



Possessive Constructions in Najdi Arabic

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Abstract

This thesis investigates the syntax of possession and agreement in Najdi Arabic (NA, henceforth) with a particular focus on the possession expressed at the level of the DP (Determiner Phrase). Using the main assumptions of the Minimalist Program (Chomsky 1995, and subsequent work) and adopting Abney's (1987) DP-hypothesis, this thesis shows that the various agreement patterns within the NA DP can be accounted for with the use of a probe/goal agreement operation (Chomsky 2000, 2001).

Chapter two discusses the syntax of 'synthetic' possession in NA. Possession in NA, like other Arabic varieties, can be expressed synthetically using a Construct State (CS), e.g. *kitaab al-walad* (book the-boy) 'the boy's book'. Drawing on the (extensive) literature on the CS, I summarise its main characteristics and the different proposals for its derivation. However, the main focus of this chapter is on a lesser-investigated aspect of synthetic possession – that is, possessive suffixes, the so-called pronominal possessors, as in *kitaab-ah* (book-his) 'his book'. Building on a previous analysis put forward by Shlonsky (1997), this study argues (contra Fassi Fehri 1993), that possessive suffixes should not be analysed as bound pronouns but rather as an agreement inflectional suffix (à la Shlonsky 1997), where the latter is derived by Agree between the Poss(essive) head and the null pronoun within NP. This results in an agreement inflection (a possessive suffix) being spelled-out on Poss^o, which shows up ultimately on the possessum as a consequence of the latter's head movement to Poss^o. The chapter concludes with some cross-linguistic data, coming in particular from Finnish, that allow for the same type of analysis.

Chapter three is concerned with possession in NA formed analytically by means of *ħagg*, the so-called Free State (FS), which has not been previously analysed from a generative perspective. This chapter is primarily concerned with instances where *ħagg* shows overt morphological agreement in number and gender with the possessum (e.g. *as-sijjaarrah ħagg-at ar-radʒdʒaal* 'the-car.SG.F of-SG.F the-man'). It is argued that *ħagg*-possessum agreement obtains under an Agree relation between the possessive marker *ħagg* and the possessum DP within its c-command domain, deriving an inflected form of the possessive marker. Several pieces of evidence are given in favour of the proposed analysis.

Chapter four discusses another instance of analytic possession, which contains the possessive markers *abu* and *umm* (possessive 'with'). Descriptively, in NA (and other Arabic dialects),

the two markers show agreement with the possessor DP: if the possessor is Feminine gender *umm* ‘with.F’ is obligatorily used and when it is Masculine gender *abu* ‘with.M’ must be employed. Given the fact that this type of possession has received little or no attention in Arabic, this work provides the first description of these two markers and compares them with the English possessive *with* as well as the Modern Standard Arabic marker *ðu* ‘with’. As for the syntactic derivation, it is argued, along the lines of Levinson (2011), that possessives containing the two markers have the same syntactic structure as their English possessive *with* counterparts. However, to the extent that the two Arabic markers show agreement with the possessor, unlike English possessive *with*, a slight modification is needed on the proposal to capture *abu* and *umm* agreement facts. It is proposed that the possessor DP in NA is merged lower in the lexical projection PP and not higher in the functional projection (pP), as suggested for English.

Finally, chapter five addresses the other main type of possession, i.e. that expressed at the level of the clause, the so-called predicative possession. Predicative possession in NA is mainly formed by the use of the locative preposition *ʕind* ‘at’ in constructions like: *al-bint ʕind-ha sijjaarah* (the-girl at-her car) ‘the girl has a car’, where the preposition *ʕind* behaves like a possessive verb; it is marked with a pronominal possessive suffix which corresponds to the phi-features of the lexical possessor. It is proposed that this suffix attached to *ʕind* (and various other categories) is an inflectional agreement marker, which is realized on the preposition as a reflex of an agreement relation established with the possessor. It is also shown that this pattern of agreement in possessive sentences is not a unique property of NA, but rather found in many (un)related languages (cf. Stassen 2009).

Declaration

No material contained in this thesis has previously been submitted for a degree at Newcastle University or any other university.

Signed

Eisa Sneitan Alrasheedi

Date

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To my parents

List of abbreviations

*	Ungrammatical
∅	Null spell out
1	First Person
2	Second Person
3	Third Person
ACC	Accusative Case
Adj	Adjective
Agr	Agreement category
AgrP	Agreement Phrase
AP	Adjective Phrase
C	Complementizer
C-command	Constituent command
CS	Construct State
D	Definiteness category
DEF	Definite
DL	Dual
DP	Determiner Phrase
EPP	Extended Projection Principle
F	Feminine
FS	Free State
GEN	Genitive Case
NA	Najdi Arabic
LF	Logical Form

M	Masculine
MSA	Modern Standard Arabic
NEG	Negative Marker
NOM	Nominative Case
N	Noun
NP	Noun Phrase
Num	Number category
NumP	Number Phrase
PF	Phonological Form
PL	Plural
Poss	Possessive category
PossP	Possessive Phrase
P	Preposition
PP	Prepositional Phrase
QP	Quantifier Phrase
SG	Singular
Spec	Specifier position
T	Tense
TP	Tense Phrase
V	Verb
VP	Verb Phrase
ϕ -features	agreement features [Person, Number and Gender]
$u\phi$ -features	uninterpretable agreement features

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List of Phonetic Transcriptions Used in Glosses of Data

IPA	Phonetic Description
ʔ	voiced glottal stop
b	voiced bilabial stop
t	voiceless dento-alveolar stop
θ	voiceless interdental fricative
dʒ	voiced post-alveolar fricative
ħ	voiceless pharyngeal fricative
χ	voiceless velar fricative
d	voiced dento-alveolar stop
ð	voiced interdental fricative
r	voiced alveolar flap
z	voiced alveolar fricative
s	voiceless dental fricative
ʃ	voiceless palatal fricative
s ^ɛ	voiceless emphatic alveolar fricative
d ^ɛ	voiced emphatic dento-alveolar stop
t ^ɛ	voiceless emphatic dento-alveolar stop
ð ^ɛ	voiced emphatic interdental fricative
ʕ	voiced pharyngeal fricative
ɣ	voiced uvular fricative
f	voiceless labio-dental fricative
q	voiceless uvular stop
k	voiceless velar stop
l	voiced dental lateral
m	voiced bilabial nasal
n	voiced alveolar nasal
h	voiceless glottal fricative
w	voiced labiovelar glide
j	voiced palatal glide
g	voiced velar stop
ʒ	voiced palato-alveolar sibilant
ts	voiceless alveolar affricate
dz	voiced alveolar affricate

Vowels

Vowel	Long	Short
High front	ii	i
Mid front	ee	e
Low front	aa	a
Mid back rounded	oo	o
High back rounded	uu	u

Chapter 1. Introduction

1.1 General background

Possession, the central notion in this thesis, is a vague concept. It can encode a wide range of relations and functions, starting from ‘strict’ ownership via (in)alienable possession to physical possession, concrete/abstract possession, temporary possession and ending up with part-whole relations (see, e.g. Lyons 1967, 1977; Miller and Johnson-Laird 1976; Clark 1978; Seiler 1983; Quirk *et al.* 1985; Barker 1995; Heine 1997; Rosenbach 2002; Stolz *et al.* 2008; Stassen 2009; Dixon 2010; Aikhenvald and Dixon 2013). Generally speaking, a possessive construction typically involves a possessor, a possessum and an element that signals the existence of a possessive relation. As shown in numerous studies (see Dryer 2005; Nichols and Bickel 2005; Stolz *et al.* 2008; Stassen 2009; Barker 2011; Börjars *et al.* 2013), the world’s languages exhibit a great deal of variation regarding the morpho-syntactic mechanisms employed to mark possession. In the nominal domain alone, it can be marked by an adposition (i.e. a preposition or a postposition), a genitive Case marker on the possessor, a dedicated possessive marker, juxtaposition of nouns via the so-called Construct State or by means of a pronominal possessive affix. Further variety arises in expressions of possession within the clausal domain.

The present thesis investigates possessive construction formation in Najdi Arabic, with a particular focus on possession expressed at the level of the DP (henceforth, DP-internal possession). Careful examination of the phenomenon reveals that this language has a rich system with respect to the grammatical means that mark the expression of possession, as will be discussed in detail in what follows. Using the main theoretical assumptions of the Minimalist Program (Chomsky 1995, and related work), the thesis offers syntactic analyses of the various possessive constructions, with a special focus placed on DP-internal possession. The current work explores in particular the agreement phenomena found in Najdi Arabic possessive constructions and adopts Chomsky’s (2000, 2001) probe/goal agreement operation in order to account for the various agreement patterns in the language under investigation. This work is thus a continuation of the ongoing research on possession and its structure in Arabic in particular and in natural languages in general.

This introductory chapter comprises three main sections. Section 1.2 provides some short background on Najdi Arabic, its main syntactic properties and earlier work done on this variety. This section also elaborates on the significance of the thesis. Section 1.3 discusses some

relevant theoretical assumptions of the Minimalist Program, which is the syntactic model adopted in the current thesis. Finally, section 1.4 provides an outline of the thesis.

1.2 Najdi Arabic

1.2.1 A brief background

Najdi Arabic is a variety of Arabic spoken in the Najd region in the middle of Saudi Arabia with approximately ten million speakers (see Lewis 2013, among others). It is a Semitic language, which belongs to a branch of the Afro-Asiatic language family. As described in Al-Sweel (1981), the term Najd is used to denote the area from Yemen to the south, to the borders of Jordan to the north, and from the Ahsa oasis to the east, to the mountains of Hijaz and the plains of Asiir to the west. The following map shows the location of the Najd region, appearing in red (from Lewis 2013: 3).



Map 1. Najd Region of Saudi Arabia

According to Ingham (1994: 5), Najdi Arabic (henceforth, NA) includes four sub-varieties spoken in the following four areas: (a) Central Najd (the dialects of Central Najd and the central Bedouin tribes), (b) Northern Najdi (the dialects of Jabal Shammar and the Shammar tribes of Northern Najd and the Jazirah), (c) Mixed Northern-Central (the dialect of Qasim and of the Dhafir tribe) and (d) Southern (the dialect of Najran, the Ght^ʿaan tribe of the south, the Āl Murrah and Ajman tribes of the east). The second sub-variety, i.e. the dialect of Northern Najdi, is the mother tongue of the current researcher; therefore, the data presented in this thesis represents his grammaticality judgments of it. Note also that the forms of the words and lexical items are given in the form used in that variety. All data from other Arabic varieties as well as other languages were obtained from the literature, unless otherwise stated.

The next subsection provides an overview of some basic grammatical aspects of Najdi Arabic, including word order, subject-verb agreement, the pro-drop property and a brief outline of

possessive formation in this variety of Arabic. The full descriptive facts concerning possessive constructions will be given in subsequent chapters.

1.2.2 *Some syntactic properties of Najdi Arabic*

The first syntactic aspect of Najdi Arabic (NA) to discuss here concerns the word order. This language shows variation with respect to VSO and SVO sequences, as in (1a-b); however, the latter is the predominant order (see Lewis 2013; Alshamari and Jarrah 2016; Alshamari 2017; Alshammari 2018, who all describe SVO as being the unmarked word order for NA).¹ SVO is also standardly assumed to be the basic word order for other varieties of Arabic (see, e.g. Mohammad 1990, Fassi Fehri 1993 for Modern Standard Arabic (MSA); Alotaibi 2019 for Kuwaiti Arabic; Musabhien 2009 for Jordanian Arabic; Shlonsky 1997 for Palestinian Arabic; Algryani 2012 for Libyan Arabic and Jlassi 2013 for Tunisian Arabic).

- (1) a. ar-radʒdʒaal iʒtara siʒjaarah (SVO)
 DEF-man bought.3SG.M car
 ‘The man bought a car.’
- b. iʒtara ar-radʒdʒaal siʒjaarah (VSO)
 bought.3SG.M DEF-man car
 ‘The man bought a car.’

Other word order permutations, including VOS and OVS are also used in the language. This is illustrated by the data in (2a) and (2b), respectively.

- (2) a. iʒtara siʒjaarah Muħammad (VOS)
 bought.3SG.M car Muħammad
 ‘Muħammad bought a car.’
- b. siʒjaarah iʒtara Muħammad (OVS)
 car bought.3SG.M Muħammad
 ‘A car Muħammad bought.’

With respect to subject-verb agreement, it should be noted that, as the examples in (1) and (2) show, the verb in NA fully agrees with the subject irrespective of the word order maintained; this is like other varieties of Arabic with the exception of MSA, in which subject-verb

¹ All examples in this thesis are from NA, unless otherwise stated.

agreement asymmetries exist (see Fassi Fehri 1993, 2012; Aoun *et al.* 1994; Benmamoun 2000; Mohammad 2000; Soltan 2007; Aoun *et al.* 2010; Ouhalla 2013 for discussion).

Another salient property of NA is that it is a pro-drop language, i.e. it can drop its subject pronoun under certain discourse/pragmatic conditions. This is illustrated in (3).

- (3) a. (ana) iʃtarit sijjaarah
 I bought.1SG car
 ‘I bought a car.’
- b. (huu) akal il-fuul
 he ate.3SG.M DEF-fava beans
 ‘He ate the fava beans.’
- c. (hii) titkallam ʃarabi
 she speak.3SG.F Arabic
 ‘She speaks Arabic.’

