic language. Note further that those systems do not look at adjectives and adverbs as separate categories. For those systems, adjectives are nouns, and adverbs, prepositions, conjunctions and interjections are particles (Weiss, 1976, p. 23).

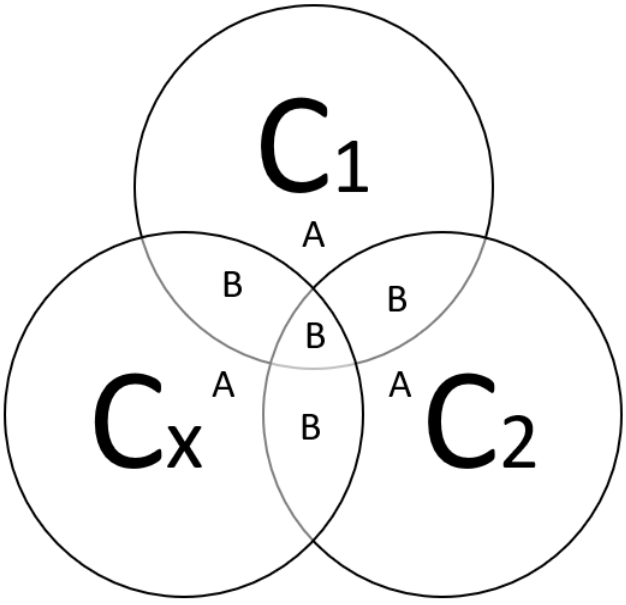
Owens (1989, p. 211) notes that Ibn Malik and Aḍud Addain Alʾaġī's systems are problematic because they have exceptions. He shows that not all nouns can have nunation or can have all case inflections. Additionally, he notes, in agreement with Aḍud Addain Alʾaġī's system,

that not all nouns have the definite article. The striking exceptional case appears with *ʾism alfiʿil* 'Name of the Verb' or *alḳālfa* 'the uncategorized'(see examples (4) and (5) above) and with other types of verbs such as verbs of exclamation, such as *ʾimīliḥahū* 'how.good.behave' and verbs of feelings, such as *biʾsa* 'defame' because such words show mixed properties.

1.3 Ostensible Categories

The term ostensible categories refer to those categories whose functions cannot be determined from their surface forms. These categories are opaque; in one sense, they appear to have one function based on their apparent form, yet in another sense, they do not fulfill the predicted function. The following diagram illustrates these categories. The diagram uses nouns (C1) and verbs (C2) to represent well-attested categories, and it creates a comparison with a third undefined language-specific element (Cx).

Figure 1. Ostensible Categories[2]



Based on the diagram, across and within C1, C2, and Cx, two possible categories can surface, A and B. The current work defines two types of OCs cross-linguistically: OLCs, mixed features

[2] Adapted from Abdelhady (2015)

categories (B) and multifunctional categories (A).

Category type A represents an element that can have more than one function; for example, it can be used as a noun (C1), as a verb (C2) or as a language-specific element (Cx). Elements that belong to category type A cannot be judged directly from their surface form. Another possible type of categories, type B, are those categories that are found to cross-share features with other categories.

Type B categories share features with nouns (C1) and verbs (C2) or with an uncategorized element (Cx). Therefore, type B creates an unusual behavior that does not fit with any pre-set features of a single given category at a time; the nature of this category is that it mixes features from more than one category, which makes its categorization within one domain impractical.

In the Arabic language, there are two types of opaque categories that fit this definition: *ʾism alfiʿil* 'Name of the Verb' (NoV) or *alḳālfa* 'the uncategorized' (Alawi, 2013; Alshawa, 2006; Hasan, 2009; Owens, 1989) and particles. This dissertation refers to the first class of words as ostensible lexical categories (OLCs), and it refers to the second class as ostensible grammatical categories (OGCs). Note that OLCs (and certain OGCs) seem to fall between category types, with morphosyntactic behavior that resembles more than one category. Other OGCs have never been assigned to a category other than "particle", a catch all term. This dissertation does not attempt a unified categorization of OCs as one category, but it shows that the syntax-pragmatics interface is a good tool for their analysis.

1.3.1 Ostensible Lexical Categories in Arabic

Ibn Malik's and Aḍud Addain Alʾaġī's system left a class of lexical items opaque because of their behavior. This class of words shows properties of nouns, verbs and interjections. The following examples illustrate this class of words.

4)

a. *hākum* *al-kitāb-a*.
take.NOV:2PL.M DEF-book-ACC
'Take the book.'

b. *ʾilīk* *al-katāb-a*.
take.NOV:2SG.M DEF-book-ACC
'Take the book.'

c. *dunk* *al-katāb-a*.
take.NOV:2SG.M DEF-book-ACC
'Take the book.'

d. *hayyā* *ʾilā* *al-madrsa*.
go.NOV:2SG to DEF-school
'Go to the school.'

e. *ħayyā* *ʿal*a ʾas-salāh.
come.NOV.IMP.2M.SG to DEF-prayer
'Come to prayer.'

5)

a. *šatān* *mā* *bayn* *al-ʿilm* *w* *al-jahl*.
differ.NOV.PL:1SG PART between DEF-knowledge and DEF-ignorance
'There is a difference between knowledge and ignorance.'

b. *hayhāt* *ʾal-ʿawd-u* *ʾilla* *ʾad-dull-i*.
impossible.NOV.PL DEF-going.back-NOM to DEF-disgrace-GEN
'Going back to disgrace is impossible.'

c. *hayhāt* *ʾan* *yaʾūdda* *ʾal-radjul-u*.
impossible.NOV.PL SUBJ.PAR come.back DEF-man-NOM
'It is impossible for the man to come back.'

d. *ʾāḳ-in* *min* *hal* *ħayyā*.
hurt.NOV.1SG-NUN from this life
'I complain from this life.'

Traditional grammarians (e.g., Alğārm & ʾmyn, 2010; Hasan, 2009; Ibn Alʾaṯīr, 1999, among others) describe this class of words inductively. They set four domains to describe common features of those words. They refer to the first domain as *tense and mood*. This class defines those lexical items based on their time and mood into past, present and imperative. This classification shows that those words are verbs because they describe time and mood. They refer to the second domain as *derivation*. This domain defines those lexical items based on their forms into templatic-

based (derived), non-derived and preposition/adverb-based. They refer to the third domain as *transitivity*. This domain defines those words based on their selection of objects into transitive and intransitive words. They refer to the fourth domain as *denotation*. This domain classifies those words based on their action into event-based words and sound-based (onomatopoeic) words.

6) Tense and mood
   a. *hajhāt* (past)
   b. *ʔuf* (present)
   c. *hāk* (imperative)

7) Derivation
   a. *hajhāt* (non-derived)
   b. *ħaðāri* (templatic-based)
   c. *ʕindak* (preposition-based)

8) Transitivity
   a. *hāk* (transitive)
   b. *ʔuf* (intransitive)

9) Denotation
   a. *hāk* (event-based)
   b. *ʔuf* (sound-based)

The inductive method captures a generalization based on capturing similar patterns and comparing them to nouns and verbs.

10)
   a. *šattān* *ʾal-ħaq-u* *w* *ʾal-bātil.*
      set.apart.NOV.PL.PAST DEF-truth-NOM and DEF-falsehood
      'Truth and falsehood were never met.'
   b. *hayhāt* *ʾan-njāħ-u* *bi-lā-ʿamal.*
      impossible.NOV.PL.PAST DEF-success-NOM with-out-work
      'Success was impossible without work.'

11)
   a. *ruwaydaka* *ʾidā* *taklam-t.*
      slow.down.NOV.DIM:2SG if speak-you
      'Slow down when you talk.'
   b. *ʿindak* *ʾil-walad.*
      near.NOV.IMP:2SG DEF-boy
      'Protect me from the boy.'

12)

a. *ʾuf-in* *min* *hāḏihi* *ʾal-ħayyāh.*
get.bored.NOV.PRES-NUN from this DEF-life
'I am bored of this life.'

b. *ʾāḵ-in* *min* *hāðihi* *ʔal-ħajjāh.*
hurt.NOV.1SG-NUN from this life DEF-life
'I complain from this life.'

This means that this classificatory system classifies those categories as verbs based on tense (past/present) (10) and mood (imperative) (11) (and probably other features). At the same time, this system also classifies those words as nouns because they show features of nouns. Those features include nunation, a nasal suffix that often appears with indefinite nouns, diminutive forms and plural forms, and prefixing a definite article before one of those lexical items (and probably other features). The inductive method describes *šatān* 'set.apart' as a verb because it shows a past interpretation, and this system describes *šatān* as a noun because it appears in a plural form (10a). The same applies to *hayhāt* (10b). A similar process applies to describing the word *ruwaydaka* 'slow.down' (11a). This system describes this word as a verb because it has an imperative interpretation. The system also describes this word as a noun because it appears in a diminutive form. The system describes *ʾufin* (12a) as a verb because it has a present interpretation. It also describes this word as a noun because of nunation. Note that this system is purely descriptive. Based on a set of items, grammarians sort out features of NoVs. I present those features in table 3.

Table 3. Nominal and verbal features of NoVs

Noun Features	**Applicability**	**Verb Features**	**Applicability**
Plural Forms	✓	Present Tense	✓
Nunation Suffixes	✓	Past Tense	✓
Definite Prefixes	✓	Imperative Mood	✓
Diminutive Forms	✓	Future Tense	✗
Subject Position	✗	Perfective Particles	✗

Object Position	✕	Negative Particles	✕
Genitive Markings	✕	Feminine Suffixes	✕
Nominative Markings	✕	Elliptic Use	✕
		Energetic Suffix -nun	✕

This description is fruitful, but it is not inclusive. That is, there are some syntactic patterns that call for revisiting this category. Those patterns appear in negation, for example (as I stated earlier).

13)

a. *ʾaʿṭī-nī ʾal-kitāb.*
give-me DEF-book
'Give me the book.'

b. *hāk ʾal-kitāb.*
take.NOV.IMP DEF-book
'Take the book.'

14)

a. *lā ta-ʿṭī-nī ʾal-kitāb.*
NEG.PAR 2SG-give-me DEF-book
'Do not give me the book.'

b. **lā ta-hāk ʾal-kitāb.*
NEG.PAR 2SG-take.NOV.IMP DEF-book
'Do not take me the book.'

They also show in other syntactic patterns that will lead us to depart from describing those words as pure nouns or verbs. Among those patterns is that NoVs impose restrictions on word order, they always come before other elements, they can precede a synonymous verb, and others. I illustrate some of those patterns below[3].

15) **(sa-ʾuħay-i) sa-ʾunadi ʿalā ʾṣ-ṣalāh.*
(FUT.PRT-call.NOV) FUT.PRT-call to the-prayer
'You have to come to the prayer.'

[3] This research will not focus on the analysis of the NoV *ṣah* because this NoV is archaic and, therefore, I have no access to the data to examine it in detail.

16)

a. *ʂah (ʾanʂit)* *ʾiḏā* *takalam* *walid-uk.*
listen.NOV.IMP (listen) if spoke.3M.SG father-your
'Listen if your father spoke.'

b. *ʾiḏā* *takalam* *walid-uk* *ʾanʂit* *la-hu.*
if spoke.3M.SG father-your listen to-him
'If your father spoke, listen to him.'

c. **ʾiḏā* *takalam* *walid-uk* *ʂah-in* *la-hu.*
if spoke.3M.SG father-your listen.NOV.IMP-NUN to-him
'If your father spoke, listen to him.'

The example in (15) shows an order for a hearer to answer call for a prayer. There are two synonymous words that serve that purpose, a verb and a NoV. There is a difference between those words once they interact with the future prefix *sa-* 'FUT.PRT.' It is acceptable to prefix this marker with a verb but not its synonymous NoV. The example in (16) shows another remarkable pattern. In conditional constructions, clauses can begin either with the independent clause or the dependent one. This is acceptable with verbs (16b) but not with NoVs (16c). This means that NoVs pattern with verbs only when the independent clause begins the conditional structure (16a). This problem seems to match the limitation on the use of temporal adverbs with NoVs discussed in section 3.2.4.

This section has presented NoVs in the Arabic language from an inductive perspective (Alshawa, 2006; Hasan, 2012; Owens, 1989, among others). Their description shows that this class of lexical items are like nouns and verbs in some respects. This class of words, however, shows remarkable patterns that differentiate them from nouns and verbs. This explains the debates over the nature of this category. In the Encyclopedia of Arabic Language and Linguistics (Lutz & Jong, 2011), researchers present NoVs as interjections (Eisenstein, 2011; Levin, 2011). Sibawayh (1970) lists this class of words as nouns that occupy a topic position. Owens (1989) views this class of words as verbs. Mubarrad (cited in Owens, 1988, p. 34) postulates that those lexical items are nouns occupying the position of verbs. In that regard, Owens (1988, p. 34) comments on NoVs by saying:

> Mubarrad explains the nominal verb [NoV][4] as a "noun put in the place of the verb and carrying its meaning and assuming the status of verb". When the nominal verb takes the place of verb it does not thereby become a morphological verb, though it does assume certain syntactic properties of verbs.

Owens (1988) highlights the importance of looking at NoVs from a syntactic perspective. His comment, however, does not capture all aspects of NoVs. If they are nouns that occupy a position of a verb, a unified analysis should explain why this position does not allow negating those nominals, and it should provide adequate reasoning for not classifying this class of words with *ʾism al-masdar* 'verbal noun' (3b). If they are verbs, is there any aspect that requires using those items instead of using a regular verb? These problems, among many others, leave NoVs without adequate justification about their nature.

1.3.2 Ostensible Grammatical Categories in Arabic

I use the term ostensible grammatical categories (OGCs) to refer to opaque particles, particles that do not fit clear grammatical functions, and multifunctional particles, particles that depart from their grammatical function and serve a pragmatic function instead. Those categories are opaque because they appear in a form that is frequently associated with a grammatical function, but they depart from that function and serve other functions instead. This means that one should expect that a pronoun, a negative particle, a complementizer, a conditional particle or any other grammatical element to depart from those labels. In my model, I refer to those elements as Cx. Note here that I deal with grammatical categories and associate them with a basic function. This reasoning is based on frequency and transparency. For example, *if* in English appears frequently as a conditional element. If this element departs from that function and serves other less frequent functions, it shows opacity and fits the description of OGCs. This section introduces OGCs in the

[4] NoVs are presented by almost nine descriptive titles and arguments across literature: Nouns, Verbs, Verbal Nouns, Gerunds, Participles, Names of Verbs, Exceptions, Interjections, and Particles. I adopt NoVs as a neutral term.

Arabic language and highlights their multifunctional nature. The study focuses on *ʾinna* 'that' and *ʾanna* 'that' and their use in Jordanian Arabic and Lebanese Arabic. It also explores opaque particles such as *ha*, *mū* and *walak* in other spoken varieties of Arabic.

Among the well-established grammatical categories in the Arabic language are complementizers (Ahmed, 2015; Jarrah, 2019; Shlonsky, 1997). Ahmed (2015, among others) describe the Arabic complementizers in line with a group of particles called *ʾinna waʾḵwātuhā* 'that and its sisters.' This group includes *ʾinna* 'that' and *ʾanna* 'that.' The basic function that qualifies those particles to function as complementizers is that they enable building complex constructions. That is, they appear as "canonical markers of subordination" (Corr, 2018). This means that those complementizers can introduce object clauses, predicate clauses or subject clauses. This appears in both Standard Arabic (17) and its spoken varieties (18).

17)

a. *samiʕ-tu* *ʾanna* *ʾar-riḍjāl-a* *wasal-u.*
heard.I COMP DEF-men-ACC arrived-3M.PL
'I heard that the men have arrived.'

b. *ʾaqul-u* *ʾinna* *al-banāt-a* *waṣal-na.*
say-I COMP DEF-girls-ACC arrived-3F.PL
'I say that the girls arrived.'

c. *ʾinna* *al-banāt-a* *waṣal-na.*
COMP DEF-girls-ACC arrived-3F.PL
'Indeed, the girls arrived.'

(Standard Arabic)

18)

a. *lagīt* *ʾid-dalīl* *ʾinn-u* *ʾil-walad*
found.1M.SG DEF-evidence COMP-3M.SG DEF-boy
sarag *ʔis-sajjāra*.
stole.3M.SG DEF-car
'I found evidence that the boy stole the car.'

(Jordanian Arabic)

(Jarrah, 2019, p. 94)

b. *ʾ*inn* ʾ*al-walad* *garaʾ* ʾ*id-daris*.
COMP DEF-boy read.3M.SG DEF-lesson
'The boy read the lesson.'

(Jordanian Arabic)

(Jarrah, 2019, p. 93)

The complementizer system in both Standard Arabic and Jordanian Arabic (and other varieties) are not similar despite using the same particles. I stop at only those differences that matter for this study. Ross (1970, among others) notes that in Standard Arabic, a complementizer can show in clause-initial position without any noticeable effect on interpretation. He iterates that by saying that structures that incorporate this pattern are "synonymous and in free variation" with those that do not. This means that (19a) and (19b) are synonymous, according to him.

19)

a. *al-banāt-u* *waṣal-na.*
DEF-girls-NOM arrived-3F.PL
'The girls arrived.'

b. ʾ*inna* *al-banāt-a* *waṣal-na.*
COMP DEF-girls-ACC arrived-3F.PL
'Indeed, the girls arrived.'

c. *ʾ*anna* *al-banāt-a* *waṣal-na.*
COMP DEF-girls-ACC arrived-3F.PL
'Indeed, the girls arrived.'

(Standard Arabic)

Ross' (1970) observation highlights that some declarative complementizers can optionally appear in clause initial positions, albeit with some restrictions on the choice of the appropriate complementizer that can occupy that position (19c). Jarrah (2019) shows this pattern does not apply to Jordanian Arabic and Lebanese Arabic. This means that those varieties ban clause-initial complementizers for subordination.

20)

a. *ʾal-walad garaʾ ʾid-daris.*
DEF-boy read.3M.SG DEF-lesson
'The boy read the lesson.'

(Jordanian Arabic)

(Jarrah, 2019, p. 93, adapted)

b. *lagīt ʾid-dalīl ʾinn-u ʾil-walad*
found.1M.SG DEF-evidence COMP-3M.SG DEF-boy
sarag ʔis-sajjāra.
stole.3M.SG DEF-car
'I found evidence that the boy stole the car.'

(Jordanian Arabic)

(Jarrah, 2019, p. 94)

c. *ʾ*inn ʾal-walad garaʾ ʾid-daris.*
COMP DEF-boy read.3M.SG DEF-lesson
'The boy read the lesson.'

(Jordanian Arabic)

(Jarrah, 2019, p. 93)

Albeit not stated, Ross' (1970) analysis suggests that using a complementizer does not trigger a complex interpretation of structures. Jarrah's (2019) analysis supports this observation, but Jarrah does not cover all patterns. Germanos (2013, pp. 150–151)[5] notices that those markers may actually appear in clause-initial positions. However, she notices that in such positions, those particles do not serve as markers of subordination. She argues that those particles serve as discourse markers (21).

[5] In the original source, some examples are not glossed. Glosses, therefore, are provided and modified to match the overall gloss patterns followed in this study.

21)

bi-n-nihaya *halla*ʾ *ʾiza* *naħdar* *film* *maṯ-an* *ʾiza*
in-DEF-end now if watch.1PL movie example-NUN if
baḥḍrh-u *bi-l-faransi* *baʃham-o* *kaʾanno* *ʕarabi* *ʕreft-i* *kif*
watch.1SG-it in-DEF-French understand.1SG-it COMP Arabic know-you how
↑ʾ*inno* *ʕarabe* *kaʾanno* *ʕam* *baħdar* *yaʔani* *ktir* *ʂurit*
COMP Arabic COMP PAR.PROG watch.1SG PAR much became.1SG
ʾ*inno* *mniħ* *bi-l-faransi.*
COMP good in-DEF-French
'At the end now if I am watching a movie, for example, if I am watching it in French, I understand it COMPL (as if) it were in Arabic, you know how, COMPL (Cx) Arabic COMPL (as if) I were watching, I become COMPL (Cx) good in French.'

(Lebanese Arabic)

(Germanos, 2013, p. 150)

In (21), two types of COMPL are realized. COMPL (as if) and COMPL (Cx). While COMPL (as if) function, in this example, as a subordinator, COMPL (Cx) has a different function; it shows an optional use in clause-initial position (Germanos, 2013, p. 151). The overall picture of complementizers confirms their status as OGC.

Germanos (2013, p. 151) shows that the omission of COMPL (Cx) in (18) does not affect structure (they are optional) and do not impact its truth values. Those discourse markers reflect attitudes of their speakers. Table (4) captures those differences.

Table 4. Germanos' (2013, p. 151) description of complementizers in Arabic

Features	Subordinator	Other Functions
Predicate Clauses	✓	✕
Subject Clauses	✓	✕
Object Clauses	✓	✕
Optionality	?	✓
Truth-Conditionality	✓	✕
Attitudinal	✕	✓
Initial Position	?	✓

The ostensibility of COMPLs shows up in whether a COMPL is being used to form complex structures or if it is just being used for pragmatic purposes.

While the previously mentioned elements can give predictions toward OGCs that appear in C1 and C2, OGCs can also target Cx, a particle that is not well-defined, and it is hard to translate; nevertheless, it modifies and affects utterances. In Jordanian Arabic, several Cx elements appear. In (22), for example, *walak* creates a threatening call to urge the hearer to answer truthfully. Translating this word is hard because its use is optional. Another element that intersects between C1 and Cx is *mū*. This element is multifunctional. It appears as a negation marker or as a confirmatory marker. The same applies to *hā*; it serves as an attention getter or as a confirmatory marker. Those confirmatory functions have hardly received any attention in the Arabic literature. The following examples illustrate those words.

22)

walak	*yā*	*walad*	*wein*	*bid-ak*	*trūħ*?
PAR:2M.SG	VOC.PAR	boy	where	want-2M.SG	go.2M.SG

'PAR, boy, where are you going?'

(Jordanian Arabic)

23)

a.

ʾinta	*sāħī*	*mū.*
you	awake.2M.SG	PAR

'You are awake, right.'

(Jordanian Arabic)

b.

kam	*hwa*	*jamīl*	*ʾan*	*nasūma*	*ramadān,*	*hā*↑?
how	he	nice	SUBJ.PAR	fast.1PL	Ramadan	PAR

'How nice that we fast Ramadhan, eh'

(Iraqi Arabic)

(Albanon, 2017, p.109)

The use of such elements is not clear from a syntactic point-of-view because Cx elements depend on subtleties in language use. Additionally, OGCs can appear in wh-words, conjunctions, pronouns, and other grammatical elements. Nevertheless, their ostensible behavior is of a different nature. For example, a wide range of particles in Arabic are polysemous: *ʾiḏā* (C1: 'conditional if' , C2: 'sudden if'), *wa* (C1: coordinator 'and', C2: coordinator 'with', C3: initiating particle 'and', CO(other functions)), *law* (C1: wishing particle 'I wish if it were the case', C2: particle 'just only',

and *ʾilla* (C1: except ‘but’, C2: coordinator ‘but’), and in spoken varieties, *šu* (C1: wh-word ‘what’, C2: vocative particle, CO) and the like. The list is not exhaustive.

1.4 Problem of the Study

The thesis highlights two major problematic types of OCs in Arabic: OLCs and OGCs. OCs are challenging cross-linguistically. It is not clear how OCs can be classified, categorized, and analyzed from a generative point of view. Before predicting how the human mind operates on syntactic structures, researchers have focused on defining and setting clear-cut definitions of how categories of their languages are shaped and created, hoping to arrive at a universal description of categories (Baker, 2003; Haegeman, 2014a; Owens, 1989; Welch, 2016; Willis, 1988; Wiltschko, 2014b).

The most agreed upon universal lexical categories to exist across all languages are nouns and verbs (Baker, 2003; Owens, 1989, among others). Nevertheless, lexicalizing nouns and verbs can show some language-specific behaviors (Borsley et al., 2007; Li, 2004; Owens, 1988, 1989; Willis, 1988); some lexical items show a mix of features and, therefore, their classification within one domain is challenging. In the Arabic grammar, NoVs appear as a distinct category, a category that called grammarians to describe as *exceptions* to the categorization system of the language and, recently, to generative approaches. Two problems are associated with NoVs. First, NoVs show not only a categorization problem but also impose several restrictions on syntactic constructions (such as negation and topicalization). The second problem that is associated with NoVs is that most of them appear in the imperative mood. Imperatives should be c-commanded by a pragmatic head to map addressees (Alcazar & Saltarelli, 2014; Hill, 2013a, 2013a; Isac, 2015). If that is the case of imperatives, another layer of complexity is added to the composition of NoVs; in fact, while Alcazar and Saltarelli's (2013) and Hill's (2013) claim might be governing clear-cut imperative

verbs, it is not clear how a pragmatic head would govern a built-in imperative interpretation that is linked with NoVs as lexical items, rather than full-fledged verbs that are able to interact with modality.

The second problem that the research highlights is related to OGCs in Arabic. Two types of OGCs create the problem: (a) multifunctional well-defined GCs and (b) particles. The problem that is associated with multifunctional grammatical elements is that these elements cannot be defined simply by looking at their sounds or meanings. Thus, it is hard to predict how elements function; a pronoun can be disguised as a copula; a determiner can be disguised as wh-elements and the like. Multifunctional elements in Arabic are not well understood from a generative perspective, nor how their syntactic status is realized.

The traditional classification system of Arabic shows limits in categorizing elements that cannot fit the description of nouns and verbs as particles. To restate that, in Arabic grammar, a particle is simply "what is leftover" (Owens, 1989). The problem is not exclusive to Arabic classification systems. In fact, it is a fundamental problem with defining particles, let alone indulging them in syntactic analysis. That is apparent with how researchers deal with particles.

> The term 'particle' does not in any way represent a uniform or clearly defined category. Restricting ourselves at this point to formal approaches to syntax, the label 'particle' covers what may appear to be a set of elements which are mostly identified negatively, in that, for instance, they lack inflectional endings, or they seem to occupy fixed positions. Because particles very often encode properties relating to discourse effects and information structure, it is often impossible to fully characterise their function in terms of a sentence-oriented grammar. [However,] all authors gathered here assume that particles have a place in the sentential syntax and all authors develop a precise account for a restricted set of particles. While authors do not adopt identical theoretical positions on the nature of particles, they converge in the assumption that particles can be analysed in terms of sentence-based syntax. (Biberauer et al., 2014, pp. 1–2)

The very description of particles highlights their problematic nature; it also highlights another problem; the way researchers look at particles is too narrow; it is restricted to those elements that

lack inflections or are fixed to specific positions. Saying so means that particles can be inflected or can have a different nature, but they are overlooked.

In the Arabic language, particles, and hence any element that has undergone pragmaticalization, are overlooked in most syntactic treatments. The case of complementizer discussed above is typical. Germanos (2013) points out that "in the majority of their occurrences, there seems to be no apparent syntactical reason for the occurrence of complementizers, as they do not link a dependent clause to the main one." The problem, therefore, is twofold: due to their nature, particles in Arabic are left without precise categorization and adequate analysis, and other elements that have undergone a process of pragmaticalization are ignored from syntactic treatments.

1.5 Significance of the Study

The study is significant from both interlinguistic and intralinguistic perspectives. The intra-linguistic importance of the study lies at the heart of exploring categories that have been considered exceptional in the Arabic language. It is, therefore, worthy to look back at the categorization system of the Arabic language and to examine those categories that are overlooked in considering the role of discourse participants and their effect on structures.

In addition, the study is significant at the interlinguistic level. If the Language Faculty (LgF) operates in a universal fashion, examining OCs helps in exposing current syntactic-pragmatic models to a new set of data from one of the Semitic languages, Arabic. The categories put forth in this study also provide a new challenge for the most recent proposals; it tests the predictions made toward understanding categories through looking at their cognitive functions (Wiltschko, 2014b), and it also provides subtle tests for models that highlight the role of discourse participants in the syntax of imperatives (Alcazar & Saltarelli, 2014; Isac, 2015).

1.6 Questions of the Study

The background of the study so far has introduced OCs and the problems that are associated with their categorization and analyses cross-linguistically. In Arabic, several questions are asked to target and indulge OLCs and OGCs in syntactic analyses. Questions about OLCs are presented in order as follows.

(i) What is the syntactic mechanism that generates and lexicalizes NoVs?

(ii) Where do NoVs fit in the universal pattern of lexical categories?

(iii) Why do NoVs restrict the distribution of other elements?

(iv) What is the impact of SAPs on NoVs?

The second set of questions target OGCs. They address two types of elements: multifunctional pragmaticalized categories and particles that are not clearly defined. The questions of the study continue as follow.

(v) How do pragmatic particles in Arabic fit the claim that those particles can be analyzed in terms of sentence-based syntax?

(vi) What is the impact of assuming that grounding is a feature?

While the questions are presented in order, their scope focuses mainly on understanding the nature of OCs in Arabic. To set hypotheses and predictions about the nature of these categories I introduce the mechanisms of two generative approaches that are proposed toward understanding OCs from a universal perspective: The Minimalist Model (Chomsky, 1995; Haegeman, 2014a; Haegeman & Hill, 2013; Rizzi, 1997) and The Universal Spine Model (Thoma, 2016; Wiltschko, 2014b; Wiltschko & Heim, 2016).

1.7 Generative Models

Categories can function in ways different from what they surface as in the syntactic structure; this leads to the premise that lexical and grammatical categories are merely neutral roots that gain their functions through syntactic operations or their syntactic contexts (De Belder, 2011; Wiltschko, 2014b). Thus, because of their ostensibility, some categories have been described as syncretistic, multifunctional, or fake. Several generative-based frameworks have been established to capture the structure of OCs. Two approaches are presented. The first approach examines ostensible grammatical categories through their functional associations. The second approach analyzes ostensible grammatical and lexical categories through their internal semantic composition. The following section presents an overview of the machinery of these frameworks.

1.7.1 The Minimalist Model

Chomsky's (1999,1995) approach has created a fundamental baseline for understanding how the human mind processes languages from a universal perspective. The approach has established several principles and examined the effect of parametric variation across languages. Within that domain, languages share some universal mechanisms for generating structures, yet vary in some language-specific patterns; the variation, nevertheless, is never random and is governed by a set of parameters. One of the fundamental universal cognitive operations is '*merge,'* a process that enables combining a limited set of elements in a pairwise '*binary'* fashion, in a '*recursive*' way, for creating large-infinite constructions.

This approach, ever since, has been exposed to a wide range of constructions across different languages, and there have been several attempts toward looking at its ability to deal with not only constructions at the level of clauses and phrases, but also with new set of constructions above the level of clauses (Haegeman, 2014a; Rizzi, 1997) and below the level of words (Marantz, 1997; Starke, 2009).

Nevertheless, a new level of expansion has emerged to address a need toward understanding the effect of discourse participants on the grammaticality of structures (Akkus & Hill, 2018; Haegeman, 2014a; Haegeman & Hill, 2013, 2013; Hill, 2007b, 2013b). The effect of discourse participants on grammaticality is part of a performative analysis (i.e., Speech Acts[6]) (Ross, 1970; Speas & Tenny, 2003). Such effects are too fundamental to be ignored; in specific languages, such as Japanese, for instance, it is proved to be at the core of understanding agreement relations beyond person and number features (Miyagawa, 2017). It seems worthwhile, therefore, to present Speech Act Projections (SAPs) and their relation to OCs.

Ross' (1970) view is that all syntactic clauses should be governed by some hidden performative verbs that restrict the illocutionary force of the utterance sets the foundation of SAPs. For example, in giving a command, a hidden performative verb or construction must be controlling the structure of the command. See the following example.

24)

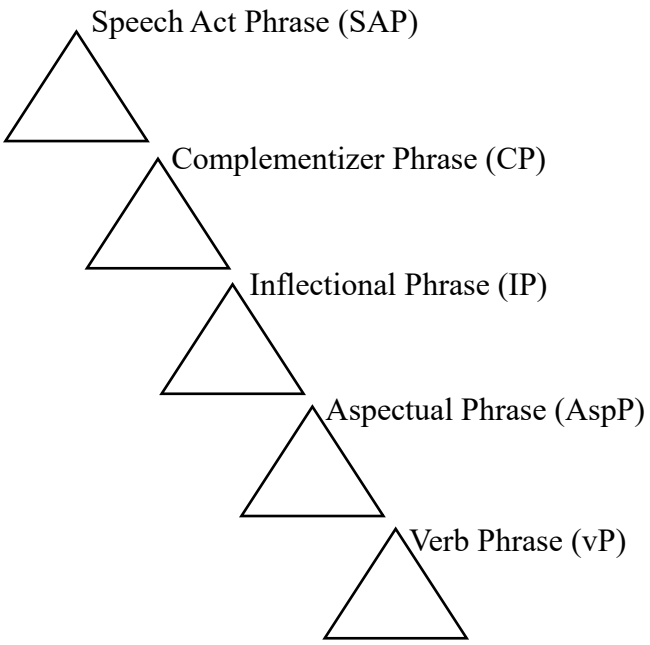
a. Open the door.
b. [I order you to] open the door.

The approach, however, has received several criticisms; the arguments against the approach have been that there is no guarantee to the types of performative verbs that should govern structures.

Speas and Tenny (2003) revive and enhance Ross' (1970) idea; they claim while it is true that defining performative verbs is not clear from a generative perspective, all languages show some patterns that call for mapping discourse participants, i.e., SPEAKERs and HEARERs. Based on that, they propose a new layer to govern clauses, SAPs. See the following representative hierarchical ordering.

[6] Even though the effect of discourse participants widens the gap between FI and discourse peripheral projections and calls for linking them along with the proposed attempts of reconciliation (cf., Branigan, 2020), their effect on the interpretation of elements (Collins & Postal, 2012b) and their relation to *phases* are part of current inquiries (cf., Biberauer, 2018).

25)



(Speas and Tenny, 2003)

Investigations on the nature of SAPs has proposed that SAPs can involve syntactic *shells* and *layers* (Haegeman & Hill, 2013; Hill, 2013a). Other models have also looked at the role of discourse participants from a different perspective. The following subsection covers SAPs and their relationship to *grounding* in discourse (Clark, 1996; Clark et al., 1983; Wiltschko & Heim, 2016).

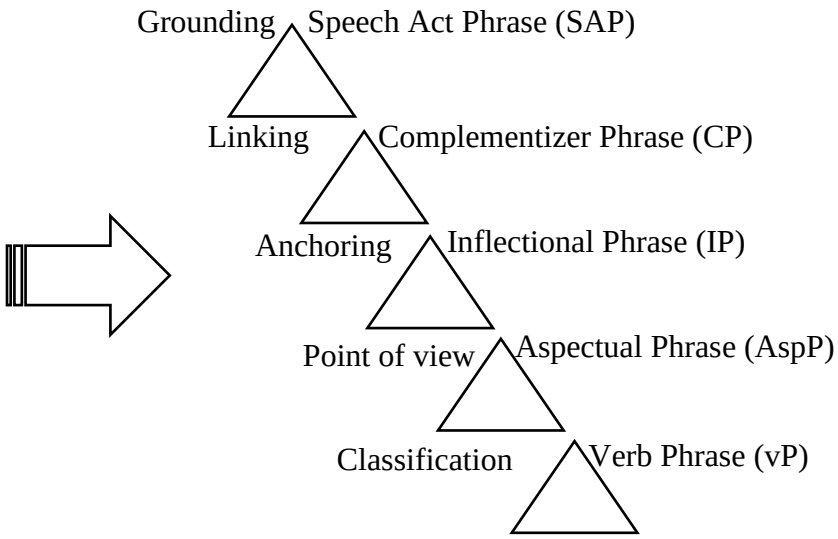
1.7.2 The Universal Spine Model

The Universal Spine Model (USM) (Wiltschko, 2014b) is introduced as a generative model that defines grammatical categories based on the cognitive functions that grammatical categories express in different syntactic contexts. The model views categorical ostensibility as a pattern that emerges when the functions of categories are not recoverable from their semantic and phonological composition but through their context. In that sense, the model targets ostensible grammatical categories that can perform more than one function by suggesting a universal set of functions that are hierarchically ordered in relation to syntactic models that explore the structure of CPs

(Chomsky, 1995), DPs (Abney, 1987), and DemPs (Bliss & Wiltschko, 2014, 2018; Ritter & Wiltschko, 2014; Wiltschko, 2014b).

Technically, the approach looks at categories (*c*) as a composition of sounds (π) and meaning (Σ) that are defined through a set of universal cognitive functions (κ): Grounding, Linking, Point of View, Anchoring and Classification (Thoma, 2016, p. 34; Wiltschko, 2014b, p. 28)[7]. The universality of functions is argued to be born out of the universality of structural orderings. The following diagram is representative.

26)



The role of each layer is described in relation to some cognitive functions. Wiltschko (2014b, p. 34) describes them as follows.

[7] The model is originally introduced with four functions. Two additional layers are later introduced to the spine: Grounding (Thoma, 2016) and Reference (Windsor, 2016).

> The lowest layer (κ: *classification*) is responsible for the classification of events or individuals; the second layer (κ: *point-of-view*) is responsible for introducing a viewpoint relative to which the event or individual is presented. The next layer (κ: *anchoring*) is responsible for anchoring the event or individual to the utterance; this may result in either deictic or anaphoric anchoring. […] the spinal function of the [penultimate] layer (κ: *discourse linking*) is to establishing a relation between the proposition or referent and the ongoing discourse. And [the topmost layer (κ: *grounding)* is responsible to relate an utterance to discourse participants (Thoma, 2016)].
>
> (Wiltschko, 2014b, p. 34)

In Wiltschko's (2014b) terminology, the association of a Unit of Language (*UoL*) (i.e., a part of speech) with a cognitive function (κ) shapes categories (*c*). She sets this equation for such a purpose: $c = UoL + \kappa$. In a nutshell, Wiltschko (2017c) shows that if a grammatical part of speech, for example, appears as an element that assesses the set of shared beliefs and ideas (i.e., *common ground* (Clark, 1996)) between a speaker and his/her hearer, this part of speech associates with κ: Grounding and functions as a confirmatory particle. If this part of speech appears as a positive or a negative answer to a polar question, this element associates with κ: Linking and functions as a response particle.

Wiltschko (2014b) argues that this approach diverges from the Minimalist Program (Chomsky, 1995). However, despite this claim that I do not take any stand on, it is useful to equip the syntax-pragmatics interface with a grounding function (or projection). In this work, introducing the USM will help only in understanding the literature and in having a second reading for my data.

1.8 Guiding Assumptions

The following notions will guide this study:

(i) NoVs have a verbal component that is disguised by SAPs.

(ii) The imperative interpretation of NoVs is due to allocutive markers, while the non-imperative one is related to expressivity.

(iii) The Grounding Projection influences the functions of OGCs.

(iv) Grounding valuation should not be limited to peripheral positions.

1.9 Data of the Study

This research is a qualitative study. I collect data in a variety of ways, including observation, textual analysis of grammar books, stories and written research articles. Those resources vary depending on the part of speech that I am dealing with because this research presents data compiled from spoken resources. However, those resources are from different points in time. This means that some forms appear either in early spoken Arabic or modern spoken Arabic.

Note here that early spoken Arabic can overlap with modern spoken Arabic. This appears clearly with judgments of native speakers of the Arabic language about certain parts of speech. At some point, native speakers' judgements of early spoken forms (e.g., *hāk* 'take') differ from historical results. Their judgement shows that *hāk* 'take' is a dialectical form of the standard form *xuð* 'take.' This shows that this form has lost its original identity. That is, it is a classical form that becomes a dialectical spoken form but not a written one (although, it is documented in written resources). This is important for this study because it means that this form is originally a spoken form and continues to have this status. This makes a neat departure from all studies that restrict classical Arabic to written resources. This means that native speakers of the Arabic language and its spoken varieties (Jordanian Arabic, Lebanese Arabic, Algerian Arabic, Tunisian Arabic, Moroccan Arabic, Egyptian Arabic, Gulf Arabic and others) can judge the acceptability of using such forms because such forms appear in their spoken dialects. This is the case of the majority of NoVs that I highlight in this study. Therefore, the judgement of native speakers is inseparable from understanding parts of speech. Native speakers' judgment about the collected data and the examples mentioned based largely on my intuitions (as a native speaker of the Arabic language) accounts for the acceptability of my data and its interpretation.

The second part of this dissertation has qualitative data from written resources that document spoken language in Jordanian Arabic, Lebanese Arabic, Iraqi Arabic, Omani Arabic, Yemeni Arabic and others. This use of multiple varieties is necessary because I aim to compare those varieties and use them to build a unified analysis and because I believe that the use of such mechanisms must appear across all those varieties. Germanos (2013, p. 150), for example, shows that complementizers can function as discourse markers in Lebanese Arabic. My observation (and the judgements of native speakers of Jordanian Arabic, Syrian Arabic, Egyptian Arabic and Algerian Arabic) shows that this pattern appears across all those varieties as well. With that in mind, I guide the analysis of data based on judgments of native speakers, rather than depending solely on their description in their written resources. The same applies to the data collected from Qasim's (2016) study which is based on spoken Southern Iraqi Arabic.

1.10 Limitations of the Study

The current study is just the tip of the iceberg in the syntax of categories and the pragmatic-syntactic interface. As a tip, the study provides a path toward understanding categories in Arabic from both syntactic and pragmatic perspectives; nevertheless, the study is limited in many respects.

First, OCs can target a wide array of elements and constructions. The study targets a limited set of OGCs and restricts the functions to be explored. In addition, the study limits exploring multifunctionality to elements that can be used for some pragmatic reasons. Thus, exploring all the cognitive functions that are proposed by the USM would not be possible.

Second, even though the study attempts to set a model for analyzing NoVs as OLCs, it would be beyond the scope of this research to test all NoVs as individual lexical items. However, saying so does not rule out that the study would establish a framework that would be applicable to all NoVs that pattern in a similar fashion.

Third, this study examines expressive NoVs only. However, the grammar of expressivity (cf., Gutzmann, 2019) includes expressive vocatives, expressive adjectives, and intensifiers. These elements are left for future research.

1.11 Road Map

Chapter 2 aims to provide a review of related literature. The review deals with how researchers have analyzed OCs in different languages. The chapter is divided into two subsections. The first section reviews OLCs in different languages and highlights the models and machinery that are followed toward understanding the nature of these categories, with particular attention to those models that reject the general description of verbs and nouns that are given by Baker (2003). The second section reviews OGCs. The review presents a thorough description of several grammatical categories that are disguised across languages; it targets complementizers, demonstratives, pronouns, and wh-words and highlights particles that have received recent attention, such as confirmations, response markers, and other verb-based and discourse related particles. Reviewing the machinery that is deployed for analyzing these phenomena helps to consider OCs, which helps in paving the way for the next chapters.

Chapter 3 deals with the syntax of OLCs in Arabic. The chapter is designed to test the categorical nature of NoVs and their relation to imperatives and expressivity. The chapter, therefore, deals with some technical analysis to arrive at a proper syntactic derivation of these categories. While the chapter presents the syntax of NoVs, it pays specific attention to their double-fold nature and their potential relation to Speech Act Projections. The chapter presents the argument through several subsections such as Predicting Categorical Identity, The Syntax of Imperative Addressee, NoVs and Expressivity and the like. Then the chapter concludes and paves the way for understanding OGCs on the following chapter.

Having laid out the tools needed for analyzing OLCs in chapter 3, Chapter 4 presents a thorough analysis of OGCs in Arabic from a syntactic perspective. The chapter is divided according to the grammatical category that it targets. Initially, it presents an argument in favor of understanding the complementizer system in Arabic and stops at different behaviors of complementizer across dialects. The chapter attempts to answer questions that are related to the syntax of discourse markers, elements that are pragmaticalized. It also provides a syntactic view of peripheral particles in Arabic and attempts to provide an integration of such particles from a syntactic-pragmatic perspective.

Chapter 5 is the final chapter in this study. The chapter is designed to conclude the topics that are presented, answer the questions raised in this chapter, summarize the main findings, and suggest new areas for future directions of investigations, at the level of syntactic-pragmatic interface and on areas related to different applications of Speech Act Projections, including, but not limited to, the syntax of expressivity in Arabic.

Chapter Two

Review of Related Literature

2.1 Introduction

Cross-linguistic data illustrate the use of several lexical and grammatical categories in an ostensible way. This chapter is designed to provide an overview of studies that examined OCs across different languages. The chapter is divided into two parts; one reviews OLCs, and the other reviews studies on OGCs.

The first part of the chapter aims to cover OLC across languages, including Welsh (Borsley et al., 2007; Borsley & Roberts, 2006; Carnie, 2011) and Blackfoot (Wiltschko, 2014a). The choice of these languages is due to the fact that these languages have verb forms that are called verb-nouns. Those forms received considerable disagreement in the literature on whether they should be categorized as nouns or verbs. Another reason for reviewing these languages is that researchers have provided some diagnostics and tests to argue with/against the categorical nature of lexical items that are classified within the domain of that category. A third reason that makes these languages interesting is that the researchers followed generative assumptions in analyzing them; nevertheless, depending on the nature of those languages, researchers have proposed new universal techniques to account for these categories. Furthermore, the section reviews studies on NoVs from a grammatical perspective, highlighting their reasons and motivations toward excepting NoVs from generative analyses.

The second part of the chapter reviews studies on OGCs across languages. The chapter focuses on pragmatic and discourse particles (Thoma, 2016; Welch, 2015; Wiltschko & Heim, 2014), response markers (Wiltschko, 2017a), impersonal pronouns (Ritter & Wiltschko, 2019), demonstratives (Bliss & Wiltschko, 2014, 2018), complementizers (Corr, 2018), wh-words

(Hachem, 2015), copulas (Welch, 2012), and others. This part exposes the reader to a wide array of languages: Blackfoot, an Algonquian language spoken by the Blackfoot or Niitsitapi people in the northwestern part of North America, (Bliss & Wiltschko, 2014, 2018), Bavarian, a Germanic/Indo-European language, (Thoma, 2016), Irish, a Celtic language, (Windsor, 2016), Cantonese, a variety of Chinese, (Wiltschko & Heim, 2014), German, a West Germanic language spoken in Central Europe, (Hachem, 2015), Hebrew, a Northwest Semitic language, (Ritter & Wiltschko, 2019), Catalan, a Western Romance language, (Corr, 2018), Afrikaans, a West Germanic language spoken in South Africa, (Biberauer, 2018), Flemish, a Low Franconian dialect cluster of the Dutch language, (Haegeman, 2014a), Romanian, a Balkan Romance language, (Haegeman & Hill, 2013), Tłı̨chǫ Yatıì, a Dene language of the Northwest Territories, Canada (Welch, 2015), to mention but a few. It should be highlighted that the focus of the chapter is on the models and diagnostics that researchers followed in examining OGCs across-languages, on the major findings of these studies, and on their relation to the current investigation.

2.2 Ostensible Lexical Categories

NoVs as OLCs show three interconnected aspects that are related to the way they are generated and pragmaticalized. Part-and-parcel of getting answers to the questions raised about their very nature is to focus on those studies that examine the syntax of mixed categories, imperatives, and expressivity. Even though not all NoVs show the same derivational behavior (e.g., some of them are not imperatives), it is crucial to review studies that would provide new tools and perspectives for analyzing them.

This section reviews studies that form a background about the way OLCs are lexicalized. In the course of defining OLCs, I begin with reviewing Baker's (2003) criteria that attempt to set clear-cut distinctions between verbs and nouns that capture their behavior cross-linguistically.

Reviewing his criteria can advance our understanding of NoVs and can provide tools and diagnostics to judge their identity. Then, I focus on those languages that show peculiar patterns that diverge from Baker's (2003) standards i.e., Welsh and Blackfoot and on those studies that presented some new tools, viz., base-generated features (Carnie, 2011), category-neutral projections (Wiltschko, 2014a) and categorization of roots (Wiltschko, 2005), for looking at OLCs cross-linguistically.

Despite its importance for arriving at a comprehensive and universal description of languages, the description of lexical categories across languages has always shown non-uniform patterns. While the way lexical categories behave in specific languages might set a vague border between lexical categories, Baker (2003) argues that all languages must have three major lexical categories: verbs, nouns, and adjectives. He sets several conditions to set the three categories apart from each other. He claims (2003) that verbs are universally distinguished from nouns and adjectives by having subjects, nouns are singled out by referentiality and identity, and adjectives are elements that do not fit any of the aforementioned descriptions of nouns and verbs, i.e., what is left over. To understand NoVs, I review his description of verbs and nouns, respectively.

Departing from Chomsky's (1970) description of verbs as categories that feature [+Verb] and [-Noun] and depending on the idea that functional categories can be distinguished by having specifiers, Baker (2003, p. 23-25) defines lexical categories as *verbs* only if they are able to have specifiers, i.e., license subjects. Based on this claim, he states the following criterion.

27) X is a verb if and only if X is a lexical category, and X has a specifier.

(Baker, 2003, p. 23)

For example, a lexical item like *eat* is a verb because it can have a subject such as *John* in (28) and *Chris* in (29) below[8].

28) I made John come to the party.

29) I made Chris dance a jig.

(Baker, 2003, p. 25)

The distinction between verbs and other lexical categories does not entail, however, that all verbs must have specifiers, but it indicates that all other categories do not have subjects. To support the prediction, Baker (2003) further argues while certain adjectives and nouns might seem to have subjects in some languages when they are used predicatively, they are still different from verbs; according to him, "nouns and adjectives are never predicates in themselves". They function as predicates because of the existence of a Pred functional category that enables their use in that way (2003, p. 31). The following examples illustrate the difference between adjectives (30) and nouns (31) that are used predicatively and verbs (32).

30) *Omar marīd.*
Omar sick
'Omar is sick.'

31) *Omar muʕallim.*
Omar teacher
'Omar is a teacher.'

32) *Omar ðahab-a.*
Omar went-PAST
'Omar went.'

(Standard Arabic)

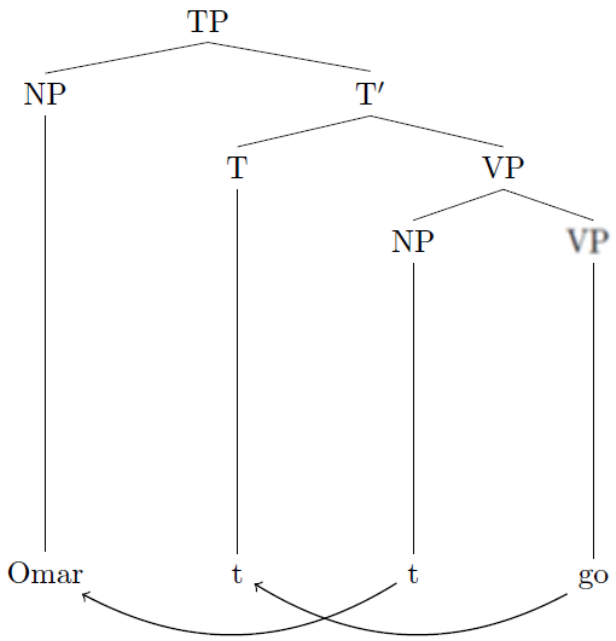
(Benmanmoun, 2000 p.8 cited in Baker, 2003, p. 46)

While *Omar* seems to function as the subject in (30) and (31) and seems to pattern with (32), according to Baker's analysis and morphological tests (tense morphology in Arabic), in (30) and

[8] The sentences are embedded to guarantee that the subject is part of the verb, rather than functional categories such as tense (2003, p. 30).

(31) *Omar* originates in the specifier position of Pred while in (32) it originates in the specifier position of the verb. The following tree illustrates the position of *Omar*[9].

33)

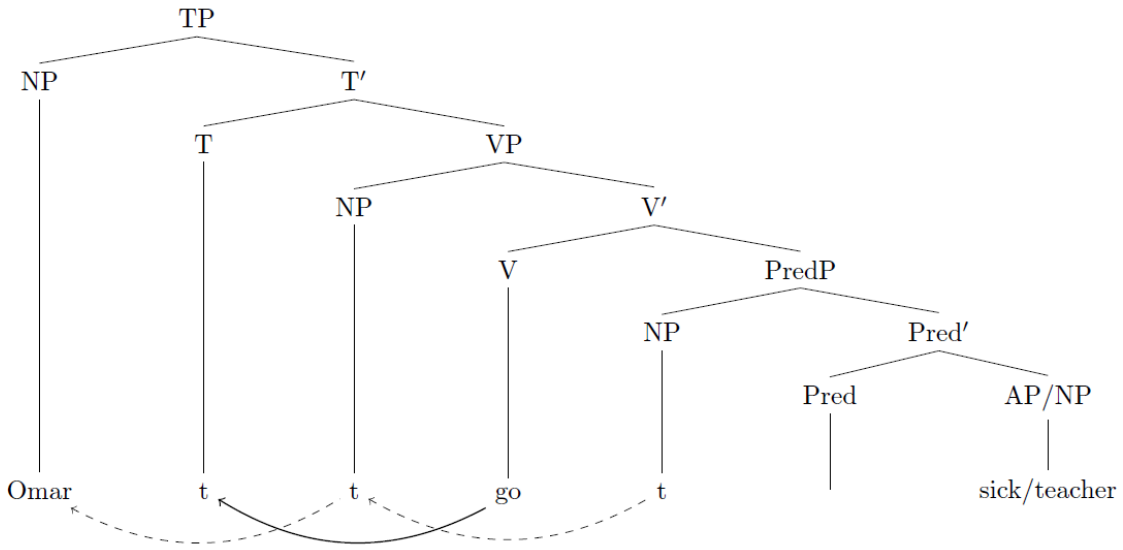


(Baker, 2003, p. 48)

The position of *Omar* in (30) and (31) differs in that it originates as the specifier of a functional rather than a lexical category. Consider the following illustration.

[9] Note that Baker's (2003, p. 48) representation does not follow the idea of intermeditae projections.

34)



(Baker, 2003, p. 49)

Baker (2003) supports his argument with data from a variety of unrelated languages and by exposing his prediction to a number of syntactic and morphological tests on word order and derivations. The overall picture is that all languages have verbs and that verbs are the only lexical category that allows subjects. His view has been criticized in that his approach does not show how a certain element is defined in the lexicon as a verb prior having a specifier, and it does not account fully for the similarities between predicative adjectives and attributive adjectives, comparing the former only to verbs (Nishiyama, 2005, p. 137). Even though his description has not been without problems (see Carnie, 2011; Nishiyama, 2005 for further details), looking at verbs from his point of view provides a neat tool to start to test the nature of NoVs in Arabic.

In addition to setting a border-line for verbs, Baker (2003) distinguishes nouns from all other categories, semantically by identity and syntactically by referentiality. Semantically, lexical items are defined as nouns if one can identify elements to belong to a specific set and if they can

fit the following frame: “X is the same ___ as Y” (Geach cited in Baker, 2003, p. 101). The following example is illustrative:

35) That is the same *man* as you saw yesterday.

From a semantic perspective, the lexical item *man* in (35) above is a noun; it shows some degree of sameness, and it fits the frame X is the same ___as Y. Modeling the semantic frame of sameness into syntax, Baker (2003, p. 104) sets the following criteria for lexical items to be categorized as nouns:

36)

a. Semantic version: nouns and only nouns have criteria of identity, whereby they can serve as standards of sameness.
b. Syntactic version: X is a noun if and only if X is a lexical category and X bears a referential index, expressed as an ordered pair of integers.

(Baker, 2003, p. 95)

Accordingly, only nouns can have some sense of reference; that is, they can be used with numerals, determiners, and other referring elements. For instance, while it is possible to use nouns with plural morphology and count them, using pluralizing adjectives and verbs results in ungrammatical constructions; the reason is attributed to the idea that only nouns can be referential. The following examples are illustrative.

37)

a. Chris is sick.
b. Chris has a disease.
c. Chris has two diseases.

d. *Chris has two sicks.

(Baker 2003, p. 107)

The examples above show a subtle difference between nouns and adjectives. As it is possible to count the lexical item *disease* (two diseases), the lexical item can be argued to be a noun. Since the same rule is not applicable to the lexical item *sick*, then, it is safe to categorize it as within any category but nouns.

Moreover, nouns are the only elements that can be used with determiners – supporting the principle of identity and referentiality; while some determiners can be used with adjectives and verbs, the argument is that their use is motivated generally by some hidden referring expression, i.e., a noun. To illustrate, I review Baker's (2003) treatment of the use of a determiner with verbs in Mohawk, Iroquoian language spoken in Canada. Consider the following example.

38)

a. *wa-shakoti-jena-'* *otja'ke ne* *wa-shakoti-'shɐ 'ni-'.*
FACT-MPS/3PO-hold-PUNC some NE FACT-MSS/3PO-defeat-PUNC
'They held some of the ones that they defeated (in battle).'

b. *[DP the [VP *pro* defeat *pro*]

c. [DP the [CP Opi C [IP *pro* defeat ti]]]

(Mohawk)

(Baker, 2003, p. 123)

The example above illustrates the use of the definite particle *ne* with the verb *'shɐ 'ni* 'defeat'. According to Baker (2003), the definite use of the particle is not related to the verb itself (38); thus, analyzing the verb *defeat* as a DP is problematic. He proposes that the structure would best fit by assuming that *ne* is associated with an operator (that provides the nominal source for *ne* which moves from the complement position of *defeat*, rather than the verb itself (38).

Even though the applicability of the idea is not straightforward, the use of a determiner with verbs can remarkably provide a new tool for testing the possible use of determiners with NoVs

in Arabic. In addition, according to the prediction that nouns have a referential index, nouns alone can antecede pronouns, they can undergo specific movements that verbs and adjectives cannot, and they can be used in argument positions, i.e., they can be used as subjects and direct objects. Now, I turn to some languages that show lexical categories that do not fit well in Baker's (2003) treatments of nouns and verbs.

Among the most puzzling behavior of OLCs appears in Celtic languages, e.g., Irish, Welsh, Breton (Borsley & Roberts, 2006; Borsley et al., 2007; Carnie, 2011, 2006; Li, 2004; Willis, 1988). In these languages, there is a class of words that are described as verbal nouns (VNs). The focus of this part is on how researchers attempted to analyze VNs from a generative perspective. Consider the following example.

39)	*tá*	*Seamus*	*ag*	*seinm*	*an*	*ceoil*	*go*
	be.PRES	James	PROG	play.VN	the.GEN	music.GEN	ADV
	deas.						
	nice						

'James is singing the song nicely.

(Irish)

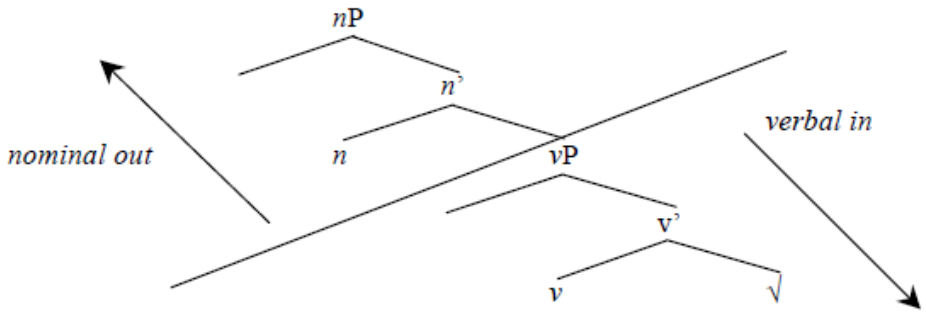
(Carnie, 2011, p. 1208)

The VN *seinm* 'play' shows "properties of both verbs and nouns. It takes arguments like a tensed verb, and it can take adverbial modification. Its complement, *ceoil* 'music', is like nouns because it takes the genitive case" (Carnie 2011, p. 1208). According to Carnie (ibid), "mixed categories, like VNs, are a serious challenge for Baker's (2003) approach" because those categories do not fit the properties of one category only (verbs or nouns).

To understand the nature of this category, researchers (e.g., Fu et al., (2001)) proposed analyzing VNs as morphologically complex units. To that end, they argued that VNs in Celtic languages are "underlyingly verbal, but have a nominal functional category, such as a determiner or other nominal functional structure, dominating the VP" (Carnie, 2006, p. 2). Using Distributed

Morphology (Marantz, 1997) as a platform for their most recent analyses of VNs, Fu et al. (2001), among others, suggested that VNs originate as roots that are shaped as phrases through verbal and nominal functional heads. The following tree is representative.

40)



(Carnie, 2006, p. 3)

Based on a reanalysis of the features given for VNs, their behavior and types (argument and predicate VNs), Carnie (2011, p. 1209) notices that Fu et al.'s (2001) predictions can rightfully cover only "the nominal behavior of argument VNs". However, he argues that they fail to account for the behavior of VNs in predicate positions (41); in these positions, VNs do not show any relation to nominals, except that some of them show some relation with genitive case - marking and valuation. Carnie (2011) notices that, in predicate VNs, the genitive case cannot be (i) licensed by little *n* because VNs are externally verbal and (ii) the genitive case cannot be assigned by determiners because the use of determiners is not allowed in such constructions.

Carnie (2011, p. 1209) claims that "the relevant nominal properties [in predicate VNs] are simply the effect of an inherent-case-as-repair strategy used when a structural case position is unavailable." The following example illustrates a genitive case marking in transitive infinitivals (a predicate VN).

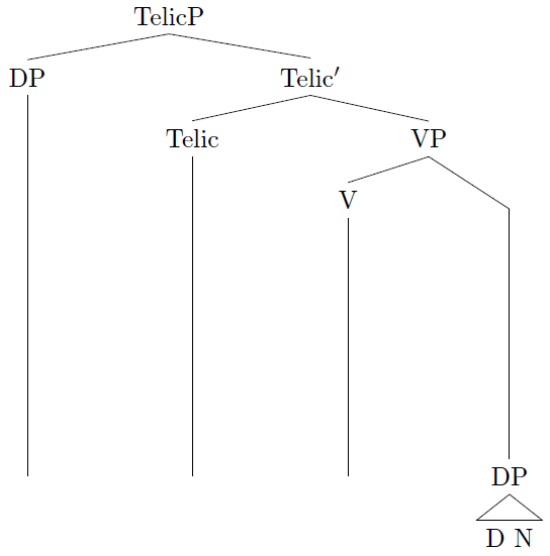
41) *Ba* *mhaith liom* *Seán* *a* *thogáil* *an* *tí*
COP good with.1SG Sean 3SM build.VN the house.GEN
'I want Sean to build the house.'

(Munster Irish)

(Carnie, 2011, p. 1220)

In (41), Carnie (2011, p. 1220) argues that the genitive case of *tí* 'house' is inserted as a last resort because the structural case position is unavailable. The example shows a telic particle *a* with a subject *Seán*. Carnie (2011, p. 1220) posits that the subject occupies the specifier position of the telic particle. The subject checks its case. Given that the only available head for assigning case is Telic ("V is an abbreviation for the root" in Carnie's (2011, p. 1220) representation). Telic assigns the common (accusative) case to the subject, *Seán* (the specifier of Telic). This position is "unavailable for the object *tí* 'house' to shift into and check its accusative case" (Carnie 2011, p. 1220). Therefore, *tí* 'house' gets its genitive case as a last resort. The following tree is illustrative.

42)



(Carnie, 2011, p. 1220)

While the technique followed gives some predictions and explains the behavior of the genitive case for VNs, it would be helpful to understand the underlying motivation to such

technique – other than accounting for surface forms. It will also be of a stronger argument if there is a reason why users of the language use the genitive case (and not any other case) to save the structure. Answering this might lead to a bigger question for understanding last resort case markings across languages.

Another fertile area of OLCs is realized in nominalization patterns across languages. Paul (2014, p. vii) argues that nominalizations show ostensible behavior as some patterns appear to be "mixed in nature: part noun, part something else" and because their "appearances typically are deceiving" (p. xii) and, therefore, they offer a direct way for looking at the nature of lexical categories. Across languages, patterns of nominalizations are challenging not only for categorization systems but also for traditional generative models and views (e.g., Chomsky, 1995; Marantz, 1997). To understand the nature of nominalization patterns, researchers added new tools and mechanisms to traditional generative approaches (e.g., Category-Neutral IPs (Wiltschko, 2014a). To understand OLCs in Arabic, it would be crucial to highlight some of these studies.

In Blackfoot, Wiltschko (2014a, p. 192) observes that the interpretation of [some nominals] is "ambiguous; they can be interpreted as clause constituents that project into CPs or as nominal constituents that could project into DPs." Based on the complexity of interpretation, she subjects nominal patterns to categorization tests to figure out if the ambiguous interpretation is related to nouns or to verbs.

Based on four diagnostics for that purpose: (i) denotement of individuals, (ii) compatibility with plural marking, (iii) compatibility with plural prefixes and (iv) compatibility with adjectival modification (p. 205), Wiltschko (2014a) argues that some nominals are only *partially* behaving like nouns; such nominals are compatible with (i) and (ii) but not with (iii) and (iv). She refers to them as *partial nominals*. The following examples illustrate two partial patterns of nominalization: bare nominalizations (43) and *-hp* nominalizations (44), respectively.

43) *aak-yo'kaa-wa*
FUT-sleep-3SG
i. 'He will sleep.'
ii. 'One who will sleep.'

(Blackfoot)

(Wiltschko, 2014a, p. 193)

44) *kit-a-oowatoo-hp-istsi*
2-DUR-eat.TI-NOM-PL
'the things you eat'

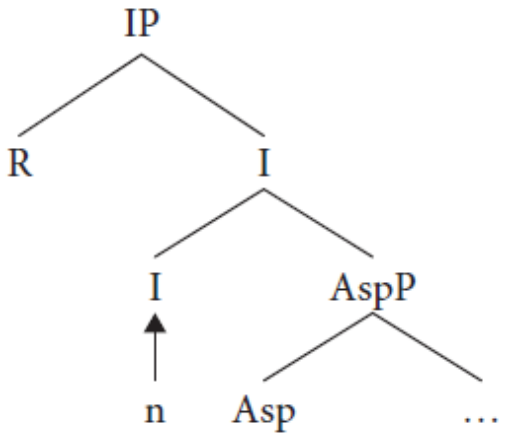
(Blackfoot)

(Frantz 1991: p. 126, cited in Wiltschko, 2014a, p.194)

Given the facts that bare nominalization and *-hp* nominalizations accept some features of nouns but reject others, Wiltschko (2014a) argues that assuming that these nominals are formed by merging a nominalizer directly (Marantz, 1997) renders wrong outputs, as these patterns are not full nouns; nevertheless, she does not reject the idea that a nominalizer should be part of forming their structure. Therefore, she introduces two new ways for associating a nominalizer: morphological merger (m-merger), a process that connects a nominalizer with a functional category and feature selection (f-selection), a process that introduces a nominalizer as a feature that can be inherited by a functional category. For instance, in *-hp* nominalizers, a nominalizer can be realized partially if it is m-merged with INFL[10]. In bare nominalizations, it is realized by f-selection. The following trees are illustrative.

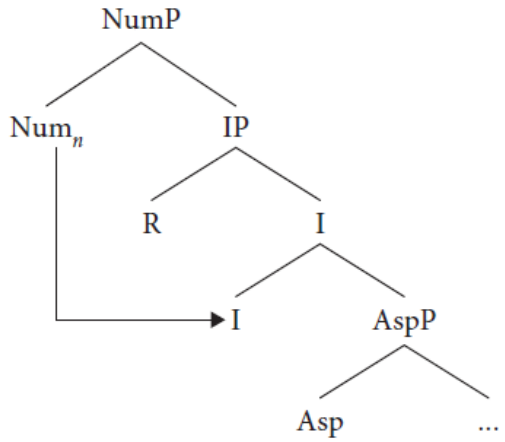
[10] According to Ritter and Wiltschko (2014) and Wiltschko (2014a), functional categories are roots – category neutral elements.

45) *-hp* nominalization via m-merger



(Wiltschko, 2014a, p. 207)

46) Bare nominalization via f-selection



(Wiltschko, 2014a, p. 205)

The processes are argued to govern partial nominalization patterns in Blackfoot. The difference between these processes is with the degree of nominalization and with how nominalization surfaces on morphological forms. These processes are significant for the current study as they provide new tools for understanding NoVs from a generative perspective.

In addition to nominalization patterns and their relationship with their surface forms, Wiltschko (2005) provides another mechanism, pre-categorical merger of roots, for looking at

surface forms of lexical items. She introduces the process based on evidence from Halkomelem Salish, a language spoken around Vancouver, Canada. The language shows behavior in which its lexical items cannot merely be distinguished through markings that are usually associated with nouns; "plural and diminutive marking combine with nouns, verbs, and adjectives" (2005, p. 245). Examples (47), (48) and (49) illustrate plural markings on nouns, verbs, and adjectives, respectively.

47) Noun
   a. *syáyeq*
      'log'
   b. *syáq'yeq'*
      'logs'

48) Verb
   a. *lhoqwet*
      'wet sthg'
   b. *lholeqwet*
      'wet many things'

49) Adjective
   a. *tsmeth'*
      'blue'
   b. *tsmeth'meth'*
      'lots of blue'

(Halkomelem Salish)

(Gallawoy (1993, p. 325-397) cited in Wiltschko, 2005, p. 1-2)

Not only plural markings appear on these categories but also diminutive markings. The next three examples are illustrative.

50) Noun
   a. *q'á:mi*
      'girl'
   b. *q'áq'emi*
      'small girl'

51) Verb

a. *xá:m*
‘crying’

b. *xexám*
‘sobbing’

52) Adjective

a. *p’eq’*
‘white’

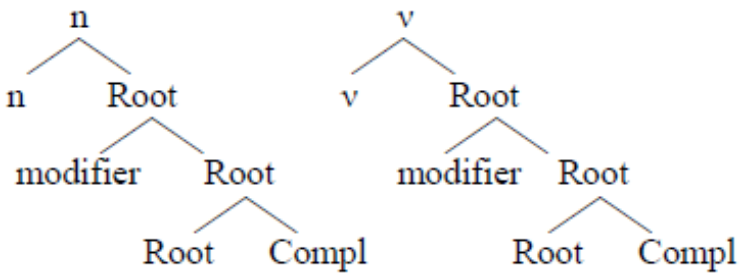
b. *p’íp’eq*
‘a little white, whitish’

(Halkomelem Salish)

(Gallawoy (1993, p. 330f.&337), cited in Wiltschko, 2005, p. 2)

After presenting a counter-argument that shows that the language has some distributional distinctions between nouns, verbs, and adjectives and by examining (Marantz, 1997) views on how lexical categories are shaped in the lexicon, Wiltschko (2005) views roots as syntactic categories that can “be modified, can take complements, can be selected for and can be pronominalized”, and she argues that looking at plural and diminutive markings as root modifiers captures the behavior of these markings on different categories. The following trees are illustrative.

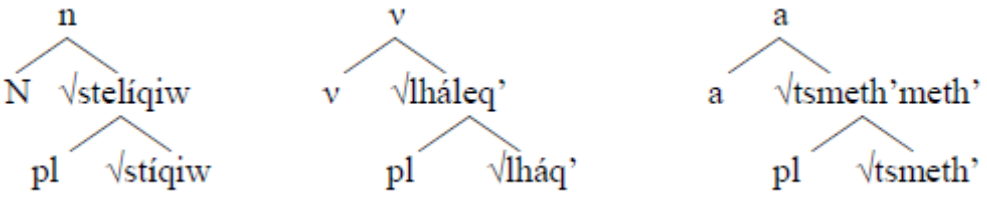
53)



(Wiltschko, 2005, p. 5)

According to her, roots as syntactic categories can provide straightforward answers for the examples mentioned above. This can be illustrated as follows. The same argument applies to diminutive forms.

54)



(Wiltschko, 2005, p. 6)

This strategy has some consequences on the distribution of nouns, verbs, and adjectives in Halkomelem Salish and supports almost all features of syntactic categories. While I refrain from presenting these pieces of evidence, it is crucial to point out that looking at roots as syntactic categories adds an essential tool for analyzing NoVs in Arabic.

To conclude, the behavior of OLCs has been puzzling; understanding their behavior using traditional generative approaches has not been fruitful. Nevertheless, since Universal Grammar is hypothesized to underlie the mechanism that the human mind follows in creating structures, researchers have overcome the limitations of traditional generative approaches by adding new mechanisms. I have presented new essential tools. Baker's (2003) account establishes a number of criteria to set nouns and verbs apart. The account provides several tools and diagnostics that capture the behavior of well-defined lexical categories across several languages. Then, the section presents some tools from Distributed Morphology; morphological forms can be obtained through merging with some functional head. After that, I introduced some behaviors that can be accounted for by some processes like *case as a last resort*. Moreover, the section introduces the idea that functional heads can be fully or partially realized. Finally, roots can be looked at as syntactic categories that can have modifiers and/or complements. The following table summarizes the primary accounts provided to analyze lexical categories in the literature.

Table 5. Summary of non-protypical nouns and verbs across languages

Features	Account	Outcome	
Genitive Markings	Default Case	Gen-Verbs	(Carnie, 2011)
Denotement of individuals	H-Merger	Nouns	(Wiltschko, 2014a)
Plural Marking	M-Merger	Partial Nouns	
Adjectival Modification	F-Selection	Featural Nouns	
Plural Forms	R-Merger[11]	Dim & PL Surface	(Wiltschko, 2005)
Diminutive Forms	R-Merger		

2.3 Ostensible Grammatical Categories

In addition to OLCs, OGCs have been studied cross-linguistically. This section reviews those studies that looked back at the nature of GCs from a broader perspective and provides a path to characterize discourse markers and particles in Arabic. The syntax of discourse markers and particles have called for articulating speech act structures (Haegeman, 2014a; Haegeman & Hill, 2013; Hill, 2007b), depicting illocutionary force (Corr, 2018; Deng, 2015; Woods, 2016, 2015) and grounding (Heim et al., 2016; Thoma, 2016) in narrow syntax, and by those proposals that called for reanalyzing GCs based on their functions rather than their sounds or forms (Wiltschko, 2014b). The review begins with tracing the functions, distributions, and use of OGCs in several unrelated languages. It establishes the foundation toward viewing them from a generative functional point-of-view.

[11] I refer to the process of associating roots with plural and diminutive features pre-categorization as R-merger.

Among the very recent proposals to view particles as part of narrow syntax examines address particles in Romanian, Bulgarian, and Umbundu (Hill, 2007b). The study focuses on those particles that show some relation with vocatives. The following examples are illustrative.

55) *O/aoleu (Doamne), de un' saˇ- l iau*?
oh oh God-VOC from where SUBJ it take-1SG
'Oh, Lord, where can I find it?'

(Romanian)

(Hill, 2007b, p. 2081)

56) *(O)lele (majko), pak trjabva da traˇgvam*.
Oh mother-VOC again must SUBJ leave-1SG
'Oh, my, I have to leave again.'

(Bulgarian)

(Hill, 2007b, p. 2081)

In (55), in Romanian, the particles *O/aoleu* 'oh' comes before a direct addressee; that is, they occupy a peripheral position that is above the vocative, *Doamne* 'God.' In (56), Bulgarian shows a similar distribution between the particles, *O*/*lele*, and the vocative, *majko* 'mother.' The distribution is argued to be part of narrow syntax as the particles show behavior that distinguishes them from "phatic interjections"[12]; they show restrictions on adjacency, precedence (c-command relationship), selection, and constituency (Hill, 2007b, p. 2083).

According to Hill (2007), the interaction of address particles with another speech act particle, *hai* (a particle argued to occupy a speech act head) cannot fit with traditional syntactic structures (Chomsky, 1995; Rizzi, 1997; Speas & Tenny, 2003). See the following example.

57) *vai maˇi (Ioane) hai caˇ nu te crede nimeni*!
Oh you Ion hai that not you believe nobody
'My God, Ion, give it up, nobody believes you!'

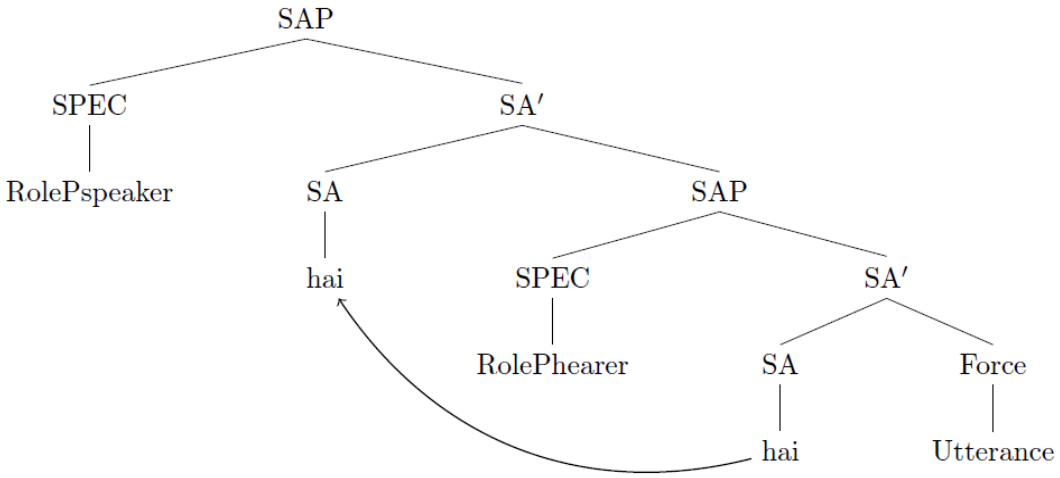
(Romanian)

(Hill, 2007b, p. 2099)

[12] It should be noted that while Hill (2007) distinguish between address particles and interjections; interjections are argued to be part of narrow syntax in subsequent studies (see Gutzmann, 2019, p. 22).

In (57) based on testing the position of *hai* relative to the address particle ,*vai* 'oh' and the vocative DP, *Ion*, Hill (2007b) argues that *hai* shows evidence for occupying a position that does not alter the distribution of the address particle and its vocative, DP. Accordingly, she proposes elaborating SAPs by claiming that SAPs are syntactic shells, following Larson's vP shell hypothesis, as in (58) below.

58)



(Hill, 2007b, p. 2099)

In west Flemish, a dialect of Dutch, Haegeman (2014a) examines the distribution of two peripheral verb-based particles, *ne* ('so there,' 'take that') and *we* ('you know') from a generative perspective, in the same spirit of Hill (2007b). The study, nevertheless, shows that SAPs are not of one layer; she argues that considering the interaction of particles with vocatives, one can predict that there are two layers of SAPs: a high layer that is directed for "initiating a speaker-hearer relation" and a lower one that "modulates their relation" (Haegeman, 2014b, p. 135).

Before reviewing Haegeman's (2014a) syntactic analysis for *ne* and *we*, let us consider their given properties. First, just like most particles, *ne*, and *we* are optional; they do not affect grammaticality, yet their omission results in a change in interpretation. Second, they are used to encode discourse participants' attitudes toward an utterance: they do not affect the truth-condition

of an utterance, they are used as attention getters or as a marker to settle a conversation, and they are used to express speakers' state, 'i.e., 'expressive function.' Third, they form an intonational unit by themselves. Fourth, they are hard to translate. Fifth, they occupy peripheral positions at the left/right edge of an utterance. Sixth, some of them are sensitive to clause types, i.e., they show restrictions to imperatives, interrogatives or declaratives. The following example is illustrative.

59) Zet je mo we.
sit you PRT *we*
'Do sit down.'

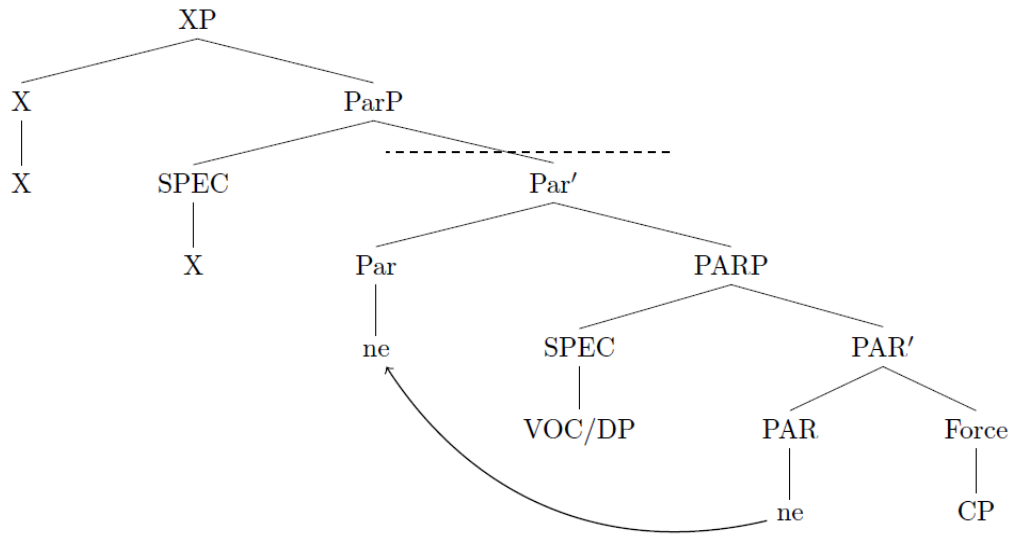
(west Flemish)

(Haegeman, 2014a, p. 122)

In (59) the use of *we* does not only show emphasis of the command given but also reflects the attitude of the speaker; it shows that the speaker has some level of expectancy that the hearer will respond to the illocutionary force of the utterance – he will perform the action of sitting down.

The use of *ne* and *we* along with vocatives shows a restriction on distribution, revealing their syntactic status. The basic idea is that syntax allows projecting particles as shells. The following diagram is representative.

60)



(Haegeman, 2014a, p. 134)

The lower shell includes a functional head, PAR, that selects a CP as its complement and includes a VOC position in its specifier. At the top of the shell, the projection of PAR is then selected by a particle head, Par, to which PAR moves to and which its complement, the CP, or its projection, PARP, can move to its specifier position. Haegeman (2014a) follows such a mechanism to account for the distribution of *we*, *ne* along with vocatives and modifies Hill's (2007b) proposal (see (60) and (58) above) slightly; the modified version is argued to give a better prediction for the Flemish data as it enables another level of projection XP (above ParP) to include the particle, *we*, which in turn selects the *ne*, ParP, as its complement (represented by the XP projection, in (60) above).

While Haegeman (2014) and Hill's (2013) studies examine verb-based particles/discourse markers in relation to vocatives, particles can show up as category neutral elements in their surface form but acquire different functions in syntactic context (Bliss & Wiltschko, 2018; Thoma, 2016; Wiltschko & Heim, 2016). For example, categories that surface as demonstratives and complementizers can function as particles in their regular use (Bliss & Wiltschko, 2018). Based on

their functions, a number of particles have been examined in different languages (Heim et al., 2016; Thoma, 2016; Tubau, 2014; Wiltschko, 2017b; Wiltschko & Heim, 2016). In what follows, I present further tools to analyze particles from a functional perspective, in which their realization is dependent on their context.

In Miesbach Bavarian, a language spoken in Germany, Thoma (2016) examines five discourse particles: *Jetz, Eh, Ja, Doch,* and *Fei* from a syntactic perspective by adopting the USM for data analysis (see Chapter 1, for further details). The study sets a framework toward understanding discourse particles as multifunctional elements whose functions are dependent on different types of contexts: situational and syntactic contexts. Among the many functions of discourse particles discussed is that these particles can be used to express epistemicity. In other words, particles are used to convey some information about discourse participants' feelings and attitudes toward a given proposition.

Following Wiltschko (2014) and Wiltschko and Heim (2016), Thoma (2016) argues that discourse particles are syntactic constructs and function as grounding units; they can ground information on the part of the speaker (speaker-oriented particles), the addressee (addressee-oriented particles) or other discourse participants (other-oriented particles). The following example illustrates a speaker-oriented discourse particle.

61) Context: I say to my partner, who is sitting next to me shivering:

Di	*frierts*	*ja…*			
you	freezes.it	PAR			
ziag	*da*	*liawa*	*a*	*Joppn*	*oo.*
pull	you	rather	DET	jacket	on

"You're cold…you had better put a jacket on."
'[I believe that] you're cold… you better put a jacket on.'

(Thoma, 2016, p. 141)

Based on her orientation tests, Thoma (2016, p. 141) argues that what licenses the use of *ja* over *Doch* and *Fei in* (61) is that *ja* is a particle that expresses the speaker's personal experience toward

the stated proposition, whereas *Doch* and *Fei* are addressee-oriented particles.

Looking at discourse particles from a syntactic functional perspective, Thoma (2016) extends the functions of USM (cf., Wiltschko, 2014). In line with the idea that SAPs are part of syntactic projections (Haegeman, 2014a; Hill, 2013a; Miyagawa, 2017 and his previous works), she shows that SAPs can be captured neatly, from a functional perspective, if one assumes that particles are grounding units of different orientations. To that end, she adds Grounding to the USM, at the top of Linking, to express the relationship between propositions and discourse context. After establishing discourse particles and defining their nature from a pragmatic and semantic perspectives, Thoma (2016) tests their syntactic distribution; given the fact that discourse particles are not always found in the left periphery which seemingly contradicts the position stated for GoundP, above Linking, she (2016, p. 258) argues that movement (or AGREE) can account for scrambled initial-positions occupied by such particles (Lam et al. 2013, cited in Thoma, 2016, p. 258). The study concludes that GroundP is what underlies and motivates the use of discourse particles in the language.

Thoma's (2016) study is significant in many respects; it sets several features to describe what makes a discourse particle. From a pragmatic perspective, discourse particles are non-truth conditional; in some contexts, they are optional, they express epistemicity, and they cannot be translated. From a syntactic perspective, the study provides some tools to account for the distribution of particles within and above a clause, and it draws a path to delimit the various functions of discourse particles. Thoma (2016) does not show how a mechanism like AGREE works from a pragmatic-syntactic perspective, nor does she define what sort of features should undergo agreement and/or valuation. Gutzmann (2019) provides an answer to that problem; he claims that expressive particles, interjections, and vocatives can have unvalued EXPRESSIVE

features that are valued through a bottom-up AGREE mechanism (See Gutzmann, 2019 for further details).

In addition, from a syntactic functional perspective, discourse markers can be used by discourse participants to confirm propositions (Heim et al., 2016; Tubau, 2014; Wiltschko & Heim, 2014, 2016). Confirmationals are argued to show some syntactic restrictions on word order and clause-types and on their interaction with other elements in discourse. To illustrate a discourse marker that is used to express confirmation, consider the following examples.

62) You have a new dog, eh?

(Canadian English)

(Wiltschko & Heim, 2016, p. 306)

63) Speaker 1: That's a hell of a lot of people.
Speaker 2: It is a lot, innit.
Speaker 3: Yes.