Like other Arabic dialects, NA lacks Case inflections on nouns: only pronouns display morphological Case distinctions. NA has two types of pronouns: (i) independent (free standing) pronouns and (ii) attached (bound) pronouns. The former type surfaces as a free standing element (cf. the subject pronouns in (3) above), whereas the latter must attach to a host, as shown in (4a-c).

- (4) a. ʃaaf-ha
 saw.3SG.M-her
 ‘(He) saw her.’
- b. kitaab-ha
 book-her
 ‘Her book’
- c. maʃ-ha
 with-her
 ‘With her’

Like other varieties of Arabic, NA is a null-copula language, i.e. the copula BE is not overt in the present tense. However, predication in the past is expressed overtly by means of the past-

tense copula *kaan* ‘was’ (see, e.g. Fassi Fehri, 1993; Benmamoun 2000; Ouhalla 2013).² This is shown in (5a) and (5b), respectively.

- (5) a. ar-radʒdʒaal yani
DEF-man rich
‘The man is rich.’
- b. Yūsif kaan imdarris
Youssef was.3SG.M teacher
‘Youssef was a teacher.’

The expression of the copula (present/past), which is a general feature of Arabic, will be relevant in chapter 5.

As regards possession formation, NA shows a number of strategies to encode possession. Typologically, possession in this Arabic variety can be divided into two main types: (I) DP-internal possession and (II) predicative possession. DP-internal possession, in turn, can be divided into two subtypes: (a) synthetic possession and (b) analytic Free State possession. As for the synthetic type, NA typically expresses possession via the so-called Construct State, which has no overt possessive marker and can denote various possession relations between the possessum and the possessor DP, as in (6a-d).

- (6) a. kitaab Muḥammad
book Muhammad
‘Muhammad’s book’
- b. ʃaʃar Saara
hair Sarah
‘Sarah’s hair’
- c. ridzil al-walad
leg DEF-boy
‘The boy’s leg’

² It should be pointed out that the expression of the copula (especially when it is unpronounced, i.e. in the present tense) has been the subject of much debate in the Semitic literature; some works argue that it is null while others argue that it is there but just not overt. See Doron (1983, 1986); Rapoport (1987); Eid (1983, 1991); Fassi Fehri (1993, 2012); Ouhalla (1994, 2013); Benmamoun (2000); Edwards (2006); Aoun *et al.* (2010); Choueiri (2016); Alharbi (2017), among others, for discussion and suggested derivations of the issue.

- d. gimmat al-dzabal
 top DEF-mountain
 ‘The top of the mountain’

NA can also mark possession (synthetically) on the possessum by means of possessive suffixes (i.e. pronominal possessors), as shown in (7).

- (7) a. kitaab-ah
 book-his
 ‘His book’
- b. faṣar-ha
 hair-her
 ‘Her hair’

The various synthetic means of expressing possession in NA are discussed in detail in chapter 2. NA can also employ a dedicated possessive marker (i.e. *ḥagg* ‘of’) to express possession analytically. This is illustrated by examples as in (8), often referred to as Free State possessives.

- (8) a. al-beet ḥagg-Ø ar-radʒdʒaal
 DEF-house of-SG.M DEF-man
 ‘The man’s house’
- b. as-sijjaarah ḥagg-at ar-radʒdʒaal
 DEF-car.SG.F of-SG.F DEF-man
 ‘The man’s car’
- c. as-sijjaraat ḥagg-aat ar-radʒdʒaal
 DEF-cars.PL.F of-PL.F DEF-man
 ‘The man’s cars’

The examples above show that *ḥagg* displays overt agreement in number and gender with the possessum DP. We consider the full details of this construction in chapter 3. In addition to the analytic *ḥagg* possessive constructions, the notion of possession in NA can also be expressed analytically through the use of *abulumm* possessives, which are somewhat similar to English ‘with’ constructions. This is illustrated in (9), where the choice between the two allomorphs *abu* and *umm* depends on the gender of the possessor.

- (9) a. ar-radʒdʒaal abu iṣjuun zurg
 DEF-man with.M eyes blue
 ‘The man with blue eyes’

b. al-bint umm ʃaʃar tʻawiil
 DEF-girl with.F hair long
 ‘The girl with long hair’

Unlike *ḥagg*-constructions, *abu/umm*-constructions are preceded by the possessor and followed by the possessum. Chapter 4 discusses this construction in detail.

Altogether, these various options mean that DP-internal possession in NA, which is the main concern of the current thesis, can be represented as follows:

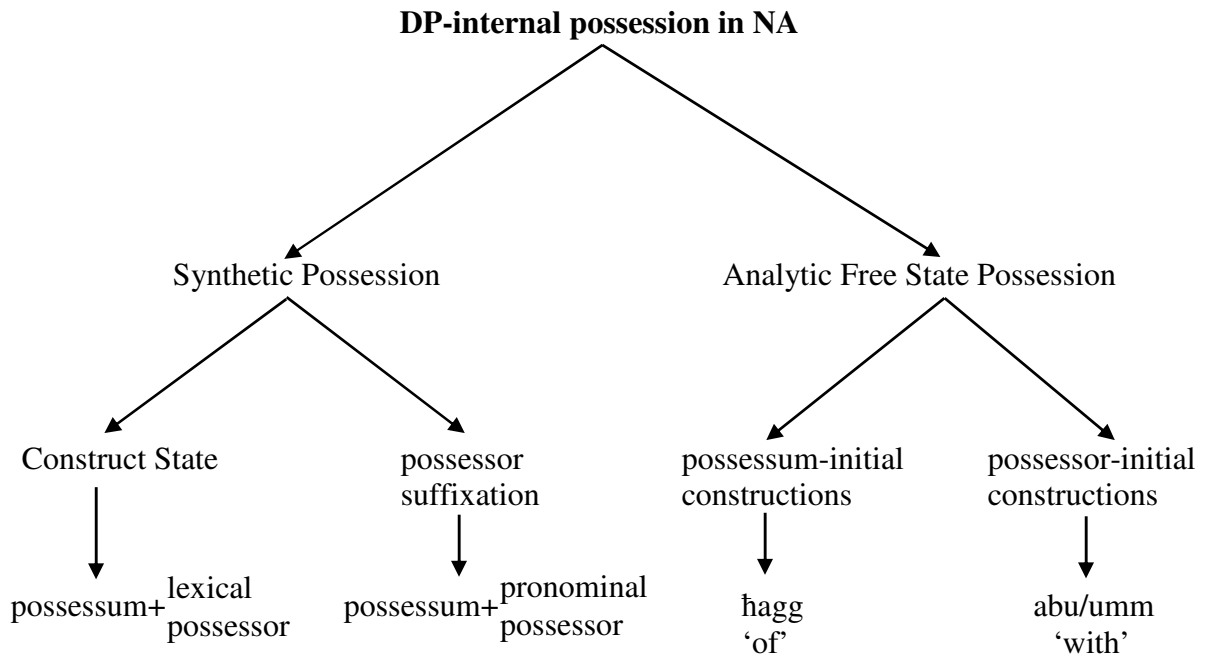


Figure 1.2 Taxonomy of DP-internal possession in Najdi Arabic

With regard to possession expressed at the level of the clause (i.e. predicative possession), NA mainly makes use of the locative preposition *ʃind* ‘at, near’ to encode possession predicatively, as in (10). NA like other Arabic dialects is a HAVE-less language, hence employs a preposition to express possessive sentences (cf. Benveniste 1966; Freeze 1992; Kayne 1993; Den Dikken 1995; Harley 2002).

(10) al-bint ʃind-ha sijjaarah
 DEF-girl at-her car
 ‘The girl has a car.’

Here the possessor is expressed twice. It is represented pronominally by means of a suffix on the preposition *ʃind* and it also appears as a lexical NP. We consider such predicative possessives in chapter 5.

Having briefly introduced the main properties of NA, the next section discusses some previous work on Najdi Arabic and relates this to the central aims of the current thesis.

1.2.3 Previous research on Najdi Arabic

Since the early 1960s, a number of linguistic studies of Najdi Arabic have been conducted by both native and non-native speakers (see, e.g. Abboud 1964, 1979; Lehn 1967; Al-Mozaini 1976; Al-Sudais 1976; Al-Sweel 1981, 1987, 1990; Sowayan 1982, 1995; Ingham 1991, 1994, 2010). These works have been carried out within the framework of traditional grammar, providing descriptions of the basic syntactic structures of the language, its various word orders, morphology, phonology, tense and aspect, negation (and sometimes even Najdi proverbs and idioms); hence they offer a detailed sketch of Najdi Arabic grammar.

In recent years, Najdi Arabic (and its sub-varieties) has also drawn the attention of several authors working in less traditional theories of language structure (see Lewis 2013; Alharbi 2017; Alshamari 2017; Alatawi 2018; Alshammari 2018 and Alshammari 2019, among others). These works mainly address the syntax of Najdi Arabic within generative syntactic theory, as represented by Chomsky (1995, and subsequent work). Much of this work analyses clause-related phenomena. For example, Lewis (2013) investigates complementizer agreement in this variety of Arabic. Alshamari (2017) deals with the issue of agreement found in clause-initial discourse-particles. Alharbi (2017), in his turn, explores the syntax of copular clauses in Najdi Arabic as compared with Standard Arabic. Alshammari (2018) discusses the syntax of temporal and conditional adverbials, analysing them within Rizzi's (1997) split CP hypothesis. Alshammari (2019) tackles the issue of conjoined wh-questions in Najdi Arabic and proposes a minimalist analysis for them.

There are fewer studies of the DP. Both Bardeas (2009) and AlQahtani (2016) analyse the structure of the nominal phrase from a generative perspective. Specifically, the first study is devoted to the syntax of numerals, quantifiers, demonstratives, superlatives and adjectives. This work also investigates in detail all types of Construct State possessives and it also briefly touches on Free State formed by *ħagg*, though providing only a descriptive account of them. As for the second study, it primarily addresses the distribution of definite vs. indefinite articles, modification within the nominal phrase, the derivation of diminutives and the syntax of so-called nunation in both Standard Arabic and what the author refers to as 'Saudi dialects'.³ He

³ It should be mentioned that this work also deals with the issue of the preferred word order SVO or VSO among Saudi speakers through experimental studies, which the researcher devotes two chapters in an attempt to answer this question.

also devotes attention to Construct State possessives, proposing a post-syntactic analysis for them, along the lines of Benmamoun (2000). Apart from this, this work has nothing to say on possession and its properties.

It should be pointed out that this relative paucity of work on possessives also characterizes the literature on Arabic in general. With the exception of the extensive research focused on the Construct State (see, among many others, Aoun 1978; Aboudi 1985; Fassi Fehri 1988, 1999; Mohammad 1988; Kaplan 1993; Stepanov 1997; Benmamoun 2000; Kremers 2003; Shlonsky 2004; Bardeas 2009; Almansour 2012; Choueiri 2014) and the few studies on Free State (i.e. Mohammad 1999; Soltan 2006; Ouhalla 2011), the investigation of possession remains largely unexplored. Additionally, there is not a single work, to my knowledge, which has examined all types of possession in any variety of Arabic from a generative perspective (but see Harning 1980 for a typological study; Brustad 2000: Ch. 2 and Guella 2007 for comparative studies).

All in all, it is clear that previous work has left several types of DP-internal possession unexplored, such as the syntax of possessive suffixes and analytic Free State constructions formed by *ħagg* and *abu/umm* possessives. This study presents a detailed account of all possessive constructions, using the framework of current generative theory. In so doing, the current work provides a full-fledged investigation of the various ways that possession is expressed in (Najdi) Arabic. Another significant aspect of the current thesis is that it considers in detail the issue of agreement within possessive constructions, which is largely overlooked in earlier works on Arabic. This work aims to investigate all patterns of agreement found in NA possessive constructions with a particular focus on DP-internal agreement.

Overall, the current study aims to answer the following main questions:

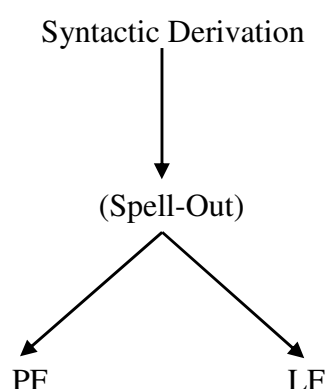
- (i) What is the syntactic structure of synthetic possession? Do the two subtypes of this type of possession behave the same or differently? Do synthetic possessive constructions with a pronominal possessor share the same structural position as their lexical counterparts, i.e. generated in Spec, NP? Or do they show different syntactic behaviour?
- (ii) Using the main theoretical assumptions of the Minimalist Program, how can analytic possessives be derived? How to account for *ħagg*-possessum agreement, on the one hand, and *abu/umm*-possessor agreement, on the other hand?

(iii) What is the nature of the pronominal element found on the locative preposition *find* ‘at’ and on the possessum in both predicative possession and DP-internal possession, respectively? Should it be analysed as an agreement suffix or a bound pronoun?