(British English)

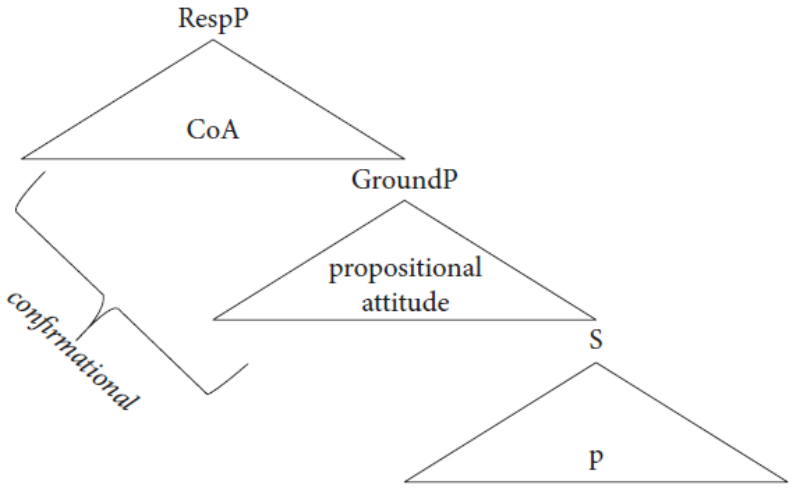
(Krug 1998 cited in Tubau, 2014, p. 54)

The use of the discourse marker, *eh*, in (62) and the pragmatic particle, *innit*, in (63) is motivated by the fact that the speaker is requesting the addressee to confirm that what is stated is true. In other words, confirmatory particles utilize instances of grounding information between discourse participants. In (62), the speaker is checking if the dog is a new one or not. In (63), the second speaker is seeking the third speaker's confirmation that he agrees with the point of view of the second speaker that there are a lot of people.

According to Heim et al. (2016), Tubau (2014), Wiltschko and Heim (2014, 2016), Confirmationals are processed in narrow syntax in a high functional projection that is dedicated to grounding information. Wiltschko and Heim (2016) argue that confirmationals can be decomposed into two function layers; the first layer targets grounding information and is realized syntactically

in a dedicated grounding phrase, GroundP, and the second layer targets cases in which the speaker is requesting a response on behalf of his addressee, Call on Addressee (CoA) and is realized by RespP, a functional projection above GroundP. The following tree is representative.

64)



(Wiltschko & Heim, 2016, p. 329)

Based on cross-linguistic data, they show that languages vary in their use of confirmationals; in Canadian English, using confirmationals to ground information can be realized by using *eh,* and the CoA is usually realized by intonation. The same function is expressed by particles in other languages, as can be seen in the following example.

65) *kʉla* *u* *ɣʉ* *bʉ* *swə* *a?*
PAR 2SG have dog new Q
'You have a new dog, eh?'

(Medumba, a Bantu language)

(Wiltschko & Heim, 2016, p. 333)

In (65), two particles are used to express and request confirmation: *kula* and *a*. According to Wiltschko and Heim (2016), the first particle functions to mark the "propositional attitude toward the proposition 'you have a new dog,' and the second particle marks the request for response that is directed to the addressee, CoA. Accordingly, Medmuba supports the argument of the existence

of two functional projections above the proposition and shows more defining features for particles from a syntactic functional perspective.

A number of studies have focused on the syntax of response particles (Espinal & Tubau, 2019; Holmberg, 2001, 2015). Response particles are particles used as answers for polar questions, as can be illustrated by the following interaction (66).

66) Speaker 1: Did you feed the dog?
Speaker 2: a. Yes. (= I fed the dog.)
b. No. (= I didn't feed the dog.)

(Wiltschko, 2017c, p. 241)

According to Holmberg (2001, 2015), *yes* and *no* response particles are syntactically governed, and they are controlled by a polarity phrase (PolP). Technically, he argues that in yes and no responses, syntactic derivations are projected into two functional projections above the CP; a functional projection that marks polarity (PolP) and a higher projection that marks focus, focus phrase (FocP), in the sense of Rizzi (1997). Response markers occupy the specifier position of the focus phrase and depending on the nature of the response (negative/positive), response markers value an unvalued polarity feature in the PolP.

From a functional perspective, response particles can be used in an ostensible way to perform other functions (Wiltschko, 2017a, 2017c); they can be used as markers of agreement and/or disagreement. The ostensibility of response particles is supported by the claim that using such particles is not always triggered by polar questions; response particles can be used with wh-questions (67), imperatives (68), and exclamatives (69) and others (Wiltschko, 2017c).

67) Katie: Why would he do something like that?

Brooke: Yes, I know. That is the question.

(Wiltschko, 2017c, p. 255)

68) Steffy: Treat me like one of your patients.

Taylor: Yes, I will.

(Wiltschko, 2017c, p. 256)

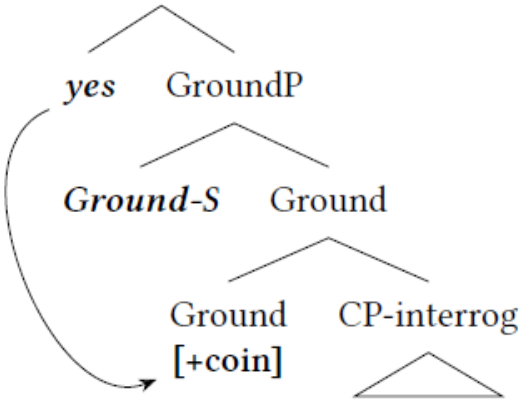
69) Michael: What a lovely family tradition to hand on to your own niece.

Avery: No, I got to know Daisy through all this.

(Wiltschko, 2017c, p. 257)

Based on a reanalysis of response particles across different contextual triggers, Wiltschko (2017b) neutralizes the categorical nature of response particles and recategorizes them. She finds that response particles are, in fact, "(dis)agreement markers" (p. 11) that can be analyzed syntactically. Nevertheless, she proposes that as (dis)agreement markers, response particles are particles used "to value an unvalued feature in the speech act structure." She assumes that the "speech act structure contains a *grounding* layer that is responsible for encoding the commitment" that is expressed by discourse participants toward a proposition (Wiltschko, 2017c, p. 263). Technically, she proposes the following structure for the second function of yes and no, as agreement and disagreement markers. Technically, to express agreement, *yes* gives a positive value for a coincidence [ucoin] feature (see Wiltschko (2014)), in which case discourse participants agree on the set of information to be in their common ground. No, on the other hand, values [ucoin] negatively, indicating a mismatch in the common ground. See the tree in (70) below.

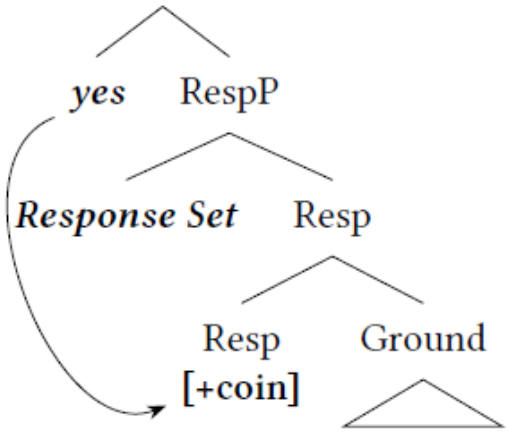
70)



(Wiltschko, 2017, p. 264)

Moreover, Wiltschko (2017) shows that response particles have a third function. They can mark calls on the addressee. To mark a response that is part of the ResP – recall the syntax of confirmationals (cf. Thoma, 2016; Wiltschko & Heim, 2016), the same spirit is utilized with the higher ResP projection. See (71) below.

71)



(Wiltschko, 2017, p. 272)

In English, ResP is realized by intonation. In other languages (e.g., Upper Austrian German), nevertheless, the function can be obtained by particles. All in all, the study provides some significant findings. First, the study shows that response particles can be multifunctional; their

multifunctionality can be accounted for internally by associating such particles with a specific function suggested in the USM. Second, response particles have three functions: they provide answers to polar questions, they express agreement and disagreement through grounding, and they can be used as triggers of response. Taking all that together accounts for the complexity of speech acts.

The use of demonstratives is explicit across languages; they can be used pronominally or as determiners (72). In their recent analysis of the structure of demonstratives in Blackfoot, Bliss and Wiltschko (2018) notice that the forms that typtically function as demonstratives serve other functions; that is, the apparent form of a demonstrative does not show any relation with marking reference (73). The following examples are illustrative.

72) *Nimáátowaanihpa ann.*
nit-maat-waanii-hpa *ann*
1-NEG-say.AI-NONAFF DEM
'I am not saying that.'

(Blackfoot)
(Bliss & Wiltschko, 2018)

73) *anni anni anni* *it-á'p-ihtsoohkit-ok-wa* *om-isti*
NEAR.ADDR.DEM (x3) LOC-around-chase.TA-INV-PROX DEM-PL
ot-nínssksss-oaawa-yi.
3-song-3PL-OBV
'Cx … He was chased around by their song.'[13]

(Blackfoot)
(Bliss & Wiltschko, 2018)

In addition to scoping over individuals (determiners or pronouns), situations (predicates), and times (temporal), demonstratives can function as discourse markers. Their study shows that the analysis of demonstratives as discourse markers is motivated by their intranslatability, connectivity,

[13] In the original source, Bliss and Wiltschko (2018) use *??* to mark undefined demonstratives. In line with my research, I use a different convention, Cx, for same purpose.

non-truth conditionality, optionality, intiality (not always), and orality. Based on these features, the study renders demonstratives, in some contexts, as discourse particles that have three functions. First, they are used to show that a "speaker has an emotional connection (positive or negative) to the content of the utterance." Second, in contexts where demonstratives are reduplicated, it is hypothesized that they are used as such for emphatic purposes. Third, demonstratives can be used as markers of three epistemic orientations: S-orientation (Speaker' speaker belief, A-orientation (Addressee's belief), and O-orientation (contextually determined participant's belief). Finally, demonstratives can be used as markers to highlight the noteworthiness of certain information to the audience.

Bliss and Wiltschko (2018) show that demonstratives are multifunctional units. Their use as particles is not limited to Blackfoot, but it can be found in other languages like German and Hebrew. Nevertheless, their use is of a different pragmatic function. Following the USM, Bliss and Wiltschko (2018) argue that their syntactic functions can be realized by associating demonstratives with the grounding layer, in a similar way like Germanic particles (Thoma, 2016).

Based on the description of discourse markers across languages, I conclude this section with their major features. Discourse markers can be multifunctional units, they are optional in the sense that they do not affect the grammaticality of structures, they reflect discourse participants' epistemic state toward a given proposition, and they do not affect the truth value of utterances. With regard to their positions, discourse markers can not only be found in peripheral positions (right/left), but also, they can be found sentence medially. The way discourse markers are integrated into syntax is done into two complementary stages: the first one aims to define and limit the functions of discourse markers through associating them with one of the functions that are proposed by the USM. The second one targets their distribution and aims to link them with their functions through movement or AGREE. Given that clauses extend based on their functional heads, some

languages show a distribution of discourse markers within a clause while others show different behavior. The following table presents some of the tools presented in the literature toward understanding discourse markers/pragmatic particles.

Table 6. Approaches to Describing Pragmatic Makers/Particles

Topic	Account	
Interjections	C-command	(Hill, 2007b)
	Constituency	
	Selection	
	Adjacency	
Expressive Position	Movement	(Thoma, 2016)
	AGREE	(Gutzmann, 2019)
Function	Grounding	(Heim et al., 2016; Thoma, 2016)
	Response	
	Others	
Orientation	Speaker	(Thoma, 2016)
	Hearer	
	Other	
Shells vs. Layers	Vocatives	(Haegeman, 2014a)

The table above illustrates the major contributions of studies that examined discourse markers/pragmatic particles from a syntactic perspective. It should be highlighted that the approaches define particles internally and externally. Due to their undefined nature, it is hard in a place to set a clear-cut definition between particles and markers; hence, the views meet on one fundamental aspect: there are elements (units of language) that are dedicated toward depicting the epistemic stance of discourse participants in syntax. Both the descriptive and analytic tools constitute an essential point of departure for analyzing discourse markers/particles in this study.

2.4 Conclusion

In this chapter, I have reviewed some studies that looked at the nature of categories from a generative perspective. It is shown that while some categories such as nouns and verbs are taken as fundamental building blocks for syntactic analysis. It is hard to reach an agreement upon what makes these categories in clear-cut fashion cross-linguistically. Some languages show distinct behaviors that lead researchers to look at categories as mixed featural units and/or as belonging partially to nouns/verbs.

In addition to the difficulty of looking at major categories such as nouns and verbs, researchers have looked at another type of category that is no less problematic: particles/markers. Due to the multifunctionality and their association with context, new models and projections have been proposed to integrate this category within generative models. The most agreed-upon conclusion (cf., Thoma, 2016; Bliss & Wiltschko, 2018, among others) is that discourse markers and pragmatic particles are syntactically conditioned by higher projections that encode discourse participants' points of view and attitudes toward utterances. Establishing models toward understanding expressive language suggests a way to address a new subset of data from Arabic.

Chapter Three

Ostensible Lexical Categories in Arabic

3.1 Introduction

Defining lexical categories has advanced syntactic theories in several respects. Some attempts have highlighted clear cut distinctions between verbs, nouns, and adjectives in most languages (Baker, 2003). However, language-specific constraints on categorization required new ways to defining lexical categories (Carnie, 2011; Wiltschko, 2005). The problem of categorization also appears in Arabic. Most recent descriptions of NoVs deal with them as interjections (Lutz & Jong, 2011). However, testing and comparing NoVs with interjections across languages show that NoVs are behaving differently in several respects. NoVs show properties associated with both verbs and nouns, but not with interjections.

While traditional attempts have focused on defining ostensible lexical categories from a language-specific perspective, they failed in framing their analyses within universally attested views on categorization. This chapter focusses on the problem of ostensible lexical categories, NoVs, in Arabic. The chapter shows that NoVs are morpho-syntactically complex categories of two interconnected layers. Internally, NoVs are defined as category-less expressive roots that merge with verbal functional heads. The internal structure of NoVs is verbal in nature. It has a specifier. Externally, expressive discoursal heads attract the internally composed units to positions in which they agree with discourse participants (cf., Miyagawa, 2017). The impact of this association has consequences on their syntactic behaviors and clarifies their mixed categorical nature.

The chapter goes as follows. The first section aims to capture the behavior of NoVs by comparing NoVs with other categories. The comparison involves apprehending their distribution,

their selection properties, and their interaction with case. Then, the chapter presents the significance of discourse situation in understanding their syntactic status. The second part draws upon possible ways of generating NoVs. To that end, the chapter presents NoVs from a morphosyntactic perspective. In Section 4, the chapter presents a syntactic-pragmatic analysis of NoVs. In this section, NoVs are linked to pragmatic functions that closely associate NoVs with speech act projections. In the final section, the chapter concludes the discussion and presents significant consequences of the syntactic model and proposes new perspectives to overcome current problems of categorization in Arabic.

3.2 Syntactic Foundations and Points of Departure

Nouns can show agreement with possessors by appending a suffix of possession (e.g., *kitāb* 'book' / *kitāb**ak*** 'your book'). However, appending such agreement on verbs is not permitted (e.g., *ḳuḏ* 'take' / **ḳuḏ**__**ak**__); nevertheless, it is permitted with NoVs (e.g., *hāk* 'take'). To pave the way for describing NoVs, I deploy several syntactic diagnostics. The first set of diagnostics aims to assess recent categorizations of NoVs (Lutz & Jong, 2011; Owens, 1989). The second set of diagnostics aims to highlight their relative position in syntactic structures. The relationship between NoVs and speech act projections is highlighted from two perspectives: the relationship of NoVs with discourse participants and their pragmatic-syntactic use that sets them apart from seemingly synonymous verbs.

3.2.1 Distribution and Optionality

In grammar, words are processed based on similar patterns and/or for occupying certain positions. The distribution of words determines their parts of speech, which can vary from one language to another. Syntactic distribution is related to determining common syntactic contexts in which lexical items occur, whereas morphological distribution determines classes based on

morphological forms and affixation. Earlier categorization attempts of NoVs emphasize their status as nouns or verbs (Owens, 1989), while most recent attempts list them as interjections (Lutz & Jong, 2011). This section revisits the syntactic patterns and positions occupied by NoVs. Structures are tested against three constraints: distribution, adjacency, and optionality. Distribution tests if NoVs are relatively constrained to certain syntactic positions. Adjacency evaluates their relative order and co-occurrence. Optionality highlights if using NoVs is demanded by structures. According to Hill (2013), the three conditions are remarkable points of departure from phatic interjections.

Examining the distribution of NoVs shows that they occupy fixed syntactic positions and impose syntactic restrictions on their arguments. While in Arabic, SVO and VSO structures are common patterns, structures formed with NoVs show similarity with VSO (74) patterns; NoVs must always be used as the first element in a clause, regardless of their type.

74)

a. *hayhāta* *al-ʿawdu* *ʾilā* *aḏ-ḏall-i.*
impossible.NOV.PL DEF-back-NOM to DEF-disgrace-GEN[14]
'Going back to disgrace is impossible.'

b. **al-ʿawdu* *ʾilā* *aḏ-ḏall-i* *hayhāta.*
DEF-back-NOM to DEF-disgrace-GEN impossible.NOV.PL
Intended: 'Going back to disgrace is impossible.'

75)

a. *hāk* *al-kitāb.*
take.NOV:2SG DEF-book
'Take the book.'

b. **al-kitāb* *hāk.*
DEF-book take.NOV:2SG
Intended: 'Take the book.'

In addition, NoVs cannot co-occur in one structure (76). Using multiple NoVs creates semantic and syntactic clashes. Semantically, every NoV has distinct meaning; they are not phatic. Syntactically,

[14] I follow Carnie's (2011) glossing patterns of mixed categories in Irish for NoVs.

they cannot co-occur with each other.

76) **hāk* *ʾāḳ* *al-kitāb.*
take:NOV:2SG hurt.NOV.1SG DEF-book
Intended: 'take the book.'

Furthermore, in most of their occurrences, NoVs are obligatory, and dispensing with them leads to ungrammatical constructions. In the above examples, omitting any of the NoVs *hayhāta* (74) and/or *hāk* (75) is unacceptable. In (74), it is unclear how 'going back to disgrace' would be manifested without *hayhāta*, nor what information is conveyed by using 'the book' by itself (75). Thus, the three syntactic constraints show that NoVs have clause-initial distribution; they cannot co-occur or dispensed.

Cross-linguistically, interjections, words used for expressing feelings and emotions, form a class by themselves. Categorizing interjections does not fit with many syntactic models of categorization since their use is pragmatically motivated, and their positions are not conditioned. NoVs are categorized as interjections (Lutz & Jong, 2011). However, by looking at their distribution and evaluating their patterns, it becomes clear that they depart from interjections in several respects.

First, it is possible to use multiple interjections (77) whereas multiple NoVs are not permitted. In (77), two interjections appear before the verb *rūḥ* 'go.'

77) *ah,* *māšī,* *rūḥ* *maʿ-āh.*
INT INT go.2M.SG with-3SG.GEN
'Ah, okay, go with him.'

Second, from a syntactic point of view, there are restrictions on the use of NoVs with interjections. In (78), it is ungrammatical to separate the NoV, *hāk* 'take,' from its complement, the book; this behavior further explains that NoVs interact with interjections in a simple way like imperative verbs.

78) **hāk* *ah* *al-kitāb.*
take.NOV:2M.SG INT DEF-book
Intended 'come on, take the book.'

While intonation breaks might explain using interjections before imperatives, NoVs show a priority for being the most initial elements in structures.

79)

a. *yalā* *ḳuḏ* *al-kitāb.*
INT take.2M.SG DEF-book
'Okay, take the book.'

b. !*yalā,* *hāk* *al-kitāb.*[15]
INT take.NOV:2M.SG DEF-book
'Okay, take the book.'

Third, while it is acceptable to give a command with/without using interjections, without using imperative NoVs, structures cannot stand by themselves for giving a command.

80)

a. *ah,* *ḳuḏ* *al-kitāb.*
INT take.2M.SG DEF-book
'Okay, take the book.'

b. *ḳuḏ* *al-kitāb.*
take.2M.SG DEF-book
'Take the book.'

c. **ah,* *al-kitāb.*
INT DEF-book
'Intended: take the book.'

d. **al-kitāb.*
DEF-book
Intended: *hāk* 'take' the book.'

Using an interjection without the verb, *ḳuḏ* 'take,' is ungrammatical (80c). Like the verb *ḳuḏ* 'take,' the NoV, *hāk* 'take,' is not optional; ignoring it results in an ungrammatical construction.

Based on distribution tests, it can be concluded that NoVs differ from interjections in two aspects. First, they cannot co-occur. Mixing NoVs create semantic and syntactic problems at the

[15] The exclamative mark '!' indicates that the sentence is a fairly weak construction; it is less likely to be used because other constructions are stronger in conveying its content.

level of interpretation. Second, unlike interjections, NoVs are obligatory in most contexts. Since interjections are more oriented toward expressing feelings and emotions, structures can survive without indulging them in syntactic contexts. However, NoVs are not optional, and they are required for grammaticality.

3.2.2 Selection Properties

A third subtle difference that calls for looking at NoVs as distinct elements is that they show selection properties that impose restrictions on the choice of complements. Some NoVs can only take prepositional phrases, while other NoVs can select determiner phrases and the like. Such a property does not apply to interjections. To illustrate this property of NoVs, consider the following examples.

81) *ʾāḳ* *min* *hāl* *ḥyāh*.
hurt.NOV.1SG from this life
'I complain about life.'

82) *ṣah* *ʿan* *biḏiʾi* *al-ḳalām*.
stop.NOV.IMP.2M.SG from bad DEF-talk
'Stop from saying bad things.'

83) *ḥaya* *ʿalā* *aṣ-ṣalā*.
come.NOV.IMP.2M.SG to DEF-prayer
'Come to prayer.'

In the examples above, the three NoVs select prepositional phrases as their complements. For instance, in (81) the NoV, *ʾāḳ* 'complain,' selects the PP, from this life. In addition, some NoVs select DPs as their arguments. See the example below.

84) *dūnaka* *al-kitāb*.
below.NOV.IMP:2SG DEF-book
'Take the book.'

The NoV *dūnaka* 'below' selects the DP, *the book*, as its complement, acting as its grammatical object. The selection property of NoVs is not limited to PPs and DPs. Some NoVs can select TPs.

85)

a. *hayhāt* *ʾan* *yaʿūda* *ar-rajl-u* [16].
impossible.NOV.PL SUBJ come.back DEF-man-NOM
'It is impossible for the man to come back.'

b. **hayhāt* *ʾanna* *ar-rajl-a* *hunā*.
impossible.NOV.PL COMP DEF-man-ACC here
Intended: 'It is impossible for the man to come back.'

c. **hayhāt* *ʾinna* *ar-rajl-a* *hunā*.
impossible.NOV.PL.1SG COMP DEF-man-ACC here
Intended: 'It is impossible for the man to come back.'

In (85a), the NoV, *hayhāt* 'impossible,' selects a TP headed by the subjunctive particle *ʾan*. Accordingly, using the NoV with CPs headed by a complementizer results in ungrammatical constructions as it is evident in (85b) and (85c) above. Accordingly, it is not legitimate to look at the NoV, *hayhāt* 'impossible,' as an interjection as selection is not a property of interjections.

3.2.3 Interaction with Case

Typically, interjections do not affect case assignment across languages. However, according to Lutz and Jong (2011), Arabic interjections do. NoVs are classified as interjections that govern other lexical items and affect their case assignment. As a verb governs nominative and accusative, an interjection with its meaning also governs two cases. They illustrate this with the following examples.

86)

a. *hayhāta* *zayd-un*.
impossible.NOV.PL.1SG Zayd-NOM
'Zayd is far.'

b. **hayhāta* *zayd-an*.
impossible.NOV.PL.1SG Zayd-ACC
Intended: 'Zayd is far.'

[16] According to Fessi Fehri (2012: 240), *ʾan* originates in C. However, Habib (2009) argues that *ʾan* originates in T not C. In this work, I refer to *ʾan* as a subjunctive particle and follow Habib (2009) because this particle behaves like infinitival *to* in English. See Habib (2009) for a counter-argument opposed to the claim that *ʾan* originates in the C head.

87)

a. *ḍarābi* *zayd-an.*
beat.NOV.IMP.2SG Zayd-ACC
'(You) beat Zayd.'

b. **ḍarābi* *zayd-un.*
beat.NOV.IMP.2SG Zayd-NOM
Intended: '(You) beat Zayd.'

(Lutz & Jong, 2011, p. 73)

According to their view, in (86a), *Zayd*, marked with the nominative case, is the agent of the interjection, *hayhāta*, while in (87a), *Zayd*, marked with the accusative case, is the direct object of the interjection, *ḍarābi*. However, cross-linguistically, this behavior is not attested as a property of interjections.

The first point of departure shows that NoVs are not behaving like interjections. In specific syntactic contexts, NoVs are not optional; they can assign case and select specific arguments. According to Hartmann and Stork (1972:115), cited in Lutz and Jong (2011, p. 78), an interjection is "a word, typically of indeclinable form, that in most languages has no grammatical or syntactic relationship to any other words or parts of a sentence." In fact, it is not a property of all languages to have interjections that govern not only other lexical items and affect their case assignment but also affect thematic and grammatical roles. With that in mind, NoVs are behaving more like verbs. The forthcoming tests aim to set the second point of departure in the behavior of NoVs.

3.2.4 Adverbial Modification

The second point of departure that characterizes NoVs can be realized through their interaction with adverbs, elements that modify an action. Four types of adverbs are examined: degree adverbs, manner adverbs, temporal adverbs, and numeral adverbs (Ryding, 2005). Just like many languages, in Arabic, adverbs can be used to modify verbs and adjectives. The tests show

that NoVs do not interact with most adverbs, yet they can allow numeral adverbs to modify their clausal structure.

To draw conclusions upon the categorical nature of NoVs, I present their interaction initially with degree adverbs and compare it with verbs. The test shows that while it is permissible for verbs to interact with adverbs, synonymous NoVs ban such modification. Notice the use of degree adverbs with NoVs in the following examples. The examples illustrate that NoVs (e.g.,(88)) ban degree adverbs in clause-initial (89), medial (90), and final (91) positions.

88) *šatāna* *al-ḥaq-u* *w* *al-bāṭil*.
set.apart.NOV DEF-right-NOM and DEF-wrong
'The right and wrong never met.'

89)

a. **kaṯīr-ān* *šatāna* *al-ḥaq-u* *w* *al-bāṭil*.
a.lot-NUN set.apart.NOV DEF-right-NOM and DEF-wrong
Intended: 'The right and wrong were very much apart.'

b. **qalīl-an* *šatāna* *al-ḥaq-u* *w* *al-bāṭil*.
a.little-NUN set.apart.NOV DEF-right-NOM and DEF-wrong
Intended: 'The right and wrong were little apart.'

90)

a. **šatāna* *kaṯīr-ān* *al-ḥaq-u* *w* *al-bāṭil*.
set.apart.NOV a.lot-NUN DEF-right-NOM and DEF-wrong
Intended: 'The right and wrong were very much apart.'

b. **šatāna* *qalīl-an* *al-ḥaq-u* *w* *al-bāṭil*.
set.apart.NOV a.little-NUN DEF-right-NOM and DEF-wrong
Intended: 'The right and wrong were little apart.'

91)

a. **šatāna* *al-ḥaq-u* *w* *al-bāṭil* *kaṯīr-ān*.
set.apart.NOV DEF-right-NOM and DEF-wrong a.lot-NUN
Intended: 'The right and wrong were very much apart.'

b. **šatāna* *al-ḥaq-u* *w* *al-bāṭil* *qalīl-an*.
set.apart.NOV DEF-right-NOM and DEF-wrong a.little-NUN
Intended: 'The right and wrong were little apart.'

Whereas the use of degree adverbs with NoVs is problematic, using such adverbs with synonymous verbs is acceptable (92).

92)

a. *ʾiftarqa al-ḥaq-u w al-bāṭil kaṯīr-ān /qalīl-an/jidan.*
set.apart DEF-right-NOM and DEF-wrong a.lot-NUN/a.little-NUN/very
'The right and wrong were very much/ a little/ a lot apart.'

b. *kaṯīr-ān / qalīl-an/jidan ʾiftarqa al-ḥaq-u w al-bāṭil.*
a.lot-NUN/a.little-NUN/very set.apart DEF-right-NOM and DEF-wrong
'The right and wrong were very much/ a little/ a lot apart.'

c. *ʔiftarqa kaṯīr-ān /qalīl-an/jidan ʔal-ħaq-u w al-bāṭil.*
set.apart a.lot-NUN/a.little-NUN/very DEF-right-NOM and DEF-wrong
'The right and wrong were very much/ a little/ a lot apart.'

The interaction of NoVs with degree adverbs can be further supported by the NoV *hayhāta* 'impossible' (93). Even when NoVs have different properties, a degree adverb is not permitted in all positions. Note that the use of such adverbs with a synonymous verb is acceptable.

93)

a. **hayhāta kaṯīr-ān ʾan yaʿūda ar-rajul-u.*
impossible.NOV.PL.1SG a.lot-NUN SUBJ come.back.3M.SG DEF-man-NOM
Intended: 'It is very impossible for the man to come back.'

b. ** jadān hayhāta al-ʿawd-u ʾilā aḏ-ḏall-i.*
very impossible.NOV.PL.1SG DEF-back-NOM to DEF-disgrace-GEN
Intended: 'Going back to disgrace is very impossible.'

Other types of NoVs show similar behavior with different types of adverbs. Based on the judgments of native speakers, using manner adverbs with NoVs results in problematic constructions. Consider the following instances.

94)

a. *ḳuḏ al-kitāb bi-qūwa.*
take.2M.SG DEF-book in-strong
'Take the book firmly.'

b. *bi-qūwa ḳuḏ al-kitāb.*
in-strong take.2M.SG DEF-book
'Firmly, take the book.'

95)

a. **hāk al-kitāb bi-qūwa.*
take.NOV.IMP:2SG DEF-book in-strong
Intended: 'Take the book firmly.'

b. **bi-qūwa* *hāk* *al-kitāb.*
in-strong take.NOV.IMP:2SG DEF-book
Intended: 'Firmly, take the book.'

Even though it is appropriate to use the adverbial element *biqūwa* 'firmly' with a verb in clause-final (94a) and initial positions (94b). Using it with a synonymous NoVs leads to ungrammatical constructions even if it is used in the same positions (95a)/(95b).

Moreover, NoVs cannot be used with temporal adverbs. Even though some NoVs are described to denote past, present, and imperative actions, modifying such actions with adverbs showing time is unacceptable[17]. See the following examples.

96)

a. *ʾiftarqa* *al-ḥaq-u* *w* *al-bāṭil* *al-bāriḥa.*
set.apart DEF-right-NOM and DEF-wrong DEF-yesterday
'The right and wrong got apart yesterday.'

b. **šatān* *al-ḥaq-u* *w* *al-bāṭil* *al-bāriḥa.*
set.apart.NOV DEF-right-NOM and DEF-wrong DEF-yesterday
Intended: 'The right and wrong got apart yesterday.'

97)

a. *hasā/al-ʾan* *ḳuḏ* *al-kitāb.*
now/DEF-now take.2M.SG DEF-book
'Now, take the book.'

b. **hasā/al-ʾan* *hāk* *al-kitāb.*
now DEF-now take.NOV.IMP:2SG DEF-book
Intended: 'now, take the book.'

Using numeral adverbs (cf. Ryding, 2005), however, with NoVs is acceptable. Thus, using an adverb such as *ʾawlān* 'firstly,' *ṯānyān* 'secondly,' *ṯāliṯān* 'thirdly,' *rābiʿān* 'fourthly' and so on and so forth does not affect the grammaticality of structures. Nevertheless, it is noticed that the use of such adverbs is marked orthographically by a colon (:) or a comma (,) and phonologically by a pause (…). The following exmples are representative.

[17] Comparing NoVs with interjections in other languages shows that, in all languages, interjections do not ban adverbs (e.g., 'Yikes, I didn't see you today!').

98) *ʾawlān* *ʾiālīka* *ʿan-ī.*
firstly go.away.NOV.IMP:2SG from-2SG.GEN
'Firstly, go away from me.'

99) *ṯānyān* *šatāna* *bayn* *lāʿib* *māhir* *w* *bayna*
secondly set.apart.NOV between player skillful and between
ʾiʿlāmī *yaʿrif* *ʾaṣūla* *al-liʿba.*
reporter know.3M.SG origin DEF-game
'Secondly, there is a difference between a skillful player and a reporter who knows how the game is played.'

100) *ʾaḳīrān* *šatāna* *bayn* *ʾiʿlāmi-kum* *w* *ʾiʿlāmi*
finally set.apart.NOV between media-your and media
al-ḳalīj.
DEF-gulf
'Finally, there is a difference between your media and that of the gulf countries.'

(Shuman, 2012)

The use of sequential adverbs with NoVs shows another subtle difference between NoVs and interjections. NoVs can be used for related structures and phrases like verbs. However, adverbs cannot come between the NoV and its complement (101).

101) **šatāna* *ʾaḳīrān,* *bayn* *ʾiʿlāmi-kum* *w* *ʾiʿlāmi* *al-ḳalīj.*
set.apart.NOV finally between media-your and media DEF-gulf
Intended: 'Finally, there is a difference between your media and that of the gulf countries.'

In addition to numeral adverbs, it is noticed that the use of evidential adverbs such as *wāqiʿiyān* 'realistically' is permitted clause initially with some NoVs (102).

102) *wāqiʿiyān* *hayhāta* *ʾan* *yajtamiʿa* *ḏālik.*
evidently impossible.NOV.PL.1SG SUBJ done that
'Evidently, this is impossible to be done.'

In Arabic, just like most languages, we can ask questions about adverbs, i.e., how the action is done, marked implicitly by *kayfa* 'how.' The following examples illustrate this behavior.

103) *ar-rajul-u* *jāʾa* *musriʿan.*
DEF-man-NOM came.3M.SG quickly
'The man came quickly.'

104) A: *kayfa* *jāʾa* *ar-rajul-u?*
how came.3M.SG DEF-man-NOM
'How did the man come?'

B: *ar-rajul-u* *jāʾa* *musriʿan.*
DEF-man-NOM came.3M.SG quickly
'The man came quickly.'

As shown earlier, NoVs do not accept manner, temporal, and other types of canonical adverbs. Given their behavior with adverbs leads to a broader question about their interaction with negation and interrogatives. I test whether NoVs can undergo any transformational processes that normally apply to similar structures formed by other categories.

3.2.5 Negation

In the Arabic language, negation occurs by using a set of particles, such as *la* 'not', *lam* 'not' and *laysa* 'there is no X.' The choice of a negating particle affects "the following phrase by requiring a particular case on a noun or noun phrase, or a particular mood of the verb" (Ryding, 2005, p. 641). The first two particles are compatible with verb phrases. The third one is compatible with noun phrases. Negation is one of the diagnostics that reveals about the structure of imperative verbs (Rivero, 1994; Rivero and Terzi, 1995). In this language, imperative verbs (105a) are negated by using *la* 'not' (105b). This particle changes verb forms morphologically to jussive (105b). The use of this particle without changing the morphological form of the verb leads to ungrammatical structure (105c).

105)

a. *ʾiḏhab* *ʾilā* *as-sawq.*
go.IMP.2S to DEF-market
'Go to the market.'

b. *la* *ta-ḏhab* *ʾilā* *as-sawq.*
NEG.PRT 2SG-go.JUS to DEF-market
'Do not go to the market.'

c. **la* *ʾiḏhab* *ʾilā* *as-sawq.*
NEG.PRT go.IMP.2SG to DEF-market
Intended: 'Do not go to the market.'

This test is crucial for my analysis because my data shows some NoVs mainly used for orders, and the test provides a key to the structure of NoVs. The following examples explore the compatibility of NoVs with negating particles. I test if those particles affect the morphological forms of NoVs.

106)

a. *hāk* *al-kitāb*.
take.NOV:2SG DEF-book
'Take the book.'

b. **la* *ta-hāk* *al-kitāb*.
NEG.PRT 2SG-take.NOV:2SG DEF-book
Intended: 'Do not take the book.'

c. **lam* *hāk* *al-kitāb*.
NEG.PRT take.NOV:2SG DEF-book
Intended: 'Do not take the book.'

d. **laysa* *hāk* *al-kitāb*.
NEG.PRT take.NOV:2SG DEF-book
Intended: 'Do not take the book.'

107)

a. *hayhāta* *an-najāḥ-u* *bi-lā-ʿamal.*
impossible.NOV.PL.PAST DEF-success-NOM with-out-work
'Success was impossible without work.'

b. **la/laysa/lam* *hayhāta* *an-najāḥ-u* *bi-lā-ʿamal.*
NEG.PRT impossible.NOV.PL.PAST DEF-success-NOM with-out-work
Intended: 'success was not impossible without work.'

In (106) and (107) above, the examples show that NoVs are incompatible with negating particles. In the case of commands (106a), altering the morphological form of imperative NoVs (106b) does not lead to grammatical structure.

Isac (2015, p. 5) argues that "clauses prototypically used for orders" depend on imperative verbs. In his discussion of the morphosyntax of imperatives, Isac (2015) describes imperatives with a set of properties. Among those properties is negation. Negation of imperatives shows that there are two types of imperative verbs cross-linguistically. Those are true imperatives and surrogate imperatives. True imperatives refer to those commands formed by using a verb form that is only

used for giving orders (108). Surrogate imperatives refer to those commands formed by verb forms that are not only used for giving orders; those forms can appear in the subjunctive or the indicative (109).

108)

a. *Inchide* *uşa*!
close.IMP.2SG door.DEF
'Close the door!'

(Romanian)

(Isac, 2015, p.7)

b. *Pijene!*
Go.IMP.2SG
'Go!'

(Greek)

(Isac, 2015, p.7)

c. *Fige*!
'leave.IMP.2SG
'Leave!'

(Cypriot Greek)

(Rivero and Terzi, 1995, p.323)

109)

a. *Să* *închizi* *uşa*!
SBJ.PRT close.SUBJ.2SG door.DEF
'Close the door!'

(Romanian)

(Isac, 2015, p.7)

b. *Na* *Pas*!
SBJ.PRT go.SUBJ.2SG
'Go!'

(Greek)

(Isac, 2015, p.7)

c. *Da* *cetes*!
SBJ.PRT read.INDIC.2SG
'You should read!'

(Bulgarian)

(Scatton, 1984, cited in Isac, 2015, p.7)

According to Rivero (1994), negation can set true and surrogate imperatives apart. True imperatives are "incompatible with negative markers" (110) (Isac,2015, p.9). Surrogate imperatives, however, show compatibility with those markers (111).

110) ∗*Den/mi* *diavase*!
NEG read.IMP.2SG
'Don't read!

(Greek)

(Isac, 2015, p. 9)

111)

a. *Na* *tu* *to* *stilis!*
SBJ.PRT CL.3SG CL.3SG send.SUBJ.2SG
'You should send it to him!'

b. *Na* *min* *tu* *to* *stilis!*
SBJ.PRT NEG CL.3SG CL.3SG send.SUBJ.2SG
'You should not send it to him!'

(Greek)

(Isac, 2015, p. 9)

However, Rivero and Terzi (1995) notice that the compatibility with negative markers test does not describe true imperative verb forms accurately because not all these forms are incompatible with negative markers. They propose classifying verb forms that are only used for orders to two types. Type I includes true imperatives that are incompatible with negative markers (112). Types II includes true imperatives that are compatible with negative markers (113).

112) Type I True imperatives

a. **Den/mi* *diavase*!
NEG read.IMP.2SG
'Don't read!'

(Greek)

(Isac, 2015, p.10)

b. **En/mi fige*!
not leave.IMP.2SG
'Don't leave!

(Cypriot Greek)

(Rivero and Terzi, 1995, p. 323)

113) Type II True Imperatives

Ne ceti!
NEG read.IMP.2SG
'Don't read.'

(Serbo-Croatian)

(Isac, 2015, p.10)

NoVs are incompatible with negative markers, and they resist changing their forms for negation. The NoV pattern in (105) fits Isac's (2015) description of true imperatives Type I; this is evident in that NoVs are incompatible with negating particles, and they cannot appear in other morphological forms/moods. This result is consistent with the description of NoVs in the literature (e.g., Alawi, 2013; Alshawa, 2006; Hasan, 2009).

3.2.6 Subordination

Conditional structures are among the many patterns of subordination across languages. This type of subordination provides a neat test to set NoVs and interjections apart. Conditional structures refer to sentences expressing factual implications or hypothetical situations in which the validity of what is shown in one clause depends on another (114) (Goodwin 1873; Haegeman and Wekker 1984; Köpcke and Panther 1989).

114)

a. If it rains tomorrow, the match will be cancelled.
b. If it rained tomorrow, the match would be cancelled.
c. If it had rained yesterday, the match would have been cancelled.

(English)

(Haegeman and Wekker 1984:45)

d. *Wenn* *du* *nach* *Barcelona* *gehst;* *dann* *besuch* *das*
if you to Barcelona go, then visit the
Museo *Picasso*.
Museo Picasso

'If you go to Barcelona, then visit the Museo Picasso.'

(German)

(Reich 2009:220)

Like those languages, in the Arabic language, conditionals consist of two clauses - a dependent and an independent clause. The language deploys several strategies for this function, among which is using the conditional particle *ʾiḏā* 'if'.

115)

a. *ʾiḏā* *aššaʿb-u* *yawm-an* *ʾarāda* *alḥayā*
if people-NOM day-NUN wanted.3PL.M live.ACC
fa-lābdda *ʾan* *yastjīb* *alqadr-u*.
PAR-must SUBJ.PAR respond fate-NOM
'If people want to live in any day, fate must respond.'

(Alshabi, 1933, line 1)

b. *wa* *ʾiḏā* *raʾa-ū* *tajārat-an* *ʾaw* *lahw-an* *anfḍḍ-ū*
and if saw-3PL.M trade-NUN or game-NUN went-3PL.M
ʾilī-hā.
to-it
'And if they have a trade or a game, they left to it.'

(Holy Quran, verse 11, p. 601)

c. *ʾiḏā* *ṣaḥb-ta* *al-laʾīm* *taʾḏīt-ta.*
if befriended-2SG.M DEF-mean.person get.hurt-2SG.M
'If you befriended the mean person, you would get hurt.'

In these conditional clauses, the first part introduces the condition, and the consequence to this condition is realized by the second part. Those parts must meet minimum syntactic requirements to operate. For example, in English, it is ungrammatical to form a conditional clause by using the condition only (116). The same constraint applies to the Arabic language (117).

116)

a. *If your mom arrives.

b. *If he eats apples.

117)

a. *ʾiḏā aššaʿbu yawm-an ʾarāda alḥayā.

b. * wa ʾiḏā raʾaw tajārat-an ʾaw lahwan.

c. *ʾiḏā ṣaḥbta allaʾīm.

Additionally, the consequent part of a conditional clause must be independent from the conditional part; that is, it must be able to stand by itself. Notice that the following examples are ungrammatical unless they involve ellipses.

118)

a. *If your mom arrives, John.

b. *If he eats apples, on the table.

Across languages, conditionals cannot have phatic interjections as their independent clause. For example, it is ungrammatical to have the interjection *ah* as the independent clause in (119).

119)

a. *If your mom arrives, ah.

b. *ah, if your mom arrives.

This shows that phatic interjections cannot establish conditionals by themselves. This case, however, does not apply to NoVs (e.g., Alawi, 2013; Alshawa, 2006; Hasan, 2009). NoVs can be used as answers to express the consequence of conditional clauses if they are used clause initially (120). This test shows that NoVs differ from interjections in this respect.

120)

a. *ṣah ʾiḏā taklma wālid-uk.*
listen. NOV.2SG if spoke.3M.SG father-your
'Listen, if your father spoke.'

b. *ʾiḏā taklma wālid-uk ṣah
if spoke.3M.SG father-your listen. NOV.2SG
Intended 'If your father spoke, listen.'

The pattern in (120a) resembles orders in English ((121a) & (121b)). This proves that NoVs are not phatic interjections.

121)

a. If your mom arrives, listen.
b. Listen, if your mom arrives.

In English, one may wonder about the validity of this conclusion, given the example in (122). According to the judgment of native speakers of English, this structure is grammatical.

122) If your mom arrives, yikes!

According to their judgments, most emotive interjections (such as *yikes* (fear/shock), *wow* (surprise), *uh-oh* (trepidation), *phew* (relief), etc) are fine in this context. There are two possible explanations to consider this structure grammatical. The first is to assume that there is an ellipsis that makes those interjections different from the one in (119). The second option is to recategorize those interjections because they do not fit with the grammar of regular conditional clauses (Goodwin 1873; Haegeman and Wekker 1984; Köpcke and Panther 1989). I cannot recall any study that projects those interjections in a way that shows that those interjections are independent clauses by themselves (if so, the first option is a good answer). However, note that the example in (122) shows a specific tense (present). It does not allow adverbial modification or negation nor expresses a command. It is beyond the scope of this section to offer a thorough analysis of those aspects, but the analysis of NoVs could offer ideas to capture their use.

3.2.7 Coordination

One of the syntactic tests that determines the nature of lexical items is coordination. The basis of the coordination test relies on the idea that "only constituents of the same type can be coordinated" (Radford, 2009, p. 53). In the Arabic language, several coordinators can be used to

connect constituents with each other, including *wa* ‘and,’ *ʾaw* ‘or,’ *lakin* ‘but,’ *ṯuma* ‘then’ and more. Coordination in Arabic connects similar structures and can affect the semantics of interpretation. Consider the following examples.

123) *ḳaraja* *al-walad-u* *w* *al-fatāt-u.*
went.out.3M.SG DEF-boy-NOM and DEF-girl-NOM
‘The boy and the girl went out.’

124)

a. *ʾiʿmal* *bi-jid* *wa* *ʾistmiʿ* *al-mawsīqā.*
work in-hard and listen DEF-music
‘Work hard and listen to music.’

b. **ʾiʿmal* *bi-jid* *wa* *al-mawsīqā.*
work in-hard and DEF-music
‘Intended: Work hard and listen to music.’

The examples above show cases of permissible types of coordination in Arabic. The coordinator *w* ‘and’ may form conjuncts at the phrasal level (123). Conjoining unequal structures results in ungrammatical constructions (124).

NoVs can be coordinated. First, it is possible to coordinate phrases headed by NoVs. Second, it is permissible to conjoin NoVs with verbs at the lexical level. Third, some instances of coordination show that phrases headed by NoVs can be coordinated with phrases headed by verbs at the clausal level. However, coordinating NoVs with nouns, adjectives, and other grammatical items is not allowed. Patterns of coordination mark a point of departure. The fact that coordinated phrases headed by NoVs cannot work without their heads questions their earlier categorization status as interjections.

Phrases headed by NoVs can be conjoined to similar phrases headed by similar types of NoVs. A phrase headed by *šatān* ‘set.apart’ can be coordinated with a phrase headed by *hayhāta* ‘impossible’. Compare the following examples.

125)

a. *šatān* *bayna* *aṯ-ṯarā* *w* *aṯ-ṯurayā*
set.apart.NOV between DEF-mud and DEF-treasure
wa *hayhāta* *ʾan* *yatsāwa* *as-safḥu* *maʿ*
and impossible.NOV SUB meet DEF-land.NOM with
al-qima.
DEF-moutain.top
'Mud and treasures are apart, and it is impossible for land and the top of a mountain to meet.'

(Mahfoud, 2019)

b. **šatān* *bayna* *aṯ-ṯarā* *w* *aṯ-ṯurayā.*
set.apart.NOV between DEF-mud and DEF-treasure
wa *ʾan* *yatsāw* *as-safḥu* *ma* *ʿal-qima.*
and SUB meet DEF-land.NOM with DEF-mountain.top
Intended: 'Mud and treasures are apart, and it is impossible for land and the top of a mountain to meet.'

(adapted)

126) *ḥayya* *ʿalā* *ḳayri* *al-ʿamal* *wa* *ʾiālīka*
come.NOV.IMP to goodness DEF-deed… and go.away.NOV:2SG
ʿan *kuli* *mā* *yaqifu* *bi-ka*.
from every PAR stop.3M.SG in-you
'Do the rightful deeds and go away from everything that bans you from doing so.'

(Alğārm & ʾmyn, 2010)

In (125a), the phrase [*šatān* [$_{PP}$ …..]] is conjoined to [*hayhāta* [$_{TP}$ …]] with *w* 'and.' Both NoVs are required. In (125b), omitting [*hayhāta* [$_{TP}$ …]] creates a coordination problem as a result of conjoining two unequal phrases. After the omission of *hayhāta,* there are two possibilities of mismatch. The first possibility demands to conjoin [*šatān* [$_{PP}$ …..]] with [$_{TP}$ **...**]. The second possibility conjoins the complement of *šatān,* [$_{PP}$ …..] with the complement of *hayhāta*, [$_{TP}$…]. In both cases, the derivation crashes because of restrictions on selection and coordination.

In addition, NoVs of the same type and pre-defined tense can be coordinated. Conjuncts can be formed with phrases headed by imperative NoVs. In (126), the imperative phrase [*ḥayya* [$_{PP}$ …]] forms a conjunct with the imperative phrase [*ʾiālīka* [$_{PP}$ …]]. Both phrases are headed by NoVs, which are required for forming structure (cf., the ungrammaticality of conjoining [*ʾiālīka* [$_{PP}$ …]]

with [$_{PP}$ ʿ*alā* [$_{DP}$ …]]). The fact that ʾ*iālīka* cannot select a prepositional phrase headed by ʿ*alā* rules out coordination at both the complement and phrasal levels. The examples above confirm the constituency of phrases headed by NoVs.

According to Hasan (2009), the second type of coordination takes place at the lexical level. In this pattern of coordination, conjuncts are formed with NoVs and verbs at the word level and by sharing one argument. For instance, *hayhāta* can be coordinated with its synonymous verb *baʿuda* 'set apart.' *šatān* can be conjoined with ʾ*iftraqa* 'differentiate' and the like. The following examples are illustrative.

127) *hayhāta* *wa* ʾ*ibtaʿud-at* *al-ġāya* ʾ*amāma*
impossible.NOV and went.away-3F.SG DEF-goal in.front.of
al-ʿājiz.[18]
DEF-desperate
'The goal is impossible and never reached by desperate people.'

(Hasan, 2009)

128) ʾ*iftaraqa* *wa* *štāna* *mā* *bayna* *al-kamāli* *w*
set.apart and set.apart.NOV PAR between DEF-perfection and
annaqṣ.
DEF-imperfection
'Perfection and imperfection are set apart.'

(Hasan, 2009)

129) * ʾ*ibtaʿud-at* *wa* *hayhāta* *al-ġāya* ʾ*amāma* *al-ʿājiz.*
went.away-3F.SG and impossible.NOV DEF-goal.F in.front.of DEF-desperate
Intended: 'The goal is impossible and never reached by desperate people.'

130) * ʾ*ibtaʿud-at* *al-ġāya* ʾ*amāma* *al-ʿājiz* *w*
went.away-3F.SG DEF-goal.F in.front.of DEF-desperate and
hayhāta.
impossible.NOV
Intended: 'The goal is impossible and never reached by desperate people.'

(adapted from Hasan (2009))

In (127), the NoV *hayhāta* 'impossible' and the verb ʾ*ibtaʿud* 'went away' form a conjunct. The

[18] The two examples are mentioned as instances of lexical coordination. However, lexical conjuncts do not seem to pattern equally. For counter evidence, see further tests of coordination and left dislocation (in the subsequent section).

same pattern is observed with the verb *ʾiftraqa* and the NoV *štāna* in (128). The second element of the conjunct determines the overall type of selected arguments, which makes conjuncts pattern as: [$_{XP}$ *hayhāta* [$_{CONJ}$ *w* [$_{VP}$ *ʾibtaʿudat* [$_{DP}$ …]]]] and [$_{VP}$ *ʾiftraqa* [$_{CONJ}$ *w* [$_{XP}$ *štāna* [$_{PP}$ …]]]], respectively. The structures above show that conjuncts are not equal. In fact, switching the position of conjoined elements results in selection mismatch: [$_{XP}$ *štāna* [$_{CONJ}$ *w* [$_{VP}$ *ʾiftraqa* [$_{PP}$ …]]]]; the verb [$_{VP}$ *ʾiftraqa*] cannot select a PP as its complement. While it is hard to observe selection mismatch in [$_{VP}$ *ʾibtaʿudat* [$_{CONJ}$ *w* [$_{XP}$ *hayhāta* [$_{DP}$ …]]]] in (129) due to the fact that the DP is the thematic agent of conjuncts, a problem appears with the realization of the agreement suffix on the verb [$_{VP}$ *ʾibtaʿud**at*** [$_{CONJ}$ *w* …. Since NoVs block subject extraction, agreement is blocked, which can be illustrated in (130).

According to Hasan (2009), only past NoVs can be coordinated with their synonymous past verbs. Imperative NoVs are not able to undergo this pattern of coordination. Thus, the following examples are ungrammatical.

131)

a. **ḳuḏ w hāk al-kitāb.*
take and take.NOV:2SG DEF-book
Intended: 'Take the book.'

b. **hāk w ḳuḏ al-kitāb.*
take.NOV:2SG and take DEF-book
Intended: 'Take the book.'

In (131a) the verb *ḳuḏ* 'take' forms a conjunct with the imperative NoV, *hāk* 'take.' The same pattern applies to the example in (131b), yet with the NoV being the initial element in the conjunct. The problem of coordination is not related to argument selection. Both the NoV and the verb can have a DP, [$_{DP}$ *al-kitāb*], as their grammatical object, [$_{XP}$ *hāk* [$_{DP}$ *al-kitāb*]], [$_{VP}$ *ḳuḏ* [$_{DP}$ *al-kitāb*]]. Semantically, forming conjuncts by doubling one verb is not valid: [$_{VP}$ take [$_{CONJ}$ and [$_{VP}$ take [the book]]]]. Nevertheless, the semantic factor does not constrain other types of NoVs from forming conjuncts with their synonymous verbs cf., [$_{XP}$ *hayhāta* [$_{CONJ}$ *w* [$_{VP}$ *ʾibtaʿudat* [$_{DP}$ …]]]] and [$_{XP}$ *štāna*

[$_{CONJ}$ *w* [$_{VP}$ *ʾiftraqa* [$_{PP}$ …]]]]. Examining conjuncts by looking at their arguments, rather than their types shows that NoVs are reported to allow coordination if and only if an argument functions as a grammatical subject, while conjuncts of this type are blocked, when their arguments are in an object position. Albeit coordination in Arabic is dependent either on the semantic correlation of actions or on the overall patterns of interpretation, coordinating NoVs with verbs shows a connection between the two categories. I argue that the function of arguments and their ability to undergo extraction help in determining which lexical items can undergo coordination.

The third type of coordination is at the clausal level. In this type, clauses headed by NoVs can be coordinated with clauses headed by verbs. The advantage of this type of coordination is that verbs and NoVs select their arguments independently. Nevertheless, this type of coordination is not common as speakers of the language are more likely to form conjuncts with verbs. Moreover, it is noticed that when such type of coordination is used, clauses headed by NoVs appear before those headed by verbs, and those clauses are restricted to giving commands. The following examples are illustrative.

132) *ḳuḏ al-kitāb wa ʾiqraʾ ad-darsa al-ʾawal.*
take DEF-book and read DEF-lesson DEF-first
'Take the book and read the first lesson.'

133)

a. *ʾilīka al-kitāb wa ʾiqraʾ ad-darsa al-ʾawal.*
take.NOV:2SG DEF-book and read DEF-lesson DEF-first
'Take the book and read the first lesson.'

b. *ʾibtaʿid ʿanī wa ʾiālīka al-kitāb.
go.away from-2SG.GEN and take.NOV:2SG DEF-book
Intended: 'Go away and take the book.'

134)

a. *dūnaka al-warq w al-qalm wa ʾktub*
take.NOV:2SG DEF-paper and DEF-pen and write
mā ʾumlīhi ʿalī-k.
whatever dictate.1SG on-2SG.GEN
'Take the paper and the pen and write whatever I dictate.'

(TheJbman, 2019)

b. *ʾištrī daftr-ān wa dūnaka alwarq wa al-qalm.
buy notebook-ACC and take.NOV:2SG DEF-paper and DEF-pen
Intended: 'Buy a notebook and take the paper and the pen.'

In (132), the conjuncts are formed by two clauses headed by verbs: [$_{CP}$ *ḳuḏ* [*al-kitāb*]] is conjoined with [$_{CP}$ *ʾiqraʾ* [*ad-dars al-ʾawal*]]]. Two commands are conjoined. Each command headed by a verb that selects an independent argument that acts as its grammatical object forms a CP. A less common type of coordination involves clauses headed by NoVs that are conjoined to clauses headed by verbs. In (133a), the construction [$_{XP}$ *ʾilīka* [*al-kitāb*]] forms a conjunct with a clause headed by a verb [$_{CP}$ [$_{VP}$ *ʾiqraʾ* [*ad-darsa al-ʾawal*]]]]. Coordination of this type fortifies the verbal nature of NoVs. When such type of coordination is used, NoV clauses must always come before other imperative conjuncts (cf., (134a) with (134b)).

The coordination test shows while NoVs can be coordinated with verbs, it is unacceptable to coordinate NoVs with other lexical items such as nouns, adjectives, adverbs, and interjections. NoVs show some properties of verbs in their functional sense and in their ability to head clauses. NoVs conjuncts, nevertheless, have restrictions on the overall structure of coordination patterns. In some respect, they impose a restriction on word order and on argument extraction. Therefore, while NoVs show some behaviors of verbs, their morphological structure, and use depart from verbs. In other aspects, NoVs pattern with nouns in their surface form and in their ability to interact with possessive affixes.

3.2.8 Substitution

Substitution is another syntactic test that can provide a prediction toward a particular lexical item and constituents. The basic idea of this test is that if constituents can be replaced by other items, then the possibility that the items are belonging to the same category or that the items share some features is valid. The fact that NoVs share a semantic interpretation with verbs constitutes the foundation of the substitution test.

135)

a. *hāk* *al-kitāb*.
take.NOV:2SG DEF-book
'Take the book.'

b. *ḳuḏ* *ʔal-kitāb*.
take DEF-book
'Take the book.'

Replacing the NoV *hāk* 'take' with the verb *ḳuḏ* 'take' is acceptable and almost gives the same semantic meaning of performing the action of getting a book from a speaker. The same idea is applicable to all NoVs. Substituting NoVs with nouns is not acceptable.

While the use of the pro-verb, *ʾifʿal* 'do' and the demonstrative lexical item, *ḏālika* 'that', as verbal and clausal substitutes as pro-forms for verbs is acceptable, they sound odd with NoVs. Using pro-verbs to substitute NoVs is not clearly possible for two reasons (a) NoVs cannot be omitted; I attribute that to their expressive meaning. In addition, (b) using a pro-verb in Arabic (the case of imperatives) requires that the second clause be in SVO word order.

The pattern of substitution shows more application than it is described; to make interrogatives in structures that contain NoVs as their heads, native speakers showed an automatic switch to verbs; thus, for them negating or asking questions about NoV clauses is not possible. Their behavior could be attributed to the impossibility of inflecting NoVs.

136) **māḏā* *ahuk?*
what take.NOV.1SG
Intended: 'What should I take?'

3.2.9 Interaction with Speech Situation

Across languages, agreement with discourse participants is understood through agreement relationship with speech act projections. For example, in Basque (Oyharçabal 1993, cited in Akkus 2016) addressee agreement takes place on main predicates.

137) *Pette-k* *lanegin* *di-**k***.
Peter-ERG worked 3SG.ERG-**M**
'Peter worked.' (said to a male friend)

(Basque)

(Oyharçabal 1993, cited in Akkus 2016)

Agreement with discourse participants can be found on both verbal and nominal domains. The basic structure of NoVs shows that they are lexical categories that can select arguments and assign case. Morphological agreement affixes are sensitive to their categorical host. In Arabic, investigations have limited second person affixes with discourse participants to nominal structures. Nevertheless, I argue that NoVs code speech participants. First, imperative NoVs show agreement markers with addressees. Second, other types of NoVs reflect the epistemic stance of speakers. The two behaviors depart from regular verbs in Arabic. It is not a property of a regular verb to show morphological affixation that encodes speech act participants nor reflects the attitudes and feelings of its speakers. In the forthcoming discussion, I show the impact of discourse participants on categorization. I present morphological and contextual evidence for NoVs as a new host for discourse agreement.

Morphologically, imperative NoVs differ from verbs in utilizing a class of hearer-oriented affixes such as *-k*. In (138a), the speaker directly hands a book over to a male hearer. The morphological structure of the NoV *hāk* 'take' encodes information about the gender of the hearer by affixing the inseparable suffix *-k*. That is, neither *hā-* nor *-k* can stand alone. Affixation of this type is not permitted with lexical verbs. In (138b), the verb *ḳuḏ* 'take' encodes such information without relying on extra affixation. Affixing *-k* onto verbs encodes redundant information. The agreement pattern can be extended to correspond not only with the gender of hearers but also their number (cf., (139a) with (139b)). Looking at the function of agreement that is hosted with lexical

verbs reveals that verbs encode phi features that agree with agents; verbs cannot be affixed to addressee affixes.

138)

a. *hāk* *al-kitāb*.
take.NOV:2SG.ADD DEF-book[19]
'Take the book.'

b. **ḳuḏ-k* *al-kitāb*.
take-2SG.ADD DEF-book
Intended: 'Take the book.'

139)

a. *hākum* *al-kitāb*.
take.NOV:2PL.ADD DEF-book
'Take the book.'

b. **ḳuḏ-kum* *al-kitāb*.
take-2PL.ADD DEF-book
Intended: 'Take the book.'

Since *-k* is inseparable from the NoV interpretation, I assume that NoVs show agreement with a hearer. Since hearers are not manifested with a separate class of pronouns, I assume that at some point in the derivation, agreement takes place with a hidden pronoun, *pro*. Agreement with *pro* appears on NoVs (e.g., *hāka* 'take' (male addressee), *hāki* 'take' (female addressee), *hākū* 'take' (a group of addressees), and the like). Supporting evidence come from other imperative NoVs.

140)

a. *ʿalīka* *nafsa-ka* *fa-hāḏib-hā*.
abide.NOV:2SG.ADD self-2SG.ADD CAUS.PRT-behave-it
'Mind yourself and make it well-behave.'

b. *ʾiālīka* *ʿanī i*.
get.away:NOV:2SG.ADD from-1SG.GEN
'Go away.'

[19] Notice a different articulation of glossing. ADD stands for addressee.

c. *dūnaka* *al-kitāb*.
take.NOV:2SG.ADD DEF-book
'Take the book.'

Unlike English, *you*, which functions as an agent in imperative structures and encodes hearers within its folds, imperative NoVs cannot agree with agents without hearer-oriented affixes. Evidently, NoVs encode information that is dedicated to speech act participants in addition to that encoded for agents. Thematic and discoursal domains specify two types of agreements for spelling out the structure of NoVs, one at the verbal level while the other is at the discoursal level. The verbal level equips NoVs specifiers for thematic role assignment like regular verbs. At the discoursal level, imperative NoVs do not have subjects. This raises a red flag against Baker's (2003) argument that verbs must have subjects, yet it does not undermine his observation that verbs must have specifiers; I add to his argument that hearers can act as specifiers for NoVs but not subjects, while specifiers of imperative verbs are of a different nature; they can act as subjects and hearers.

If the argument is on the right track, the presence of hearers explains why some NoVs cannot change forms to suit agents; they cannot operate with the agentive agreement *-t* (as noticed by Arab grammarians (e.g., Alğārm & ʾmyn, 2010; Hasan, 2009; Ibn Alqaym Aljawzya, 1954; Ibn Alʾaṯīr, 1999; Sibawayh, 1970)). The following table draws a distinction between English and Arabic, *you*, and their agreement systems. Two types of pronouns are represented. The distinction is drawn based on two angles: the ability to act as a subject, and the ability to represent the hearer. Based on these criteria, I argue for two types of *pros* that can act as specifiers; the first type can act as specifiers of verbs. The second type can act as a specifier of speech acts.

Table 7. Second Person Representation in English and Arabic

Evidence from	English	Arabic	
	you/pro	-k/pro	-t/pro
Agentive	✓	✗	✓
Addressee/hearer	✓	✓	✗

Given the fact that NoVs can show agreement with second person hearers (marked by *-k*), but they cannot show agreement with second person agents (marked by *-t*) show a difference in the command system between the two languages at the syntactic-pragmatic level. In English, *pro* is bonded with hearers and can be used as the specifier of imperatives. In Arabic, two types of *pro* are assumed to exist: the first type patterns with that of English and governs lexical imperatives, while the other one differs in that it cannot be used to govern lexical imperatives, but rather it can act as a specifier of NoVs. This conclusion confirms that imperatives are commands done from the side of the speaker but fulfilling the action may or may not be the case from the side of the hearer.

When a speaker gives a command, the illocutionary force of an utterance is directed toward an addressee for fulfillment. Other speech acts, nevertheless, transmit utterances for expressing epistemic stance, i.e., how a speaker feels and expresses his attitudes or emotions. In that case, speakers are involved in giving an action. The fact that some types of NoVs do not show explicit affixal agreement with hearers entails that they are specified for speakers. For example, when a speaker expresses that a specific action is impossible and he wants to confirm its impossibility, he uses *hayhāta* 'impossible,' and when he wants to express the impossibility of making a comparison between two items, he utilizes *šatāna* 'impossible,' and *surʿāna* 'hurry' indicates that the speaker is expressing his attitudes about the way someone performed the action from the speaker's point of view. Thus, the pragmatic context of using NoVs demands integrating actions with speakers'

attitudes. Descriptive NoVs involve specifiers at the level of the speaker. The consequence of such implementation is that a speaker is expressing how an agent performed an interconnected action. Hence, at one end, the action involves someone/something that handles illocutionary force, and at the other end, it combines how the speaker feels about the way the illocutionary force is handled.

Speech act specifiers block agreement affixes on NoVs. Table 8 below shows *ʾāḳ* 'hurt' cannot accept agentive markings such as *-t* albeit the regular interpretation shows that there is a person who is saying that he got hurt. Then, the action codes a person who would most likely fit the pronominal specification of *ʾanā* 'I' [1SG]. The structure, however, does not allow explicit use of agentive pronouns to fulfill the specifier position. A reasonable answer is that even though there is someone who feels pain, the feeling is expressed from the point of view of the speaker who is bonded with the person who underwent the action.

Table 8. Participants' Orientation in NoVs

NoVs	SPEAKER /-t	ADDRESSEE / -k
Present	*ʾāḳ* /* *ʾāḳ -tu* hurt.NOV:1SG/hurt.NOV-1SG.SUB	* *ʾāḳ* /* *ʾāḳ -k* hurt.NOV:2SG/hurt.NOV-2SG.ADD
Past	*hayhāta* /* *hayhāta-tu* impossible.NOV:1SG/impossible.NOV-1SG.SUB	* *hayhāta* / * *hayhāta -k* impossible.NOV:2SG/impossible.NOV-2SG.ADD
Imperative	* *ʿalya*/* *ʿalya-tu* abide.NOV:1SG/abide.NOV-1SG.SUB	* *ʿalya-ta*/ *ʿalya-k* abide.NOV-2SG/abide.NOV-2SG.ADD

The distinction between the different types of NoVs goes directly to how they are oriented. Speaker-oriented NoVs do not reflect addressee related agreement markers, while addressee-oriented NoVs do. The orientation of NoVs can be tested with how they interact with speech act projections such as vocatives (Akkus & Hill, 2018; Al-Bataineh, 2019; Hill, 2007b, 2013b). It is noticed that vocative structures are accepted before constructions headed by NoVs and after them.

141)

a. *yā* *ʾaḳī,* *šatān* *bayna* *an-najāḥ* *wa*
VOC.PAR brother-my difference.NOV:1SG between DEF-success and
al-fašal.
DEF-failure
'My brother, there is a difference between success and failure.'

b. *šatān* *bayna* *an-najāḥ* *wa* *al-fašal*
difference.NOV:1SG between DEF-success and DEF-failure
yā *ʾaḳ-ī.*
VOC.PAR brother-my
'My brother, there is a difference between success and failure.'

c. *yā* *ʾaḳ-ī* *hayhāt* *ʾan* *yastamiʿ* *la-nā*
VOC.PAR brother-my impossible.NOV:1SG SUBJ listen to-us
aṭ-ṭulāb.
DEF-students
'My brother, it is impossible for students to listen for us.'

The articulation of a vocative construction revolves around a call on an addressee. The call is established by a speaker who directs the attention of an addressee toward an utterance. From a pragmatic perspective, the structures above show how a speaker is calling on an addressee and moving forward toward expressing his point of view using *šatān* 'difference' and *hayhāt* 'impossible'. Imperative NoVs show a similar interaction with vocatives. Thus, vocatives impact agreement with hearers.

142) *yā* *ʾayu-hā* *al-laḏīna* *ʾāmnū* *ʿalīkum*
VOC.PAR those-3SG DEF-who believed.3SG abide.NOV:2PL.ADD
ʾanfusa-kum.
self-2PL.ADD
'O those who believed, abide yourself.'

(Holy Quran, Al-maidah, verse 105)

In (142), a speaker calls on a group of people to perform the action coded by his utterance headed by the NoV *ʿalīkum* 'abide.' Remarkably, the NoV shows agreement with the addressees marked by the agreement affix *-kum* [2PL.ADD]. The role of the speaker shows that he calls his addressee to pay attention and he calls them to abide themselves. The calls on addressee and the fact that an imperative is coding an addressee give a plausible explanation for agreement patterns. Therefore,

using an agreement marker that depicts an agentive hearer leads to ungrammatical construction (143).

143)

a. *yā* *zayd* *ʿalīk* *b-aḥāl-ak.*
VOC.PAR Zaid abide.NOV:2SG.ADD on-self-2SG.ADD
'O Zaid, abide yourself.'

(Jordanian Arabic)

b. **yā* *zayd,* *ʿalī-t* *b-aḥāl-ak.*
VOC.PAR Zaid abide.NOV-2SG on.self-2SG.ADD
Intended: 'O Zaid, abide yourself.'

(Jordanian Arabic)

The interaction of NoVs with speech situations can be depicted in the structure of their selected arguments. NoVs must specify points of reference for discourse participants and define their arguments. According to Lander and Haegeman (2013), spatial deixis define points of reference and marks the proximity between speakers and hearers. Based on that, they define three points of reference: proximal 'close to a speaker,' medial 'close to a hearer,' and distal 'far from a speaker and hearer'. In the Arabic language, only proximal and distal deixis exist in the form of demonstratives. While it is permitted for regular imperative verbs to select arguments regardless of their points of reference, NoVs demand using only proximal deixis.

144)

a. *ḳuḏ* *ḏālika* *al-kitāb.*
take that DEF-book
'Take that book.'

b. *ḳuḏ* *hāḏā* *al-kitāb.*
take this DEF-book
'Take this book.'

145)

a. *hāk* *hāḏā* *al-kitāb.*
take.NOV:2SG.ADD this DEF-book
'Take this book.'

b. *hāk ḏālika al-kitāb.
take.NOV:2SG.ADD that DEF-book
Intended: 'Take that book.'

(Noor & I, 2018)

In (144a), the speaker defines the distance of *al-kitāb* 'the book' as far from both the speaker and the hearer using the distal demonstrative *ḏālika* 'that.' The deixis, nevertheless, shifts in (144b). The book is close to at least the speaker. The distance shift is marked by the proximal demonstrative *hāḏā* 'this.' In both cases, the use of spatial deixis to mark distance does not affect the grammaticality of structure. However, c-commanding the demonstrative phrase with NoVs restricts the use of spatial deixis. In (145a), the distance of *al-kitāb* 'the book' is proximate to the speaker and hearer, marked by the proximal demonstrative *hāḏā* 'this.' Increasing the distance between discourse participants and *al-kitāb* 'the book' leads to ungrammatical structure, as it can be seen in (145b). The relationship of situational context and NoVs show that arguments of NoVs must be close and at the sight of both the speaker and hearer.

In Arabic, definiteness can be realized in several patterns such as using the definite article *al-* 'the' and *ʾiḍāfa* 'construct state.' NoVs require their DPs to be defined by one of these patterns. A piece of evidence toward definiteness comes from the unacceptability of using NoVs with items denoting indefiniteness such as 'any' (148). For example, English structures, such as 'take any book,' go side by side with regular imperative verbs (146) in the Arabic language but not with synonymous NoVs (147).

146) *ḵuḏ kitāb.*
take book
'Take a book.'

147)

a. *hāk kitāb.
take.NOV:2SG.ADD book
'Take a book.'

b. **dunaka* *kitāb*.
take.NOV:2SG.ADD book
'Take a book.'

148)

a. *ḳuḏ ʾiya kitāb*.
take any book
'Take any book.'

b. **hāk ʾiya kitāb*.
take.NOV:2SG.ADD any book
Intended: 'Take any book.'

The same behavior appears with other types of NoVs. Thus, it can be concluded at this stage that NoVs mark specific situational contexts for their use.

I raised a red flag against Baker's (2003) observation that verbs are the only category that can have subjects/specifiers. If that is the case, one might be tempted to ask the following questions: how can we account for non-agentive specifiers of NoVs? How can we account for the nominative case that is assigned by some NoVs? And how can their arguments have thematic roles as agents? I argue that NoVs can have specifiers but not agentive subjects at their outer layer. While this seems to be contradictory because NoVs encode a verbal semantic interpretation, I argue that the internal morphological syntactic composition of NoVs can still have subjects that specifies their verbal interpretation only. Yet, their outer level can only have discoursal specifiers but not agents. Then, NoVs may have two different types of specifiers to control their structure. Specifiers for their verbal interpretation and other specifiers that control their NoV interpretation. If the outer layer of NoVs does not have an agent as its specifier, then the outer layer might be able to depart a little bit from restrictions on verbs. This conclusion is defended in the following section.

3.3 The Syntax of Ostensible Lexical Categories

Testing the behavior of OLC in Arabic leads to a question regarding the way NoVs are generated in the human mind. From a descriptive grammatical perspective, NoVs cannot merely be defined as interjections. What makes them like interjections is the fact that NoVs are associated

with a speech situation that articulates an expressive interpretation. They are different from interjections in other respects that put them in a direct comparison with verbs and nouns. Their similarity with verbs appears in that they can appear in various positions that fit verbs in Arabic. They are like nouns in their apparent forms. They differ from nouns in that they cannot be substituted by nouns of the same meaning. In this section, I turn out to a possible syntactic representation of NoVs that would enable defining their identity. Moreover, the section attempts to look at the status of the morphological composition of NoVs and comes close to their expressive relation with interjections and imperatives.

3.3.1 A Morphosyntactic View of NoVs

The tests provided above show a crucial point of departure to analyze NoVs from a generative syntactic perspective: NoVs show some aspects that make them akin to verbs; they can be coordinated and substituted by verbs and, above all, they impose selection properties of specific verbs. Therefore, I conclude that NoVs, at a certain point of their generation, are endowed with a verbal illocutionary force. More specifically, at their inner core, NoVs contain verbal force. But, from a syntactic perspective, NoVs are category-less roots $\sqrt{NoV}$ that are defined through the course of their generation. A piece of evidence for this assumption comes from the fact that some NoVs are derived in a very restricted sense from morphological templates[20] that are based on triconsonantal roots $\sqrt{\text{f ʿ l}}$.

[20] Compare with interjections.

149)

ROOT		TEMPLATE		OUTCOME
$\sqrt{sr^{\text{ʿ}}}$	»	faʿlan	»	surʿān
$\sqrt{ktb}$	»	fiʿlan	»	kitāb
$\sqrt{\underline{h}\underline{d}r}$	»	faʿal	»	ḥaḏ̲āri

If syntax derives morphological structures (cf., Marantz, 1997; Starke, 2009), the syntactic foundation of NoVs is firmly established and generalized to other types of NoVs that are not based on any morphological templates.

150)

ROOT		OUTCOME
$\sqrt{hayh\bar{a}t}$	»	hayhāt
$\sqrt{\check{s}at\bar{a}n}$	»	šatān
$\sqrt{\text{ʾuf}}$	»	ʾuf

Looking at NoVs as roots have some immediate consequences on the realization of the apparent forms of some NoVs such as *hayhāt* ‘impossible.’ One of the remarkable features of *hayhāt* that has been a matter of debate is that it shows a plural form that is in parallel with nouns. For example, the plural form of the noun *wayl* ‘agony’ is *wayllat* ‘agonies.’ While it is possible to retain the singular form of the noun *wayllat* ‘agonies,’ the NoV *hayhāt* does not have a singular form. If pluralization of the NoV *hayhāt* takes place at the root level and generates a category-less plural form, it becomes possible to draw an immediate answer as to how pluralized NoVs show up in nominal forms.

151)

$\sqrt{wyl}$ + PLURAL » [*wayll-at* [$\sqrt{wyl}$ PLURAL -at]]

$\sqrt{hayh\bar{a}t}$ + PLURAL » [$\sqrt{hayh\bar{a}t}$ [$\sqrt{hayh\bar{a}t}$ PLURAL]]

Basically, the noun *wayl* 'agony' can have plural and singular forms because plurality is morphologically derived by merging with lexical items. For NoVs, plural forms are not affecting agreement, interpretation, nor any structural aspect. Thus, at some point of their generation, plural forms take place at the root level by merging PLURAL with a root base-generated form $\sqrt{hayh\bar{a}t}$. A supporting evidence comes from the fact that such forms never appear without the pluralizing suffix *-at*: * $\sqrt{hayh}$.

Since roots can be the basis of not only lexical items but also function words, a similar argument can be extended to cover NoVs that are based on function words, i.e., prepositions based NoVs. The argument given is based on the reasoning that function words can only be defined in a strict syntactic context (cf. Wiltschko, 2014). If the argument is on the right track, function-based categories can be viewed as category neutral elements. For example, *ʔala* 'on' can have dual functions: a preposition and a NoV. This conclusion can immediately be supported by the fact that the NoV interpretation can be realized if and only if the functional item (i) agrees with discourse participants and (ii) precedes its argument.

The stated principles add to the understanding of NoVs two syntactic environments. The first principle ties NoVs with discourse participants (hearer/speakers). The second one defines their structural position relative to their arguments. Consider the following examples.

152) *ʿalā al-kitāb.*
on DEF-book
'on the book'

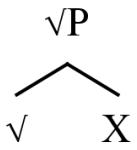
153) *alkitāb* *ʿalayka.*
DEF-book on.2SG
'The book is on you.'

154) *alayka* *alkitāb.*
abide.NOV:2SG DEF-book
'Abide the book.'

The first two examples above violate the previously stated conditions: (152) violates condition (i) in that *ʿalā* does not show agreement with the hearer and (153) violates condition (ii) in that the argument, *al-kitāb* comes before *ʿalā*. Therefore, based on the violation of the defining context of NoVs, *ʿalā* functions as a preposition. In (154) *ʿalā*, on the other hand, shows agreement with the hearer (condition (i)) and precedes its argument (condition (ii)). It, therefore, meets the criteria set for *ʿalā* to function as a NoV.

The semantic interpretation and syntactic context are inseparable from defining function-based NoVs. Assuming that NoVs at this stage are roots that are to be defined in the course of a syntactic derivation helps in establishing a link with their verbal interpretation and sets a path for defining variation in syntactic contexts. The initial simplex syntactic representation of NoVs then could be in line with the following tree.

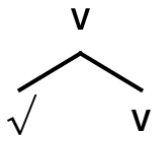
155)



The tree shows that NoVs generated as roots $\sqrt{NoV}$ can select, X, as their complements; selection only shows up in line with synonymous verbs and generates a ROOT phrase, $\sqrt{P}$. At this stage of the derivation, NoVs are not defined. The tree opens the door for spelling out not only NoVs but also their synonymous verbs. First, it is noticed that native speakers of the language rely on negating common NoVs by switching to verbs automatically. It means that native speakers are able at a certain point in their syntactic interpretation to access the semantic/pragmatic core of NoVs.

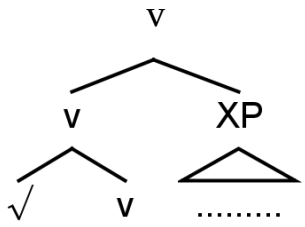
Second, NoVs can have thematic roles and "govern cases" just like verbs (Lutz & Jong, 2011). Consider initially how a verb can be generated.

156)



The tri-consonantal root $\sqrt{\text{ʾḵḏ}}$ moves to a functional head *v* and gains its identity as a verb. If the derivation is spelled-out at this stage, it produces a verbal output. Refuting the claim that interjections are case assigner heads fits neatly with the internal morphological core of NoVs. First, a verbal functional head *v* governs the interpretation of ROOT phrases. If all lexical items are derived from roots (Marantz, 1997), then at a certain syntactic level of generating NoVs, they pattern with verbs and anchor grammatical roles with events. The anchoring function permits spelling out relating a NoV utterance participants.

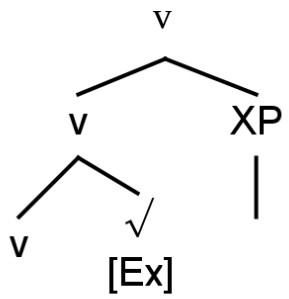
157)



Second, NoVs pattern in a similar way with interjections in that they are expressive lexical

elements; they are more expressive than ordinary verbs in articulating meaning. To derive such function, I argue that the internal morphological structure of NoVs contains an expressive feature that is dedicated toward deriving lexical outputs of specific selection requirements.

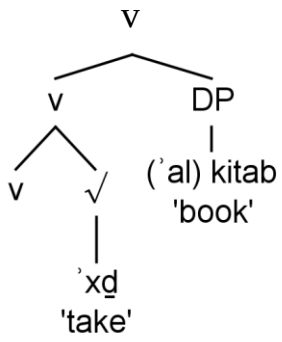
158)



The expressive function equips roots with a distinctive expressive feature [Ex] that turns roots into expressive elements. Expressive roots merge with a functional head *v* that turns such roots into verbs that can select arguments.

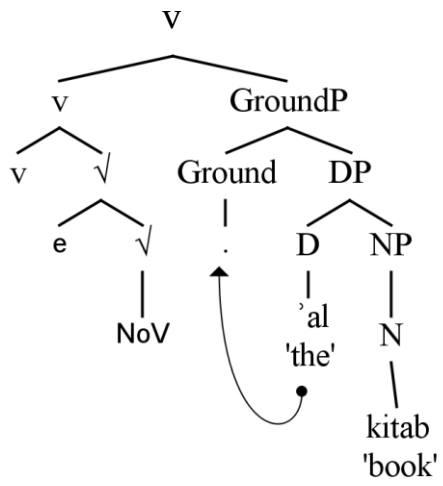
NoVs differ in their selection properties from well-defined verbs in that they require their arguments to be part of the shared beliefs between participants. In other words, NoVs require that their arguments be defined as part of the common ground between speakers. Advancing on my argument that NoVs are expressive verbal units can establish a foundation for understanding their selection demands. Before dealing with the structure of NoVs, let's consider how a verb is derived along with the stated assumptions.

159)



The first syntactic difference is that roots that turn into full verbs do not impose definiteness on their selected DPs. The argument ‘the book’ can show up in as either definite or indefinite. However, with NoVs the case is slightly different. Selected arguments must be definite. Therefore, NoVs are not selecting simple DPs but rather grounded ones. This idea comes from Ritter and Wiltschko’s (2019) views on positing that SAP/GroundP can be part of the structure of nominals. Following their views, I present grounded nominals with a c-commanding grounding projection. Nevertheless, the theory of how grounding features are interpreted which is developed in chapter 4 will offer another mechanism with the same effect, and which would make a GroundP level in nominal structure perhaps superfluous.

160)



Verbs can substitute NoVs if they are grounded; however, it is not possible for a NoV to replace a verb if its argument is indefinite.

3.3.2 A Syntactic Analysis of NoVs

I suggested earlier that any syntactic analysis of NoVs should highlight their verbal component and their interaction with speech situations; that is, the use of NoVs is pragmatically motivated, which endows them with an expressive function. Putting all the pieces together, I propose that allocutivity and expressivity are the cogwheels behind the ostensible behavior of NoVs. Allocutivity creates imperative force, hence imperative NoVs are hearer-oriented units of language. Expressivity creates non-imperative NoVs; hence non-imperative NoVs are speaker-related units of language. The analysis captures both types by the same mechanism; the speech act zone creates OLCs.

3.3.2.1 The Impact of Allocutivity

The majority of imperative NoVs show a bound relation with a second-person marker. My earlier proposal has suggested that the Arabic language draws a distinction between agentive and non-agentive second person affixes (see section 3.2.9). Let us assume that in their syntactic derivations, non-agentive second person markers are related to a head that has a valued second person feature. To set the scene for the impact of allocutivity on imperative NoVs, I begin by presenting syntactic derivations that show a distinction between agentive and non-agentive *you* (with distinct associated markers or agreement patterns[21]).

A clear demonstration comes from the use of multiple *you* in one syntactic structure, where the first *you* has a thematic role of an agent, while the second *you* does not; instead, the second *you* should be related to the hearer. The multiple appearance of *you* must only be motivated for pragmatic reasons; more specifically, the pragmatic *you* should appear for emphasis purposes. To establish a foundational line of the prediction, consider the following examples.

161)

a. *ʾa-raʾay-ta-ka* *hā-ḏā* *ʾal-laḏi* *karram-ta*
Q.PAR-saw-2M.SG-2M.SGPAR DEM DEF-that prefered-2SG
ʿalā-yya!
on-1SG.ACC
'Did you **YOU** see the person that you preferred over me?'

(Holy Quran, Sura 17, verse 62)

b. *ʾa-raʾay-tu-kum* *ʾin* *ʾatā-kum* *ʿaḏāb-u* *Allah-i*
Q.PAR-saw-2M.PL-2M.PL if came-2M.PL.ACC torture-NOM God-GEN
baġta!
suddenly
'Did you **YOU** see if God's torture besieged you suddenly.'

(Holy Quran, Sura 6, verse 40)

[21] I refrain from presenting pro-drop for clarity of the argument; nevertheless, I think that *-ak* and *-ta* may represent agreement markers with hidden pros in the same positions.

The question in (161) shows a complex representation of the addressee that can be decoded only at the syntactic-pragmatic interface. The verb *raʾay-ta-ka* 'you see' is suffixed by two markers of *you*: *-ta* and *-ka*; the two markers, nevertheless, refer to the same addressee. The only difference is that the first marker, *-ta* is an articulation of the covert agent, while the second marker *-ka* does not function as an agent. The order of morphemes shows that they are syntactically governed; the suffix *-ta* must come before the suffix *-ka*.

162)

a. *ʾa-raʾay-ta-ka*

b. **ʾa-raʾay-ka-ta*

163)

a. *ʾa-raʾay-tu-kum*

b. **ʾa-raʾay-kum-tu*

The syntactic difference pours out naturally from their hierarchical order; the agentive *you* (*-ta*/*-tu*) is closer to the verb than the non-agentive one (*-ka*/*-kum*). This entails their different syntactic positions.

To establish the status of *-ka* and *-kum* as distinct markers, I propose that such markers in this syntactic context cannot function as the subject or the object of the verb. First, the verb *raʾa* 'see' is a monotransitive verb; that is, it selects one object. Thus, if the thematic role is associated with a direct object, the verb cannot look for further arguments. Therefore, if the direct object of the verb is not present, the structure should be problematic; however, if the structure does not present the pragmatically motivated *you*, it should not affect the arguments of the verb. This is exactly what we observe in (161a) and (161b). Consider the following patterns.