1.3 Theoretical framework and basic assumptions

The theoretical framework assumed in this study is the Minimalist Program (Chomsky 1995, 2000, 2001, and related work), which at the most general level is concerned with the study of the basic, irreducible aspects of the human language faculty. According to the Minimalist Program, there are universal principles and a limited number of universal parameters, which every language follows. According to Chomsky (1995), there are two interface levels of syntactic representation: Logical Form (LF), i.e. the interface to the conceptual-intentional system and Phonetic Form (PF), that is the interface to the articulatory-perceptual system.⁴ The former is associated with meaning, whereas the latter is concerned with sound. A basic representation of the PF and LF interfaces of the model of grammar is schematically shown in (11) below, adapted from Embick and Noyer (2007: 292):

(11) The Grammar



Within the Minimalist Program, there are three syntactic operations which account for the syntactic derivation: Merge, Move and Agree. As regards the operation Merge, Chomsky (1995, 2001, 2005), points out that there are two types of Merge: (i) External Merge and (ii) Internal Merge. External Merge, as Chomsky explains, is an operation of grammar which takes two syntactic objects from the Lexicon and combines them in the structure. On the other hand, Internal Merge, which is usually referred to as Move, is an operation that takes an already merged category (i.e. in its base-position in a syntactic structure) and remerges it into a higher position in the structure. On this view, the operation Move is simply an instance of Internal

⁴ It should be noted that in pre-minimalist approaches, there are two other levels of representation, namely S-structure and D-structure. However, these levels were eliminated in the Minimalist Program.

Merge. In addition, the Minimalist Program crucially postulates that syntactic structures are always built from a bottom up fashion, through the operation Merge; this is unlike previous theories within the generative framework, particularly the Government and Binding theory (GB), where the building up of syntactic objects works in a top-down fashion.

In the Minimalist Program, features play a major role in syntactic derivations. Chomsky (1995: Ch. 4, 2000, 2001) draws a distinction between interpretable and uninterpretable features. The former contribute to the semantics of a sentence, whereas the latter make no contribution to the semantics of a sentence. While uninterpretable features play no role in interpretation, they can do a lot of work in the syntax. Typical examples of uninterpretable features are Case and EPP⁵ (see Chomsky 1995: 277-278; Adger 2003: Ch. 2; Radford 2006: 184 for discussion of (un)interpretable features).

With regard to the operation Agree, this is a formal mechanism for valuation and deletion of uninterpretable features before the derivation converges at LF (Chomsky 2007: 18). This syntactic operation establishes an agreement relation between two elements, namely a *probe* and a *goal*. In Chomsky's (2000, 2001) view, the probe is the higher element (which is always a head X) and has uninterpretable features, for example uninterpretable phi-features ($u\phi$ -features) on the probe T.⁶ The goal, on the other hand, is the lower element (which is usually a phrase XP); it has identical but interpretable ϕ -features (say, the $i\phi$ -features of an NP or a DP). The Agree operation, according to Chomsky, deletes the $u\phi$ -features of the probe and assigns a 'value' to it based on the matching interpretable ϕ -features of the goal. The requirement of valuing and deleting the uninterpretable features is said to be in accordance with the principle of *Full Interpretation* (FI), cited below from Chomsky (1995: 27), which demands that there is nothing but interpretable elements at both interfaces, LF and PF; otherwise, the derivation crashes.

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

⁵ The EPP feature originally stands for Extended Projection Principle (see Chomsky 1982: 10), which requires that a sentence must have a subject. In the Minimalist Program (Chomsky 2000, 2001), however, it is usually understood as the necessity for a particular functional head to have a specifier (cf. Kayne 2000: 322; Alexiadou *et al.* 2007: 29; Bošković 2011: 332ff.).

⁶ Following Pesetsky and Torrego's (2001) convention, I use $u\phi$ -features to refer to uninterpretable person, number and gender features.

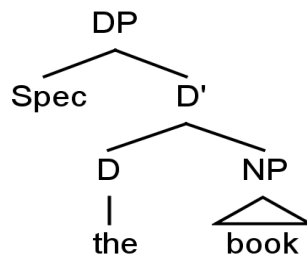
The conditions imposed on the operation Agree are summarised below (Chomsky 2000: 122).

- (12) The probe α agrees with the goal β providing that:
- a. α has uninterpretable Φ -features.
 - b. β has matching interpretable Φ -features.
 - c. β is active by virtue of having an unvalued Case feature.
 - d. α c-commands β .
 - e. There is no potential goal γ intervening between α and β .

Within generative minimalist syntax, the Agree relation plays a central role in syntactic derivations. In this regard, Miyagawa (2010: xi) mentions that '[w]ithout agreement and movement, human language would be a shadow of itself for expressing human thought'. Throughout this work, we will see instances of these two operations in (Najdi) Arabic possessive constructions.⁷

A final point to be mentioned here is Abney's (1987) DP-hypothesis, which represents an analysis that is widely accepted in the generative literature on noun phrases and is also adopted in the current thesis. According to Abney (1987), the internal structure of noun phrases (NPs) mimics that of clauses in its richness of functional categories.⁸ Abney (1987) argues that there is a functional projection, namely DP (Determiner Phrase), which dominates the NP projection. Within this theory of DP, the functional head D encodes definiteness; hence, it is widely assumed to be occupied by the definite article in many languages (see, e.g. Abney 1987; Ritter 1991; Giusti 1992, 1997; Szabolcsi 1994; Siloni 1997; Fassi Fehri 1999; Lyons 1999; Danon 2001, 2008; Longobardi 2001; Ticio 2003; Borer 2005; Bernstein 2008). This is illustrated in the following basic structure for the English noun phrase *the book*.

(13) The book



⁷ For further discussion of minimalism, the reader is referred to Chomsky (1995, 2000, 2001, 2004, 2005, 2007, 2008, 2013); Radford (1997); Adger (2003); Hornstein *et al.* (2005); Bošković and Lasnik (2007), among others.

⁸ This is in line with the functional categories found in the verbal domain, such as (C)omplementizer, (Infl)ection, (Neg)ation and (Asp)ect (cf. e.g. Szabolcsi 1983, 1987; Abney 1986; Pollock 1989; Piccolo 1991; Ritter 1991).

Abney's (1987) DP-hypothesis has in fact been considered as a turning point in the investigation of noun phrases. In the 1970s and until the mid-1980s, determiners, e.g. (in)definite articles and demonstratives, were schematically represented in specifier positions of NPs (i.e. Spec, N'' or Spec, N'''), hence part of the projection of the noun phrase, which itself did not have any functional layer (see, for instance, Jackendoff 1977: 104, cited in Alexiadou *et al.* 2007: 53-54; Borer 1984). However, Abney's (1987) seminal work has been immensely influential given that it has enabled the structure of noun phrases to be modelled on that of clauses, i.e. a noun phrase is headed by the determiner, which instantiates its own maximal projection. Nowadays, it is generally accepted in generative syntax that noun phrases have the basic structure above, with at least the functional projection DP.

To summarise, the present section has briefly introduced the main theoretical assumptions adopted in the current work; all other relevant theoretical assumptions will be discussed as the chapters proceed. In the following section, I offer a brief picture of the chapters to come.

1.4 The organization of the thesis

This thesis consists of six chapters, which are organised as follows. The present chapter has introduced some brief background on NA (including some syntactic properties and discussion of previous work), the theoretical framework adopted and the structure of the study. Chapter Two discusses the syntax of synthetic possession in NA. The first part of the chapter discusses the syntax of Construct State. This type of synthetic possession has attracted much attention in the literature and the chapter provides an overview of its main characteristics and syntactic derivation. The second part explores the other type of synthetic possession, formed by pronominal possessor suffixation, which has received little attention in the generative literature (though see Fassi Fehri 1993 and Shlonsky 1997). The chapter first presents two competing proposals for the analysis of synthetic pronominal elements, i.e. the incorporation approach and the agreement approach, and then shows that there is compelling evidence that pronominal possessive suffixes (i.e. pronominal possessors) should be treated as agreement markers, along the lines of Shlonsky (1997). This evidence comes from emphatic constructions as in *kitaab-ha hii* (book-3SG.F she) 'her book', where the possessive suffix is in agreement with a free standing overt pronominal. However, given that Shlonsky's agreement proposal was couched in an early version of Minimalism (Chomsky 1993, 1995), some amendments are required in order to bring his analysis into line with subsequent developments in the theory of agreement in Minimalism (Chomsky 2000, 2001).

Chapter Three investigates the syntax of analytic Free State formed with the possessive marker *ḥagg*. The chapter first presents the descriptive facts of *ḥagg* possessives. This is followed by a short discussion of the categorical status of this word. Afterwards, this chapter briefly discusses cases where *ḥagg* is used as an anti-ambiguity device in contexts where structural ambiguity arises in certain possessive constructions. Following this, the chapter reviews previous work by Mohammad (1999), which is the first to discuss the Free State possessives in (Palestinian) Arabic within a generative framework. It will become clear that his proposal faces several problems and I will propose a different analysis of Free State possessives in (Najdi) Arabic. In this chapter, the issue of *ḥagg*-possessum agreement will play a prominent role. On the one hand, the preposition *ḥagg* is assumed to assign Genitive Case to the possessor DP to its right, bearing in mind that prepositions assign Genitive Case in Arabic (see, e.g. Siloni 2002: 180-181; Ouhalla 2009a, 2011). On the other hand, *ḥagg* obligatorily agrees with the possessum DP. This state of affairs is seemingly problematic; however, as will be discussed in detail in the chapter, viewing this pattern of agreement as being similar to subject-verb agreement, where the verb assigns Case to its complement object and agrees with the subject DP, yields a plausible account of *ḥagg*'s behaviour.

Chapter Four deals with the syntax of analytic Free State formed by *abu* and *umm* possessives, which share some properties with English 'with' possessives. However, in NA and other Arabic dialects, the possessive markers *abu* and *umm* show agreement with the possessor DP in gender: if the possessor is Feminine gender, *umm* 'with.F' is obligatorily used and when it is Masculine gender *abu* 'with.M' must be employed. This chapter has a twofold aim. The first objective is to provide a full description of such possessives, since they have not been described before, to the best of my knowledge. This will be done in part by means of a comparison with English possessive *with*. The second objective is to offer a syntactic analysis of these possessives. It is argued, along the lines of Levinson (2011), that possessives containing *abu/umm* have the same syntactic structure as their English possessive *with* counterparts. However, since the (Najdi) Arabic markers differ from English possessive *with* in showing agreement with the possessor, some adjustments to Levinson's (2011) analysis will be necessary in order to capture the agreement relation with the possessor.

After the discussion of DP-internal possession in chapters 2-4, chapter Five turns to the syntax of the second main type of possession, that expressed at the clausal level. For this, NA makes use of a specific locative preposition, which means that NA is a HAVE-less language. The chapter shows that when the preposition *ʕind* 'at' is employed to encode predicative possession, it behaves in a way somewhat similar to a verb; it is marked with a pronominal possessive suffix

that cross-refers to the lexical possessor. It is proposed, building on a proposal put forth by Harley (2002), that this suffix attached to *ɕind* is an agreement marker, which is spelled-out as the result of an Agree relation established between the preposition and the possessor DP. A number of arguments are given in favour of this treatment. Drawing on Stassen (2009), it is also shown that this pattern of agreement in possessive sentences is not a unique property of NA, but is also attested in several other (un)related languages.

Chapter Six concludes the thesis by summarising the main conclusions of the study. It also highlights some issues that need to be further investigated and offers some other suggestions for further research.

Part I. DP-internal possession

Chapter 2. Synthetic Possessive Constructions

2.1 Introduction

This chapter investigates the syntax of two types of synthetic possession in Najdi Arabic (NA): construct state and possessive suffixes, focusing on their syntactic derivations within the nominal phrase.

I will first discuss the syntax of construct state. As this type of possession has been extensively investigated in the literature on Semitic, I will summarise some of its main characteristics and syntactic derivation. After reviewing its key points, I will then proceed to discuss the second type of synthetic possession, i.e. possessive suffixes, which is often overlooked in the literature. The discussion will reveal that this type of possession is not unproblematic. In the literature there appears to be disagreement whether these bound forms, suffixed to the possessum (and many other heads), are pronouns or agreement inflections. The status of such elements is said to be morphologically ambiguous between incorporated bound pronouns and pure agreement markers (Fassi Fehri 1993: 97, 121). As the discussion is developing, I will bring into focus two previous proposals that investigated the pronominal system in Semitic: Fassi Fehri's (1993) pronominal incorporation analysis and Shlonsky's (1997) inflectional agreement analysis, showing that NA data support the second one. In this chapter, I also discuss some aspects of possessive noun phrases with pronominal possessors. I first consider the idea that possessive noun phrases with pronominal possessors occupy the same structural position as their lexical counterparts (cf. Fassi Fehri 1993; Jamary 1993; Plunkett 1996). However, along the lines of Shlonsky (1997) and Holmberg (2018), I argue that they occupy two different positions. I will propose that while lexical possessors are base-generated in a thematic position (Spec, NP), pronominal possessors occupy a higher functional head (Poss^o). Consequently, I will propose, building on Shlonsky's (1997) proposal, that the pronominal possessor is a morphological realization of the Agree relation (Chomsky 2000, 2001) which obtains between Poss^o and the XP element located within its c-command.

The chapter is organized as follows. In 2.2, I will discuss various aspects of the construct state, highlighting its main properties and giving an overview of the different proposals for its derivation. In 2.3, I will provide a basic description of possessive suffixes in NA. In 2.4, I will discuss two previous approaches to pronominal suffixes: Fassi Fehri's (1993) incorporation approach and Shlonsky's (1997) agreement approach. Section 2.5 presents a discussion of Shlonsky's (1997) agreement approach to Semitic clitics, emphasizing some of its advantages and giving some suggested modifications to it. Section 2.6 provides a syntactic account of

pronominal possessor constructions in NA. Section 2.7 offers some cross-linguistic comparative discussion, with particular reference to English and Finnish (Holmberg 2018). The overall purpose of this section is to show that agreeing pronominal possessors are not an idiosyncratic property of NA. Finally, section 2.8 concludes the chapter.

2.2 Construct State: an overview

Possession in NA can be synthetically expressed by the use of the so-called Construct State (CS).⁹ CS has been the focus of much research in Semitic languages. Several studies have addressed this type of synthetic possession, attempting to highlight its interesting properties as well as syntactic derivation. Among these studies that have examined its various issues and ramifications are: Aoun (1981); Aboudi (1985); Borer (1996, 1999); Ritter (1991); Fassi Fehri (1993, 1999); Siloni (1997); Mohammad (1999); Shlonsky (1997, 2004); Benmamoun (2000); Sichel (2002); Ouhalla (2009, 2011); Benmamoun and Choueiri (2013); to cite just a few. CS (also known in the literature as ‘annexation’ or ‘*ʔidʿaafah*’) is defined as the genitival relation held between the head noun ‘the possessum’ and the possessor DP (Aoun 1981). In NA, like other Arabic dialects, the simplest instance of CS is formed by juxtaposition of the possessor and the possessum, as shown in the following examples:

- (1) a. *kitaab* *al-bint*
 book DEF-girl
 ‘The girl’s book’
- b. *ridʒl* *al-walad*
 leg DEF-boy
 ‘The boy’s leg’
- c. *aḡu* *l-imdarris*
 brother DEF-teacher
 ‘The teacher’s brother’
- d. *ʃaʃar* *Saara*
 hair Sarah
 ‘Sarah’s hair’

⁹ For a different type of CS, i.e. adjectival construct states, see Siloni (1996, 1997, 2002); Hazout (2000); Al-Sharifi and Sadler (2009), among many others.

- e. s^ooot Muḥammad
 sound Muhammad
 ‘Muhammad’s voice’

- f. ʔas^odigaaʔ Muhammad
 friends Muhammad
 ‘Muhammad’s friends’

- g. ʔays^oaan ʔaf-ʃadʒarah
 branches DEF-tree
 ‘The tree’s branches’

In (1a-g), we can see that *ʔid^oaafah* can express various semantic relations that may obtain between the possessum and the possessor DP. These relations may include, but are not limited to, alienable possession (1a), inalienable possession (1b-d), theme-source (1e), social relation (1f) and part-whole relation (1g).

There are a number of characteristics of CS. Some of its main properties are reviewed here. For a fuller description of CS, see Mohammad (1999: 28-34) and Borer (1999: 44-47). First, the possessor DP, also called ‘the genitive phrase’ or ‘the annex’, should be definite, either by the definite article *al* which is prefixed to the noun (*al* + NP) forming a full DP (1a-c) or by being a proper noun which is inherently definite (1d-f). Second, the possessum, also dubbed as ‘possessed noun’ or ‘possessee’, cannot bear overt definite marking, i.e. prefixed with the definite article *al*, hence the ungrammaticality of (2).¹⁰

- (2) **al-kitaab* *al-bint*
 DEF-book DEF-girl
 Intended: ‘The girl’s book’

Although the possessum (the head noun) lacks any overt definite article, it has been treated in the Semitic literature as a semantically definite noun (Ritter 1988, 1991; Borer 1996; 1999; Benmamoun 2000; Siloni 2001; Shlonsky 2004). Evidence for this claim comes from the

¹⁰ The absence of the definiteness marker on the head of CS recalls a similar strategy in English possessive Noun Phrases (NPs) formed by the -s marker where the head noun lacks the definite article (ia-b) (see also note 12 below).

(i) a. Mary’s (*the) book b. The girl’s (*the) book
 In these constructions, the definite article of the head noun seems to be in complementary distribution with the definite possessor. Their inability to co-occur with each other can be attributed to vacuous quantification (see Chomsky 1982, 1986), which generally prohibits iterating determiners as in **every the dog*.

adjective modifying the possessum, which must be marked for definiteness; otherwise the relevant construction becomes ungrammatical under the DP reading, as in (3).¹¹

- (3) ?istifwaar al-bint *(al)-yaali
hairdryer.SG.M DEF-girl DEF-expensive.SG.M
‘The girl’s expensive hairdryer’

In (3), the adjective *alyaali* ‘the expensive’ agrees in number and gender with the possessum *?istifwaar* ‘hairdryer’ rather than the possessor *albint* ‘the girl’, since they both have the same singular and masculine features. On the other hand, the adjective *alyaali* does not agree in definiteness with the possessum but rather agrees with the possessor. This fact has been taken as a strong evidence that the head noun (and any modifying adjective) inherits the definiteness value from the possessor DP in CS (see Borer 1999; Fassi Fehri 1999; Benmamoun 2000; Siloni 2001 and Danon 2008).

Another salient property of CS is that no adjective (or any other element) can intervene between the possessum and the possessor. Any adjective must follow the entire possessor DP as in (4a).

- (4) a. galam al-walad al-azrag
Pen DEF-boy DEF-blue
‘The boy’s blue pen’
- b. *galam al-azragq al-walad
Pen DEF-blue DEF-boy
Intended: ‘The boy’s blue pen’

Strict adjacency between the two members of CS must be respected; otherwise, the resulting construction is ungrammatical (4b).

The last property of CS that I address here is Case assignment. Due to the fact that Case is not morphologically marked in (Najdi) Arabic as in (5b), I provide a similar construction from Modern Standard Arabic (MSA) to explain the Case properties of CS given that Case in the latter is not abstract (5a).

¹¹ It should be noted that the construction in (3) is grammatical, without the use of the definite marker *al* on the adjective, if predication reading is forced, as in (i):

i. ?istifwaar al-bint yaali
hairdryer Def-girl expensive
‘The girl’s hairdryer is expensive.’

- (5) a. *kitaab-u* *tʕ-tʕaalib-i* (MSA)
 book-NOM DEF-student-GEN
 ‘The student’s book’
- b. *kitaab* *tʕ-tʕaalib*
 book DEF-student
 ‘The student’s book’

In CS, the Case of the whole DP appears on the first member, i.e. the possessum *kitaab* ‘book’. The possessum is assigned a structural Case, i.e. Nominative, Accusative or Genitive, based on its structural position in the respective sentence. As for the Case of the second member, the possessor *tʕʕaalibi* ‘the student’, it should be highlighted that it is always assigned Genitive Case, as indicated in (5a). Having reviewed the key points of CS, let us now turn to the derivation of such constructions.

2.2.1 Syntactic derivation of Construct State: a brief sketch

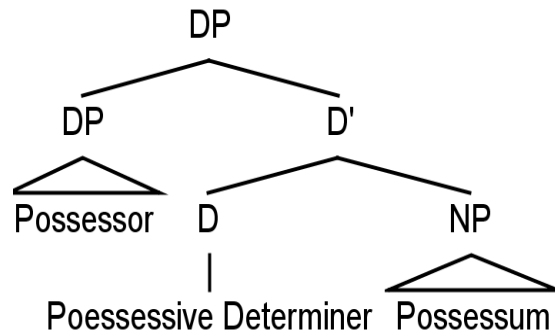
Although Construct State (CS) and English possessive noun phrases are not directly comparable since English doesn’t have such constructions,¹² it will be useful to start with the derivation of English possessive noun phrases with a lexical possessor, as in (6), and then move on to discuss the structure of CS.

- (6) a. The girl’s book
 b. Mary’s book

Ever since Abney’s (1987) original proposal of the DP hypothesis, the structure of possessive noun phrases in English has been widely assumed to be as follows: (cf. Haegeman 1994; Radford 1997; Bernstein 2001; Alexiadou *et al.* 2007; Poole 2011; Carnie 2013; Salzmänn 2018, among others)

¹² See, however, Longobardi (1995, 1996a,b) for discussion of what is called ‘hidden’ CS in Romance and Germanic Saxon genitive constructions. One of the points that Longobardi provides in favour of his argument is that the definiteness of the whole possessive NP is determined by the possessor DP which can only have the definite article as compared to Semitic CS. See also Duffield (1995) and Kane *et al.* (2016) for discussion of the construct state in Irish; and Sadler (2000) for discussion of Welsh genitive constructions which bear strong resemblance to Semitic CS.

(7) The structure of English possessive noun phrase (Abney 1987)



In (7), one can observe that the possessum NP serves as the complement of D' with the possessive marker in D' and that the possessor DP is in the specifier position of DP. One argument in favour of this structure is that it predicts the grammaticality of possessive constructions like (8a-b).

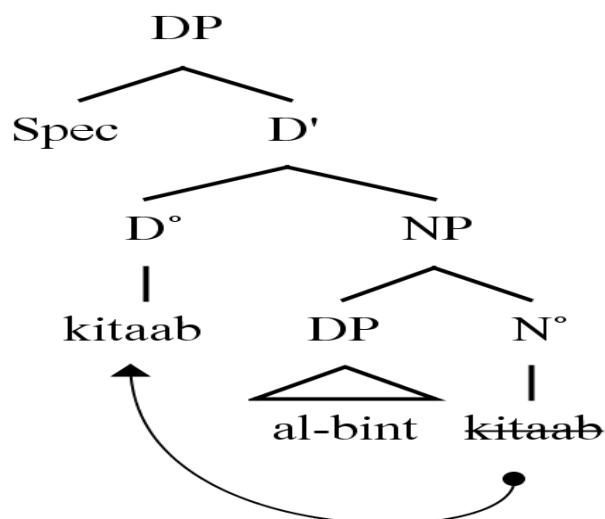
- (8) a. The Duke of Edinburgh's car
 b. A cousin of mine's house

The schematic derivation in (7) elegantly accounts for constructions like (8), given that the possessive –s marker is not a suffix on the possessor N but rather a clitic on the whole possessor DP. For example, the *car* in (8a) is not *Edinburgh's* but rather *the Duke's*. Put another way, the possessive clitic –s is just affixed to whatever NP/DP precedes it. This is the basic structure of English possessive noun phrases.¹³ While the structure in (7) is perfectly fine for English, it is not straightforward for Semitic CS, however. To briefly illustrate the differences in both languages; let us first consider the simplified schematic derivation in (10) for the example in (1a), which is repeated below in (9).

- (9) *kitaab al-bint*
 book DEF-girl
 'The girl's book'

¹³ This structure will be developed and elaborated on in subsequent sections.

(10)



In (Najdi) Arabic CS, unlike English, the possessum *kitaab* ‘book’ must precede the possessor *al-bint* ‘the girl’ – cf. (6) and (9). Additionally, the lexical possessor DP *al-bint* ‘the girl’ is base-generated in Spec, NP. Put another way, the Arabic possessor in CS is not as high in the structure, i.e. Spec, DP, as in the case with the English possessor (Fassi Fehri 2012: 175). Another difference is that the head noun (possessum) raises to the head D° position in (Najdi) Arabic, as shown in (10), while it remains in-situ in English (7). The movement of the head noun *kitaab* to D° ensures the correct linear order of the construct state members at spell-out where the possessum precedes the possessor DP.

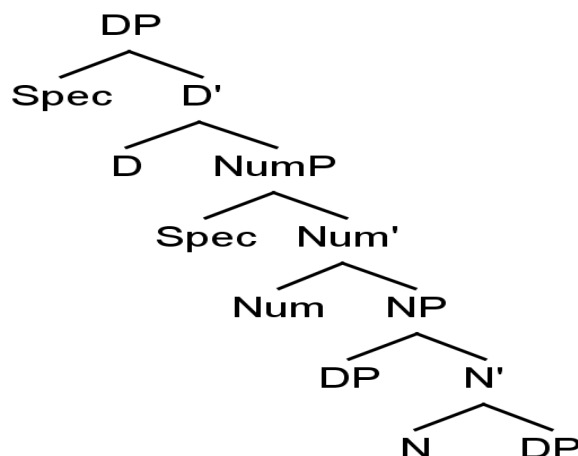
The question which arises here concerns the motivation of the N° -to- D° movement in CS. In Semitic literature, various analyses have been advanced to account for such movement. Ritter (1991), for instance, argues that the possessum N° raises to D° in order to assign a +/- Def value to D° , since D° in these constructions is unspecified for definiteness. For Ritter, the head noun N° inherits the definiteness value of the possessor and by moving to D° , N° assigns the same value to D° and ultimately to the whole phrase. By contrast, Fassi Fehri (1993) argues that the obligatory raising of N° in Semitic languages is due to the affixal nature of D° which needs to be lexicalised. Additionally, Fassi Fehri (1999), following the main assumptions of the Minimalist Program and depending on Chomsky’s (1995) distinction of strong vs. weak features, argues that the movement of N° to D° comes from the complementary distribution between the spelling-out of the definite article and the possessum which would vie for the same D° position of DP. For him, D° in Arabic is endowed with a strong definiteness feature [DEF]. This feature is either checked by the overt spell-out of the definite article *ʔal* in Free State (FS) or by the raising of the possessum to D° in CS. In the latter constructions, the possessum moves to D° ; hence blocking the spell-out of the definite article. Borer (1999), on the other hand, argues

that the movement of N° to D° is due to so-called the definiteness spread (see Danon 2001, 2008 for a thorough discussion of definiteness spread in Semitic).¹⁴

So far we have seen that the derivation of CS involves N° -to- D° movement. The basic structure of CS, given in (10), has been widely assumed since the late eighties and early nineties. However, ever since Ritter (1991), it has been widely accepted in Semitic literature that there is a functional projection between NP and DP: NumP for Ritter (1991, 1992, 1993, 1995); PossP for Fassi Fehri (1993), Agr_{gen}P for Siloni (1997), AgrP for Mohammad (1999), NumP for Benmamoun (2000), FP for Ouhalla (2011) and nP for Fassi Fehri (2012). Ritter (1991) points out that the simple structure in (10) where the NP is a complement of D° is problematic. Before reflecting on this matter in more detail, let us first introduce the essence of her proposal.