164) [CP *ʾa* [TP … [vp *raʾay-ta* [DP *hā-ḏā* *al-laḏi* *karram-ta* *ʿalā-yya*]]]]

165) *[CP *ʾa* [TP … [vp *raʾay-ta* [DP -ka] [DP *hā-ḏā* *al-laḏi* *karram-ta* *ʿalā-yya*]]]]

In (164) even though the structure does not present the marker *-ka*, it is acceptable. However, in (165), assuming the *-ka* is the direct object leads to ungrammatical construction. The reason supports my observation; the ungrammaticality of (165) is related to the fact that the monotransitive verb does not have two objects. The prediction rules out *-ka* as the direct object. Assuming that *-ka* is an object will also give a wrong interpretation: '*you saw you the person'*. In addition, the agentive *-ta* confirms that *-ka* is not the agent, albeit having the same referent.

The development in syntactic theories has shown that there are two ways in which the addressee appears in syntactic structures: agentive and non-agentive addressees (Antonov, 2015). The non-agentive addressee is introduced by a class of morphemes that are called allocutive markers (Haddican, 2018). In Basque, for example, speakers may use allocutivity with finite verbs in two occasions: familiarity and politeness. Based on that, there are two allocutive pronouns in the language *hi* and *zu*. The second person feature is part of the two pronouns; nevertheless, *hi* shows familiarity, and *zu* expresses respect (Antonov, 2015, p. 56).

166) *Bilbo-ra* *n-oa*
Bilbao-ALL 1.S-go
'I am going to Bilbao.'

167) *Bilbo-ra* *n-oa-k*
Bilbao-ALL 1.S-go-ALLOC:M
'I am going to Bilbao.' [male addressee]

168) *Bilbo-ra* *n-oa-n.*
Bilbao-ALL 1.S-go-ALLOC:F
'I am going to Bilbao.' [female addressee]

169) *etʃe-a* *banu-sy.*
house-ALL 1.S.go-ALLOC:RSP
'I am going to the house.' [respected addressee]

(Basque)

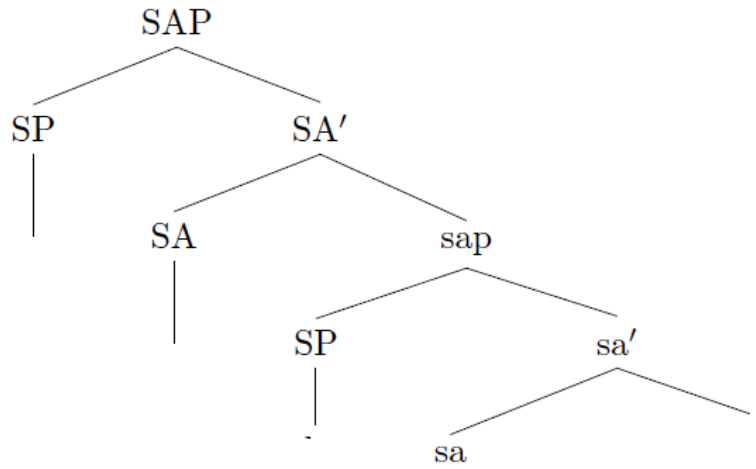
(Antonov, 2015, pp. 57–58)

According to Antonov (2015), the allocutive markers, *-k* (167) and *-n* (168), show that the speaker is familiar with addressee. In (169), the speaker uses the allocutive morpheme *-sy* as a politeness

strategy to code respect for the addressee.

I argue that imperative NoVs permit allocutive morphological markers (e.g., *hāk* 'take') for pragmatic reasons. Assuming that *-k* represents the hearer and arguing that *-k* does not have any thematic roles is the first step for the analysis of *-k* in terms of pragmatic projections.

170)



The *-ka* appears to have a relation with the hearer head, a c-commanding position higher than the CP where a valued second-person feature is present (Hill, 2007b); that is, the hearer head (let it be *sa*) must have a constraint over *-ka*; therefore, the allocutive marker cannot get any thematic roles. There are two outcomes of this prediction. The first one is to assume (following the literature (Kaur, 2018, among others) that *-ka* originates in C with unvalued second-person feature and that it enters in an upward probe-goal relation with *sa* to value its unvalued second-person feature. The second one is to assume that *-ka* originates in *sa* as a result of spelling out the valued second person feature. Consider again the following data:

171) *hāk* *al-kitab-a*.[22]
PAR:2M.SG DEF-book-ACC.
'Take the book.'

[22] Note that most imperative NoVs are composed of either prepositions or particles.

172) *dūnaka* *al-qalam-a*
PAR:2M.SG DEF-pen-ACC
'Take the pen.'

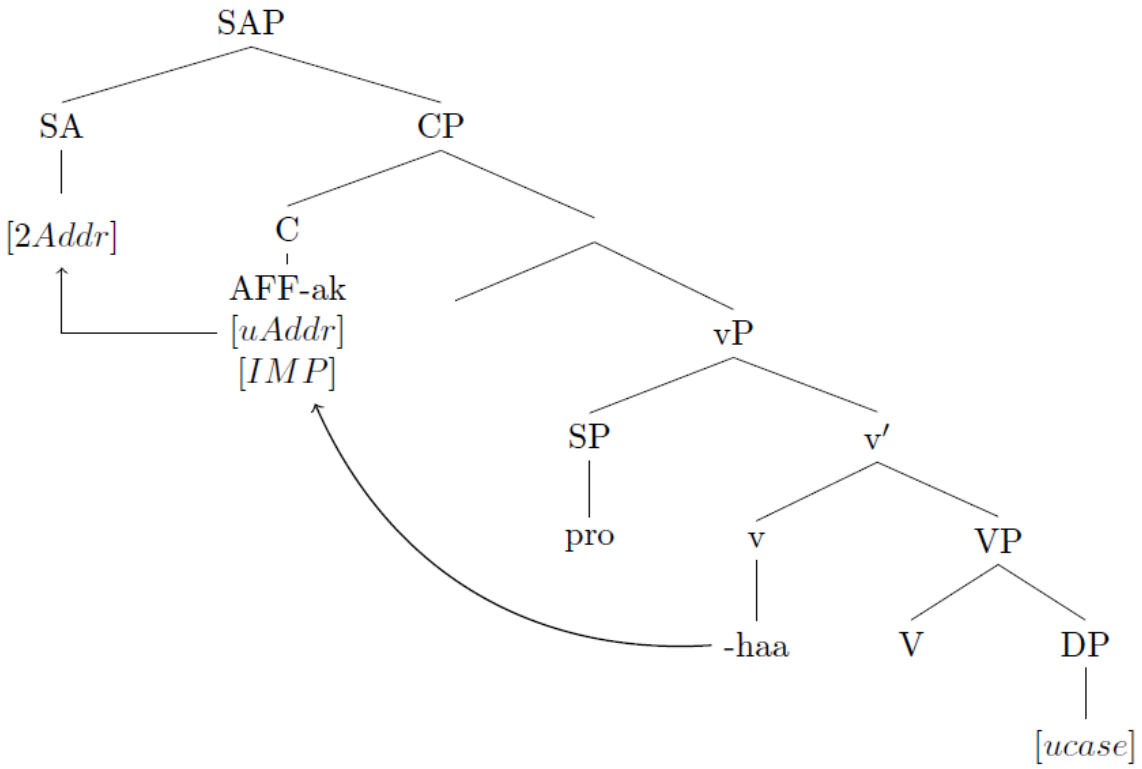
Syntactically speaking, I argue that the particle, *hā*, is verbal in nature; it originates in the V position; it acts as a verb and may end up like verbs. In addition, the particle moves to a position that enables its agreement with the speech act zone, namely agreement with the addressee; at that level, the particle behaves differently. In that position, the particle merges with the allocutive marker that does not have a thematic role; that is, the particle attaches to the second person marker. One may ask, then, what is the trigger for the movement to a head that would enable the particle to get that association? The answer to this question is the affixal nature of the allocutive marker and feature valuation. The allocutive marker is a bound morpheme; that is, it cannot stand by itself. Let us assume that the hearer head has a valued second person feature (Hill, 2007a). The allocutive marker attracts the verbal particle to move from its original position to attach to it. Since affixes generally only attach to units of language of a specific nature, one application of this process is to assume that the allocutive affix only attaches to prepositions or particles to form a NoV. As proposed by Kaur (2018), I assume that T is defective in imperative constructions[23]; that is, it is not actively participating in the construction of imperatives. After presenting the claim that the motivation for moving the verbal particle to a higher position is the affixal nature of the allocutive marker, I present the role of feature valuation in the process.

I assume that the allocutive marker originates in the C position[24]; the C position has unvalued second person feature and a valued imperative feature (Kaur, 2018, among others); as an

[23] I refrain from presenting T in the following trees; yet, we assume that T has a default interpretation of present.
[24] A fully competitive analysis is to assume that the allocutive marker originates in SA (as an articulation of the interpretable second person feature) and that C has a strong imperative affix; in this scenario, the imperative affix attracts *hā* to C and then the allocutive marker attracts it again to SA; both views give a similar outcome; nevertheless, we might argue for the latter on the basis that these constructions block topicalization and focus; for now, we follow the literature in establishing the idea that allocutivity is part of imperative NoVs for the clarity of the argument. In the next section, we present effect of the latter on expressive NoVs.

active probe the allocutive marker enters in an upward agree mechanism with the addressee head that has a valued second person feature. The marker agrees with the addressee and because of its affixal nature, it attracts the verbal particle; they form one unit. The outcome is a verbal imperative NoV that is associated with a non-agentive second-person marker.

173)



The prediction provides evidence for the role of allocutive markers in imperative interpretations. Kaur (2018) shows that Punjabi, an Indo-Aryan language, deploys allocutive markers, such as *-je*, with declarative verbs for endowing such verbs with imperative force.

174) *(tuu/tussi)* *bacce-nuu* *vekh-Ø/vekh-o.*
(2.SG/2.PL) child-ACC see.IMP-2.SG/see.IMP-2.PL
'Look after/see the child.'

(Punjabi)

(Kaur, 2018)

175) *(tussi) bacce-nuu vekhyaa-je.*
(2.PL) child-ACC see.PERF.M.SG-ALLOC
'Look after/see the child!'

(Punjabi)

(Kaur, 2018)

Kaur (2018) shows that allocutivity is the primary source for the imperative interpretation in (175). I also conclude that what endows particles with imperative force is their association with allocutive markers.

To support the prediction, I provide further evidence from conjunction patterns that involve NoVs. I discuss those patterns in contrast to imperative regular verbs (176). In pattern A, it is acceptable to conjoin phrases headed by NoVs with phrases headed by verbs (177); however, the phrases headed by NoVs must come before those headed by verbs (cf., (178) with (177)). In pattern B, it is permissible to conjoin two phrases headed by NoVs (126). In pattern C, non-imperative NoVs can conjoin with verbs at the lexical level (127). Note that this pattern is not allowed for imperative NoVs (131b).

176) *ʾiʿmal bi-jid wa ʾistamiʿ al-mawūsīqā.*
work in-hard and listen DEF-music
'Work hard and listen to music.'

177) *daūnaka al-warq w al-qalam wa ʾuktb mā*
take.NOV:2SG DEF-paper and DEF-pen and write whatever
ʾumlīhi ʿalay-k.
dictate on-2SG.GEN
'Take the paper and the pen and write whatever I dictate.'

178) **ʾištarī daftr-ān wa dawnaka al-warq*
buy notebook-ACC and take.NOV:2SG DEF-paper
Intended: 'buy a notebook and take the paper.'

179) *ḥaya ʿalā ḳayri al-ʿamal wa ʾiālīka*
come.NOV.IMP to goodness DEF-deed… and go.away.NOV:2SG
ʿan kuli mā yaqifu bik.
from every PAR stop.3M.SG in-you
'Do the rightful deed and go away from everything that bans you from doing so.'

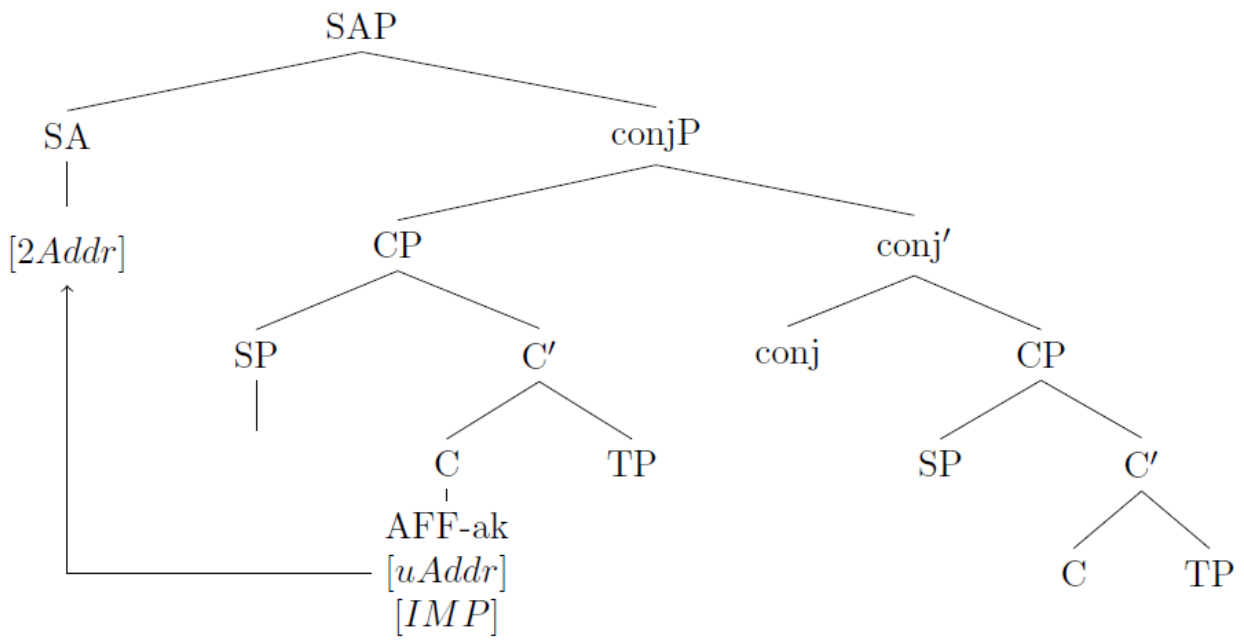
180) *hayhāta* *wa* *ʾibtaʿud-at* *al-ġāya*[25] ....
impossible.NOV and went.away-3F.SG DEF-goal ….
'The goal is impossible and never reached by desperate people.'

181) **hāk* *w* *ḳuḏ* *al-kitāb*.
take.NOV:2SG and take DEF-book
Intended: 'Take the book.'

These patterns leave us with the following question: What are the syntactic restrictions that generate these patterns? Given our proposed analysis, the question leads to the following conclusion. Since the C head c-commands verbal conjuncts, the allocutive marker agrees with SA and attracts the closest head in its c-commanding position. This proposal accounts for pattern A, why the example (177) is acceptable while that in (178) is not, highlighting the asymmetrical pattern of coordination, where only the closest element in coordinated CPs is attracted. If that is the case, then, pattern A follows a condition that is similar to the Attract Closest Condition which states that "a head which attracts a given kind of constituent attracts the closest constituent of the *relevant kind* (italics mine) (Radford, 2009, p. 183). After the attraction of the verbal part *hā*, the affix in C probes upwardly for a goal to value its unvalued second person feature. As the SA head has a valued second person feature, it values the unvalued feature of the allocutive marker. Note that SA is the closest head for C that has the allocutive marker that attracted the verbal component; thus, we observe a case of asymmetrical verbal conjuncts.

[25] I discuss this example in detail in the Non-Imperative Expressivity section (3.3.2.2).

182)



This type of asymmetrical conjuncts resembles that of asymmetrical agreement with conjoined subjects in subject-verb agreement patterns (183).

183) *ḳaraja* *al-walad-u* *w* *al-fatat-u.*
went.out.3M.SG DEF-boy-NOM and DEF-girl-NOM
'The boy and the girl went out.'

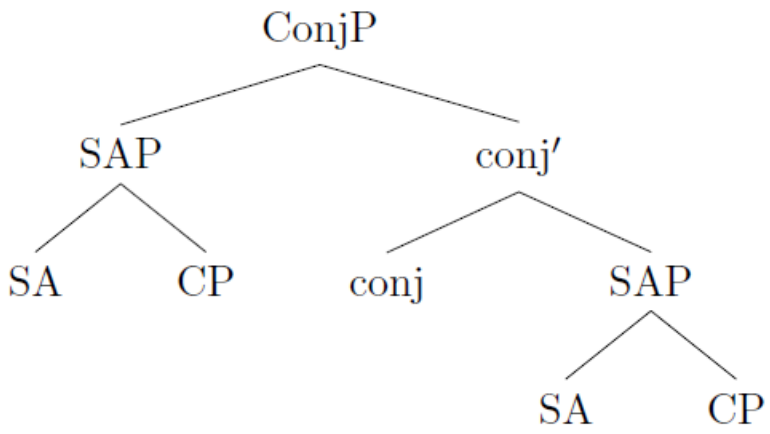
(Standard Arabic)

(Aoun et al., 1994)

After examining patterns of conjoined preverbal and postverbal subjects and looking at their agreement with their predicates, Aoun et al. (1994) show that the Arabic language shows asymmetrical patterns of conjunction in which the verb agrees only with the first conjunct. They argue that the asymmetrical patterns are due to structural asymmetries between the two conjuncts that make the first element more significant than the second one for agreement (123). I argue that this is exactly the case of (177).

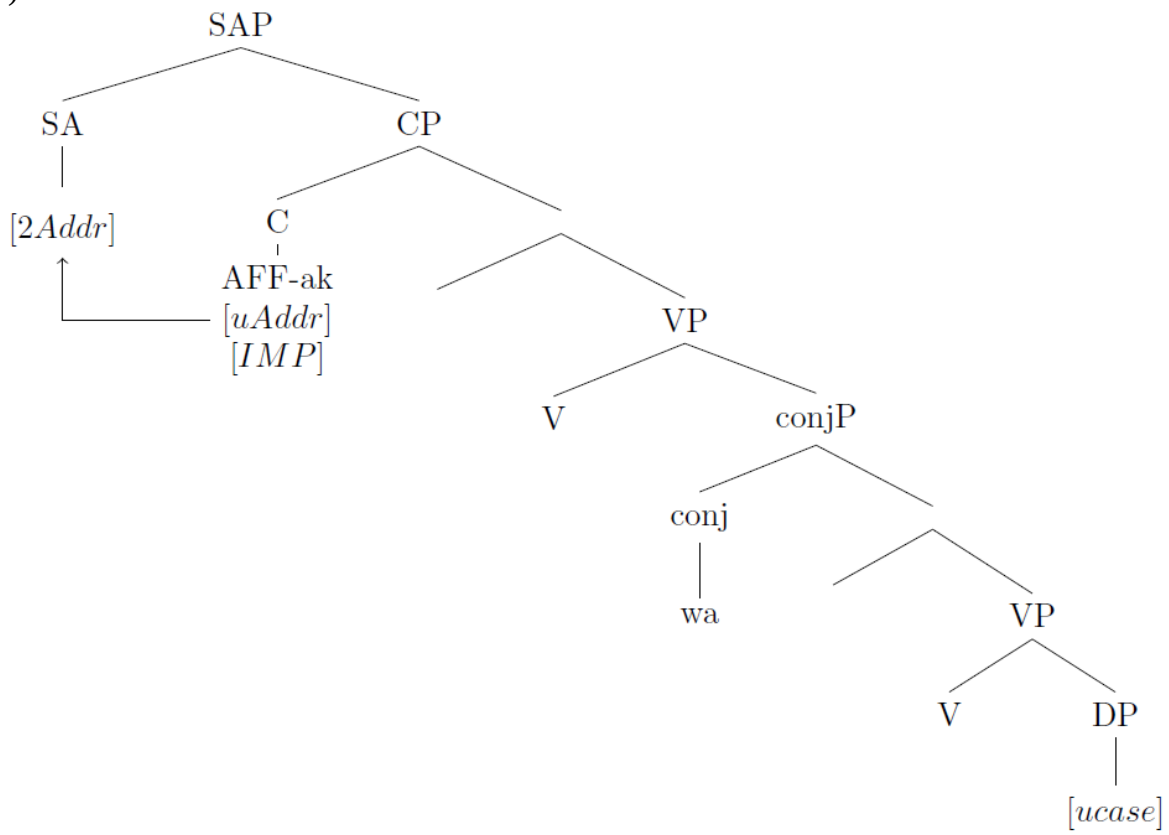
On the basis of the Coordination Condition which states that "only constituents of the same type can be coordinated" (Radford, 2009, p. 53), in pattern B (126), two equal conjuncts, i.e., SAPs, are coordinated, resulting a larger constituent; that is, the process of coordinating NoV phrases is similar to coordinating two clauses headed by regular verbs.

184)



In addition to its semantic restrictions, pattern C confirms the affixal nature of the allocutive marker and shows a specific constraint on selection. To account for the ungrammaticality of (131b), it appears that, in lexical coordination, it is the verbal element of the NoV that selects *conjP*.

185)



The problem of the selection in (185) is twofold. First, the NoV is a transitive verbal element that has valued case feature; that is, it requires a nominal element to agree with. Since a verb c-commands the only nominal element, it exhausts the possibility for the verbal component of the NoV to fulfil its requirements. Thus, the derivation crashes; this accounts for the ungrammaticality of (131b)[26].

A further evidence comes from left dislocation. Complements of NoVs cannot be topicalized, and they cannot be used in focus. In Arabic, left dislocated elements leave behind a clitic on their verbal element.

[26] Note that (127) differs in that the DP does not function as the object of the expressive NoV.

186)

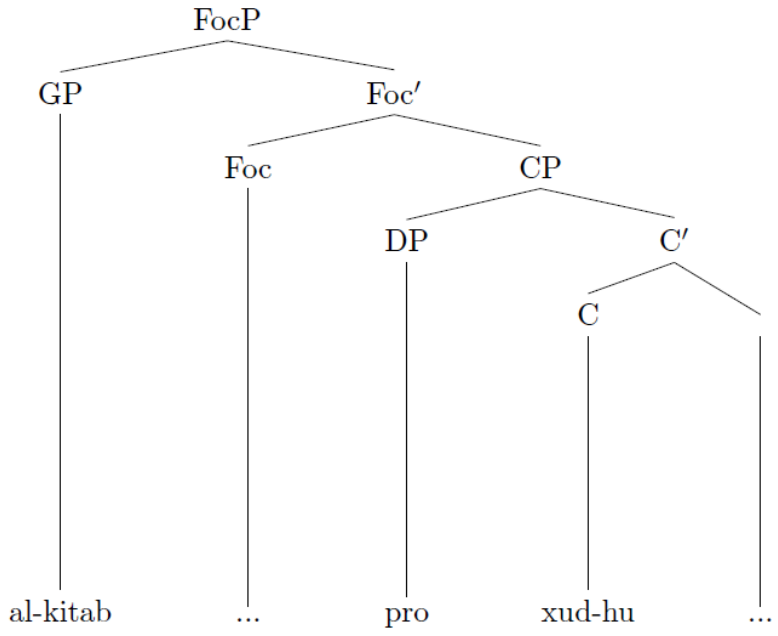
a. *hāk* *al-kitāb.*
take.NOV:2SG DEF-book.
'Take the book.'

b. **al-kitāb* *hāk/-u.*
DEF-book take.NOV:2SG/-3SG
Intended: 'THE BOOK take.'

Imagine that NoVs are morphosyntactic complex units that block further affixation. It becomes valid to assume that NoVs cannot host clitics of left dislocated elements; I attribute that to their allocutive marker. This gives a remarkable account for banning topicalization and elements in focus.

A natural outcome is that as long as the allocutive feature is inactive, arguments may undergo left dislocation; that is, a verb may permit left dislocation as long as the allocutive marker is not attached to it yet.

187)



Notice that the GP *al-kitāb* 'the book' moves to occupy SPEC-FOC, leaving behind a clitic. Assuming that the allocutive component is not active yet in the derivation, the clitic finds a host,

the verb. The verb raises to a higher position, C, to mark the imperative force of the utterance. The verb cannot move to/values a second person allocutive marker because of its clitic, which prevents clitics from attaching to NoVs (188).

188) **al-kitāb* *ʿalya-**hu**ka* / *ʿalyaka-**hu.***
DEF-book.ACC on-3SG.2SG / on:2SG-3SG
Intended: 'The book is on you.'

In the example above, using a clitic along with the allocutive marker distributes the morphological structure of NoVs. The reason is attributed to a potential clash between suffixes. While it is permitted for a verb to host a clitic, a NoV does not allow clitics once it attaches to the second-person marker.

Just like subordinated structures, in typical conjunctive structures, lexical conjuncts should not impose restrictions on each other's complements; if two verbs, for example, have a coordination/subordination relation, their complements should be independent and can be subject to dislocation. The following example illustrates a case of subordination.

189) *ḍana* *salīm-u* *ʾanna* *al-bayt-a* ~~*Ø*~~ *ʾištrā-hu*
thought Saleem-NOM COMP DEF-house-ACC TOP bought-3SG
zayd-un.
Zaid-NOM
'Saleem thought that the house Zaid bought.'

(Standard Arabic)
(Shorofat, 1999)

In (189), the DP, *al-bayta* 'the house' undergoes dislocation from its original position, the complement of the verb *ʾištrā* 'bought,' and moves to occupy the specifier position of an embedded topic phrase, without any restrictions imposed by the verb *ḍana* 'thought.' By analogy, the conjuncts formed by coordinating two regular verbs are independent in dislocating elements.

190) *ḳālid-un ʾištrā al-mazraʿat-a w al-bayt-a Ø*
Khaled-NOM bought DEF-farm-ACC and DEF-house-ACC TOP
ʾištrā-hu zayd-un.
bought-3SG Zaid-NOM
'Khaled bought the farm and the house Zaid bought it.'

(Standard Arabic)

(Shorofat, 1999)

Let us see how dislocating an element interacts with verbal conjuncts. In Arabic, lexical coordination of two verbs which c-command one DP requires dislocating the DP to the left of the two lexical items.

191)

a. **ʾištrā w ʾakala at-tufāḥat-a.*
bought.3SG and ate.3SG DEF-apple-ACC
Intended: 'He bought and ate the apple.'

b. **ʾištrā w ʔat-tufāḥat-a ʾakala -hā.*
bought.3SG and DEF-apple-ACC ate-3SG
'He bought, and the apple ate.'

c. *ʔat-tufāḥat-a ʾištrā-hā w ʾakala-hā.*
DEF-apple-ACC bought.3SG-3SG and ate-3SG
'The apple, he bought and ate.'

The examples above show instances of object dislocation. As we notice, object dislocation is banned without leaving a clitic affixal pronoun. To sum up, conjunct patterns and left dislocation support my prediction; that is, higher affixes impose restrictions on NoVs.

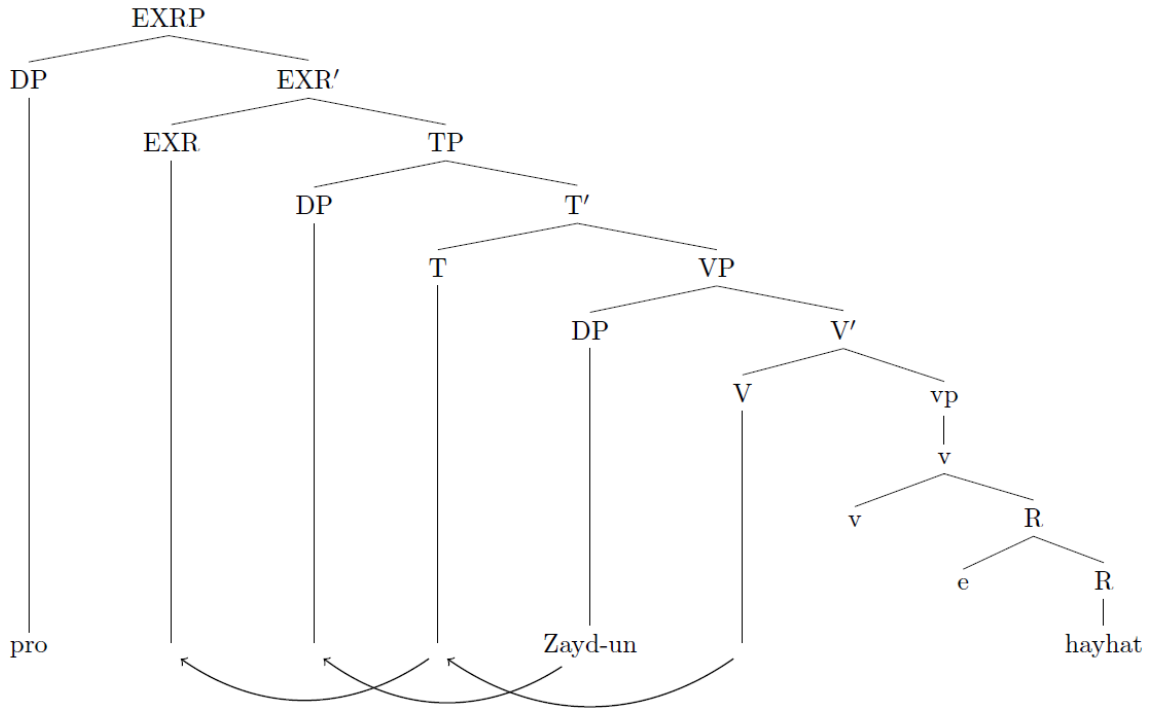
3.3.2.2 Non-Imperative Expressivity

Like imperative NoVs, I argue that non-imperative ones (192) show a relation with the speech act zone; nevertheless, unlike imperative NoVs, users of the language deploy non-imperative ones to express their feelings; more specifically, I propose that the speaker zone is what generates expressive NoVs. To generate them, the language faculty requires two elements: a non-thematic speaker that is different from a thematic agent and a head that is compatible with their expressive function.

192) *hayhāta* *zayd-un.*
impossible.NOV:1SG Zayd-NOM
'Zayd is far.' (impossible to reach)

Following the same line of reasoning, I assume that *hayhāta* is derived out of an intransitive verb. *Zayd* functions as the agent of the intransitive verb and occupies the specifier position of the functional head *v.* The DP, *Zayd* gets a NOM case by agreement with T, and then it moves to SPEC-TP because of the EPP feature. In the next stage, let us assume that the expressive verbal root moves to EXP to highlight the pragmatic force of the utterance. We face the same question again: What would trigger the movement of the verbal element to the expressive head. I propose two possible answers: the first possibility is that the expressive head is affixal in nature; it attracts the verbal component; the second possibility is the valuation of the expressivity feature. The two answers lead to one conclusion. After moving to the expressive head, the verbal component becomes expressive; that is, an additional element is activated or attached to the verbal component. Pursuing the same line of reasoning of imperative NoVs, we predict that the expressive head has unvalued feature for a first person; that is, it enters in agreement relation with a speaker.

193)



The current proposal shows that the final landing site for *Zayd* is SPEC-TP; more specifically, *Zayd* cannot move to SPEC-EXRP. I attribute this to two possible restrictions. The first option is that the discourse participant blocks *Zayd* from moving to this position. The second constraint is that after the verbal component moves to EXR, it attaches to an expressive affix; preventing other clitics from attaching to the verbal component. Recall that in my earlier discussion of allocutive markers, I proposed that they block cliticization. Let us assume that this is exactly what goes in the derivation of non-imperative NoVs. After roots undergo cyclic movements, they reach EXR. At EXR, it is re-spelled out as *hayhāt* to pattern along with the stated hypothesis and agrees implicitly with *pro*. The prediction blocks *Zayd* from coming before the NoV.

194) **zayd-un* *hayhāta.*
Zayd-NOM impossible.NOV:1SG
Intended: 'Zayd is far.' (impossible to reach)

Based on my analysis, we should observe restrictions on topicalization and conjunction patterns, as we observed earlier. The first piece of evidence comes from topicalization. The affixal nature

and, possibly the valuation of the speaker and/expressive feature, freeze the arguments of non-imperative NoVs. Consider the following patterns.

195)

a. *surʿān* *al-musafir-ūn.*
hurry.NOV.PAST DEF-traveller-PL.NOM
'The travelers hurried up.'

b. **al-musafir-ūn* *surʿān/ surʿān -hum.*
DEF-traveller-PL.NOM hurry.NOV.PAST/hurry.NOV.PAST-3SG
Intended:'The travelers hurried up.'

To form a clear picture about conjunction patterns (Pattern C), observe the behavior of subject extraction in regular verbs below. You should notice that regular verbs are showing an additional affix that agrees with the subject.

196)

a. *ʾibtaʿada-t* *w* *ʾiḳtafa-t* *as-safīna-tu.*
went.far-3SG and disappeared-3SG DEF-ship-NOM
'The ship went far and disappeared.'

b. *as-safīna-tu* *ʾibtaʿada-t* *w* *ʾiḳtafa-t.*
DEF-ship-NOM went.far-3SG and disappeared-3SG
'The ship went far and disappeared.'

c. *ʾibtaʿada-t* *w* *as-safina-tu* *ʾiḳtafa-t.*
went.far-3SG and DEF-ship-NOM disappeared-3SG
'The ship went far and disappeared.'

The examples show that it is permitted to dislocate the subject to a topic position across the lexical conjuncts. However, the reported instances of lexical coordination between NoVs and lexical verbs crash altogether if the subject of the lexical verb undergoes dislocation. Consider the following examples.

197)

a. **hayhāta* *wa* *ʾal-ġāya-tu* *ʾibtaʿud-t* *ʾamāma*
impossible.NOV and DEF-goal-NOM went.away-3SG in.front.of
al-ʿājiz-i.
DEF-desperate-GEN
Intended: 'The goal is impossible and never reached by desperate people.'

b. *ʾ*al-ġāya-tu* *ʔamām* *al-ʿājiz-i* *hayhāta* *wa*
DEF-goal-NOM in.front.of DEF-desperate-GEN impossible.NOV and
ʾibtaʿud-t.
went.away-3SG
Intended:‘The goal is impossible and never reached by desperate people.’

c. *ʾ*al-ġāya-tu* *hayhāta* *wa* *ʾibtaʿud-t* *ʔamām*
DEF-goal-NOM impossible.NOV and went.away-3SG in.front.of
al-ʿājiz-i.
DEF-desperate-GEN
Intended: ‘The goal is impossible and never reached by desperate people.’

In the example above, moving the DP *ʾal-ġāya* ‘the goal’ from its original position to a topic position leads to an ungrammatical structure. However, without coordinating the NoV *hayhāta* the structure is acceptable. Moreover, moving the DP, *ʾal-ġāya* ‘the-goal’ from its original position as the subject of the lexical verb, *ʾibtaʿud* ‘went.away’ to a left dislocated position is unacceptable once the lexical verb is coordinated with the NoV. The reason could be related to the fact that in Arabic, dislocated subjects should leave behind a clitic affixal subject pronoun, *-t*; since NoVs cannot be affixed with subject pronouns, movement is blocked across conjuncts with NoVs. 198)

a. *hayhāta* *al-ʿawd-u* *ʾilā* *aḏ-ḏaḏl-i*.
impossible.NOV DEF-back-NOM to DEF-disgrace-GEN
‘Going back to disgrace is impossible.’

b. **al-ʿawd-u* *ʾilā* *aḏ-ḏaḏl-i* *hayhāta*.
DEF-back-NOM to DEF-disgrace-GEN impossible.NOV
Intended: ‘Going back to disgrace is impossible.’

It is noticed from the above examples that the complements of the NoVs cannot be topicalized, and they cannot be used in focus. By and large, I attribute that to constraints on affixation.

3.4 Concluding Remarks

The analysis gives straight forward answers to several puzzling questions that have been raised regarding the behavior of NoVs. Why do NoVs reject negation? The answer is that NoVs are higher than the scope of negation. In syntax, NEG c-commands VPs. Since NoVs are only

active at SA, then they cannot be a target for negation. The same answer is given to the second question. Why do NoVs reject interrogatives? Since NoVs show an association with non-thematic specifiers, it is not valid to ask questions about who performed them. However, it is entirely legitimate to ask a question that targets their internal VPs. Thus, native speakers can relate and have immediate access to their internal structure yet once they are related to the speech act zone, the zone prevents agentive questions and transfers such questions to their internal structure. A piece of supporting evidence comes from the fact that not only using agentive marking suffixes but also using agentive prefixes along with NoVs is not allowed (See chapter 1, *la t-hāk* 'do not take'). A long puzzling question for Arab grammarians (e.g., Alğārm & ʾmyn, 2010; Hasan, 2009; Ibn Alʾaṯīr, 1999), has been why a verb can come before NoVs but not vice versa. Given the analysis above, verbs might be able to select expressive phrases. However, spelling out a verb within the same syntactic internal structure of NoVs does not activate the expressive feature of NoVs. Thus, NoVs cannot co-occur with a verb in the same EXP phrases. Their expressive phrases, nevertheless, can be selected by verbs (cf. verbs of saying such as *ʔaqul* 'say').

Having answered the questions asked by Arab grammarians (e.g., Alğārm & ʾmyn, 2010; Hasan, 2009), I turn now to the categorization problem of NoVs. Are NoVs verbs or nouns, interjections, or fourth category? The answer is that NoVs are expressive units of language that are composed internally of verbs. The first piece of evidence comes from the fact that NoVs can have specifiers. According to Baker (2003), verbs are the only category that can have specifiers. Thus, NoVs are not adjectives nor nouns. Back to the puzzling behavior, it is already discussed that NoVs show some affixation that is associated with nouns, such as nunation. The answer is that nunation with NoVs does not function as markers of nouns, but since nouns can be hosts of expressivity, nunation is used to give pragmatic emphasis – expressivity - for NoVs rather than definiteness. A quick test that can support this fact is that the defining nunated NoVs with a definite article leads

to unacceptable forms of NoVs. In addition to nunation, plural markings and definiteness are argued to be part of the internal root of NoVs. The reason given depends on contrasting such features with morphological forms. It has been shown that singular forms of plural NoVs are not permitted. Thus, those NoVs have plural as part of their roots. With that in mind, NoVs cannot accept all nouns markings nor can they occupy their positions (subjects or objects). Moreover, NoVs cannot pattern with verbs. Their external structure is what makes such a distinction.

To sum up, NoVs are ostensible multifunctional units. The behavior of NoVs contrasts with their surface forms. Moreover, since NoVs have non-agentive pro specifiers that are different from those controlling their internal verbal structure, NoVs seem to be verbs that contrast with the general description of verbs as the only category that has specifiers. The fact that NoVs have specifiers such as *pro* does not rule out that their internal structure could mark different types of specifiers for their verbal composition. Thus, the argument given is that ostensible lexical categories are behaving exceptionally. Their behavior is attributed to the observation that their specifiers are not agentive, but rather they are connected to speech acts participants. Thus, suppletive forms embed verbal force to mark the expressive function that is obtained higher up in syntactic derivations and to provide appropriate hosts for discourse participants agreements that would not usually appear on verbs with acquiring some thematic rules such as theme (object). Thus, NoVs can only be understood by setting their components apart through accessing their internal composition. They have some expressive power that can be found in interjections.

Chapter Four

Ostensible Grammatical Categories in Arabic

4.1 Introduction

This chapter focuses on the syntactic behavior of OGCs in spoken Arabic variaties (Iraqi Arabic, Jordanian Arabic, Lebanese Arabic and Omani Arabic). It investigates constructions with confirmatory particles (199), attitudinal particles (200), and/or grounding markers that do not pattern with fixed positions (201). In addition, the chapter highlights the impact of the addressee marker on the interpretation of call particles (202).

199) *kam* *hwa* *jamīl* *an* *naṣūma* *ramaḍān,* *hā*↑
how he nice SUBJ.PAR fast Ramadan PAR
'How nice that we fast Ramadan, eh'

(Iraqi Arabic)

(Albanon, 2017, p. 109)

200) *yā* *hā* *tšā* *ġer* *ḍarab* *aḳū-h* *il-bārḥa*.
A.PAR A.PAR A.PAR A.PAR hit.PST.3M.SG brother-3M.SG DET-yesterday
'AP AP AP AP He hit his brother yesterday.'

(South Iraqi Arabic)

(Qasim, 2016, p. 48)

201) *inno* *yaʿnī* *kiṯīr* *ṣurt* *mnīḥ* *bi-l-faransī.*
DM PAR a lot became good in-DEF-French
'You became good in French.' (I doubt it.)

(Lebanese Arabic)

(Germanos, 2013, p. 154)

202) *walak* *taʿāl* *la-hūn*!
PAR:2M.SG come.2M.SG to-here
'Hey! come here.

(Jordanian Arabic)

Understanding the nature of GCs is one of the most challenging tasks in the study of language. Like lexical categories, GCs cannot merely be defined based on their sounds or meanings (Owens, 1989; Wiltschko, 2014b). Without a precise definition of GCs, across languages, classificatory systems overlook OGCs, such as particles (199-201). In addition, researchers (Aoun

et al., 1994; Benmamoun, 2011; Fassi Fehri, 2012) often fail to describe multifunctional GCs such as *-ak* (202), in all their syntactic contexts.

The study of particles is tricky (Biberauer & Sheehan, 2011; Haegeman & Hill, 2013). Particles are often characterized by negatively valued distinctive features (e.g., fixed position, repudiation of inflection, and others) (Biberauer & Sheehan, 2011). Therefore, researchers allocate particles based on their behavior and propose models for describing how the allocated pieces fit together. However, such models describe specific cases. Arriving at an accurate description of GCs necessitates exposing existing models to a new chunk of data from different languages. In addition, here, I show evidence for a syntactic treatment of grounding markers. Hence, I advance a supplementary machinery to explain how non-peripheral grounding markers get their identity in the syntax proper, following Bayer and Obenauer (2011) and Pesetsky and Torrego (2007).

The machinery proposed here supposes that feature valuation is not limited to uninterpretable features; AGREE may target both interpretable and uninterpretable features (Pesetsky & Torrego, 2007). This mechanism provides a tool for integrating non-peripheral grounding markers in the syntax proper. Schaefer (2019), for example, demonstrates confirmatory particles that are part of the verb phrase. If confirmatory particles and grounding markers are not restricted to peripheral constructions but clearly express a relation with grounding projections (Wiltschko & Heim, 2016), they require a mechanism for grounding valuation, established by a link with higher projections. I will illustrate the impact of the proposed machinery on data from spoken varieties of Arabic.

Moreover, to my best knowledge, the effect of allocutive markers (Kaur, 2018; Miyagawa, 2017) is overlooked in previous treatments of agreement relations in the Arabic language (Aoun et al., 1994; Benmamoun, 2011; Fassi Fehri, 2012). By extending the prediction reached in Chapter 3, I show evidence that supports the impact of allocutive morphemes on the interpretation of

particles. Even though the literature (Aoun et al., 1994; Benmamoun, 2011; Fehri, 2012, among others), examine *-ak* as a pronominal suffix that encodes a genitive, oblique or accusative case, depending on the category it attaches to, this study highlights several cases, in which the suffix cannot be treated pronominally (202). I extend the role of SAPs (Haegeman & Hill, 2013; Hill, 2007b) to capture such cases.

The chapter is organized as follows. Section 1 introduces confirmatory particles. The section examines the relationship between confirmatory particles and invariant tags and shows that in Arabic, invariant tags are, in fact, markers of confirmation. The analysis of confirmatory particles forms the first stage in developing the non-peripheral grounding machinery. It highlights how confirmatory particles in Arabic and other languages such as Emai (Schaefer, 2019) may be analyzed in line with the literature (Tubau, 2014; Wiltschko & Heim, 2016). However, they may not fit neatly. In section 3, I push the machinery further and examine attitudinal particles in Iraqi Arabic. The section shows how current models may not give satisfying answers to how different attitudes can be generated syntactically, for a single utterance, in constructions with serial attitudinal particles. The analysis predicts that the functions of serial attitudinal particles dissolve through a link that connects all particles to one grounding head. In section 4, I test the applicability of the mechanism and give insight into non-peripheral grounding of categories. The test is based on ostensible complementizers. In section 5, I encapsulate the effect of allocutive markers on particles and show how upward and downward force may be established, following Miyagawa (2017). Section 6 concludes the chapter.