Ritter (1991) analyses possessive noun phrases in Semitic, arguing that all types of genitive constructions (CSs and FSs) can be given one unified analysis. Ritter points out that the hypothesis that a noun phrase has only one functional category, i.e. the determiner (projecting the DP), is not enough. Ritter then goes on to propose that the Semitic noun phrase has another functional projection, which she calls Number Phrase (NumP). According to Ritter, the NumP is an intermediate projection, situated between the functional DP and the lexical NP. This means that a DP would have the following schematic representation (Ritter 1991):

(11)



As for the reason for the postulation of NumP, Ritter argues that the Num head is the place for the generation of grammatical number interpreted as either singular or plural (see Ritter 1991, 1992, 1993, 1995; Alexiadou *et al.* 2007: 234-235 for discussion; see also Kremers 2003 for an

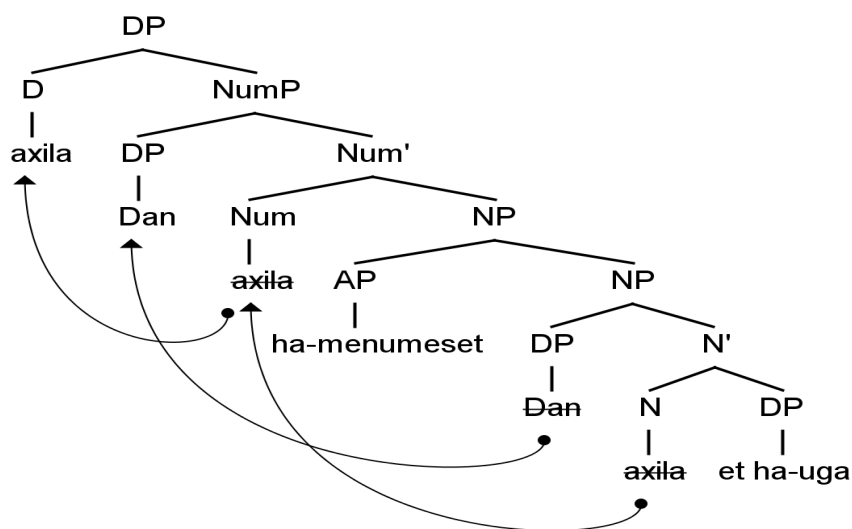
¹⁴ The above analyses advocate for a syntactic approach to CS. See, however, Borer (1988, 1996), Benmamoun (2000) and Siloni (2001, 2003) for a morpho-phonological account. For instance, Benmamoun (2000) develops an analysis of CS in which he argues that such constructions are generated by post-syntactic (phonological) merger, which renders both members of CS as one lexical item (or one prosodic unit).

argument that NumP is projected independently in Arabic in the case of regular plurals). Additionally, Ritter (1991) points out that there are other reasons for the existence of an intermediate functional projection (like NumP) in Semitic - that is to account for the Case assignment of the (genitive) possessor and the postnominal position of adjectives in CSs.¹⁵ Let us begin with the latter first. Ritter (1991) argues that adjectives are NP-adjoined in Semitic. For example, Ritter cites the construction in (12) as evidence to support her claim.

- (12) axilat dan ha-menumaset et ha-uga (Modern Hebrew)
 eating Dan DEF-polite ACC DEF-cake
 'Dan's polite eating of the cake'

Here, the adjective *menumeset* 'polite' modifying the head noun *axilat* 'eating', follows *Dan* the genitive DP. Ritter argues that derived nominals like *axilat* 'eating' in (12) and the adjective modifying it can be taken as evidence of the existence of the functional projection, NumP. Ritter provides the following schematic derivation in (13) for the construction in (12) (adapted from Ritter 1991):

- (13)



In (13), the derivation starts by merging the head noun N° with its complement, the DP *et hauga* 'the cake'. Afterwards, the possessor DP *Dan* is merged in Spec, NP forming NP. The adjective *hamenumaset* 'polite' is merged within the lexical NP, which in turn merged with the functional head Num. Ritter (1991) argues that the adjective *hamenumaset* 'polite' is an NP adjunct which always remains in its merge position. What the derivation in (13) also shows is that the

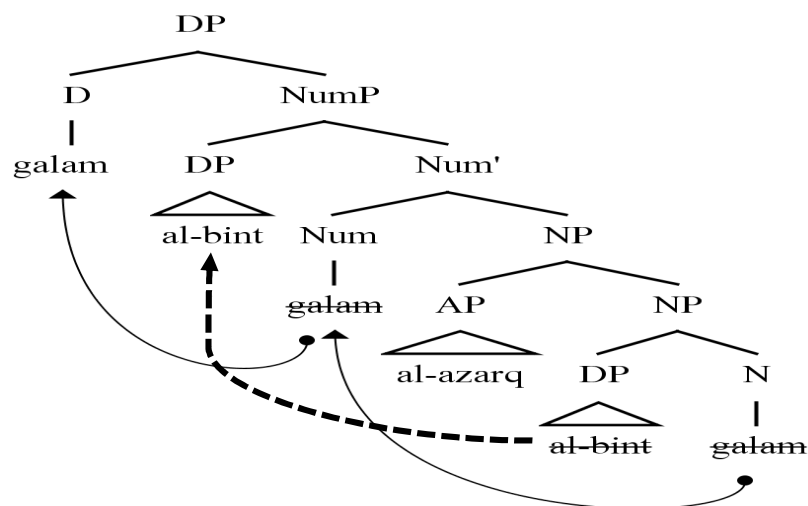
¹⁵ Ritter points out further that there are other reasons to think that there is a functional projection if one wants to: (1) maintain a transparent parallelism between nominal and clausal domains, where NumP is the DP equivalent of IP in clauses; (2) have a uniform analysis of both CSs and FSs (see Ritter 1991, 1992, 1993; Alexiadou *et al.* 2007: 247-253 and references therein for discussion of these points).

possessum *axila* head moves to Num[◦], across the adjective *hamenumeset* and then raises to D[◦], undergoing as such a successive cyclic head movement N[◦]-to-Num[◦] to D[◦]. According to Ritter (1991), the movement of the noun to D[◦] is crucial in order to identify the D_{gen} which is the source of the genitive Case in the Semitic CS. Additionally, the possessor DP *Dan* undergoes phrasal movement from Spec, NP to Spec, NumP to lodge in a position right-adjacent to D_{gen}. The movement of the possessor DP to Spec, NumP has the effect of leaving the adjective behind, deriving thus the right word order.

When we apply the structure in (13) to the (Najdi) Arabic example in (14), the following schematic derivation in (15) is yielded:

- (14) *galam al-bint al-azarq*
 pen DEF-girl DEF-blue
 ‘The girl’s blue pen’

(15)



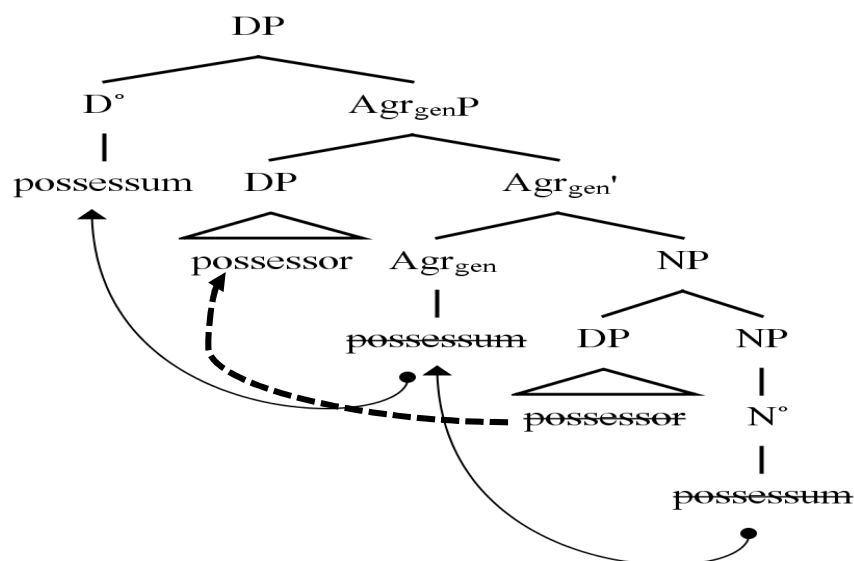
In this structure, the possessor DP *al-bint* is merged with the possessum *galam*, forming NP. Merged with the NP is the adjective *al-azarq*. Combined with the NP is the functional head Num[◦]. In the next step of the derivation, the possessum *galam* undergoes movement to Num[◦] and subsequently raises to D[◦]. The possessor *al-bint* vacates its position to Spec, NumP for Case reasons.

Given the discussion above, the structure in (10) cannot be on the right track (as compared to the structures in 13 and 15). This is because the possessor of CS in (10) remains in its (thematic) merge position, Spec-NP. In cases where there is an adjective modifying the possessum, as in examples (12) and (14), and assuming that adjectives are left-adjoined to NPs (see, for instance, Bernstein 1991; Carstens 1991; Picallo 1991; Ritter 1991; Valois 1991, 1996; Alexiadou and Wilder 1998; Borer 1999; Benmamoun 2000), the order of CS construction would be

*possessum N° > Adj > Possessor DP, giving thus the wrong word order. This means that the possessor DP must have undergone movement to some position above NP and below D° (cf. Alexiadou *et al.* 2007). Note that this issue does not arise in structures (13) and (15), given that the possessor DP moves above the adjective and below the head noun in D°, deriving the surface order N° + Possessor DP > Adj. In view of this, the structures in (13) and (15) are therefore clearly preferable to (10). The discussion thus far lends support to the postulation of a functional projection such as NumP in possessive noun phrases.

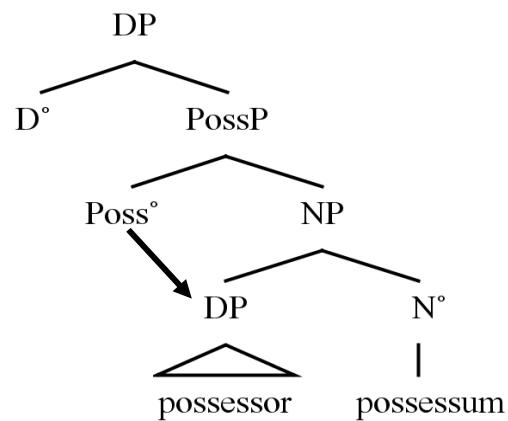
As for the second point concerning the Case assignment of the possessor DP, it has been established above that the possessor undergoes movement to Spec, NumP so that it can be Case-licensed. Ritter (1991) assumes that D_{gen} is an abstract head which assigns genitive Case under government to the possessor DP in Spec, NumP. This line of thought was adopted in pre-minimalist approaches, like in the Government and Binding framework (Chomsky 1981, 1982). However, in the Minimalist Program (Chomsky 1993, 1995), the notion of government has been challenged and no longer plays a role. This led some Semitic researchers to propose a Case-motivated analysis of CS. For instance, Siloni (1997) argues that the Case of the possessor DP is assigned in a Specifier-head configuration. Siloni postulates that there is an Agreement projection in the Semitic CS, which is parallel to Ritter's (1991) NumP, but she labels its head as Agr_{gen}. While discussing the role of the Agr_{gen}, Siloni (1997: 43) writes the following: 'I label the agreement projection Agr_{gen}P, but this notation is only mnemonic: it is an AgrP where structural Case is checked in the noun phrase'. This is illustrated schematically in (16) (adapted from Siloni 1997: 43).

(16)



Under Siloni’s proposal, the possessor DP must undergo movement to Spec of Agr_{gen} to be assigned Genitive Case under a Spec-head Agreement relation (see Siloni 1997: 43-47, 180-184 for more in-depth discussion of Agr_{gen} and Case assignment of CSs under this proposal). Note again that the correct surface word order here is achieved by N-to-D movement which takes place in the syntax proper.¹⁶ Siloni’s (1997) contention of Agr_{gen}P was adopted in the early stages of the Minimalist Program (Chomsky 1993, 1995). In the light of more recent approaches to agreement and Case assignment (Chomsky 2000, 2001) where the possessor needs not be in a specifier-head relation with a Case-licenser (given the c-command relation between a probe and goal), I propose to leave out Agr_{gen} in favour of a Poss(essive) head (cf. Fassi Fehri 1993: Ch.5; Alexiadou *et al.* 2007 and Holmberg 2018, among others). Following this proposal, I assume that what assigns Genitive Case to the Possessor DP is the Poss^o head. The updated structure is given in (17):

(17)



This is the proposed structure for CSs that I will use for the remainder of this chapter (I will return to this structure in section 2.6 when discussing the derivation of possessive noun phrases with a lexical possessor in Arabic and Finnish).

In the preceding discussion we have presented and reviewed the syntax of possessive noun phrases with a lexical possessor; the so-called Construct State (CS). As mentioned above, the CS in Arabic and Hebrew has been studied extensively (see, e.g. Aoun 1978, 1981; Harning 1980; Borer 1984, 1988, 1996, 1999; Fassi Fehri 1987, 1988, 1993, 1999, 2012; Aboudi 1985; Ritter 1987, 1988, 1991, 1992, 1993, 1995; Mohammad 1988, 1999; Ouhalla 1988, 1991, 2009, 2011; Hazout 1990; Siloni 1991, 1996, 1997, 2001; Duffield 1995; Longobardi 1996a;

¹⁶ It is worth mentioning that CSs have been reanalysed as DPs involving successive XP movement (see Cinque 2000, 2005; Sichel 2002, 2003; Shlonsky 2004, 2012 and the references cited there). See also Pereltsvaig (2006) and Shlonsky (2006) for arguments against and in favour of N-raising vs. XP-raising, i.e. ‘roll-up’ or ‘snowballing’ movement in the Semitic DP.

Boucherit 1997; Shlonsky 1997, 2004, 2012; Stepanov 1997; Benmamoun 2000, 2003; Brustad 2000; Heller 2002 ; Sichel 2002; Kremers 2003; Ryding 2005; Hoyt 2008; Watson 2009; Ouwayda 2010; Benmamoun *et al.* 2013; Al-Shaer 2014; and Choueiri 2014). This list is not exhaustive. Given the fact that CS has attracted a lot of attention in the literature, and is hence well-studied, I focus below on a lesser-investigated aspect of synthetic possession – that is, possessive suffixes, which are also referred to as ‘pronominal possessors’. This type of ‘pronominal’ possession, as opposed to ‘nominal’ possession, has received remarkably little attention in the Semitic literature. To the best of my knowledge, there are only two main works which have thoroughly investigated pronominal possession and its properties: Fassi Fehri (1993) and Shlonsky (1997) (the two approaches will be discussed in section 2.4).¹⁷

Below we concentrate on the syntax of possessive suffixes, the so-called pronominal possessors. Let us first set the stage with a brief description of such suffixes in (Najdi) Arabic.

2.3 Possessive suffixes: setting the stage

In the previous section, it has been shown that possession in (Najdi) Arabic is formed by CS. CS is often called in the literature as ‘synthetic possession’ given that there is no separate word expressing the *of*-genitive and because no element can intervene between the two members of CS (18a); hence they are treated as one ‘lexical item’ or ‘prosodic unit’ (see, e.g. Benmamoun 2000). The motivation for referring to CS as ‘synthetic’ possession is even more obvious in the second type of synthetic possession – that is through the use of a possessive suffix, as in (18b).

- (18) a. *kitaab Saara*
book Sarah
‘Sarah’s book’
- b. *kitaab-ha*
book-her
‘Her book’

In (18b), the possessive suffix *-ha* ‘her’ is attached to the possessum *kitaab* ‘book’, forming the possessive construction *kitaab-ha* ‘her book’. Najdi Arabic, like other Arabic dialects, makes

¹⁷ In the pertinent literature on possessive noun phrases, one comes across side remarks such as those by Plunkett (1996: 95-96), Benmamoun (2000: 142) and Choueiri (2006: 581). There is also Ahmed’s (2015) study which extensively investigates the pronominal system in Standard Arabic but only in the verbal domain (see note 22 regarding this work).

use of such possessive suffixes to express possession synthetically. Table 2.1 provides a complete list of possessive suffixes in (Najdi) Arabic, with an example for each.¹⁸

Table 2.1 Possessive suffixes in (Najdi) Arabic

Possessive suffix	φ-features	Example
-i	1SG	kitaab-i 'my book'
-ik	2SG	kitaab-ik 'your book'
-ah	3SG.M	kitaab-ah 'his book'
-ha	3SG.F	kitaab-ha 'her book'
-na	1PL	kitaab-na 'our book'
-kum	2PL.M	kitaab-kum 'your book'
-kin	2PL.F	kitaab-kin 'your book'
-hum	3PL.M	kitaab-hum 'their book'
-hin	3PL.F	kitaab-hin 'their book'

The status of suffixes like *-ah* 'his', *-ha* 'her' (or → *ʔad^δ-d^δamiir ʔal-muttas^δil* 'lit. the attached pronoun', as traditional Arab grammarians refer to it) is unclear and still a controversial issue in the syntax of Semitic. Such lack of clarity is reflected in the terminology used in the literature to refer to such forms (attached to the possessum and other lexical heads), which is not very systematic. For instance, Fassi Fehri (1993) follows the above tradition and calls such pronominal elements as 'incorporated pronouns' or 'suffixed pronouns'. Shlonsky (1997), on the other hand, refers to them as 'clitics', or 'enclitics', pointing out that they are pure agreement morphemes, as will be discussed in the next section.

To complete this basic descriptive background, it should be noted that a possessive suffix can be used with all types of possessed nouns. Consider the following examples.

- (19) a. *kitaab-i*
 book-my
 'My book'

¹⁸ It should be pointed out that Najdi Arabic is not different from Standard Arabic or other dialects of the area as regards the syntax of pronominal possessive suffixes. There is a marginal difference, however, between Standard Arabic on the one hand and Najdi Arabic, as well as other varieties of Arabic, on the other hand, when it comes to the 3rd person singular masculine form which is *-hu* in the former while it is *-ah/ -uh* in the latter.

- b. kalb-ah
dog-his
'His dog'
- c. ridʒl-i
leg-my
'My leg'
- d. ʕamm-ha
uncle-her
'Her uncle'
- e. fikrat-na
idea-our
'Our idea'
- f. sʕadiig-i
friend-my
'My friend'

As shown in these examples, the possessive suffix can attach to various types of possessums, including alienable possession (19a-b), inalienable possession (19c-d), abstract notions (19e), social relations (19f), etc. Recall that this is also true of CS, as we have already seen in the previous section, where it expresses many different genitive relations (cf. (1) above). Like the CSs, the definite article *ʔal* cannot be spelled-out if the head noun carries a possessive suffix. Compare the following constructions.

- (20) a. kitaab-ha
book-her
'Her book'
- b. *al-kitaab-ha
DEF-book-her
Intended: 'her book'

Assuming that the definite article *ʔal* is a definiteness feature and that the suffix *-ha* on the noun in (20a) also carries a definiteness feature, the ill-formedness of (20b) follows if we assume that a lexical item cannot be doubly marked for the same feature (Marantz 1988).

Evidence for the assumption that the DP formed by noun + possessive suffix is definite comes from the obligatory use of the definite article *ʔal* with any accompanying adjective, as in (21).

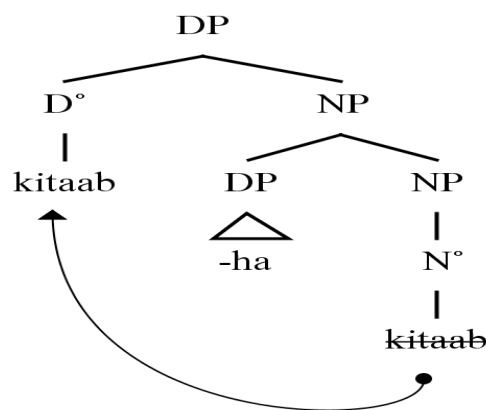
- (21) *kitaab-ha* **(al)-dzadiid*
 book-her DEF-new
 ‘Her new book’

The use of the definite article *ʔal* with the adjective *dzadiid* ‘new’ in such possessive constructions strongly suggests that the given DP *kitaab-ha* ‘her book’ is definite rather than indefinite. Arabic thus appears to forbid the co-occurrence of possessive noun phrases with a possessive suffix and the definite article, as is the case in English (**the her book*).¹⁹

Up until now, we have seen a brief description of possessive noun phrases with a pronominal possessor in (Najdi) Arabic. The question which then arises is how to derive this type of synthetic possession. Some authors, including Plunkett (1996), have adopted the idea that the structure of possessive noun phrases with a pronominal possessor is parallel to that of CS, suggesting, thus, that a pronominal possessor occupies the position that is occupied by a lexical possessor in the CS. According to this line of reasoning, the schematic representation of the (Najdi) Arabic example in (22) would be as in (23).

- (22) *kitaab-ha*
 book-her
 ‘Her book’

- (23)



¹⁹ It should be noted that this is not universally the case, as some languages permit (or even demand) the use of a possessive suffix with the definite article (cf. (i)). For discussion of this issue see, among others, Cardinaletti (1998), Haspelmath (1999), Longobardi (2001), Alexiadou *et al.* (2007) for Italian, Old Spanish, Greek and Paduan; Karimi (2007) for Kurdish; Holmberg and Odden (2004, 2008) for Hawrami.

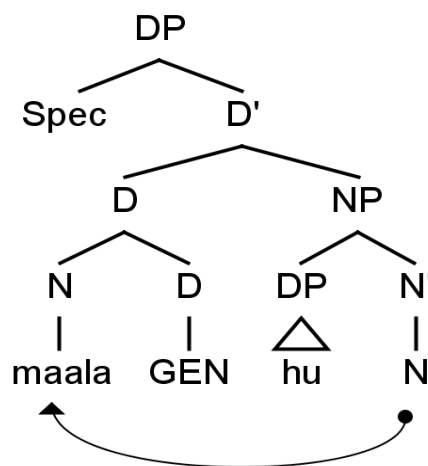
(i) a. *la sua macchina* b. *il mio libro* (Italian)
 the his car the my book (data from Alexiadou *et al.* 2007: 553, 566)

This structure shows that the possessum *kitaab* ‘book’ is merged under the N° node. The pronominal possessor *-ha* ‘her’ is base-generated as a DP in the thematic specifier position of the NP (cf. Jamary 1993; Plunkett 1996; Choueiri 2006). Afterwards, the head N° *kitaab* undergoes movement to the head D° . The noun raising leaves no available place for the definite article *ʔal* to occupy, resulting in the ban on the latter to appear in possessive constructions with pronominal possessors. As a direct consequence of the head noun N° moving up to the D° , the linear order between the possessum and the pronominal possessor is switched around as compared to the point where the two elements enter the derivation of the relevant structure.

The structure in (23) is the same as Plunkett’s (1996) analysis of what she refers to as ‘possessive pronominal’ in MSA. Following Fassi Fehri’s (1987) analysis of CSs, Plunkett (1996: 95) points out that ‘possessive constructions containing pronominals have a parallel structure to other possessive constructions.’ In Fassi Fehri’s (1987) work, CSs are derived by raising of the head noun N° to D° . Fassi Fehri argues that, just as V° raises in IP, N° must raise in DP in order for genitive Case to be assigned to the possessor, since the Case marker in the D° position is unable to assign Case except when supported by a lexical head (Plunkett 1996: 95). Assuming that the above basics of Fassi Fehri’s (1987) analysis are on the right track, Plunkett suggests that they can be extended to Arabic pronominal possessives. Specifically, she provides the structure in (25) for the Standard Arabic possessive construction in (24) (adapted from Plunkett 1996: 95).

- (24) *Maal-a-hu* (MSA)
 Money-ACC-his
 ‘His money’

(25)



This is how Plunkett (1996) and others derive pronominal possessors to receive a uniform analysis of CSs with lexical possessors. However, this is actually a simplification. The picture is more complicated than the simple idea that the structures in (23) and (25) suggests. This is so because there are other works which have thoroughly investigated the pronominal system in Semitic, arguing for two competing analyses: the pronominal incorporation analysis (Fassi Fehri 1993) and the inflectional agreement analysis (Shlonsky 1997). Given that any adequate consideration of (possessive) pronominal suffixes should consider both types of analyses, I discuss them in detail in what follows. As will be demonstrated, Shlonsky's (1997) agreement approach makes the right prediction for Najdi Arabic.

The following section 2.4, thus, presents two previous works on pronominal suffixes: in 2.4.1 I will first discuss Fassi Fehri's (1993) view of such bound forms as incorporated pronouns. In 2.4.2 I will then give Shlonsky's (1997) view of such forms as agreement suffixes. A full description of such suffixes is found in Shlonsky (1997: 177-181) and is summarized here in 2.4.2.1. This is then followed in 2.4.2.2 by Shlonsky's criticism of the incorporation analysis. A syntactic analysis of these suffixes is also provided by Shlonsky (1997) and summarized here in 2.4.2.3. What is lacking, however, is twofold: (i) the empirical evidence that supports Shlonsky's (1997) agreement approach, given in 2.5.1 and (ii) a theoretically motivated analysis of agreement in light of recent developments in the syntactic theory (Chomsky 2000, 2001), given in 2.5.2 and 2.6.

2.4 Previous analyses of Semitic clitics: a literature review

2.4.1 Fassi Fehri's (1993) incorporation analysis

This section presents an overview of the incorporation analysis which is one of the earliest attempts at providing a full account of pronominal suffixes in Semitic.²⁰ While discussing free and bound forms in Modern Standard Arabic, Fassi Fehri (1993: Ch.3) points out that such forms, which bear ϕ -features, pose a problem for syntactic theory. This is because these forms are morphologically ambiguous between pronouns and inflections (Fassi Fehri 1993: 97, 116-117, 121). Fassi Fehri also notes that such pronominal elements have been analysed in the literature as inflectional agreement markers (see, e.g. Chomsky 1982, Rizzi 1982 for Italian, and McCloskey and Hale 1984 for Irish) and as bound pronouns (see, e.g. Anderson 1982 for Breton, Hale 1987 for Irish, and Baker and Hale 1988 for a number of languages). Fassi Fehri (1993: 96-103) takes the latter position and argues that the relevant forms in Arabic are best

²⁰ There is an older work of Fassi Fehri than the one discussed here (viz. Fassi Fehri 1990), which discusses the incorporation analysis, too. Here I discuss Fassi Fehri (1993) only.

analysed as incorporated pronouns (i.e. actual DPs), rather than agreement inflections. Specifically, he argues that such bound forms exhibit ‘pronominal incorporation’, which in his words is ‘a process by which a (phonetically realized) bound pronoun is generated in an argument position at D-structure, and later incorporated into a governor at S-structure’ (1993: 96). This is so given their ‘argumental’ nature, as we will see later on. Afterwards, Fassi Fehri (1993), following traditional Arab grammarians, goes on to distinguish between free (independent) and bound forms, as exemplified in (27a-b) and (28a-d) from Fassi Fehri (1993: 98, 101).