4.2 The Case of Confirmatory Particles

Confirmatory particles refer to a group of particles that aim to assess the shared amount of information between discourse participants (Bliss & Wiltschko, 2018; Heim et al., 2016; Wiltschko

& Heim, 2016). The function and distribution of particles have often been the focus of studies of pragmatics and conversation management (Cook, 1999). However, cartographic speech act theory (Haegeman, 2014a; Hill, 2007b; Wiltschko & Heim, 2016) posits that confirmatory particles are generated syntactically (Tubau, 2014; Wiltschko & Heim, 2016). Confirmatory particles help in accessing the shared information, beliefs, and attitudes of discourse participants regarding a given proposition. Clark (1996) and Clark et al. (1983) call this process *grounding*. Confirmatory particles can function as grounding units (Wiltschko & Heim, 2016).

Wiltschko and Heim (2016) describe the distribution of confirmatory particles, focusing on confirmatory particles that occupy peripheral positions. However, Schaefer (2019)[27] examines a group of deictic confirmatory particles in Emai, a North-Central Edoid speech variety spoken in Nigeria, that are sensitive to discourse participants within the verb domain (non-peripheral positions).

203)

a. *ólí* *ómò* *búú* *mè* ***ré***. confirmatory
DEF baby PRP.approach me VNT
'The baby approached me.' (here where I am)

(Emai)

(Schaefer, 2019)

b. **ólí* *ómò* *búú* *é* ***ré***.
DEF baby PRP.approach you VNT
'The baby approached you.'

(Emai)

(Schaefer, 2019)

[27] In response to my question whether *ré* could be part of the right periphery, Ronald Schaefer pointed that they are part of the verb itself, which is evident in the text below. The particle *ré* is not separated by a pause. In addition, the argument of the verb restricts its distribution.

c. *ólí ómò búú ói / ólì òkpòsò ré.
DEF baby PRP.approach her the woman VNT
'The baby approached her / the woman.'

(Emai)

(Schaefer, 2019)

In addition, in spoken varieties of Arabic, confirmatory particles do not show a fixed position; they can optionally occupy either a leftmost or a rightmost position, favoring the latter. The paucity of research on Arabic confirmatory particles necessitates exploring their syntactic behavior. Consider the following examples.

204)

a. ʾanā šaft-ak bi-s-sawq ṣaḥ.
I saw-2SG.ACC in-DEF-market right
'I saw you in the market, right.'

(Jordanian Arabic)

b. ʾinta bitḥbn-ī mū.
you love-1SG.ACC right
'You love me, right.'

(Jordanian Arabic)

205) kam hwa jamīl an naṣūma ramaḍān, hā↑?
how he nice SUBJ.PAR fast Ramadan PAR
How nice that we fast Ramadhan, eh

(Iraqi Arabic)

(Albanon, 2017, p.109)

In the examples above, the speaker has some information about the utterance, yet he is not sure if the addressee shares the same information. Therefore, the speaker tries to figure out what the addressee knows. In other words, in their attempt to negotiate and establish grounding, speech act participants enter in a give-and-take negotiation process for confirming the validity of stated propositions. Researchers refer to such invariant tags as confirmatory particles (Wiltschko & Heim, 2016). The section revolves around presenting confirmationals and invariant tags across spoken varieties of Arabic, explores the interaction of confirmatory particles with clause types, peripheral

constructions and coordination and presents how confirmationals can be generated in the syntax proper.

4.2.1 Confirmationals and Invariant Tags

Polarity questions have received considerable attention in the literature (Holmberg, 2001, 2015; Holmes, 1983). Holmes (1983) analyzes the functions of tag questions from a pragmatic perspective. She finds that tag questions can be classified into two types: modal tags and affective tags. From a syntactic perspective, Holmberg (2001,2015) has focused on answers to polarity questions. He presented ample evidence for the integration of *yes* and *no* answers to the syntax proper. He demonstrates that *yes* and *no* answers are projections of polarity heads. Wiltschko (2017b) shows two novel aspects related to invariant tags and *yes* and *no* answers. Wiltschko (2016, among others) points out that invariant tags parallel confirmationals; speakers may not use invariant tags to request information, but instead, they use them for confirmation. The same idea is extended to *yes* and *no* answers; Wiltschko (2017b) demonstrates that *yes* and *no* particles should not always be viewed as answers to polarity questions. They can convey other functions once integrated with higher grounding projections; they can function as agreement and disagreement markers.

In SA, tag questions are formed through deploying a complex morphological structure that is composed of three components, including a question particle *ʾa*, a verb, *laysa*, and a demonstrative *kaḏalik* 'that.' The fusion of these units creates tag question *ʾa laysa kaḏalik* 'isn't it' (Albanon, 2017). In SA, tag questions show agreement with agents. The agreement is marked on the negative verbal particle *laysa* 'not.' The following examples are illustrative.

206)

a.	*al-jaw-u*	*jamīl,*	*ʾa-lays-a*	*ka-ḏālik.*
	DEF-weather-NOM	beautiful	Q.PAR-not-3SG	like-that
	'The weather is nice, isn't it?'			

b. *al-rijāl-u* *hunā,* *ʾa-lays-u* *ka-ḏālik.*
DEF-men-NOM here Q.PAR-not-3PL like-that
'The men are here, aren't they?'

c. **ʾa-lays-u* *ka-ḏālik* *al-rijāl-u* *hunā.*
Q.PAR-not-3PL like-that DEF-men-NOM here
'The men are here, aren't they?'

(Standard Arabic)

(Albanon, 2017, p. 109)

Arabic tag questions modify declarative statements, depending on their pragmatic function. Following Holmes (1983), Albanon (2017) classifies Arabic tag questions into three types: (i) modal tags, (ii) affective tags, and (iii) power tags[28]. Modal tags are used for confirming stated propositions, showing that the speaker is uncertain about what he knows and requires the addressee to confirm that what he knows is true (207). Affective tags are used mainly in spoken varieties of Arabic and show that the speaker is sure about his proposition, yet he awaits the addressee to confirm sharing the same point of view (208). Power tags are rare. They define the power relation between speakers and their addressees.

207) *akal-ta* *al-muza,* *ʾa-lays-a* *ka-ḏālik*?
ate-2SG DEF-banana Q.PAR-not-3SG like-that
'You ate the banana, didn't you?'

208)

a. *kam* *hwa* *jamīl* *an* *naṣūma* *ramaḍān,* *hā*↑?
how he nice SUBJ.PAR fast Ramadan PAR
'How nice that we fast Ramadhan, eh'

(Iraqi Arabic)

(Albanon, 2017, p. 109)

b. *yaʿmal-u* *bi-rijluh* *y-kanzū* *lā*
make-3SG by-leg PROG-compress PAR
'He makes it with his foot; he compresses it [= dates], right?'

(Omani Arabic)

(Lutz & Jong, 2011)

[28] I could not verify power tags across languages, nor could I find any supporting example in Albanon's (2017) study.

While, in Standard Arabic, tags are formed mainly by using a question particle and an agreeing verb, tags in spoken varieties of Arabic are expressed solely by means of particles. In Iraqi Arabic, speakers deploy *hā* for expressing confirmatory tags. In Sanai Arabic, a dialect spoken in Yemen, speakers form confirmatory tags by adding a negative particle *mā* at the end of a clause (209). The particle *mā* is invariant and is not affected in whether it follows a negative or a positive declarative structure. In Jordanian Arabic, confirmatory tags are formed by *saħ* (210a), *mū* (210b) and *hā*. The particles deployed in such varieties are invariant.

209)

a. *mā* *gad* *jaš* *mā*.
not PAR come not
'He hasn't come, has he?'

(San'ai Arabic)

(Watson, 1996, p. 134)

b. *gad* *jaš* *mā*.
PAR come not
'He has come, hasn't he?'

(San'ai Arabic)

(Watson, 1996, p. 134)

210)

a. *ʾanā* *šaft-ak* *bi-s-sawq* *ṣaḥ.*
I saw-2SG.ACC in-DEF-market right
'I saw you in the market, right.'

(Jordanian Arabic)

b. *ʾinta* *biṯḥb-nī,* *mū*.
you love-1SG.ACC right
'You love me, right?'

(Jordanian Arabic)

The syntax of confirmatory particles is validated and attested in many languages, such as Canadian English. According to Tubau (2014) and Wiltschko and Heim (2016), discourse markers are computed and generated in narrow syntax. While the computation of discourse markers cannot

be assessed by standard syntactic tests of coordination, binding, and others, discourse markers can establish a relation with their clauses like tag-questions in many languages.

211)

a. I have a new dog, eh
b. You have a new dog, eh
c. She has a new dog, eh

(Canadian English)
(Wiltschko & Heim, 2016)

They refer to those markers that function like tag questions as inherently invariant confirmatory particles. Such particles can be used to convey confirmatory contexts of two types modality and affectivity. In order to arrive at a categorization of such particles, I establish a link between their form and functional interpretation, following the USM (Wiltschko, 2014b).

4.2.2 The Syntactic Status of Confirmatory Particles

Exploring the syntactic status of confirmatory particles relies on the idea that syntactic clauses are defined through their functional projections; a recent analysis of clausal structures suggests that clauses can be extended to include a projection that targets the interaction of speech participants and how their views modify propositions in a dedicated functional projection, GroundP (Wiltschko & Heim, 2016). It is challenging to test the distribution of confirmationals using regular syntactic tests of constituency. However, examining restrictions on clause types and testing the interaction of confirmationals in coordinative structures and with peripheral constructions, may show the role of syntax in generating and restricting the use of pragmatic particles and their correlates. The following tests aim to figure out the status of confirmatory particles in Arabic.

4.2.2.1 Testing for Clause Types

Following Yang and Wiltschko (2016), four clause types are examined: declaratives, exclamatives, imperatives, and informative interrogatives. Consider the following examples.

212)

a. **rawūḥ ma ʿ ʾaḳ-ūk ʿalā as-sūg mū / saħ / ha*
go with brother-2SG on DEF-market PAR / PAR/ PAR
'Go with your brother to the market, right.'

b. *ʾiftaḥ al-bāb *mū / saħ / *ha*
open DEF-door PAR /right /PAR
'Open the door in a right way.'

(Imperative)

213) *kam hua jamil an nasum ramadhan, ha↑*
how he nice SUBJ.PAR fast Ramadan PAR
'How nice that we fast Ramadhan, eh'

(Exclamative)

(Albanon, 2017, repeated)

214) **wayn rāḥ ʾaḳ-ūk mū / saħ / ha*
where went brother-2SG PAR / PAR/ PAR
'Where did your brother go?'

(Informative Interrogatives)

215) *lays ruḥit ma ʿ-āh *mū / saħ / ha*
why went with-3SG.M PAR / PAR/ PAR
'Why did you go with him!'
(You should not have gone with him.)

(Rhetorical Interrogative)

In Arabic, confirmatory particles show restrictions on clause types. They cannot be used with imperatives (212) and informative regular questions (214). However, they appear with declaratives, exclamatives (213), and rhetorical interrogatives (215). *saħ* may appear with imperatives (212b); nevertheless, in this case, *saħ* does not function as a particle, but rather it points to the way actions should be performed, functioning as an adverb. Thus, only in its adverbial function *saħ* can be used with imperatives. Since the other confirmatory particles function differently, they are banned from appearing in that context. It appears that *mū* cannot be found with rhetorical interrogatives; the reason could be attributed to the fact that *mū* may be restricted to certain pragmatic contexts, such as politeness and degree of certainty (See Yang & Wiltschko, 2016).

4.2.2.2 Testing against Peripheral Constructions

Testing for clause types shows that confirmatory particles do not originate in the C position. In order to arrive at the right structure of confirmatory particles in Arabic, I examine how confirmatory particles interact with topicalization and focus (Rizzi, 1997). First, I introduce the structure of topics and elements in focus. Then, I test the interaction of the confirmatory particle *ha* with these elements.

Shorofat (1999) defines the grammatical basis of topic constructions in SA. According to him, a topicalized DP must be definite, nominative, and base generated. In the comment part, the verb must contain a resumptive pronoun that refers to the topic. Consider the example in (216) for illustration.

216) *ʾal-bayt-u, ʾištara-hu ali-un.*
DEF-house-NOM bought-it Ali-NOM
'The house, Ali bought it.'

(Standard Arabic)
(Al-Shorafat, 1999, p. 2)

In (216), the DP *ʾal-bayt-u* 'house' is marked for definiteness. The verb *ʾištara* 'bought' has an obligatory resumptive pronoun that refers to the noun *ʾal-bayt-u*. The DP *ʾal-bayt-u* 'house' occupies a topic position. According to Ouhalla (1994, p. 67), DPs need not always be in the nominative case to be characterized as topics. A topic can have the accusative case marker –as it is illustrated in (217) below.

217) *l-kitāb-a, qaraʾ-tu-hu*
DEF-book-ACC read-1SG-it
'The book, I read it.'

(Standard Arabic)
(Ouhalla, 1994, p. 67)

In (219b) below, the DP *ʾil-binit* 'the girl' fits the characteristics of topics. First, it occupies a peripheral position. Second, the verb *ḍarab* 'hit' has an obligatory resumptive pronoun *-ha* that

refers to the DP *ʾil-binit* 'the girl' (cf.219b). In addition, in spoken varieties of Arabic, topicalization is not limited to a single element of a particular type; that is to say, multiple topics can be found in the language, and different elements can be topicalized – for example, adverbs and others.

218) *ar-rajāl, ams, šāf al-filim.*
DEF-man yesterday saw.3M.SG DEF-movie
'As for the man, yesterday, he saw the movie.'

(Turaif Arabic)
(AlShammiry, 2007)

The examples below illustrate the interaction of the confirmatory particle *ha* with topics. They show that the particle *ha* occupies a right peripheral position, a position that is different from topicalized elements.

219)

a. *ʾil-walad ḍarab ʾil-binit, ha↑*
DEF-boy hit.3M.SG DEF-girl PAR
'The boy hit the girl, right!'

b. *ʾil-binit,ʾ ʾil-walad ḍarab-ha, ha↑*
DEF-girl DEF-boy hit-3F.SG PAR
'The boy hit the girl, right!'

c. **ha↑ ʾil-binit ʾil-walad ḍarab-ha,*
PAR DEF-girl DEF-boy hit-3F.SG
'The boy hit the girl, right!'

d. *ar-rajāl, ams, šāf al-filim ha↑*
DEF-man yesterday saw.3M.SG DEF-movie PAR
'As for the man, yesterday, he saw the movie, right!'

Regardless of whether the DP, *ʾil-binit* 'the girl' is topicalized (219b) or not, the particle *ha* shows a fixed right peripheral position (219c). Moreover, the presence of the particle is not affected by multiple topics (219d).

Focus can be a new piece of information introduced in the discourse –contrastive or emphatic. Like topics, focus in SA has been argued to line up with a number of features (Ouhalla, 1994, 1997). Moreover, Ouhalla (1994) argues that focus in Arabic can be of different types, among

which are sentential focus, focus markers, interrogative focus, negative focus, and others. I introduce the basic grammatical properties of focus in Arabic and their position relative to question operators.

In root clause constructions, DPs in focus can be definite (220) or indefinite (221). Yet, it is not common for a definite element to be in focus. Unlike topics, focused constructions are always accusative as they are associated with a gap. The verbs in focus constructions do not have resumptive clitics in the comment part. These features can be illustrated in the examples below.

220) *ʾAL-BAYT-A* *ʾištara* *zayd-un.*
DEF-house-ACC bought Zayd-NOM
'The house, Zayd bought (it).'

221) *ŠAAY-AN* *šariba* *zayd-un.*
tea-ACC drink.3M.SG Zayd-NOM
'It was TEA that Zayd drank.'

(Standard Arabic)

(Ouhalla, 1994, p. 66)

In comparison with topicalized DPs (216), the examples in (220) and (221) differ in that the verbs *ʾištara* 'bought' and *šariba* 'drank' do not have resumptive clitic pronouns that refer to the DPs in focus. Moreover, focused elements are not marked by a pause.

The interaction of confirmatory particles, such as *ha*, with elements in focus, shows that elements in focus do not alter the position of confirmatory particles. The examples below depict this interaction in spoken Arabic varieties.

222)

a. *ŠAAY* *šarib* *zayd,* *ha↑*
tea drink.3M.SG Zayd, PAR
'It was TEA that Zayd drank, right.'

b. **ha↑* *ŠAAY* *šarib* *zayd.*
PAR tea drink.3M.SG Zayd
'It was TEA that Zayd drank, right.'

c. * *ŠAAY* *ha↑* *šarib* *zayd.*
tea PAR drink.3M.SG Zayd
'It was TEA that Zayd drank, right.'

d. * *ŠAAY* *šarib* *ha↑* *zayd.*
tea drink.3M.SG PAR Zayd
'It was TEA that Zayd drank, right.'

The confirmatory particle *ha* is not impacted by elements in focus (222a), and it cannot be in a focus position (222b) or below focused elements (222c). The confirmatory particle is analogous to the position of the confirmatory particle *eh* in Canadian English (Wiltschko & Heim, 2016) and the particle *ha* in northern Mandarin Chinese (Yang & Wiltschko, 2016).

4.2.2.3 Testing for Coordination

In all studies examined (Tubau, 2014; Wiltschko & Heim, 2016; Yang & Wiltschko, 2016), the interaction of confirmatory particles with coordination is not tested. The reason is that particles form an entity that is beyond regular syntactic tests (Wiltschko & Heim, 2016). While I agree with their conclusions, it is useful to highlight the behavior of confirmatory particles in languages in which coordination could be in part semantically motivated (Aoun et al., 1994). Therefore, I test (i) if confirmatory particles themselves can form a conjunct, and (ii) whether one particle can confirm the information in coordinated CPs. The following examples are illustrative.

223)

a. * *ʾil-walad* *ʾakal* *ʾit-tufāħa,* *ha* *w* *mu*
DEF-boy ate.3M.SG DEF-apple PAR and PAR
'The boy ate the apple, right!'

b. *ʾil-walad* *ʾakal* *ʾit-tufāħa* *w* *il-binit* *širbat* *ʾil-ʿaṣīr* *ha↑*
DEF-boy ate.3M.SG DEF-apple and DEF-girl drank DEF-juice PAR
'The boy ate the apple and the girl drank the juice, right!'

c. * *ʾil-walad* *ʾakal* *ʾit-tufāħa* *ha↑* *w* *il-binit* *širbat* *ʾil-ʿaṣīr.*
DEF-boy ate.3M.SG DEF-apple PAR and DEF-girl drank DEF-juice
'The boy ate the apple and the girl drank the juice, right!'

d. * *ʾil-walad* *ʾakal* *ʾit-tufāħa* *ha↑* *w* *il-binit* *širbat*
DEF-boy ate.3M.SG DEF-apple PAR and DEF-girl drank
ʾil-ʿaṣīr *mu.*
DEF-juice PAR
'The boy ate the apple right and the girl drank the juice, right!'

e. * *ʾil-walad* *ʾakal* *ʾit-tufāħa* *ha↑* *w* *il-binit* *širbat*
DEF-boy ate.3M.SG DEF-apple PAR and DEF-girl drank
ʾil-ʿaṣīr *ha↑*
DEF-juice PAR
'The boy ate the apple right and the girl drank the juice, right!'

The examples above show that it is impossible to use multiple confirmatory particles in coordinative constructions. In (223a), conjoining two particles to confirm one proposition is problematic. However, it is possible to confirm two coordinated propositions by one particle (223b). It is also observed that it is ungrammatical to confirm one clause in a coordinative structure involving more than one clause (223c), unless, intuitively speaking, the first clause ends with a long pause – which marks a new utterance. It is ungrammatical to confirm coordinated clauses by using two distinct confirmatory particles at the edge of each clause (223d). Using two confirmatory particles that sound the same i.e., one *ha* at the edge of each clause (223e) is equally problematic.

The coordinative test shows that confirmation in Arabic should target coordinative constructions as one unit, unless separated by long pauses. The long pauses may mark the beginning of a new utterance and run out the function of the conjunction *wa* – as a coordinator. The results of the test confirm the conclusions reached in the literature (Tubau, 2014; Wiltschko & Heim, 2016; Yang & Wiltschko, 2016).

4.2.3 Generating Confirmatory Particles

To arrive at the syntactic structure of confirmatory particles in Arabic, I explore three interconnected approaches. Two approaches (Espinal, 2011 & Tubau, 2014) view confirmationals from a cartographic perspective (Cinque & Rizzi, 2010; Rizzi, 1997). In the first two approaches, confirmationals are functional projections. They are the outcome of a grounding functional head

that c-commands a CP. The third approach (Wiltschko & Heim, 2016) views confirmationals as the outcome of a functional association with a grounding layer specified by speech act roles. Wiltschko and Heim (2016) refer to the third approach as the *neo performative hypothesis*. The three approaches meet at the function of confirmationals; that is, they establish a link between confirmationals and grounding. Nevertheless, they depart on their representation. I review the merits and demerits of each approach briefly.

Espinal (2011) postulates a detailed mapping for pragmatic particles, following Rizzi's (1997) cartographic approach (224). In addition to the functional heads proposed by Rizzi (1997), Espinal (2011) sets additional pragmatic functional heads that c-command ForceP. Each pragmatic particle represents a functional head that captures a pragmatic function. For example, exclamations are the outcome of an exclamative functional head, a vocative particle results in a vocative phrase and a confirmatory particle creates a grounding phrase. Within such a hierarchy, pragmatic particles merge as heads or specifiers.

224) [GroundP Ground [VocP Voc [ExclP Excl [ForceP Force [TopP Top [FocP Foc [TopP Top [FinP Fin [PolP Pol [IP Infl]]]]]]]]]]

In light of this proposal, Espinal (2011) examines confirmatory particles, such as *eh*, *oi* and *fa*, in Catalan.

225) *hi* *sereu* *per* *Nadal,* *eh,* *oi* *fi?*
here be.FUT.2PL at Christmas PAR
'You will be with us at Christmas, won't you?

(Catalan)

(Espinal, 2011, p. 64)

She argues that confirmatory particles originate in the specifier position of ForceP because confirmationals may specify the nature of C. While Espinal's (2011) study has provided a basis for

analyzing confirmatory particles, her study does not show how confirmationals interact with speech act participants.

To incorporate speech acts in the derivation of confirmationals, Tubau (2014) integrates Espinal's (2011) cartographic mapping with Krifka's (2017) theory of speech acts. By examining the structure of the confirmatory particle *annit* (226), a particle spoken in British English and attested in other variaties of English such as Malaysian English, Hong-Kong English, Indian English and White South African English, Tubau (2014) argues that a syntactic analysis of confirmatory particles should involve a request for confirming an assertion; that is, syntactic structures should map a request to confirm an asserted proposition.

226)

a. You told your mom, *annit*?

b. Oh, she got A levels, *annit*?

(Tubau, 2014, p. 55)

Tubau (2014) builds her syntactic analysis of confirmatory particles on Krifka's (2017) model of negated polarity questions.

227) There is a vegetarian restaurant here?

(Krifka, 2017, p. 25)

The model marks the assertive force of a polarity question, such as that in (227), by a syntactic operator, ASSERT. The model also establishes requests in the same way; that is, a syntactic operator, REQUEST, is responsible for the request interpretation behind the question. Tubau (2014) argues that these two operators should also be present in the derivation of confirmatory particles. Putting the two models (i.e., Espinal, 2011 and Krifka, 2017) together, Tubau (2014) proposes looking at confirmationals in light of the following derivation:

228) [GroundP Ground [ForceP REQUEST [ForceP ***confirmationals*** [ForceP ASSERT Force [TP….]]]]]

(Tubau, 2014)

Tubau (2014) argues that confirming information depicts a process of grounding. Accordingly, she argues that syntax should associate the grounding function with asserted propositions. Even though Tubau's (2014) analysis shows the need for speech act projections, it does not represent them clearly.

The third approach (Wiltschko & Heim, 2016) views confirmationals from a performative perspective; that is, the approach looks at the role of speech act projections (Speas & Tenny, 2003) in the derivation of confirmatory markers. The model incorporates two basic ideas. The first idea is that since speech act projections have a hearer projection and a speaker projection, confirmationals could trigger a response from the addressee to confirm that a proposition is true or to confirm what the addressee knows about the proposition is true. The second idea is that since the function of confirmationals is to ground information, the model views speech act projections as grounding projections. Unlike previous approaches (Espinal, 2011; Tubau, 2014), the model looks at confirmatory particles as part of the grounding layer; from a functional perspective confirmatory particles exist above the CP (see chapter 2 for further details). The model, however, leaves the linear order of confirmatory particles without adequate answers.

Arabic confirmatory particles can be considered within the spirit of these modules (Espinal, 2011; Tubau, 2014; Haegeman & Hill, 2013; Hill, 2007b, 2013b; Wiltschko & Heim, 2016). I now turn toward specifying the syntactic domain and position of confirmatory particles in Arabic.

4.2.4 Analyzing Confirmatory Particles in Arabic

Confirmatory particles in Arabic can appear at either the right (229a) or left edge (229b) of a declarative asserted clauses.

229)

a. *ʾanā* *šuft-ak* *bi-s-sawg* *ṣaḥ.*
I saw-2SG.ACC in-DEF-market right
'I saw you in the market, right.'

b. *ṣaḥ* *ʾanā* *šuft-ak* *bi-s-sawg.*
right I saw-2SG in-DEF-market
'I saw you at the market, right.'

(Jordanian Arabic)

230) *kam* *hwa* *jamīl* *an* *nasūma* *ramadān,* *hā*↑?
how he nice SUBJ.PAR fast Ramadan PAR
How nice that we fast Ramadhan, eh

(Iraqi Arabic)

(Albanon, 2017)

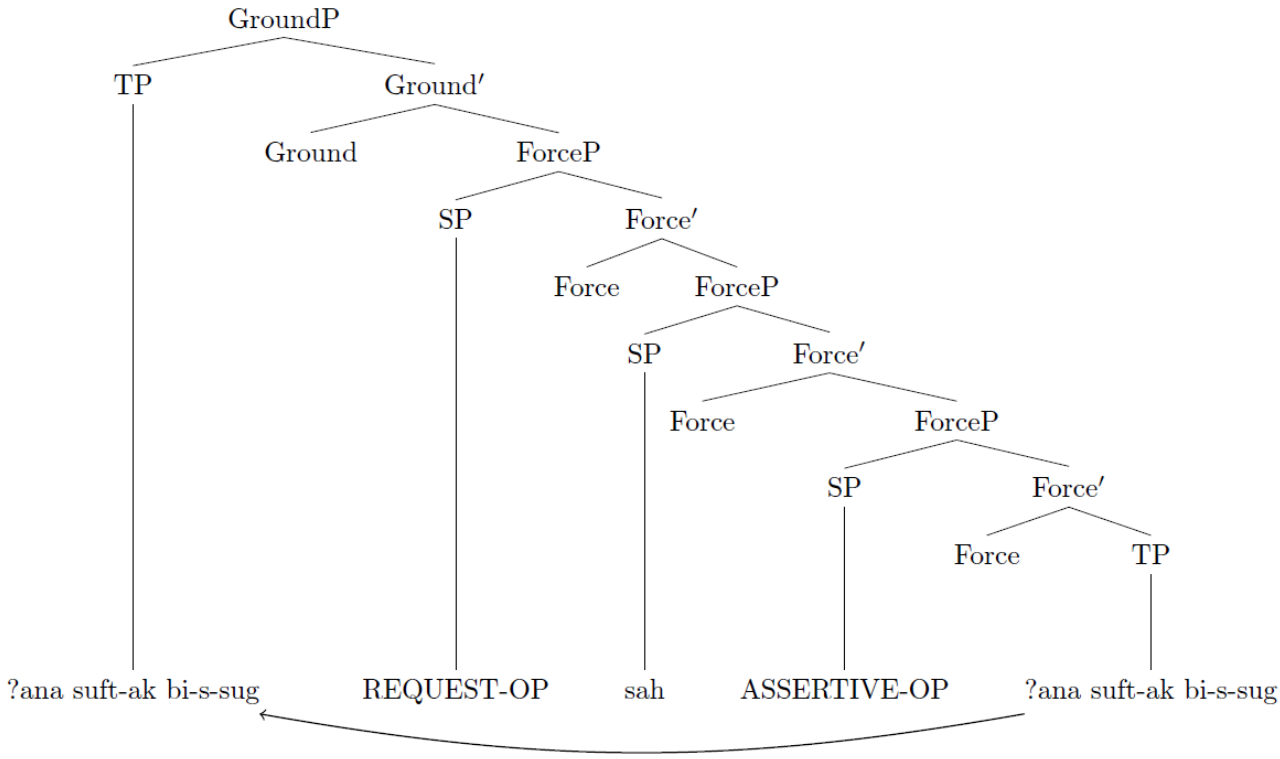
231) *yaʿmal-u* *bi-rijluh* *y-kanzū* *lā*
make-3SG by-leg PROG-compress PAR
'He makes it with his foot; he compresses it [= dates], right?'

(Omani Arabic)

(Lutz & Jong, 2011)

Tubau's (2014) model (confirmatory particles are part of the CP) can account for the Arabic data, yet such an approach has limits. According to the model, the language faculty generates confirmationals in two steps. The first step deals with depicting how speakers call their addressees for a response. The second step presents how a confirmed clause can be grounded by moving it to a SPEC-ground position. In light of Tubau's (2014) model, the derivation of left-peripheral confirmationals in Arabic goes as follows.

232)



(Adapting Tubau's (2014) model)

The model shows that splitting Force can generate confirmatory particles, such as *ṣaḥ* (229), *ha* (230) and *lā* (231). The mechanism deals with generating only right peripheral confirmationals and overlooks patterns in which confirmationals might appear at the left periphery instead (229b), and it does not account for confirmatory particles that are part of the verb domain (e.g., Schaefer, 2019). In addition, her model violates the Locality Principle and the Phase Impenetrability Condition (Chomsky, 1995, 1999) on subjacency, which restricts movement across phase boundaries. Furthermore, the model ignores the role of speech act participants in the grounding projection.

The function of confirmatory particles can still be viewed in line with Wiltschko and Heim (2016); that is, confirmatory particles may function as grounding units that are part of the speech act projection. However, the mismatch between the function and the linear order remains

problematic. This necessitates a modified model. Therefore, I present a mechanism and show evidence on how grounding valuation may operate technically on such particles. Then, I show how the mechanism operates on non-peripheral grounding units.

4.3 The Case of Attitudinal Particles

Attitudinal particles are ostensible grammatical categories that express the attitudes of discourse participants towards propositions. In many languages, attitudinal particles have been examined from a pragmatic and semantic perspective based on their functions (Jucker & Ziv, 1998). Most recent attempts to analyzing attitudinal particles claim that such particles are syntactically governed (Bayer & Obenauer, 2011; Heim et al., 2016; Wiltschko & Heim, 2014).

In Iraqi Arabic, Qasim (2016)[29] shows that speakers of Gilit dialect, a dialect spoken in south Iraq, deploy a group of grammaticalized lexical items (e.g., *hitš*, *dā*, *ġer*, *hā*, *yā*, *tšā*, *aza*, and *mū*) only for expressing speakers' attitudes. The behavior of those particles highlights their ostensible nature. Based on data collected by face-to-face interviews with speakers of the Gilit dialect, Qasim (2016) observes that "peripheral attitudinal particles are always interchangeable with other lexical categories. [This] makes their meaning elusive in this dialect." The purpose of this section is to examine those particles from a minimalist syntactic perspective, with the aim to generate a mechanism for grounding valuation (cf., Thoma, 2016).

Even though these particles are used for expressing speakers' attitudes toward propositions, multiple particles can show up in the left-periphery. The unusual behavior leads to a paradox; how can a speaker express divergent attitudes, for a single utterance, at the same time? I propose a generative mechanism that dissolves such a discrepancy by establishing a grounding link from the

[29] This section is based on Qasim's (2016) data, unless otherwise stated.

uppermost grounding head to the lowermost one; the link values serialized particles as shades of a grounding head.

4.3.1 The Multifunctionality of Attitudinal Particles

Attitudinal particles are context-sensitive in Iraqi Arabic. The function of attitudinal particles cannot be figured out without specifying context. Attitudinal particles are often homophonous with other functional categories such as demonstratives (233), interrogative particles (234), negative markers (235), and others (Qasim, 2016, p. 45-47). Consider the following examples.

233)

a. *hitš* *raḥ*.
DEM went.3SG.M
'He went this way.'

(p. 46)

b. *haḏa* *ġer* *ši.*
DEM NEG thing
'That is something else.'

(p. 46)

234) *yā* *ali*?
Q.PAR Ali
'Which Ali (do you mean)?'

(p. 47)

235) *la* *mū* *haḏa.*
NEG NEG DEM
'No, it is not this.'

(p. 47)

According to Qasim (2016), the function of "modality"[30] is context-dependent. To qualify for this function, a particle should appear in left-peripheral positions and should encode speakers' attitudes toward a proposition, without affecting its truth value. Consider the following examples.

[30] Qasim (2016) uses the term modality to refer to the particles under investigation. In his sense, modal particles do not function as modal auxiliaries, such as *may* and *might*, in English.

236) *ġer* *idja* *w* *gali-na* *ġer* *ši*!
A.PAR come.PST.3SG and say. PST.3SG-3PL NEG something
'AP He came and told us something else!' (Shocked)

(p. 51)

237) *aza* *haḏa* *šbi*[31]?
A.PAR DEM WH
'AP What is wrong with him?' (Surprised)

(p. 51)

In (236), *ġer* appears in two contexts. In the first context, it is used for expressing emotions. Thus, the speaker is wondering if that really happened. In the second context, *ġer* appears as a negative marker, denoting that it is not the same thing that the speaker has been told. The variability of the use of this particle is demanded by its context. In (237), *aza* marks a surprise. The speaker is expressing how much she is surprised about the behavior of the person she is pointing to.

Another use of attitudinal particles in this dialect (and in Jordanian Arabic) shows up mainly by using the particle for marking "a proposition in which the speaker does not want to give more explanation about the topic" (Qasim, 2016, p. 52). The following example is illustrative.

238) *hiš* *mā* *arid* *arūḥ* *li-l-madrasa.*
A.PAR NEG want.PRS.1SG go.PRS.1SG PREP-DET-school
'AP I do not want to go to school.' (Bullheaded)

(p. 52)

The speaker is expressing that it is not useful for the addressee to try to know about the reason for not going to school. He is expressing that he does not want to go because he feels that he should not go.

As reported in Qasim's (2016) study, the function of the rest of those particles is not crystal clear (239). He does not describe the function of *mū*[32]. He describes *yā* as a femnistic particle because it appears in the speech of females (if this particle resembles that in Jordanian Arabic, it functions for

[31] The same particle is found in Jordanian Arabic and Palestinian Arabic.
[32] The data in its source is limited for describing four attitudinal particles only (e.g., *yā*, *hā*, *tšā*, *ġer*). Therefore, it is not clear how *mū* interacts with other particles. Arguably, I think that *mu* is a confirmational marker in this dialect and it does not interact with other attitudinal particles.

entreatment), *hā* as a surprise particle (however, this is not always the case), *tšā* as a particle to express intentions toward taking an action, and *dā* as a politeness particle because it softens orders (in most cases).

239)

a. *mū* *ani* *ruhit* *il-barha.*
A.PAR 1SG went DEF-yesterday
'AP I went yesterday.' (I confirm that) (*my interpretation)*
(p. 48)

b. *yā* *ma* *adri.*
A.PAR NEG know.PRS.1SG
'AP I don't know.' (with a hope you stop asking (*my interpretation*)
(p. 48)

c. *hā* *hāda* *aḳu-i.*
A.PAR DEM brother-1SG
'AP This is my brother.' (surprised)
(p. 48)

d. *tšā* *aruḥ* *anām* *aḥsan.*
A.PAR go.PRS.1SG sleep.PRS.1SG better
'It is better for me to go to sleep.'
(p. 48)

4.3.2 Serialization of Attitudinal Particles

Qasim (2016) points out that attitudinal particles in Iraqi Arabic have strict serial ordering. In other words, some particles must come before other particles. The reason is attributed to their use mainly as expressive elements. The following example is illustrative.

240) *yā* *hā* *tšā* *ġer* *ḍarab* *aḳu-h* *il-barḥa.*
A.PAR A.PAR A.PAR A.PAR hit.PST.3SG brother-3SG.M DET-yesterday
'AP AP AP AP He hit his brother yesterday.'
(p. 48)

Changing the strict ordering of attitudinal particles either changes their function or results in ungrammatical construction. This makes the patterns in (241) ungrammatical.

241)

a. * *hā* *yā* *tšā* *ġer* *ḍarab* *aḳu-h* *il-barḥa.*
A.PAR A.PAR A.PAR A.PAR hit.PST.3SG brother-3M.SG DET-yesterday
'AP AP AP AP He hit his brother yesterday.'

b. * *ġer* *yā* *tšā* *hā* *ḍarab* *aḳu-h* *il-barḥa.*
A.PAR A.PAR A.PAR A.PAR hit: PST.3SG brother-3M.SG DET-yesterday
'AP AP AP AP He hit his brother yesterday.'

Given the descriptive analysis, Qasim's (2016) study points toward three crucial points for a syntax of attitudinal particles in Iraqi Arabic. First, attitudinal particles show restrictions on their interaction with clauses (i.e., they must appear in peripheral positions). Second, they point toward layered projections (they show strict internal ordering). Third, they presumably involve an interaction with speech act projections.

4.3.3 Generating Attitudinal Particles

The multifunctionality of attitudinal particles and their strict hierarchical order indicate that those particles are generated through associations with mulitple functional layers (Wiltschko, 2014b; Thoma, 2016). Their strict hierarchical order points toward a piece of evidence for the complexity of speech act projections that contain such particles.

The USM (see Chapter 1 for further details) accounts for the multifunctionality of those particles by associating each function with a different layer: Linking and Grounding. If those particles account for speakers' attitudes, the USM associates them with GroundP, a layer dedicated to expressing speakers' orientation toward a proposition. If those particles, instead, are part of any functional layer below the CP, such particles function differently; they can function as interrogative markers, for example. Based on such reasoning, associating *yā* with the Linking layer affects its interpretation and marks it as an interrogative particle, occupying the specifier position of a CP.

c = *Grounding* + UoL => Attitudinal Particle

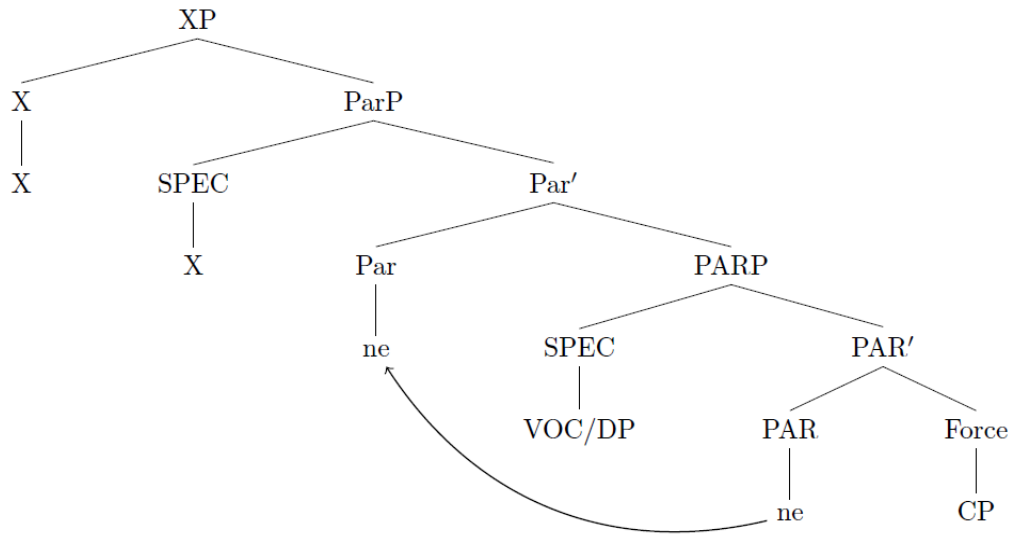
c = *Linking* + UoL => Interrogative particle

The USM model explains function of those particles neatly and provides a tool to account for the first function (the focus of the current section); however, the USM does not provide a way to account for the linear order of those partilces to reflect a single attitude. This calls for a new

mechanism for the interpretation of such particles which is consistent with the linear order in which they appear. This mechanism provides a chain that connects the grounding function of those particles to a grounding head.

Haegeman (2014a) and Hill (2007b) provide a tool to account for the linear order of particles (see Chapter 2 for a detailed distinction between Haegeman (2014a) and Hill (2007) in the syntactization of discourse markers). Haegeman's (2014) analysis of multiple particles in West Flemish is summarized (again) in the tree diagram below (see Chapter 2 for a discussion of this diagram).

242)



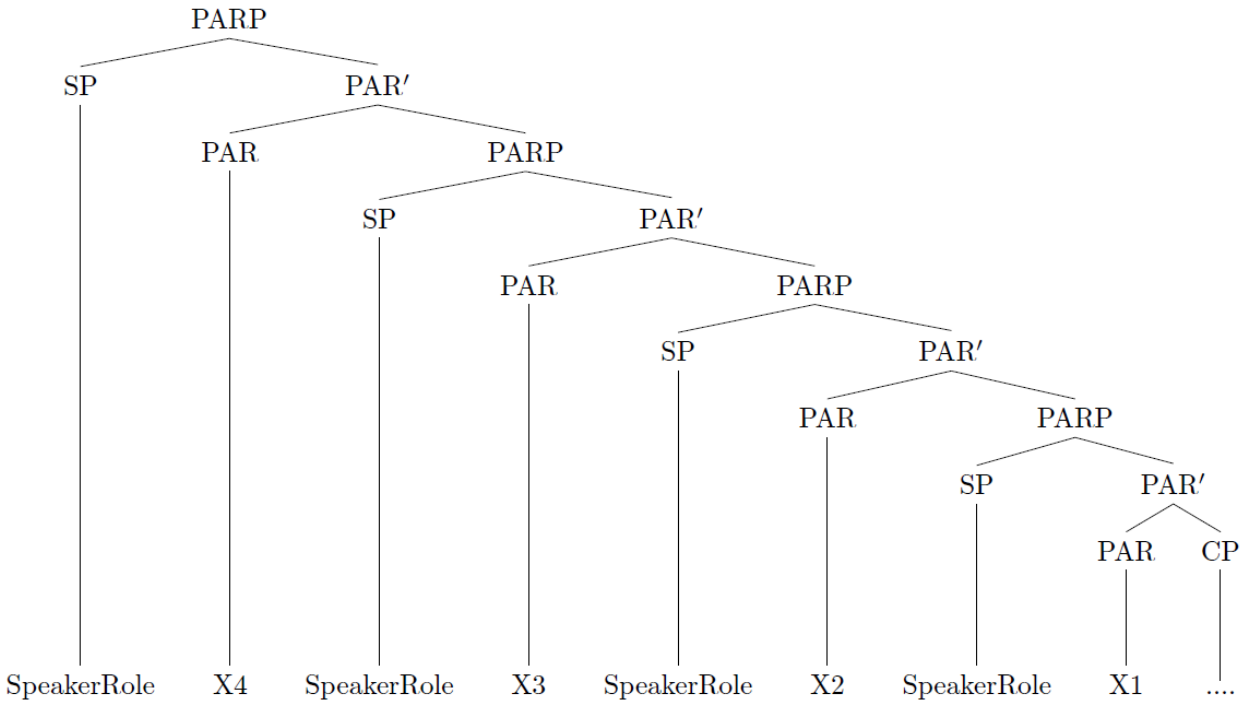
(Haegeman, 2014, p. 134)

This analysis provides a background for analyzing attitudinal particles. The serialization patterns of those particles shows that such particles are syntactically governed in multiple projections. Like Haegeman's (2014) analysis, I argue that those particles are generated in the head position of functional phrases dedicated to such particles. Each phrase is specified for a speaker. Since the specifier head of the topmost particle c-commands all those particles, their specifiers are

linked with each other. In that sense, it becomes possible to argue for a syntactic restriction imposed by the serial ordering of those particles.