- (27) a. *ʔanta marriid^s-un* (MSA)
 you sick-NOM
 ‘You are sick.’
- b. *huwa jaaʔ-a*
 he came-3SG.M
 ‘He came.’

Fassi Fehri points out that, in MSA and in examples like (27b), the free pronoun *huwa* ‘he’ can function as a true argument, where it is expressed with the presence of an agreement inflection on the verb *jaaʔ* ‘came’. Fassi Fehri takes this to be an instance of rich agreement, where the verb is specified for person, number and gender.

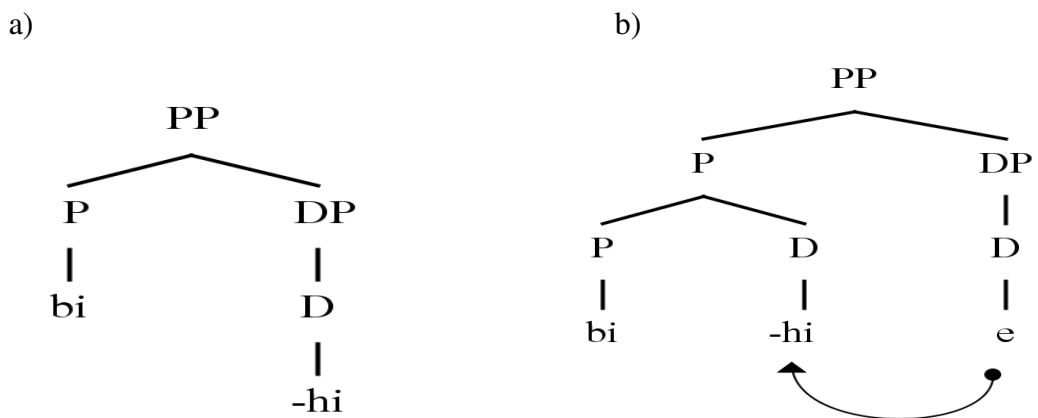
Leaving aside the discussion of free forms for the moment, Fassi Fehri observes that affixal/bound forms can attach to verbs, prepositions, nouns and adjectives, as illustrated in the following examples:

- (28) a. *intaqad-tu-hu* (MSA)
 criticized-I-him
 ‘I criticized him.’
- b. *iltaqay-tu bi-hi*
 met-I with-him
 ‘I met him.’
- c. *intaqad-tu muʔallif-a-hu*
 criticized-I author-ACC-his
 ‘I criticized his author.’

- d. Zayd-un ḥasan-u l-wajh-i wa ʔanta qabiīh-u-hu
 Zayd-NOM nice-NOM DEF-face-GEN and you ugly-NOM-it
 ‘Zayd has a nice face, and you have an ugly one.’

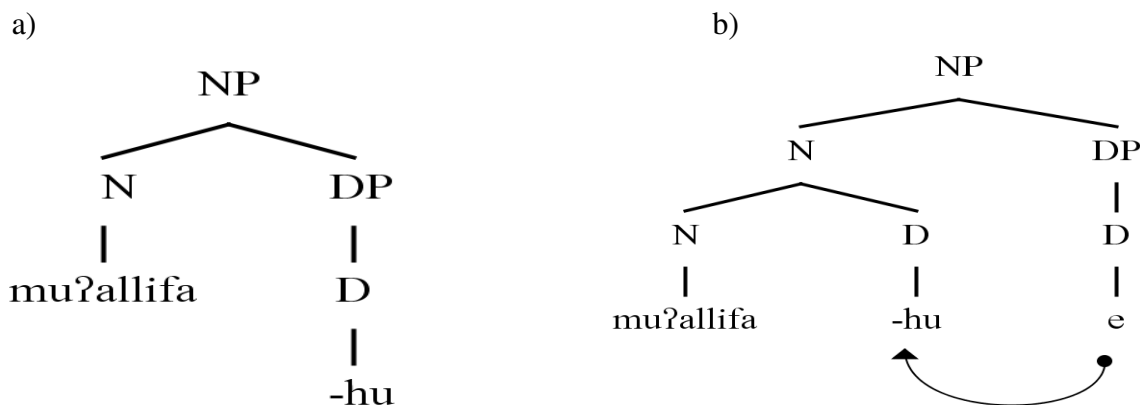
In (28a-d), we can see that suffixal endings can show up on the verb *intaqad* ‘criticized’, the preposition *bi* ‘with’, the noun *muʔallif* ‘author’, and on the adjective *qabiīh* ‘ugly’. As for syntactic derivation, Fassi Fehri (1993: 102) proposes that these pronominal suffixes are ‘bound pronouns’, which are base-generated in argument positions. Specifically, he suggests, following Abney (1987) and Hale (1988), that they occupy the D⁰ head of a DP and then must undergo head adjunction to incorporate into their lexical hosts in syntax proper. Such movement of pronominals is assumed to be as a result of their need to be morphologically supported, drawing on Lasnik’s (1981) filter, which prohibits unsupported bound forms. Consider the following basic structures for the construction *bi-hi* ‘with it’, in (28b), which Fassi Fehri offers as an illustration of the incorporation analysis (from Fassi Fehri 1993: 102, his diagram (15)).

(29) The structure of the prepositional phrase (PP) *bi-hi* ‘with it’



The tree in (29a) represents Fassi Fehri’s (1993) suggested analysis for the prepositional phrase *bi-hi*, ‘with it’, before any movement of the pronominal suffix *-hi*, ‘it’, takes place; whereas the second tree shows the structure after incorporation of the D⁰ element into P⁰. Based on Fassi Fehri’s proposed analysis of the preposition phrase *bi-hi*, ‘with it’, the structure of *muʔallifa-hu* ‘his author’ (28c) would also be as follows:

(30) The structure of the possessive noun phrase (NP) *muʔallifa-hu* ‘his author’



The structure of *muʔallifa-hu*, ‘his author’, is derived by moving the possessive pronoun *-hu* ‘his’ to adjoin to its lexical host *muʔallifa* ‘author’, as shown in (30b). Under the incorporation analysis, it can be noticed that although the pronominal suffixes in diagrams (29b and 30b) move upwards (viz. leftwards), these suffixes are incorporated to the right of their lexical hosts, and not to the left, to give the surface word order.

Fassi Fehri then points out that the incorporation analysis straightforwardly explains the complementary distribution between the ‘bound pronoun’ and the DP argument, as shown by the following ill-formed sentence (from Fassi Fehri 1993: 102):

- (31) **dʕarab-tu-hu ʔal-walad-a*
 beat-I-him DEF-boy-ACC
 Literally: ‘I beat him the boy.’

The ungrammaticality of the sentence in (31) follows from the complementarity between *-hu*, ‘him’, and the DP *ʔalwalad*, ‘the boy’, which would be competing for the same position. As Fassi Fehri (1993: 102) puts it: ‘This construction cannot be generated if the bound pronoun here were to originate as a head of a DP. This would amount to the generation of two DPs in the same argument position.’

Following this, Fassi Fehri (1993: 107-108) proceeds to suggest that the incorporation analysis can be carried over to the forms appearing on verbs, assuming that the morphemes on verbs can naturally be seen as bound pronouns. To illustrate, let us consider the following sentences (from Fassi Fehri 1993: 107, 108).

- (32) a. *jaaʔ-uu*
 come.PERF-3.PL.M
 ‘They (M.) came.’
- b. *jiʔ-na*
 come.PERF-3PL.F
 ‘They (F.) came.’

Recall that, in (27b), Fassi Fehri has treated the morpheme which appears on the verb in SV order as a realization of rich agreement with the subject pronoun. In VS order, however, Fassi Fehri (1993) hypothesizes that the suffixes *-uu* and *-na* (32a-b) should be viewed as instances of bound pronouns attached to the verb rather than as agreement inflections.

- (33) a. * *jiʔ-na* *ʔal-banaat-u*
 come.PERF-3PL.F DEF-girls-NOM
 Literally: ‘They came the girls.’
- b. * *jiʔ-na* *hunna*
 come.PERF-3PL.F they.F
 Literally: ‘They they came.’

According to Fassi Fehri (1993: 108), the main reason for such treatment is that they are in complementary distribution with the postverbal DP arguments, be it pronominal or lexical subjects, which are assumed to be generated in the same argument positions; hence the sentences in (33a-b) are ill. Put differently, the ungrammaticality of these constructions, as opposed to the well-formedness of the ones in (32a-b), is due to the latter ungrammatical sentences having two arguments (i.e. subjects): the bound pronoun *-na* showing up on the verb and the syntactic DP.²¹

The analysis in Fassi Fehri (1993), which is couched in the framework of Government and Binding theory (Chomsky 1981, 1982), has been called into question by some subsequent works, most notably by Shlonsky (1997).²² This work has shown that the incorporation analysis

²¹ As Fassi Fehri (1993: Ch.3) points out, this would lead to a violation of the Theta Criterion proposed by Chomsky (1981), which states that each argument is assigned one and only one theta role, and each theta role is assigned to one and only one argument.

²² The other work that I am aware of is Ahmed (2015), who provides a criticism of Fassi Fehri’s approach to pronominal elements. In this paper, Ahmed argues extensively that Fassi Fehri’s (1993) incorporation analysis is not on the right track. Specifically, he discusses a number of diagnostics that traditional Arab grammarians provide, showing that these suffixes in Standard Arabic are best treated as agreement markers (i.e. a realization of subject-verb inflectional agreement) and not incorporated pronouns. He ultimately adopts a Distributed Morphology (DM)

suffers from several problems and that pronominal suffixes in Semitic should instead be analysed as pure agreement suffixes, as we will see in the next subsection.

2.4.2 Shlonsky's (1997) agreement analysis

In the previous section 2.4.1, we have seen that Fassi Fehri (1993) has argued that pronominal suffixes are bound pronouns which originate in argument positions (e.g. in Spec, NP in the nominal domain parallel to subject position in the clausal domain). Before discussing Shlonsky's analysis, let us first consider the following statement from Fassi Fehri (1993):

A natural assumption is that the bound forms are pronouns in these contexts. The alternative - that is, taking them as agreement markers - has no motivation, whether theoretical or empirical, as far as I can see. From a 'concrete' perspective, there is no reason to think that Arabic instantiates morphological agreement with nouns, prepositions, or even verbal objects. (p. 102-103)

In this section, we will see that this statement seems to hold true for now (at least for Modern Standard Arabic).²³ However, the idea of agreement has been implemented differently in Semitic (as will be discussed in 2.4.2.3). In what follows, I first present Shlonsky's description of Semitic clitics, which is then followed in 2.4.2.2 by his criticism of the incorporation analysis.

2.4.2.1 Shlonsky's (1997) agreement analysis: description of Semitic clitics

Investigating the pronominal system in Arabic and Hebrew, and building on previous research (Shlonsky 1994), Shlonsky (1997) points out that pronominal suffixes have been analysed in early work on generative grammar as either incorporated pronouns or inflectional agreement markers. Shlonsky (1997) espouses the latter view. Specifically, he argues that an inflectional suffix is housed in a functional head (viz. Agr^o) that agrees with a *pro*, and to which a lower lexical head adjoins to in overt syntax (as discussed below in section 2.4.2.3). Let us now elaborate on the properties of Semitic clitics in more detail. In light of data from Palestinian Arabic and Hebrew, Shlonsky (1997: 177-179) begins the discussion of the so-called Semitic clitics by noting that they have three main characteristics: (1) they can attach to all lexical categories, as well as some functional categories, (2) they are always enclitics attaching to the right of their hosts and (3) they bear no Case distinctions, as the following sentences in (34a-d) and the table in (35) demonstrate (the Semitic clitic appears in boldface):

framework (Halle and Marantz 1993; Noyer 1997), arguing that it accounts for such suffixes in Standard Arabic. Here I will not rehearse his criticisms of the incorporation analysis for reasons of space. The interested reader is referred to this work (and the references therein) for more discussion and criticism of Fassi Fehri's approach.

²³ But see the discussion of (47).

- (34) a. kaan b-ixayyt^s-**ha** (Palestinian Arabic)
 Be.PAST.3SG.M 3SG.M-IMPERF.sew-3SG.F
 ‘He was sewing it.’
- b. ʕaʕaan-**ha** b-itxayyt^s l-fistʕyaan (Palestinian Arabic)
 because-3SG.F 3SG.F-IMPERF.sew DEF-dress
 ‘Because she sews the dress ...’
- c. tmunot-**eha** tluyot ʕal ha-kir (Hebrew)
 picture-3SG.F hang.PASSIVE.BENONI.SG.F on DEF-wall
 ‘Her pictures hang on the wall.’
- d. xaʕavnu ʕal-**eha** (Hebrew)
 think.PAST.1PL about-3SG.F
 ‘We thought about her.’