The first step of the derivation of particles in Iraqi Arabic begins with assuming each particle projects a phrase in a fixed way. The first particle selects a CP as its complement. The higher particles select the projected phrase of the lower ones in turn. The process passes in three sequential stages until it covers all the projected elements (243)[33].

243)



According to Wiltschko and Heim (2016), the addressee should be projected at the top layer, while according to Haegeman (2014b) and Hill (2007b), it should be projected above the CP. Thus, for simplification purposes, I focus on the projection of particles and their integration with their specifiers. Consider the example of serialization again (repeated below).

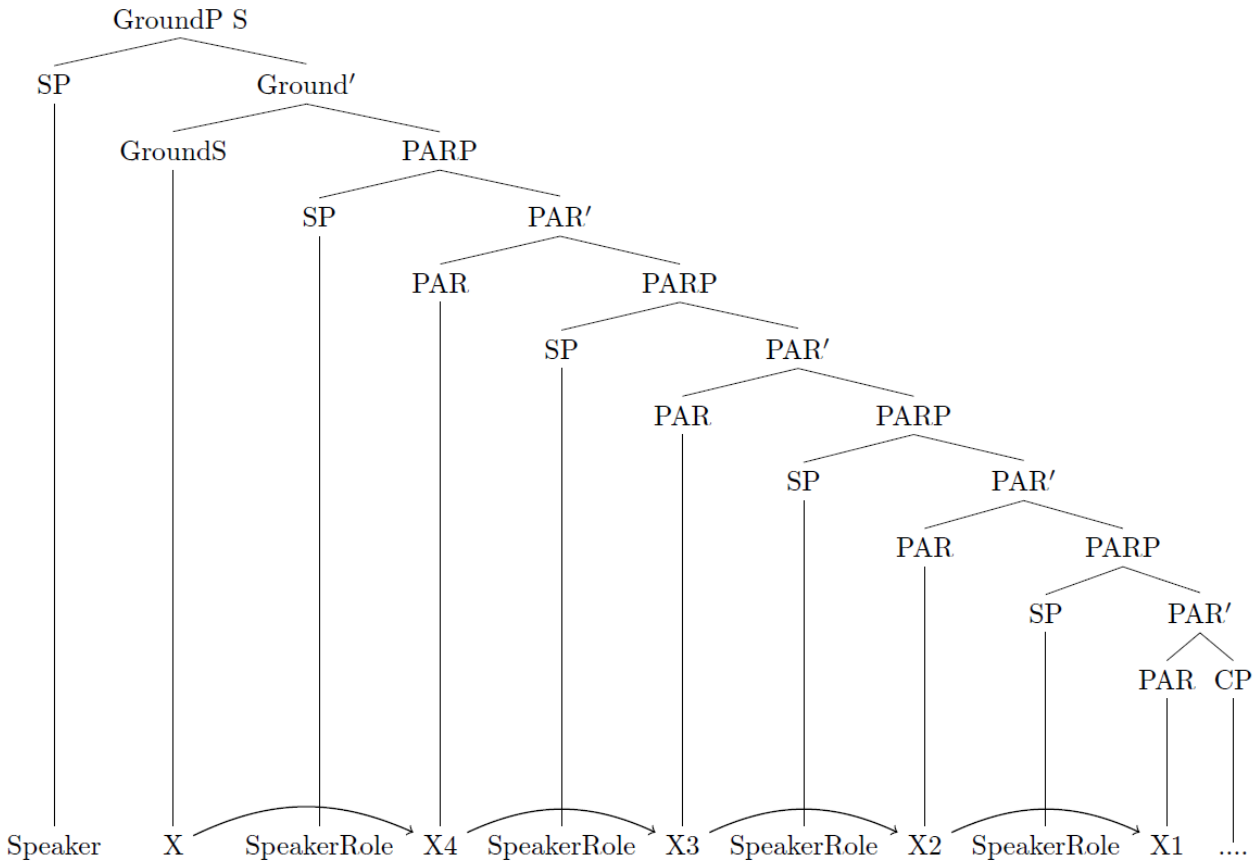
[33] Speaker roles are identical; I present how a specifier holding this role may hold distinct attitudes that are realized by multiple attitudinal particles.

244) *yā hā tšā ġer ḍarab aḳu-h il-barḥa.*
A.PAR^4 A.PAR^3 A.PAR^2 A.PAR^1 hit: PST.3SG brother-3M.SG DET-yesterday
'AP^4 AP^3 AP^2 AP^1 He hit his brother yesterday.'

(p. 48)

Based on the derivation above, the first attitudinal particle, *ġer*, selects the CP. In SPEC-PAR, the particle is specified for speaker, arguably occupied by a *pro*. The projection of the particle *ġer* represents the first layer. In the second layer, the particle, *tšā*, selects the maximal particle projection of *ġer*. The process continues in the same fashion till all the particles are projected in the same fashion. To correlate the derivation with how grounding works, I assume that the topmost layer is c-commanded by a speaker-oriented grounding head. The grounding head selects the lower heads and percolates a grounding feature – similar to F-selection (see chapter 2). If that is the case, then, not only specifiers are linked to SPEC-GroundP but also the functional heads of speaker-oriented particles (see Bayer and Obenauer (2011) for a similar argument).

245)



The derivation shows that a speaker could use more that one particle to depict his orientation; nonetheless, all the functions are going to be buried under the broader function of grounding. In the following section, I will elaborate upon the nature of the selected feature. It is going to be supported by considering how grounding units can be generated in non-peripheral grounding positions.

4.4 The Case of Complementizers

In the Arabic grammatical tradition, the complementizer system is described with a group of particles called *ʾinna waʾḵwātuhā* 'that and its sisters.' The system includes seven particles: *ʾinna* 'that,' *ʾanna* 'that,' *kaʾanna* 'as if,' *liʾanna* 'because,' *lakina* 'but,' *laʿla* 'wishing particle,' and *layta* 'wishing particle' (Ahmed, 2015; Jarrah, 2019). The function of complementizers in this

system is not different from the function of complementizers cross-linguistically. They are elements (particles) that are used for forming complex structures (Ahmed, 2015; Fassi Fehri, 2012; Jarrah, 2019; Ross, 1970; Shlonsky, 1997; Soltan, 2006).

246)

a. *ʾaqūl-u inna al-banāt-a waṣl-nā.*
say-1SG COMP DEF-girls-ACC arrived-3F.PL
'I say that the girls arrived.'

(Standard Arabic)

b. *ʾinna al-banāt-a waṣl-nā.*
COMP DEF-girls-ACC arrived-3F.PL
'Indeed, the girls arrived.'

(Standard Arabic)

c. *laget ʾid-dalil ʾinn-o ʾil-walad sarag ʾis-sayara.*
found DEF-evidence COMP-3SG DEF-boy stole DEF-car
'I found evidence that the boy stole the car.'

(Jordanian Arabic)

(Jarrah, 2019, p. 94)

Nevertheless, the use of complementizers as discourse markers (Germanos, 2013) has been overlooked in generative treatments.

247) *ʾinno yaʿnī kaṯīr ṣurt mniḥ bi-l-faransi.*
DM PAR a lot became good in-DEF-French
'You became good in French.' (I doubt it.)

(Labanese Arabic)

(Germanos, 2013)

(247) shows that, in spoken Arabic variaties, the forms of complementizers can serve as discourse markers. As discourse markers, I refere to them as ostensible complementizers because they depart from their basic function.

4.4.1 The Multifunctionality of Complementizers

Germanos (2013) shows that Arabic complementizers can be used as discourse markers. As discourse markers, complementizers do not function as subordinators, i.e., they do not establish

complex structures. Discourse markers, nevertheless, are part and parcel of expressing speakers' attitudes and of establishing common ground and intimacy between discourse participants.

Recent scholarship has suggested that establishing common ground is syntactically governed by high-level projections (Thoma, 2016; Yang & Wiltschko, 2016). Precisely, common ground structures necessitates looking at three types of markers: (i) reception markers, markers used for signaling a reaction on the part of addressee (e.g., Wiltschko, 2017), (ii) addressee-centered markers, markers that modify the speaker's own information (iii) and information-centred markers, markers that modify the information itself (Jucker & Ziv, 1998). If information-centered markers are syntactically generated, they cannot be addressed by assuming that GroundP should only be associated with peripheral elements because such markers can signal grounding information at any level.

Such discourse markers have been ignored from syntactic generative treatments due to their ostensible forms that disguise them as subordinators and because of their unpredicted distribution. Following the USM (Wiltschko, 2014b), I argue that a complementizer can function as a subordinator if it is associated with a Linking layer. If a complementizer departs from that function and gets associated with a grounding layer, it functions as a discourse marker. The use of complementizers as discourse markers aims to express speakers' epistemic stance about a given proposition. Consider the following examples.

248)

a. *ʾinno* *yaʿnī* *kaṯīr* *ṣurt* *mniḥ* *bi-l-faransi*.
DM PAR a lot became good in-DEF-French
'You became good in French.' (I doubt it.)

(Labanese Arabic)
(Germanos, 2013)

b. *ʾinno* *ʾiða* *bid-ak* *tidji* *taʿal.*
DM COMP want.2SG come come.
'If you want to come, come (but I see that you should not come.)

(Jordanian Arabic)

249) *laget* *ʾid-dalil* *ʾinn-o* *ʾil-walad* *sarag* *ʾis-sayara.*
found DEF-evidence COMP-3SG DEF-boy stole DEF-car
'I found evidence that the boy stole the car.'

(Jordanian Arabic)

(Jarrah, 2019, p. 94)

In (248), the *ʾinno* shows up as the most left-peripheral element in the clause, above the discourse particle *yaʿni* 'mean.' Jarrah's (2019) observes that in spoken Jordanian Arabic, the use of a complementizer in clause-initial positions is not allowed.

250) **ʾinno* *ʃuf-t* *ʾiz-zalamih.*
COMP saw-1SG DEF-man
'I saw the man.'

(Jordanian Arabic)

(Jarrah, 2019)

However, since the appearance of the form of the complementizer in clause-initial positions is not ruled out in spoken everyday language (248b), its use in this position entails a different interpretation. In (248b), the speaker uses *ʿinno* as a marker of epistemic stance, expressing his opinion about the stated proposition. For him, he is not confident that he became competent in French. In (249), *ʿinno* is used as a subordinator.

The multifunctionality of *ʿinno* can be accounted for by assuming that as a discourse marker *ʿinno* is associated with GroundP, a layer dedicated to expressing the speaker's orientation toward a proposition. *ʿinno,* as a subordinator, however, is associated with Linking, a function that enables *ʿinno* to occupy the C position of a CP. The relationship is expressed as follows.

251) c: Discourse Marker = <UoL + k: *Grounding*>

c: Subordinator = <UoL + k: *Linking*>

As a discourse marker *ʿinno* can appear in relatively any order (see (252)) . Thus, it is impossible to assume that *ʿinno* is generated in GroundP.

252)

a. *yaʿani ktir ʂurit ʾinno mniħ bi-l-faransi.*
PAR much became.1SG DM good in-DEF-French
'I became good in French.'

(Labanese Arabic)

(Germanos, 2013)

b. *ʾinno ʾiða bid-ak tidji taʿal.*
DM COMP want.2SG come come.
'If you want to come, come (but I see that you should not come.)

(Jordanian Arabic)

However, it is already established that *ʾinno*, as a discourse marker, shows an association with the epistemic stance of speakers and their orientation toward propositions. In the next section, I propose a new mechanism through which a grounding head can activate grounding units of language that are not generated in GroundP, yet they are linked to it. For simplicity, I refer to these units of language as *grounding shades*.

4.4.2 Non-peripheral Grounding

Mostly, discourse markers show free word order. The idea of epistemic valuation rises from the behavior of discourse markers in Arabic. To link the relatively high function with low generated discourse markers, I adopt Bayer and Obenauer's (2011) views on establishing agreement relation between high Force heads and illocutionary force modifying particles that are generated away from Force. I assume that there is a link between Ground and discourse markers. The link ensures that discourse markers are basically elements that show the process of grounding. If grounding is syntactically governed, it would be possible to assume that it can target any element in a structure, away from GroundP. With that in mind, it becomes possible to account for non-peripheral

grounding units of language, *grounding shades*; the term introduces adjuncts that have grounding impact without being based in grounding heads.

The process of establishing a non-peripheral grounding discourse marker depends on feature valuation and agreement in the sense proposed by Pesetsky and Torrego (2007) and (Bayer & Obenauer, 2011). Their view is based on sharing features across syntactic units. In the proposed model, the Agree mechanism goes as follows.

Agree (feature sharing version)

(i) An unvalued feature F (a probe) on a head H at syntactic location α (Fα) scans its c-command domain for another instance of F (a goal) at location β (Fβ) with which to agree.

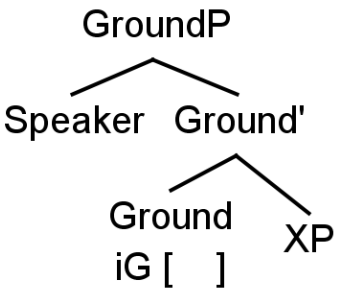
(ii) Replace Fα with Fβ, so that the same feature is present in both locations.

(Pesetsky & Torrego, 2007)

The mechanism of Agree shows that a probe with unvalued features looks for a goal to agree with, in the usual way proposed by Chomsky (1995). It differs, however, in that instead of deleting the matching features, both the probe and the goal end up sharing the same feature[34]. Bayer and Obenauer (2011) utilize this mechanism in the derivation of non-peripheral discourse particles. Their mechanism is based on the observation that even though discourse particles can modify the illocutionary force in German, they cannot be thought of as elements that are generated in the specifier position of Force, due to their linear order. I extend the model and argue that non-peripheral grounding elements can share features with grounding peripheral heads.

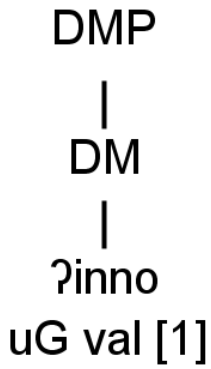
[34] In Pesetsky and Torrego (2007) valuation of wh in English, they use the following notations: iQ[ ] represents an interpretable but unvalued feature for wh-questions in C. Wh words have an uninterpretable although valued interrogative Q-feature represented as [uQ+INTEROGATIVE]. I use similar notations for grounding valuation.

253) u Ground



I further assume that each discourse marker projects into a phrase, DMP. I posit that marker phrases are adjuncts that have valued uninterpretable ground feature. The ground head in the ground phrase probes for a goal. Following the mechanism of feature sharing, the probe and the goal share the same feature of grounding. Any discourse marker undergoes the same process of valuation. In that sense, information centered markers are linked with the grounding head.

254) i Ground



The process of valuation is not limited to the one discourse marker. It targets subsequent markers in the same way.

4.4.3 Generating Ostensible Complementizers in Arabic

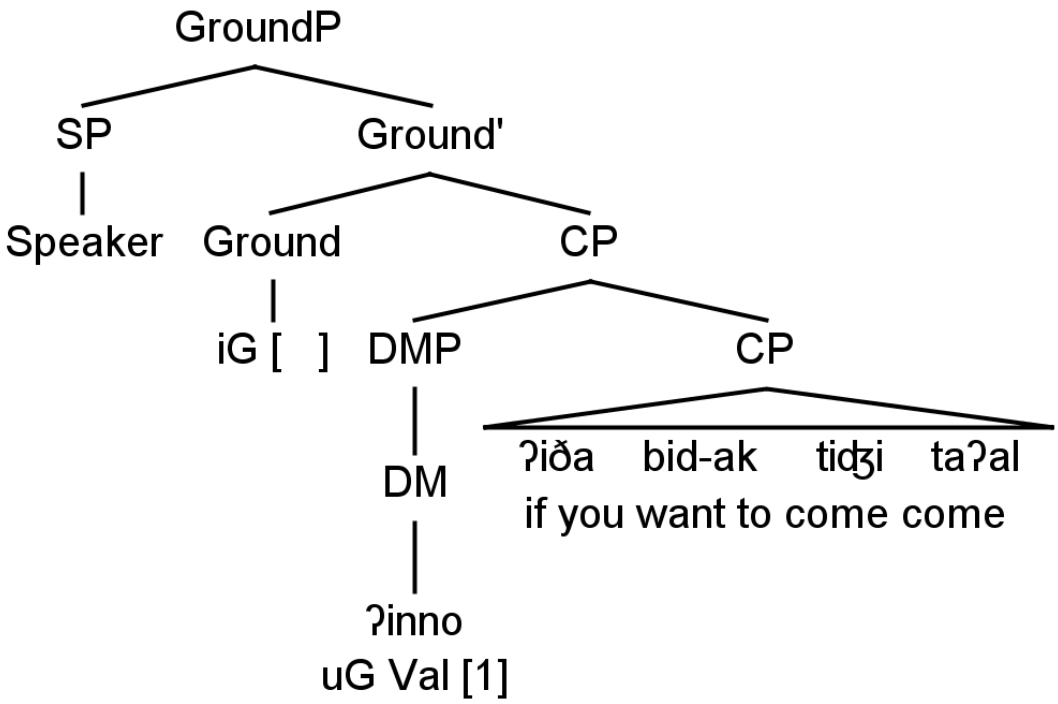
Based on the mechanism suggested earlier, the function of complementizer determines whether it would be generated as a subordinator or as a discourse marker. The first function is determined by its association with Linking, while the second function shows up if the ostensible complementizer is associated with Grounding. Now, I present some data in favor of the second function, as it has been understudied and overlooked from syntactic treatments. Consider the following example.

255) *ʾinno ʾida bid-ak tidji taʿal.*
DM COMP want.2SG come come.
'If you want to come, come (but I see that you should not come.)

(Jordanian Arabic)

The first step in generating ostensible complementizers in Arabic is to determine their syntactic function. The second step is to correlate the form with its distribution. Grounding elements are, for the most part, signals that are injected in speech for the continuous assessment of common ground. Thus, from a syntactic perspective, they should behave like adjuncts. The derivation of (255) can be schematized as follows.

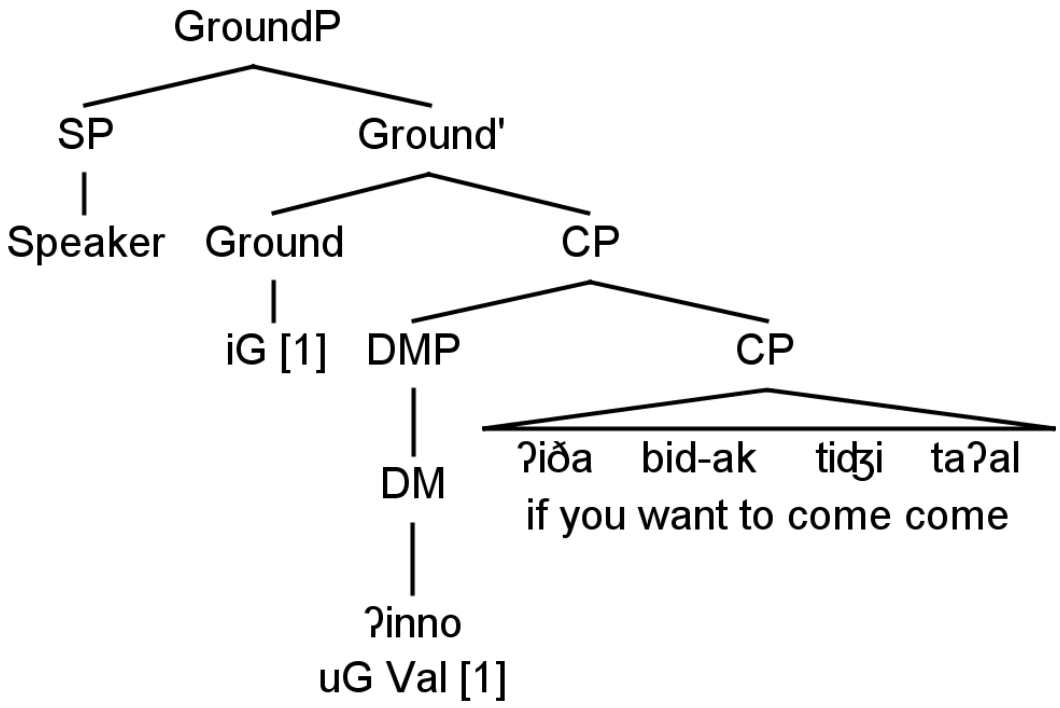
256)



The mechanism of generating a non-peripheral DMP that expresses speakers' attitude about the whole proposition begins with assuming that there is a link between the grounding head and the discourse marker. The grounding head has an unvalued interpretable grounding feature. The head probes for a matching goal with a valued grounding feature. Since the discourse marker *ʾinno* is c-commanded by the grounding head, the grounding feature of the head is valued. Following (Bayer & Obenauer, 2011; Pesetsky & Torrego, 2007), I deduce that, by the valuation of interpretable features, the head and the goal share the same valued feature. Thus, grounding is actualized on the grounding shade through its association with the grounding head. The ultimate

derivation of feature valuation is depicted on similar indices on both the probe and its goal, as it can be illustrated below.

257)



The analysis provides a prediction toward the status of non-peripheral grounding phrases. If the analysis is on the right track, then it becomes reasonable to assume that grounding signals are computed away from grounding heads. The signals themselves can be representative of speakers' attitudes without requiring that they be grounding heads by themselves. That would enable the interpretation of phrasal markers such as *you know* in English when it is used as a signal for assessing common ground. Moreover, it enables dislocating *ʾinno* to non-peripheral positions without losing its core function of expressing attitudes.

Another consequence of assuming that a link could be established between grounding heads and grounding shades is that if an element has a valued interpretable grounding feature that is relatively positioned inside the CP, it could be a target for grounding valuation. While Wiltschko (2014) has proposed that the association of grammatical categories in one of the functional layers in the spine could help in defining that category, her proposal is based on defining one function at a time – a single one-to-one correspondence between functions and layers. If the proposal at hand is right, we could think of one core layer through which an element can associate and another subfunction through which the element can inherit from the higher functional layers. To put that in other words, if a complementizer originates in the C position and most likely it shows an association with Linking, it could at the same time acquire an additional function from c-commanding layers through establishing a link with the Grounding Layer. In that sense, the grammatical category is defined based on a core function and a sub-function. The case of clause-initial Arabic complementizers might fit well in that dimension. I leave this matter for future research.

4.5 The Case of Call Particles

One of the most recent areas in syntactic literature has focused on the syntactic structure and the functional composition of call constructions (Hill, 2013b). Across languages, a calling on an addressee is mostly done by vocative particles (Hill, 2007b) or by intonation (Heim et al., 2016). In the Arabic language, vocatives are not exceptional. According to Moutaouakil (1989), there are eight vocative particles: *ʾa*, *ʾay*, *yā*, *ʾaya*, *haya*, *ʾay*, *ʾa*, and *wa*. Most particles appear along with an addressee. While most studies have focused on dealing with calls established by using the particle *yā* (Shormani & Qarabesh, 2018), studies have overlooked calls established by the particle *wa* (Moutaouakil, 1989), claiming that *wa* is no longer used for vocatives.

In addition, the area of call particles shows remarkable illustrations of the role of addressee markers. The grammar of Arabic does not tolerate vocatives with pronouns. Nevertheless, call particles show a close integration with addressee markers. The impact of such integration results in calls established as warnings. The overall assumption is that the association of addressees with particles creates a new domain for imperatives. I advance this proposal by examining the following particles: *yāk* and *walak*[35]. I claim that the interpretation of prohibition is syntactically motivated by the addressee marker *-ak.* The examples below are illustrative.

258)

a. *walak* *taʿal* *la-hun*!
PAR:2M.Sg come.2M.SG to-here
'Hey! come here.'

(to a male addressee)
(Jordanian Arabic)

b. *walik* *taʿal-i* *la-hun*!
PAR:2F.SG come-2F.SG to-here
'Hey, come here.'

(to a female addressee)
(Jordanian Arabic)

259) *yāk* *wī* *ʾil-lis*.
VOC[2M.Sg] PAR DEF-thief
'watch out for the thief!'

(Omani Arabic)
(Lutz & Jong, 2011, p. 486)

This part of the research aims to answer the following questions. What is the syntactic status of *walak*? And how is it different from regular vocative constructions? What is the difference between normal vocatives and derogatory vocatives? To answer these questions, I present a brief background of vocatives (Moutaouakil, 1989). I show that *walak* cannot pattern with standard

[35] The analysis of *walak* also applies to other warning particles such as: *ʾūʕak* and *ʔiʂħak*.

vocative particles. Evidence comes from their interaction with addressees (Hill, 2017). I claim that *walak* obtains its function through associating with addressee oriented projections that enable its interpretation as a strong call on addressee (Wiltschko & Heim, 2016).

4.5.1 Vocatives in Arabic

Many studies have examined vocative constructions in Arabic and their relation to speech act projections (Al-Bataineh, 2019; Shormani & Qarabesh, 2018; Soltan, 2016). Moutaouakil (1989) defines a vocative from a pragmatic perspective as a "function associated with a constituent referring to the entity addressed in a given discourse setting." The definition states two essential components for vocatives (i) its reference to an addressee and (ii) the reference is established pragmatically through speech acts. With that in mind, vocative constructions in Arabic have three ways of expressing the speech act of vocative. Based on traditional descriptions of vocatives, Moutaouakil (1989) identifies three types of vocatives: vocatives of hailing, vocatives of lamentation, and vocatives of entreaty.

260) y*ā* *xalid-u,* *qtarib*.
VOC Khalid-NOM approach
'Khalid, come nearer.'

(vocative of hailing)

261) *yā* *la-Zayd-in* *li-xalid-in.*
VOC to-Zayd-GEN for-Khalid-GEN
O, if only Zayd were by Khalid's side!'

(vocative of entreaty)

262) *wa* *Zaydah.*
voc Zayd
'O Zayd!'

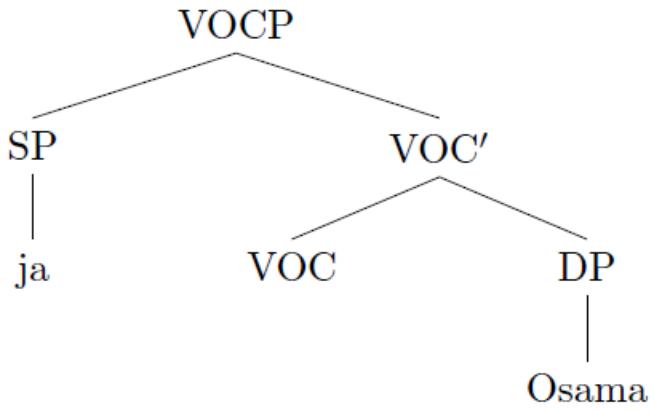
(vocative of lamentation)

(Moutaouakil, 1989, p. 145)

The three types differ in their illocutionary force. Only the first type has received extensive analysis in recent generative literature.

Most recent generative treatments of vocatives predict that a vocative construction consists of an optional vocative particle that occupies the specifier position of a vocative head (Espinal, 2011; Hill, 2007a, 2013b), schematized in (263) below. Soltan (2016) shows the applicability of this model in generating vocatives in Arabic.

263)



According to Soltan (2016), in Egyptian Arabic, the vocative particle is obligatory with nouns and adjectives and is prohibited with second-person pronouns and definite DPs. The distribution of the vocative particle, in Egyptian Arabic, shows that vocative particles cannot be used with pronouns.

264) **yā ʾinta*.
VOC you
Intended: 'Hey, you'

Studies on vocatives follow one basic pattern in which a vocative particle is not inflecting for the addressee. While I do not reject previous treatments of vocative in Arabic, they fail to account for cases such as *wal**ak*** (Jordanian Arabic) and *ya**k*** (OA).

4.5.2 The Structure of *walak*

The particle *walak* indicates that the speaker is calling an addressee to pay his attention toward performing the command. *walak* shows a complex relationship with the addressee. In (265),

the particle demonstrates agreement with a male addressee, while in (266), it agrees with a female one. In SA, this sort of agreement is not valid with vocative particles such as *yā* (Soltan, 2016).

265) *walak* *taʿal* *la-hun!*
PAR:2M.Sg come to-here
'Hey! come here.'

(to a male addressee)
(Jordanian Arabic)

266) *walik* *taʿal-I* *la-hun!*
PAR:2F.SG come-2F.SG to-here
'Hey, come here.'

(to a female addressee)
(Jordanian Arabic)

267) * *yak* *taʿal* *la-hun.*
PAR:2M.SG come to-here
'Hey, come here.'

(to a male addressee)
(Standard Arabic)

268) **yaik* *taʿal-i* *la-hun.*
PAR:2F.SG come-2F.SG to-here
'Hey, come here.'

(to a male addressee)
(Standard Arabic)

Decomposing the structure of *walak* necessitates looking at the functions of its parts. *wa* is a multifunctional morpheme in Arabic (e.g., *wa* 'conjunction', *wa* 'with,' *wa* 'oath preposition,' *wa* 'vocative particle). Given the multifunctionality of *wa* in Arabic, I claim that *wa* obtains its functions through its syntactic context. I further argue that *wa* in *walak* can be used as a call on addressee only if it is associated with a *Responding layer*. The responding layer motivates the interpretation of the marker *-ak* that is associated with the addressed entity.

The machinery adopted for the valuation of the second-person marker *-ak* is built upon Miyagawa's (2017) cartography. First, I assume that *walak* gets its imperative force by a link established by C, which patterns along with Miyagawa's (2017) proposal for the valuation of allocutive agreement. In addition to Miyagawa's (2017) proposed machinery, C determines the clause type associated with the structure of the CP following *walak*. To enable the multiple valuation of *walak* and its subsequent CP, I postulate that C contains features that move upward for *walak* valuation, and other features that move downward for determining clause types. The speculation is supported by the following observations. First, *walak* departs from standard vocatives; it has an imperative prohibition force. Second, *walak* does not originate in the C position Third, the subject of the clause may differ from the entity addressed. Finally, the force of the clause might not pattern with force established by *walak*[36].

269) *walak* *ʾaḥmad* *ʾakal* *ʾat-tufāḥa*.
PAR:2M.SG Ahmed sleep.3M.SG DEF-apple
'Hey, Ahmed ate the apple.' (strong call)

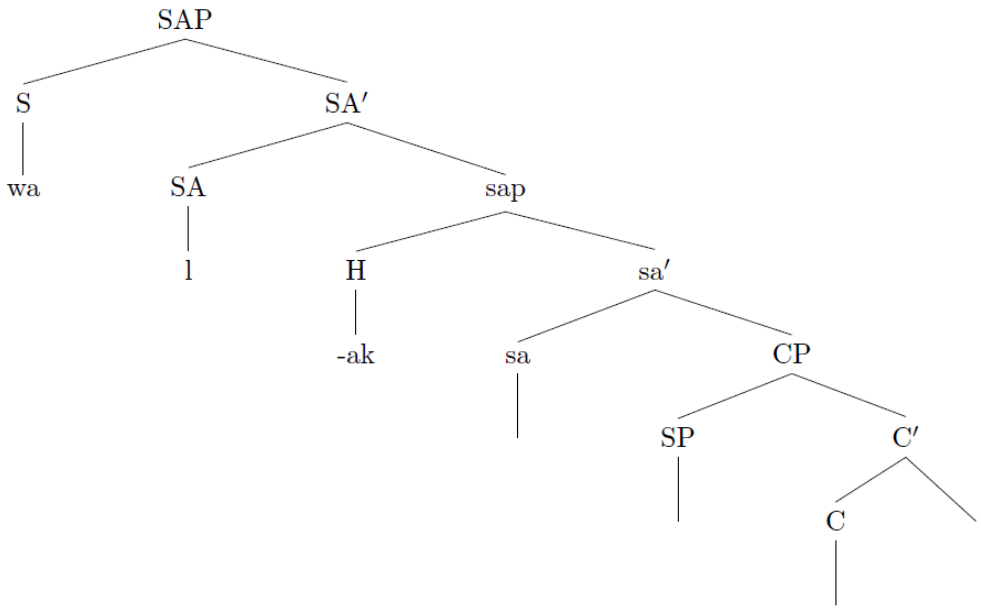
I argue that the *l* is a vocative head that is specified by *wa*. That is, *wa* originates in the speaker position of SA. I further argue that the agreement marking on *wa-l-**ak*** is due to the second person feature in Hearer[37]. As proposed by Miyagawa (2017), the second person marker is due to the movement of the allocutive probe from C to SA. The implication of such movement is a probe looking for a second person feature. The feature is valued on Hearer. The mechanism is schematized as follows.

[36] The structure of *walak* resembles that of NoVs; nevertheless, the roots of imperative NoVs may originate in verbal positions.
[37] Arabic is a pro-drop language (Kenstowicz, 1989). I refrain from presenting pro-drop for clarity of the argument; nevertheless, *-ak* may represent agreement markers with hidden pros occupying the same positions.

270) [SAP {SPEAKER} SA [sap {HEARER} sa [CP {SP} C [TP {SP} T]]]

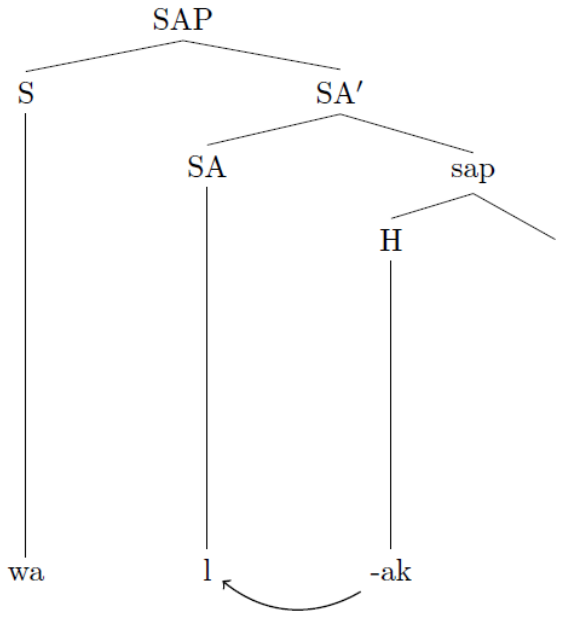
Based on my view, *-ak* is an exponent of the second person feature, which originates in the specifier of sa {Hearer} (271).

271)



Given the fact that bound inflections cannot stand by themselves, SA attracts *-ak*. The derivation depicts this movement as follows.

272)



If the specifier of the vocative phrase is occupied by a pragmatic role of the addressee, then, the bound affix *-ak* should show coindexing that matches the antecedent that c-commands it. Since allocutive addressee c-commands *-ak*, *-ak* agrees with its probe.

It appears that a noun or a pronoun used as a call (cf., Shormani & Qarabesh, 2018) can only be limited to those that depict the indexical relation between *-ak* and the pronoun. The following examples are illustrative.

273) *ʾinta walak taʿal la-hun.*
you PAR:2M.SG come to-here
'You *walak* come here.'

274) **huwa walak taʿal la-hun.*
he PAR:2M.SG come to-here
'You *walak* come here.'

275) * *ġabi walak taʿal la-hun.*
stupid PAR:2M.SG come to-here
'Stupid *walak* come here.'

276) *walak* *ġabi* *taʿal* *la-hun.*
PAR:2M.SG stupid come to-here.
'*walak* stupied come here.'

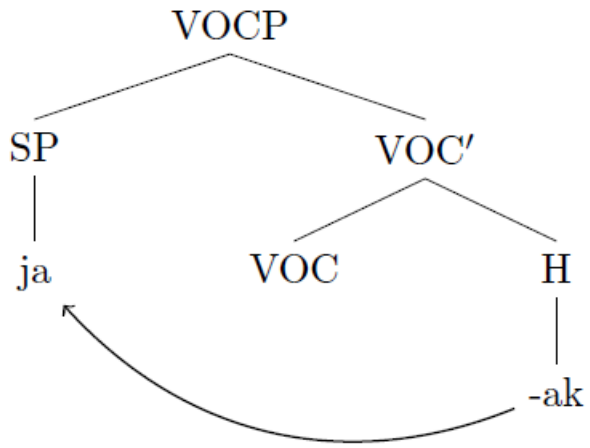
A natural outcome of the prediction is that the bound affixes cannot attach to specifiers. Thus, the ungrammaticality of the examples above (repeated below) is attributed to the same reason.

277) **yāk* *taʿal* *la-hun.*
PAR.2M.SG come to-here
'Hey, come here.'

(to a male addressee)

In (278), assuming that *yā* is merged as in the specifier position of VOC prevents the bound pronoun from attaching to it, as it can be schematized below.

278)



While in SA, *yā* is not allowed to behave in a similar way like *walak*, in Omani Arabic, we observe that two particles are used to establish a warning call on addressees. The first particle *yak* shows inflection for the addressee and another particle *wī* that encodes a warning (Lutz & Jong, 2011). What is remarkable about this structure is that the entity addressed is covert; nevertheless, the first particle inflects for it. The structure is like *walak* in that the addressee is not overt. Another similarity is that the particle *yā* is ending with *-k* that corresponds with the addressee. The following example is illustrative.

279) *yāk wī ʾil-lis.*
VOC PAR DEF-thief
'watch out for the thief!'

(Omani Arabic)
(Lutz & Jong, 2011, p. 486)

The prediction shows a neat interaction between syntactic outputs and pragmatic motivations. When a call is established in typical situations, it is fully-fledged with a vocative particle and an addressee. Strong calls are more urgent and direct. Thus, they are generated without the need for spelling out the addressee. I argue that, in addition to features proposed by Hill (2007b), a vocative head contains a derogative feature [derogative]. Such a feature is valued in a binary fashion [+/- derogative]. In strong calls, the derogative feature allows a bound affix to be selected if it is semantically valued as [+derogative]. If the feature is valued as [-derogative], the head cannot select a bound affix. Thus, it seems that the difference between SA and OA regarding the use of the particle *yā* is at the level of both feature valuation and the position of *yā*.

In SA, *yā* does not function as a strong call. *yā* cannot be the host of *-ak*. Therefore, it is concluded that *yā*, in this variety, originates in the specifier position, as suggested by Soltan (2016). In OA, *yā* behaves differently. It can host *-ak* and implicate a strong call. It is concluded that *yā* originates in the head position of *sa*. If the derogative feature is a coincidence feature that can be valued by pragmatic force (Wiltschko, 2014b), *yā* values the derogative feature as [+]. Given the position and valuation of *yā,* it is interpreted as a warning marker in OA.

4.6 Conclusion

In this chapter, I discussed how OGCs could be disguised because of their multifunctionality. The chapter has highlighted some areas that could affect how syntax processes functional categories, with a particular focus of pragmatic particles. The analysis tackled four types

of OGCs: call particles, attitudinal particles, confirmatory particles, and ostensible complementizers.

The chapter has highlighted the use of a call particle in spoken JA, *walak*. The particle has been associated with *call on addressee* due to its functional similarity with vocatives. While the particle is hard to be defined from a semantic perspective due to its complex structure, the structure of *walak* shows a composition of three elements *wa, la* and *ak*. Decomposing *walak* is motivated by the use of *wa* as a vocative particle, the impossibility adjoining *-ak* with vocative particles such as *yā* (the regular vocative particle) and the optionality of using *wa*. This strucutre suggests that *la* is a head by itself. By utilizing the USM, I established an association between the particle and the grounding layer, more specifically, calls on addressee. The use of the particle for warnings suggests that calls are can have variable strength and functions; ordinary calls are established by regular vocative particles, while strong calls are established by particles such as *walak*. If C shares features with the *sa* head, the imperative force of *walak* gets valued by *sa*.

Moreover, the chapter has analyzed confirmationals in Arabic. By examining the role of particles such as *saħ*, *mū,* and others, the study has highlighted their role as conformational particles. The study of confirmationals provides supporting evidence for the articulation of grounding projections. Furthermore, the chapter has analyzed attitudinal particles in Arabic. The analysis of attitudinal particles has shown that single-layered attitudinal particles can be generated in higher projections to establish a connection between speakers' attitudes and the given propositions. For example, by using the particle *aza*, the speaker is expressing a surprise. Using other particles has different pragmatic functions. The chapter presents how the multifunctionality of attitudinal particles can be dissolved through the USM. The argument begins with defining particles as category-neutral elements (just like roots in the traditional sense/ UoL in the USM). As UoL, particles can be defined in their syntactic and pragmatic context. Because of their pragmatic

context and their relationship with speakers' attitudes, the analysis treats attitudinal particles as part of the grounding function. Since Iraqi Arabic shows a peculiar use of four particles in that domain, I argued that all particles could dissolve into one primary grounding function by a link of features.

The chapter includes a challenging area of OGCs, ostensible complementizers. While most treatments of complementizers show that they are elements that originate in the C position, their use as discourse markers is overlooked. The subject of discussion has highlighted discourse markers that can present a speaker's attitude without being tied to peripheral positions. Based on the idea that grounding can be the topmost functional layer in the universal spine and given the murky positions of discourse markers in Arabic, I envisaged a new possible outlet for their integration within syntax. I argued that if grounding heads can contain an interpretable unvalued feature of grounding, then that feature can establish a link between grounding units of language that have a similar valued interpretable feature. Once a link is established by AGREE, regardless of the linear distance of the discourse marker, the head can probe for that feature as a goal, connecting grounding shades to the core head.

Chapter Five

Findings of the Study, Concluding Remarks and Directions for Future Research

5.1 Findings of the Study

While it seems an easy task to set a boundary between categories such as nouns, verbs, adjectives, and adverbs (Baker, 2003), examining the exact nature of categories raises many questions. This study has focused on the syntax of ostensible categories in Arabic. Two broad categories are scrutinized: OLCs and OGCs. The first class has been examined against major lexical categories, nouns, and verbs and against interjections. The analyses and treatments have been couched along the side of ideas woven altogether from different views on generative syntactic treatments on lexical categories (Baker, 2003) and are extended toward new insights of integration between models on speech acts (Gutzmann, 2019; Haegeman, 2014a; Ritter & Wiltschko, 2019; Shormani & Qarabesh, 2018; Woods, 2016). The second class has focused on grammatical categories. The motivation toward examining such class of words is related to their "fuzzy nature" (Wiltschko & Heim, 2016). Studying these categories has revealed several remarks that would enable enhancing our understanding of the syntax-pragmatics interface.

The study has highlighted several questions in Chapter 1. The findings of the study provide answers to those questions as follows.

Concerning the syntactic mechanism that lexicalizes NoVs, the study shows that pragmatics impact the derivation of NoVs. The morphological structure of NoVs shows that they are complex morphemes. They can appear with affixes of nouns such as nunation. They utilize morphological templates of nouns; they show plural and diminutive forms. The study finds that those aspects are not contrastive and pragmatically motivated.

Even though nunation marks indefinite nouns, the definite article can block nunation on nouns because nouns become definite. Unlike nouns, the definite article cannot appear with NoVs that accept nunation. The study compares nunation with emphatic affixes that appear with verbs. Both nunation and emphatic affixes have a stressed nasal sound. The study concludes that nunation with NoVs serves an expressive function.

The morphology of the Arabic language operates upon morphological templates to alter roots. A plural template alters a morphological root and results in a plural form, and a diminutive template modifies a root and results in a diminutive form. A template does not restrict the occurrence of a morphological root with other templates or in other forms.

The study shows that plural and diminutive NoVs are roots. Those NoVs are frozen in their templates, and they are not contrastive. A plural NoV does not have a singular counterpart. The same applies to diminutive NoVs. The study concludes that plural and diminutive templates can serve other functions. Those functions appear in exaggerating and deprecating actions. The study concludes that pragmatically motivated templates are morphological roots. Such roots make NoVs appear with nominal forms.

Concerning the categorization problem of NoVs, the study attributes this problem to the complex composition of NoVs. The research shows that NoVs are expressive parts of speech. Their internal structure is verbal. Their external structure shows an expressive function. The internal structure fits universally with verbs because NoVs can have specifiers. According to Baker (2003), verbs only can have specifiers. Their expressive structure distinguishes them from verbs and makes them closer to nouns in forms and interjections in expressiveness. However, the study finds that NoVs do not fit the specifications of nouns or interjections.

The study raises a question on the reason that blocks negative and interrogative patterns with NoVs. The investigation relates this behavior to SAPs. In syntax, NEG c-commands VPs. The

study shows that NoVs are only active at a speech act head. This position situates NoVs in a higher place than that of negation. Therefore, NoVs cannot be negated.

NoVs do not allow the formation of interrogatives. Concerning this behavior, the study shows that the association of NoVs with non-thematic specifiers blocks questions. Because the speech act zone has pragmatic roles, categories that move to this layer have pragmatic specifiers. This zone c-commands C. Moving to SAPs blocks questions that target NoVs because NoVs are suppletive forms of internal verbs. Those forms only appear when a verb moves to a SAP.

Chapter four focuses on answering questions related to the nature of pragmatic particles and the grounding mechanism. The study shows that pragmatic particles can be analyzed in terms of sentence-based-syntax. Additionally, the research introduces a new model to improve the grounding mechanism.

The first question that I raised regarding the possibility of analyzing pragmatic particles in sentence-based syntax targets the syntactic patterns of those particles. The study shows that pragmatic particles in the Arabic language are two types. The first type shows strict word order patterns and has specific functions. The study concludes that pragmaticalized particles have a direct association with SAPs and they can be analyzed by generative models.

The idea of grounding valuation rises from the behavior of discourse markers in spoken Arabic varieties. This model posits that grounding is a feature. This is a point of departure from earlier accounts that syntactize common ground management (Heim et al. 2016; Wiltschko and Heim 2016; Thoma 2016; Tubau 2014). This model has implications not only on particles but also on other functional and lexical categories. The study utilizes Thoma's (2016) views on syntactizing grounding functions in Wiltschko's (2014) Universal Spine and Pesetsky and Torrego's (2007) model on feature sharing and proposes that grounding is a feature that resembles the FORCE feature in Bayer and Obenauer's (2011) model.

The impact of assuming that grounding is a feature is obvious. Clark (2006: 117) relates deictic expressions like the adverb yesterday in 'George arrived yesterday' to common ground if the hearer is present at the time of the utterance. This is because the adverb is grounded; that is, the speaker and the hearer know the point of time that the speaker is referring to. Note also that speakers use definiteness to mark a grounded noun. That is, a definite article like 'the' means that a hearer has knowledge about what the speaker is referring to. Earlier models do not account for this because their analysis focuses only on discourse markers.

5.2 Concluding Remarks

The study concludes with the following remarks. Examining OLCs and OGCs reveals a new type of agreement in the Arabic system. While most studies focus on the standard agreement, subject-verb agreement, and its pronominal correlates (Ahmed, 2015; Aoun et al., 1994; Benmamoun, 2011; Fehri, 2012), the findings of this study show that ostensible categories are often attached to affixes dedicated for depicting addressees, such as *-ak* and its derivatives. The study has focused on how this affix gets its interpretation. Even though the literature (Aoun et al., 1994; Benmamoun, 2011; Fehri, 2012, among others), examine *-ak* as a pronominal suffix that competes for genitive, oblique and accusative case, depending on the category it attaches to, the study has highlighted several cases in which the suffix cannot be treated according to previous treatments. The following table illustrates Benmamoun (2011) classification of *-k*.

Table 9 The Classification of *-k* in Benmamoun's (2011, p. 145-146) analysis

Second Person	Category	Singular	Dual	Plural
object clitics in perfective	Verbs	***šakara**-ka*	*šakara-kuma*	*šakara-kum*
object clitics in imperfective	Verbs	*ya-* ***šakara**-ka*	*ya- šakara-kuma*	*ya-šakara-kum*
genitive clitics	Nouns	***kitābu**-ka*	*kitābu-kuma*	*kitābu-kum*
oblique clitics	Prepositions	***maʕa**-ka*	*maʕa-kuma*	*maʕa-kum*

The classification above deals with how the marker *-k* is defined relative to verb, nouns, and prepositions. Thus, *-k* is viewed, based on these contexts, as a pronominal suffix. Benmamoun (2011) classification characterizes *-k* behavior in well-known contexts. He (2011, p.146) claims that "object clitics are not sensitive to the category type and to aspectual or temporal properties of the head that hosts them." However, the classification above overlooks other contexts, such as OLCs and OGCs; as I discussed earlier, *-k* does not behave like an object, genitive, or oblique clitic with OLCs and OGCs. Yet, it retains its relationship with the addressed entity, second-person feature. It is in such contexts where *-k* qualifies to function as an allocutive marker. First, *-k* does not show any thematic/grammatical role; it is not an object or subject. Second, it is sensitive to the addressed entity. The impact of such treatment is evident in how NoVs and other particles get their imperative interpretation because of such a marker (A relatively similar case can be observed in Punjabi (Kaur, 2018)).

Moreover, the study clarifies the derivation of one of the most challenging categories in Arabic, NoVs. The problem of NoVs shows up in their remarkable composition. The study shows the impact of SAPs on NoVs categorization. Researchers (e.g., Wiltschko & Heim, 2016) argue

that clauses are representations of their highest functional heads. Their view holds true for many cases, such as confirmationals (Wiltschko & Heim, 2016). The expansion of clausal structure leads to new facets. Left-peripheral functional heads (Rizzi, 1997) may lead to a movement to peripheral sites. For example, in Yiddish, Davis and Prince (1986) demonstrate a case of verb topicalization. By analogy, stretching the clausal structure, to account for pragmatic particles, may forge a new zone for head movement. In addition, the extension leads to a new set of pragmatic features that may emerge in higher domains. The functions of NoVs necessitate associating them with a speech act zone; unlike verbs, NoVs may express attitudes and feelings of speakers. The association and movement to higher zones have consequences on blocking adverbial modification, negation, coordination, and other transformations.

Comparing imperative NoVs and strong call particles, such as *walak* draws a neat path for elements that are part of the speech act zone. The observation is that the higher an element is positioned, the more chances it has to detach from lower domains. That points directly to the effect of phases (Chomsky, 1999) at higher zones. Spelling out lower domains may lead to disconnected elements. In the case of NoVs, detachment is not possible because it involves head movement. Compared to NoVs, *walak* is more disconnected from the subject since it does not originate at lower domains. The conclusion explains why only verb-based discourse markers (Haegeman, 2014a) occupy the speech act zone in west Flemish; the answer could be in line with the path we envisaged. It could be that verbs moved to speech act zones, and, then, they detached – through phases – from the lower domains.

The study devises tactics to target the behavior of ostensible categories. The fundamental insight of all types of machinery revolves around the role of speech act participants and their impact on structures; serialization of particles and non-peripheral grounding are challenging for current models on speech acts. The study introduced a mechanism in which serialized particles can be

linked with a grounding head; the link creates a chain between serialized particles to be interpreted as one grounding unit. While the chain enables the valuation of serialized particles, the mechanism has an impact on non-peripheral grounding markers. I demonstrated how the link could embrace discourse markers, within and above the clausal level, provided that they function as grounding units.

Those concluding remarks raise more questions and point to new areas of research on the impact of SAPs on categorization and on the relationship between feature inheritance and SAPs.

5.3 Directions for Further Research

The predictions made throughout this research show that both lexical and grammatical categories can be more complex than what they seem at their surface level. In the Arabic language, lexical categories have always been represented in grammar based on subjective criteria. For example, there is some disagreement on the nature of lexical categories. The current study showed a clear path to follow. By utilizing Baker's (2003) reasoning for setting lexical categories apart, we can have fixed patterns, based on which we can establish the initial foundation for defining lexical categories.

Expressive language refers to the way the speaker is transmitting his/her attitude about a given proposition. Most studies have examined expressive language either from a semantic or a pragmatic perspective. The development in speech act projections (Haegeman & Hill, 2013; Hill, 2013a; Miyagawa, 2017; Wiltschko, 2017b) has enabled a neat integration between expressive language and speech-act participants (Gutzmann, 2019). The syntax of expressivity has still received a paucity of attention in the literature. According to Gutzmann (2019), expressive language is limited to adjectives, intensifiers, vocatives, pronouns, modal particles, and interjections.

Expressivity can also be hosted on verbs. While Guztman (2019) has presented expressivity without any indication of how it would impact expressive lexical items, we present evidence, from Arabic, that once expressivity feature is valued on verbs, it can have two outcomes: aggrandizement and deprecation. Aggrandizement shows up in verbs undergoing pluralization; pluralia tantum verbs depart from the typical association of such a feature with nouns (Pesetsky & Torrego, 2007). Deprecation appears evidently in diminutive verbs (280). Even though a diminutive feature is associated, normally, with nominals (Wiltschko, 2005), in Arabic, speakers may deprecate actions by utilizing the same mechanism (cf., (280) with (281)).

280)

a. *mā* *ʾ**umayliħa**-hu*!
PAR behave.good.DIM-3M.SG
'How good he is!'

b. *mā* *ʾ**uħaysina**-hu*!
PAR behave.good.DIM-3M.SG
'How good he is!'

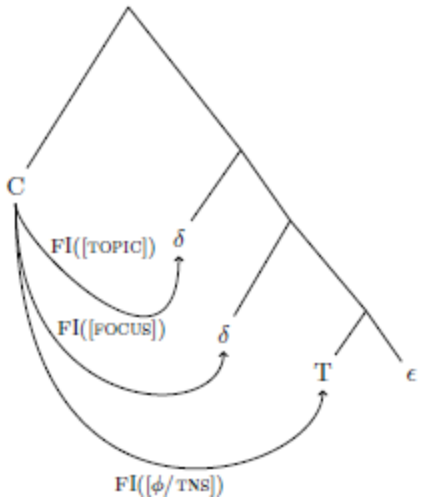
281) *ʾalha-ka* *haða* *ʾ**al-** ʿ**uwaylim***.
distract-you this DEF-scientist.DIM
'This trivial scientist distracted you.'

The syntactic motivation for expressive verbs is evident in that expressive verbs can only be hosted in expressive constructions that introduce the point of view of speakers (e.g., exclamations), and they do not behave like Complementizer Phrases; they do not allow syntactic transformation processes, such as negation and interrogation, nor do they permit adverbial modification. Even though they depart from verbs in that sense, they can still be affixed by accusative clitic pronouns (e.g., *-hu*) and can have agentive specifiers (*ʾanndjāhu* 'the success'in the case of NoVs).

The second line of research is at the heart of syntactic models. Discourse markers have been thoroughly studied from a pragmatic and discourse perspectives (Al Kohlani, 2010; Blakemore, 2002; Fraser, 1990, 1999; Lenk, 1998; Schiffrin, 1988; Travis, 2002). New proposals have argued that discourse markers can enhance our understanding of narrow syntax (Haegeman, 2014a;

Haegeman & Hill, 2013). Thus, in narrow syntax, discourse markers are part of the left-periphery. While this claim seems to be a new expansion on the power of syntax to account for the pragmatic side of language, it creates a problem for Chomsky's (1995, 1999) model of Feature Inheritance since analyzing a pragmatic/discourse marker imposes new functional heads in a syntactic tree above the complementizer projection. Future inquiries may attempt to answer the following question. Can Branigan's (2020) reconciliation between Feature Inheritance and cartography (i.e., Branigan's (2020) Multiple Feature Inheritance) be expanded to create a tie that enables covering speech act projections?

282)

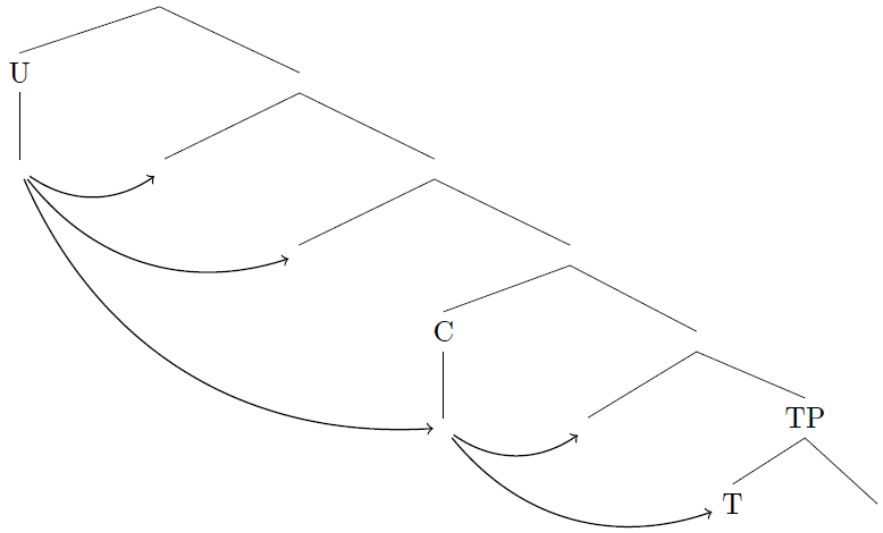


(Branigan, 2020, p. 6)

Integrating Branigan's (2020) MFI approach and SAPs may strengthen current cognitive theories on how phases work and could simplify current proposals that call for projecting speech acts at every phase. I presented evidence in favor of such integration. Yet, the scope of application has limitations. If pragmatics operates at the level of utterances rather than sentences (clauses), it becomes legitimate to assume that features are transferred at the level of the utterance rather than

the clause. A more robust view in light of Branigan's (2020) proposal may require departing from C as the topmost locus head for feature inheritance to a higher head, such as U(tterance) (283).

283)



The U head has not only agreement and tense features, but it also contains abstract features such as [VOC], [GROUND], [EXPRESSIVITY], [EXCLAMATORY], [CONFIRMATORY], [FORCE], [TOPIC], [FOCUS] and others. Some features are inherited by higher discoursal heads, while other features percolate to C and T, which in turn transfer the features to their dedicated heads. Under this view, FI and SAPs can be covered under one umbrella – FI. It is challenging to arrive at such a model, yet it would enable the reintegration of phase theory at the pragmatic-syntactic interface.

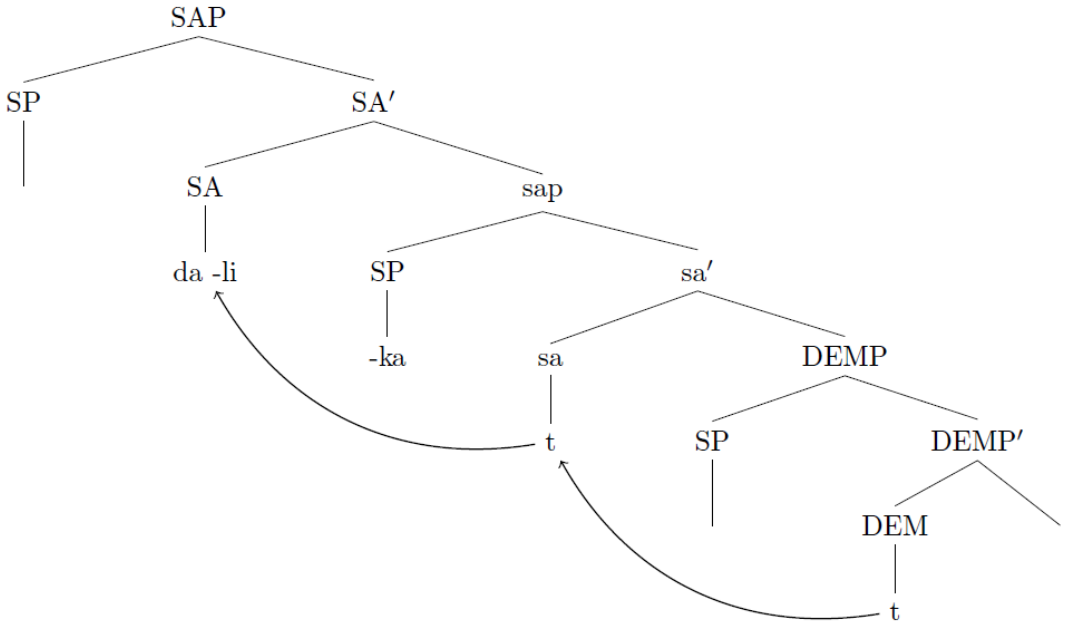
The third line of research is an extension of the results reached in this study. In Arabic, the interpretation of demonstratives is opaque. The demonstrative *dalika,* for instance, is often glossed as 'that'. However, the demonstrative is not always interpreted as a distal marker; decomposing the demonstrative shows an interaction with the addressee marker *-ak*. The impact of the addressee marker reverses the commonly held view that the demonstrative should point to distal objects; instead, its use entails proximity (284).

284) *d̲ālika ʾal-kitab lā raybba fī-hi …*
this DEF-book no doubt in-it.GEN
'This book is undoubtful.'

(Holy Quran, Sura 2, verse 2)

I attribute the proximity of the interpretation to the structure of the demonstrative itself (285); *d̲alika* may be decomposed into three parts:d̲ða-*li-ka* [DEM-li-2M.SG]. Because of the addressee marker, I argue that *d̲a* [DEM] depicts proximity. The speaker is not only pointing toward the book but also implying a command for a nearby addressee. The book is far from the speaker, indicated by -*li*, but it is close to the hearer. The decomposition may provide further evidence for the impact of speech acts at the morphosyntactic level (Marantz, 1997), confirming the similarity between CPs, DPs, and DEMPs (Bliss & Wiltschko, 2014, 2018; Clark et al., 1983; Wiltschko, 2014d).

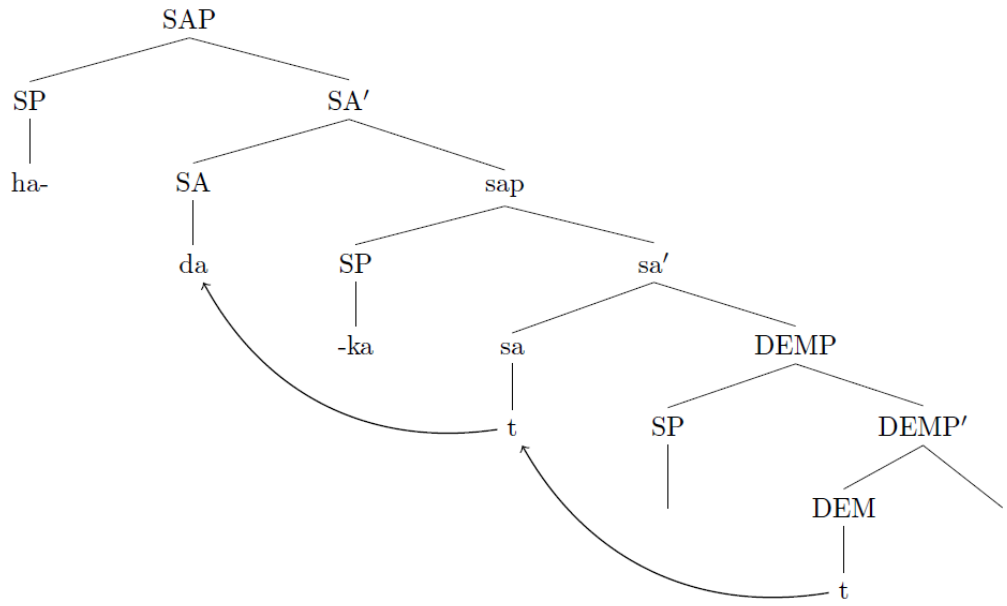
285)



It is observed that, in NoVs, the allocutive marker is realized as the cogwheel of the imperative interpretation. In DEMPs, the allocutive marker changes the spatial deictic interpretation. The behavior of other closely related demonstratives such as *had̲ak* 'that' provides a full articulation of

the specifier position of the speaker; the demonstrative may be decomposed into three elements [*ha*-DEM-2.SG]. *ha*- represents a marker through which the speaker is drawing the hearer's attention (286).

286)



In line with the finding, a potential area of research is to explore the impact of the allocutive marker on other demonstratives and opaque categories and figure out its influence on their interpretation.

Works Cited

Abdelhady, S. (2015). The pragmatic functions of the ostensible communicative act of invitation in Jordanian Arabic. *SKY Journal of Linguistics*, *28*(1) 7–35.

Abney, S. (1987). *The English noun phrase in its sentential aspect* [Ph.D.]. MIT, Cambridge, Massachusetts, United States.

Ahmed, A. (2015). On agreement affixes, incorporated pronouns, and clitics in Standard Arabic. *SKY Journal of Linguistics*, *28*(1) 67–103.

Ahmed, H. (2015). *Verbal complementizers in Arabic* [Ph.D.]. The University of Utah, United States.

Akkus, F., & Hill, V. (2018). The speaker in inverse vocatives. *35th West Coast Conference on Formal Linguistics (WCCFL 35)*, University of Calgary, 49–58.

Al Kohlani, A. (2010). *The function of discourse markers in Arabic newspaper opinion articles* [Ph.D.]. Georgetown University, United States.

Alawi, H. (2013). ʔalfuruq ʔannħawijah bajn ʔalʔfaɣal w ʔsmaʔ ʔalʔfɣal "Grammatical differences between verbs and names of verbs." *Maʤalıt Kullajat ʔatarbjah ʔalʔsasıja Lilʕulum ʔattrabwija w ʔalınsanjah, 13*, 555–570.

Albanon, R. (2017). Gender and tag-questions in the Iraqi Dialect. *English Language, Literature & Culture*, *2*(6), 105-114.

Al-Bataineh, H. (2019). The syntax of vocatives in Arabic. *Brill's Journal of Afroasiatic Languages and Linguistics*. *1*(1) 1-33.

Alcazar, A., & Saltarelli, M. (2014). *The syntax of imperatives*. New York, United States, Cambridge University Press.

Alğārm, A., & ʾmyn, M. (2010). *Ālnḥw ālwāḍḥ fy qwāʿd āllġa ālʿrbya*. Cairo, Egypt, Aldār ālmṣrya ālsʿwdyā llṭbāʿ w ālnšr wāltwzyʿ.

Alshabi, A. (1970). ‘ʾirādatu alḥayāti,’ *daywān ʾaġānī alḥayā* , ladār attawnsya lalnšr, Tunisia.

Alshawa, A. (2006). *Muʕʤam ʔasmaʔ ʔalʔadʕal fi ʔalluɣa ʔalʕrabjah*. Demascus, Syria, MujamaʕAlluɣa Al-Aarabyah.

Antonov, A. (2015). Verbal allocutivity in a crosslinguistic perspective. *Linguistic Typology*, *19*(1), 55–85.

Aoun, J., Benmamoun, E., & Sportiche, D. (1994). Agreement, word order, and conjunction in some varieties of Arabic. *Linguistic Inquiry*, *25*(2), 195–220.

Baker, M. (2003). *Lexical categories: Verbs, nouns, and adjectives*. Cambridge, United Kingdom, Cambridge University Press.

Bayer, J., & Obenauer, H. (2011). Discourse particles, clause structure, and question types. *The Linguistic Review*, *28*(4), 449-491.

Benmamoun, E. (2011). Agreement and cliticization in Arabic varieties from diachronic and synchronic perspectives. *Al-ʾArabiyya*, *44/45*, 137–150.

Biberauer, T. (2018). Peripheral significance: A phasal perspective on the grammaticalisation of speaker perspective. *20th Diachronic Generative Syntax Conference (DiGS20)*, University of York, United Kingdom, 1–26.

Biberauer, T., Haegeman, L., & Van Kemenade, A. (2014). Putting our heads together: Towards a syntax of particles. *Studia Linguistica*, *68*(1), 1–15.

Biberauer, T., & Sheehan, M. (2011). Introduction: Particles through a modern syntactic lens. *The Linguistic Review*, *28*(4), 387-410.

Blakemore, D. (2002). *Relevance and Linguistic Meaning: The Semantics and Pragmatics of Discourse Markers*. Cambridge, United Kingdom, Cambridge University Press.

Bliss, H., & Wiltschko, M. (2014). *The syntactic composition of Blackfoot demonstratives*. 46th Algonquian Conference, Mohegan Sun Casino and Convention Center, Uncasville, Connecticut, United States.

Bliss, H., & Wiltschko, M. (2018). *Stsíkiistsi ki stsíkiistsi: The ubiquity of Blackfoot demonstratives in discourse* [Workshop]. Discourse Functions of Demonstratives, Department of Linguistics and Nordic Studies, University of Oslo, Blindern, Norway.

Borsley, R., & Roberts, I. (2006). *The syntax of the Celtic languages: A comparative perspective*. Cambridge, United Kingdom, Cambridge University Press.

Borsley, R., Tallerman, M., & Willis, D. (2007). *The Syntax of Welsh*. Cambridge, United Kingdom, Cambridge University Press.

Branigan, P. (2020). Multiple feature inheritance and the phase structure of the left periphery. In S. Wolfe & R. Woods (Eds.), *Rethinking V2*. Oxford, United Kingdom, Oxford University Press.

Carnie, A. (2011). Mixed categories in Irish. *Lingua, 121*(7), 1207–1224.

Carnie, A. (2006). *Phasing in mixed categories: Evidence from Irish*. Workshop on the Internal Syntax of Nominalized Clauses, Syracuse/Cornell, United States.

Chomsky, N. (1970). Remarks on nominalization. In *Readings in English transformational grammar*, ed. R. Jacobs and P. Rosenbaum, 184–221. Waltham, Mass.: Ginn.

Chomsky, N. (1995). *The Minimalist Program*. Massachusetts, United States, MIT Press.

Chomsky, N. (1999). *Derivation by Phase*. Massachusetts, United States, MIT Press.

Cinque, G., & Rizzi, L. (2010). *Mapping spatial PPs: The Cartography of Syntactic Structures*. Oxford, United Kingdom, Oxford University Press.

Clark, H. (1996). *Using Language*. Cambridge, United States, Cambridge University Press.

Clark, H., Schreuder, R., & Buttrick, S. (1983). Common ground at the understanding of demonstrative reference. *Journal of Verbal Learning and Verbal Behavior*, *22*(2), 245–258.

Collins, C., & Postal, P. (2012a). *Imposters: A study of Pronominal Agreement*. Massachusetts, United States, MIT Press.

Cook, H. (1999). Particles. *Journal of Linguistic Anthropology*, *9*(1/2), 181–183.

Corr, A. (2018). 'Exclamative' and 'quotative' illocutionary complementisers in Catalan, European Portuguese and Spanish: A study in Ibero-Romance syntactic 'near-synonymy.' *Languages in Contrast*, *18*(1), 69–98.

Davis, L., & Prince, E. (1986). Yiddish verb-topicalization and the notion lexical integrity. *Papers from the 22nd Regional Meeting,* Chicago Linguistic Society, Chicago, United States.

De Belder, M. (2011). *Roots and affixes: Eliminating lexical categories from syntax* [Ph.D.]. Utrecht University, The Netherlands.

Deng, D. (2015). The syntacticization of illocutionary forces and the root vs. non-root distinction: Evidence from the sentence-final particle *ba* in Mandarin. *Lingua*, *162*, 32–55.

Eisenstein, H. (2011). Interjections. In L. Edzard & R. de Jong (Eds.), *Encyclopedia of Arabic Language and Linguistics* (pp. 378–380). The Netherlands, BRILL.

Espinal, T. (2011). Pragmatic particles at the syntax-cognition interface. In L. Payrató & J. M. Cots (Eds.), *The Pragmatics of Catalan* (pp. 49–80). Berlin, Boston, Walter de Gruyter.

Espinal, T., & Tubau, S. (2019). Response systems: The syntax and semantics of fragment answers and response particles. *Annual Review of Linguistics, 5*(1), 261-287.

Fassi Fehri, A. (2012). *Key Features and Parameters in Arabic Grammar*. Amsterdam, The Netherlands, John Benjamins Publishing.

Fraser, B. (1990). An approach to discourse markers. *Journal of Pragmatics*, *14*(3), 383–398.

Fraser, B. (1999). What are discourse markers? *Journal of Pragmatics*, *31*(7), 931–952.

Fu, J., Roeper, T., & Borer, H. (2001). The VP within process nominals: Evidence from adverbs and the VP anaphor Do-So. *Natural Language & Linguistic Theory*, *19*(3), 549–582.

Germanos, M. (2013). From complementizers to discourse marker: A case of pragmaticalization. In J. Owens & A. Elgibali (Eds.), *Information Structure in Spoken Arabic* (pp. 145-165). London, United Kingdom, Routledge.

Goodwin, W. (1873). On the Classification of Conditional Sentences in Greek Syntax. *Transactions of the American Philological Association* (1869-1896), 4, 60–79.

Gutzmann, D. (2019). *The Grammar of Expressivity*. Oxford, United Kingdon, Oxford University Press.

Habib, R. 2009. The Syntax of the Standard Arabic Particles ʔan and ʔanna. *Selected Papers from the 2006 Cyprus Syntaxfest*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Hachem, M. (2015). *Multifunctionality the internal and external syntax of D- an W-Items in German and Dutch = Multifuntionaliteit: De interne en externe syntaxis van d- en w-items in het Duits en het Nederlands. (Met een samenvatting in het Nederlands.) Proefschrift* [Ph.D.]. Utrecht University, The Netherlands.

Haddican, B. (2018). The syntax of Basque allocutive clitics. *Glossa: A Journal of General Linguistics*, *3*(1), 1-31.

Haegeman, L., & Wekker, H. (1984). The syntax and interpretation of futurate conditionals in English. *Journal of Linguistics*, 20(1), 45–55.

Haegeman, L. (2014a). West flemish verb-based discourse markers and the articulation of the speech act layer. *Studia Linguistica*, *68*(1), 116–139.

Haegeman, L., & Hill, V. (2013). The syntacticization of discourse. *Syntax and Its Limits*, 1(1), 370–390.

Hasan, A. (2012). *Muħawalat altajsir ʔannaħawi ʔalħadiɵa 'Modern Attempts to simplify Arabic Grammar*'. Cairo, Egypt, Dar Al Kotob Al Ilmiyah.

Hasan, ʕabas. (2009). *ʔal-naħū ʔal-wāfiī*. Egypt, Cairo, Dar ʔal-maʕārif.

Heim, J., Keupdjio, H., Lam, Z., Osa-Gómez, A., Thoma, S., & Wiltschko, M. (2016). Intonation and particles as speech act modifiers: A syntactic analysis. *Studies in Chinese Linguistics*, *37*(2), 109-129.

Hill, V. (2007b). Vocatives and the pragmatics–syntax interface. *Lingua, 117*(12), 2077–2105.

Hill, V. (2013a). *Vocatives: How Syntax meets with Pragmatics*. The Netherlands, Brill.

Hill, V. (2017). Vocatives in the Balkans. *Revista Letras, 96*(1), 334-353.

Holmberg, A. (2001). The syntax of yes and no in Finnish. *Studia Linguistica, 55*(2), 141–175.

Holmberg, A. (2015). *The Syntax of Yes and No*. Oxford, United Kindom, Oxford University Press.

Holmes, J. (1983). The functions of tag questions. *Language Research Journal, 3*(1), 40–65.

Ibn Alqaym Aljawzya, B. (1954). *ʾiršād assālkʾilā ḥalʾalfya Abn Mālk*. Dār alkatb alʿālmya.

Ibn Alʾaṯīr, M. (1999). *Albadīʿ fī ʿalm alʿarbya*. Saudi Arabia, Jāmʿaʾam alqarā.

Isac, D. (2015). *The Morphosyntax of Imperatives*. Oxford, United Kingdom, Oxford University Press.

Jarrah, M. (2019). Record your agree: A case study of the Arabic complementizer *ʔinn*. *Journal of Linguistics, 55*(1), 83–122.

Jucker, A., & Ziv, Y. (1998). *Discourse Markers: Descriptions and Theory*. Amestrdam, John Benjamins Publishing.

Kaur, G. (2018). *Adresee agrement as the locus of imperative syntax*. North East Linguistics Society, Cornell University, United States.

Kenstowicz, M. (1989). The null subject parameter in modern Arabic dialects. In Jaeggli O. & K. Safir (Eds.), *The null subject parameter* (pp. 263–275). Dordrecht, The Netherlands, Springer.

Krifka, M. (2017). Negated polarity questions as denegations of assertions. In C. Lee, F. Kiefer, & M. Krifka (Eds.), *Contrastiveness in Information Structure, Alternatives and Scalar Implicatures* (pp. 359–398). The Netherlands, Springer International Publishing.

Köpcke, K.-M., & Panther, K.-U. (1989). On correlations between word order and pragmatic function of conditional sentences in German. *Journal of Pragmatics*, 13(5), 685–711.

Lander, E., & Haegeman, L. (2018). The nanosyntax of spatial deixis. *Studia linguistica*, 72(2), 362-427.

Lenk, U. (1998). Discourse markers and global coherence in conversation. *Journal of Pragmatics*, *30*(2), 245–257.

Levin, A. (2011). *Ism al-fiʿl*. In de J. Jong & L. Edzard (Eds.), *Encyclopedia of Arabic Language and Linguistics* (pp. 432–434). The Netherlands, BRILL.

Li, C. (2004). On verbal nouns in Celtic languages. *Proceedings of the Harvard Celtic Colloquium*, Harvard, *24/25*, 163–194.

Lutz, E., & Jong, R. (Eds.). (2011). *Encyclopedia of Arabic Language and Linguistics*. The Netherlands, BRILL.

Mahfoud, M. (2019, Aug 8). Tweet on a codolence of Alḥāj ʿabdullah Almaṭrūd. Retrieved from https://twitter.com/MMajed7070/status/733638417628684288

Marantz, A. (1997). No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania Working Papers in Linguistics* 27, Pennsylvania, United States.

Miyagawa, S. (2017). *Agreement Beyond Phi*. Massachusetts, United States, MIT Press.

Moutaouakil, A. (1989). *Pragmatic functions in a functional grammar of Arabic*. Dordrecht, The Netherlands, Foris Publications.

Nahar, A. (2019, Aug 1). *ʔasmaʔ ʔalʔafʕal wa ʔaqsamasha*. Retrieved June 11, 2019, from http://njyiu.com/book/2/MUTUSTO/nahu2_28.htm

Nishiyama, K. (2005). Verbs, adjectives, and pred: Review of Mark Baker Lexical Categories: Verbs, Nouns, and Adjectives. *English Linguistics Research, 1*(22), 133–161.

Noor, A., & I, K. (2018). *Qawaid Al-Lughatil Arabiyah Berbasis Mind Map: Tingkat Perguruan Tinggi*. Caremedia Communication.

Ouhalla, J. (1994). Focus in Standard Arabic. *Linguistics in Potsdam, 1*, 65–92.

Ouhalla, J. (1997). Remarks on focus in Standard Arabic. In M. Eid & R. Ratcliffe (Eds.), *Current Issues in Linguistic Theory* (Vol. 153, p. 9). Amestrdam, John Benjamins Publishing Company.

Owens, J. (1988). *The Foundations of Grammar: An Introduction to Medieval Arabic Grammatical Theory* (E. Koerner & J. Brozek, Eds.; Vol. 92). Amestrdam John Benjamins Publishing Company.

Owens, J. (1989). The syntactic basis of Arabic word classification. *Arabica*, *36*(2), 211–234.

Paul, I. (2014). *Cross-linguistic Investigations of Nominalization Patterns*. Amestrdam, John Benjamins Publishing Company.

Pesetsky, D., & Torrego, E. (2007). The syntax of valuation and the interpretability of features. In S. Karimi, V. Samiian, & W. Wilkins (Eds.), *Linguistik Aktuell/Linguistics Today* (Vol. 101, pp. 262–294). Amestrdam, John Benjamins Publishing Company.

Qasim, H. (2016). The grammaticaliztion of modal particles in South Araqi Arabic. In *Modalities in Arabic* (pp. 45–55). University of Bucharest Center for Arab Studies, Bucharest, Bulgaria.

Qur'an Transliteration (2019).http://transliteration.org/quran/WebSite_CD/MixPure/Fram2E.htm

Radford, A. (2009). *An introduction to English sentence structure*. Cambridge, United Kingdom, Cambridge university press.

Reich, I. (2009). What Asymmetric Coordination in German tells us about the syntax and semantics of conditionals. *Natural Language Semantics*, 17(3), 219–244.

Ritter, E., & Wiltschko, M. (2014). The composition of INFL: An exploration of tense, tenseless languages, and tenseless constructions. *Natural Language & Linguistic Theory*, *32*(4), 1331–1386.

Ritter, E., & Wiltschko, M. (2019). Nominal speech act structure: Evidence from the structural deficiency of impersonal pronouns. *Canadian Jounral of Linguistics*. 64(4), 709-729.

Rivero, M. (1994). Clause structure and V-movement in the languages of the Balkans. *Natural Language and LinguisticTheory*, 12(1), 63–120.

Rivero, M. and Terzi, A. (1995). Imperatives, v-movement and logical mood. *Journal of Linguistics*, 31(2), 301–32.

Rizzi L. (1997) The Fine Structure of the Left Periphery. In Haegeman L. (Eds.) *Elements of Grammar*. Kluwer International Handbooks of Linguistics. Dordrecht, The Netherlands, Springer.

Ross, J. (1970). On declarative sentences. In R. Jacobs & P. Rosenbaum, *Readings in English Transformational Grammar* (pp. 22–227). Waltham, United States, Ginn and Company.

Ryding, K. (2005). *A Reference Grammar of Modern Standard Arabic*. Cambridge, United Kingdom, Cambridge University Press.

Schaefer, R. (2019). *Deictic directionality exponents in Emai* [Abstract Presentation]. The Western Conference on Linguisitcs (WECOL), California State University, Fresno.

Schiffrin, D. (1988). *Discourse Markers*. Cambridge, United Kingdom, Cambridge University Press.

Shlonsky, U. (1997). *Clause Structure and Word Order in Hebrew and Arabic: An Essay in Comparative Semitic Syntax*. Oxford, United Kingdom, Oxford University Press.

Shormani, M., & Qarabesh, M. (2018). Vocatives: Correlating the syntax and discourse at the interface. *Cogent Arts & Humanities*, *5*(1), 1-37.

Shorofat, M. (1999). Topics in Arabic: A minimalist approach. *Alarabyia*. *32*(1), 1-21.

Shuman, H. (2012). *Sanawat fi qalʔat ʔalxatiʔa*. Egypt, Cairo, Ktab Inc.

Sibawayh, A. (1970). *Al-Kitab* (H. Derenbourg, Ed.). Reprint Hildesheim and New York: Georg Olms.

Soltan, U. (2006). Standard Arabic subject-verb agreement asymmetry revisited in an Agree-based minimalist syntax. In C. Boeckx (Ed.), *Linguistik Aktuell/Linguistics Today* (Vol. 92, pp. 239–265). Amesterdam, John Benjamins Publishing Company.

Soltan, U. (2016). *The syntax of vocatives in Egyptian Arabic*. The Annual Arabic symposium on Linguistics, Middlebury College, United States.

Speas, P., & Tenny, L. (2003). Configurational properties of point of view roles. In A. Di Sciullo (Ed.), *Linguistik Aktuell/Linguistics Today* (Vol. 57, pp. 315–344). Amesterdam, John Benjamins Publishing Company.

Starke, M. (2009). Nanosyntax A short primer to a new approach to language. *Nordlyd*, 1-6.

TheJbman, X. (2019, June 11). ʾasmāʾ alʾafʿāl waʾqsāmhā. Retrieved from https://www.startimes.com/?t=9699687

Thoma, C. (2016). *Discourse particles and the syntax of discourse-evidence from Miesbach Bavarian* [Ph.D.] University of British Columbia, British Columbia, Canada.

Travis, C. (2002). *Discourse Markers in Colombian Spanish*, Berlin, Boston, De Gruyter Mouton.

Tubau, S. (2014). The syntax of the confirmatory pragmatic particle “Innit” / La sintaxis de la partícula pragmática confirmatoria “innit.” *Atlantis*, *36*(2), 53–72.

Watson, J. (1996). *Ṣbaḥtū! A Course in Ṣanʿānī Arabic*. Germany, Harrassowitz.

Weiss, B. 1976. A theory of the parts of speech in arabic (noun, verb, particle): A study of the 'Ilm 'al-Wad'. *Arabica*, 23, 23-36.

Welch, N. (2012). *The bearable lightness of being: The encoding of coincidence in two-copula languages* [Ph.D.]. University of Calgary, Calgary, Canada.

Welch, N. (2015). Deducing clause structure from the right periphery In Tłı̨chǫ Yatıì. *International Journal of American Linguistics*, *81*(2), 261–291.

Welch, N. (2016). Propping up predicates: Adjectival predication in Tłı̨chǫ Yatıì. *Glossa: A Journal of General Linguistics*, *1*(1), 2.

Willis, P. (1988). Is the Welsh verbal noun a verb or a noun? *WORD*, *39*(3), 201–224.

Wiltschko, M. (2005). The syntax of precategorial roots1. *Proceedings of WSCLA 10 (UBCWPL 17)*, The University of British Columbia, 245–259.

Wiltschko, M. (2014a). Patterns of nominalization in Blackfoot. In I. Paul (Ed.), *Cross-linguistic investigations of nominalization patterns*. Amesterdam, John Benjamins Publishing Company.

Wiltschko, M. (2014b). *The universal structure of categories: Towards a formal typology*. Cambridge, United Kingdom, Cambridge University Press.

Wiltschko, M. (2017a). Response markers as a window into linguistic modularity. *Wiener Linguistische Gazette*, 303–311.

Wiltschko, M. (2017b). Ergative Constellations in the Structure of Speech Acts. In J. Coon, D. Massam, & L. deMena Travis (Eds.), *The Oxford Handbook of Ergativity*. Oxford, Oxford University Press.

Wiltschko, M. (2017c). *Response Particles Beyond Answering*.

Wiltschko, M., & Heim, J. (2014). The syntax of sentence peripheral discourse markers: A neo-performative analysis. *Outside the Clause: Form and Function of Extra-Clausal Constituents*, University of Vienna.

Wiltschko, M., & Heim, J. (2016). The syntax of confirmationals: A neo-performative analysis. In G. Kaltenböck, E. Keizer, & A. Lohmann (Eds.), *Studies in Language Companion Series* (Vol. 178, pp. 305–340). Amesterdam, John Benjamins Publishing Company.

Windsor, J. W. (2016). *From phonology to syntax—And back again: Hierarchical structure in Irish and Blackfoot* [Ph.D.]. University of Calgary, Calgary, Canada.

Woods, R. (2016). *Investigating the syntax of speech acts: Embedding illocutionary force* [Ph.D.]. University of York, United Kingdom.

Woods, R. (2015). Modelling the syntax-discourse interface: A syntactic analysis of “please”. *ConSOLE XXIII: Proceedings of the 23rd Conference of the Student Organisation of Linguistics in Europe (7-9 January 2015, Paris)*, 360–382.

Yang, X., & Wiltschko, M. (2016). The confirmational marker ha in Northern Mandarin. *Journal of Pragmatics*, *104*(1), 67–82.