(35) Paradigm of Semitic clitics in Palestinian Arabic (adapted from Shlonsky 1997: 179)

a.	Verb + Object:	fhimt 1-mʕalme. understand.PERF.ISG DEF-teacher.F ‘I understood the teacher.’	fhimt- ha . understood-her ‘(I) understood her.’
b.	Noun + Possessor:	beet 1-mʕalme house DEF-teacher .F ‘the teacher’s house’	beet- ha house-her ‘her house’
c.	Preposition+object:	min 1-mʕalme from DEF-teacher.F ‘from the teacher’	min- ha from-her ‘from her’
d.	Complementizer + Subject:	ʔinnu 1-mʕalme that DEF-teacher.F ‘that the teacher...’	ʔin- ha that-she ‘that she...’
e.	Quantifier + DP:	kull 1-mʕalmaat all DEF-teachers.F ‘all the teachers’	kull- hin all-them ‘all of them’

The sentences in (34) and the paradigm in (35) clearly show that Semitic clitics appear on all lexical categories, on a verb (34a and 35a), a noun (34c and 35b), a preposition (34d and 35c), and on the functional category C° (34b and 35d) and Q° (35e). Shlonsky (1997: 177-179) points

out that the above-mentioned three points contrast sharply with Romance clitics as in (36a-c), given that in the latter: they do not appear on all the lexical items (and show up only on verbs); they can be enclitics (in imperative constructions 36c) or proclitics (in tensed verb 36a); and they manifest Case distinctions (as evidenced in the form of the Accusative clitic 36a; versus the Dative form in 36b).

- (36) a. Elle **l'**a cousu. (French)
 she it-has sewn
 'She has sewn it.'
- b. Elle **lui** donne un cadeau.
 she 3SG.DAT gives a present
 'She gives her/him a present.'
- c. Donne-**lui** un cadeau!
 give-3SG a present
 'Give him/her a present!'

Shlonsky (1997: 178) then formulates the following generalization in (37), pointing out that it holds true for Semitic clitics.

(37) Clitics are always attached to the closest c-commanding head.

In addition to the three defining properties alluded to above, Shlonsky goes on to discuss other properties of Semitic clitics, pointing out that a fourth property that distinguishes them from Romance languages such as French or Italian is that clitics in the former never cluster, as witnessed in the following sentences from Cairene Arabic (Shlonsky 1997: 180, citing Kenstowicz and Wahba 1980) (Shlonsky's gloss and translation):

- (38) a. il-mudarris fahhim id-dars li-1-bint.
 the-teacher understand(PERF-CAUS)-3MS the-lesson to-the-girl
 'The teacher explained the lesson to the girl.'
- b. il-mudarris fahhim 1-bint id-dars.
 the-teacher understand(PERF-CAUS).3MS the-girl the-lesson
- c. il-mudarris fahhim -u li-1-bint.
 the-teacher understand(PERF-CAUS).3MS -3MS to-the-girl

d.	il-mudarris	fahhim	-ha	id-dars.
	the-teacher	understand(PERF-CAUS).3MS	-3FS	the-lesson
e.	il-mudarris	fahhim	-u	laa- ha .
	the-teacher	understand(PERF-CAUS).3MS	-3MS	to-3FS
f.	*il-mudarris	fahhim	-ha	-u / -u -ha
	the-teacher	understand(PERF-CAUS).3MS	-3SG.F	-3SG.M / 3SG.M -3SG.F

According to Shlonsky, the non-clustering property of Semitic clitics is evident in the double object constructions in (38), which show that clitic clustering is not allowed in Cairene Arabic, as well as in other varieties of Arabic. While the constructions in (38a-b) demonstrate the double object alternation and the constructions in (38c-d) show that they are possible by means of the pronominalization of either objects (where only one clitic can attach to the verb *fahhim*), the construction in (38f), crucially, illustrates that any attempt to attach both clitics to the verb, in either order, is not possible. As Shlonsky points out, the only way is to use the prepositional dative marker *li* ‘to, for’, as in (38e), which allows each clitic to have its own host.²⁴ The final contrast between Semitic and Romance clitics that Shlonsky identifies is that there is no resemblance between clitics and determiners in the former, a matter which is correct for the latter. For instance, while *la* is the (feminine) definite article in French and also the 3rd person feminine (Accusative) clitic (see, for example, Cardinaletti 1994), this is not the case in Semitic as there is no such similarity.

To summarize, the properties of Semitic clitics are given in (39), (Shlonsky 1997: 180-181).

(39) Properties of Semitic clitics:

- a. They occur on the right of their host, never on the left.
- b. They are always attached to the closest c-commanding head.
- c. They appear on all lexical categories and on certain functional ones.
- d. They do not manifest case distinctions.
- e. They never cluster - that is, there is a single clitic per host.
- f. They bear no morphological resemblance to nominal determiners.

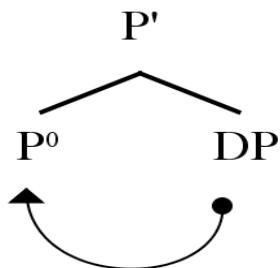
2.4.2.2 Shlonsky’s (1997) criticism of the incorporation analysis

Following this, Shlonsky (1997) goes on to discuss the incorporation analysis of Semitic clitics, pointing out that this view has been advanced in the Semitic literature by Broselow (1976), who

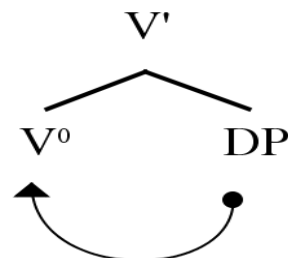
²⁴ For clitic clustering in Romance, see, for instance, Cardinaletti and Shlonsky (2004) and Cardinaletti (2007).

claims that clitics are right-adjoined to their hosts. He also points out that Fassi Fehri (1993) adopts a similar idea, along the lines of Baker's (1988) theory of incorporation, as we have seen in section (2.4.1). This is also shown schematically as follows (Shlonsky 1997: 181):

(40) a.



b.



Shlonsky points out that, although the above analysis is compatible with the 'locality of cliticization' where each clitic follows its host, it suffers from some problems. Firstly, Shlonsky observes that this line of analysis that treats clitics as incorporated pronouns to their governors, does not take place in Romance clitics, which are also assumed to be X° heads (cf. Sportiche 1990, 1996; Franco 1993; Cardinaletti 1998 and Roberts 2010 for discussion). Another shortcoming which undermines such an analysis is that it does not account for the question of why Semitic clitics appear always to the right and never to the left of their hosts. Shlonsky starts with the possibility that this may be related to some parametric variation (à la Kayne 1989, 1994) between Semitic and Romance that could render the directionality of head-to-head adjunction in the former to the right and in the latter to the left. He then points out that to the extent that one can find other types of left adjunction in Semitic, this possibility is ruled out, as shown by the following copula inversion constructions.

(41) a. Dani haya tofer smalot (Hebrew)

Dani be.PAST.3SG.M sew(BENONI).3SG.M²⁵ dresses

'Dani was sewing dresses.'

b. Dani tofer haya smalot

Dani sew(BENONI).SG.M be.PAST.3SG.M dresses

'Dani was sewing dresses.'

²⁵ Shlonsky points out that there are three verbal forms in Hebrew: the prefixal conjugation (the future tense), suffixal conjugation (the past tense) and a third verbal form called the *Benoni* 'intermediate', which is employed for the expression of the present tense (Shlonsky 1997: 11). He also points out that the *Benoni* in Hebrew can incorporate to an auxiliary and has been taken as evidence for participle raising to T° (see Shlonsky 1997: 11-12, 22-23, 26-39 for more detail).

Shlonsky (1997) points out that the participle in (41) can show up to the left of the auxiliary and, following Borer (1995), he also points out that when it undergoes movement it incorporates into the auxiliary, forming one single unit. Crucially, this incorporation is to the left of the auxiliary and not to the right. Relating this line of argument to Semitic clitics, Shlonsky (1997: 182) points out that: ‘if one maintains that clitics are incorporated to their heads, then one must perforce complicate the description of Semitic incorporation by adding an exception clause affecting the direction of the attachment of clitics (or conversely, of inverted participles)’.

Another problem with the incorporation analysis which Shlonsky points to is what Broselow (1976) himself observes regarding the obligatory encliticization of postverbal direct objects onto the verb, which does not take place in postverbal subjects. Let us consider the following sentences which Shlonsky (1997: 182) provides to explain this issue in more detail.

- (42) a. *bə-yaldut-o* *raxav* *Dani* *ʕal* *gamal*
 in-youth-3SG.M ride.PAST.3SG.M Dani on camel
 ‘In his youth, Dani rode a camel.’
- b. *bə-yaldut-o* *raxav* *hu* *ʕal* *gamal*
 in-youth-3SG.M ride.PAST.3SG.M he on camel
 ‘In his youth, he rode a camel.’
- c. **bə-yaldut-o* *raxav* *-o* *ʕal* *gamal*
 in-youth-3SG.M ride.PAST.3SG.M 3SG.M on camel
 Intended: ‘In his youth, he rode a camel.’

The sentences above illustrate subject-verb inversion in Hebrew. While the sentences (42a-b) show that the verb *raxav*, ‘rode’, can be followed by its subject, the lexical *Dani* (42a) or the pronominal *hu* ‘he’ (42b), the ungrammatical sentence in (42c) shows the inability of the postverbal pronoun *-o* to encliticize onto the verb *raxav*. Shlonsky points out that one might entertain the idea that the above example is ill-formed as a result of what he refers to as “structural reasons” - that is, a clitic must be a sister to its host (as schematized in diagrams 40a-b above) and a subject can never be a sister to a verb. However, Shlonsky points out that this line of explanation is at odds with the observation that Semitic clitics can appear on deverbal nouns (or *masʕdar* in Arabic), as in (43a-b) from Hebrew:²⁶

²⁶ For discussion of deverbal nouns see Fassi Fehri (1993); Hazout (1995); Alexiadou and Stavrou (1998); Borer (2003, 2005), among others.

(43) a. ktivat Dan ʔet ha-maʔamar hirgiza ʔet Miriam
 writing Dan ACC DEF-article anger.PAST.3SG.F ACC Miriam
 ‘Dan’s writing of the article angered Miriam.’

b. ktivat -o ʔet ha-maʔamar hirgiza ʔet Miriam
 writing 3SG.M ACC DEF-article anger.PAST.3SG.F ACC Miriam
 ‘His writing of the article angered Miriam.’

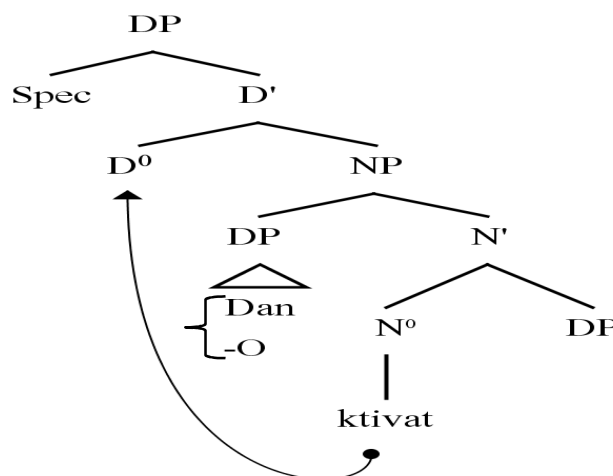
Note that the above Hebrew examples can be completely replicated in (Najdi) Arabic, as in (44):

(44) a. kitaabat Muḥammad li- l-maqaal zaʕalat Saara
 writing Muhammad of DEF-article angered.3SG.F Sarah
 ‘Muhammad’s writing of the article angered Sarah.’

b. kitaabat -ah li- l-maqaal zaʕalat Saara
 writing 3SG.M of DEF-article angered.3SG.F Sarah
 ‘His writing of the article angered Sarah.’

Of crucial importance, Shlonsky points out that the constituent structure in (43) strongly favours the movement of the head noun from N° to D° , which takes place in the syntax proper. This movement achieves the correct linear word by raising the head noun *ktivat* ‘writing’ to D° above the possessor *Dan* or the enclitic pronoun *-o*, which is here the agent of writing, and positioned in Spec, NP. This is illustrated schematically in the following tree (Shlonsky 1997: 183; based on his (14)).

(45)



Notice here that the possessors, the lexical DP *Dan* and the clitic possessive pronoun *-o*, are not sisters to their host (viz. the derived nominal *ktivat*; ‘the possessum’) but rather c-command it underlyingly; before movement takes place. This is further piece of evidence that Shlonsky provides for the argument that clitics in Semitic are not merged locally next to their hosts but rather higher in the structure. Based on all this, Shlonsky argues that ‘there are no clitics in Semitic, that is, no pronominal arguments whose heads are raised and incorporated to a host’ (1997: 183). Following this, he goes on to reject the view that subject agreement are instances of pronominal incorporation (à la Fassi Fehri 1993), pointing out that they are cases of inflectional agreement.²⁷ He arrives at this conclusion based on a number of syntactic and morphological considerations of data from Palestinian Arabic, Modern Standard Arabic, Hebrew and Berber (see Shlonsky 1997: 183-189 for discussion). He then proceeds to develop a suggested proposal for pronominal clitics, or the so-called Semitic clitics, arguing that they are pure agreement markers, as we will see next.

2.4.2.3 Shlonsky’s (1997) inflectional agreement analysis: the proposal

The main assumptions of Shlonsky’s (1997) proposal are summarised as follows. Firstly, Shlonsky assumes that Semitic clitics are X° heads which are housed in Agr° projections, which dominate the lower lexical projections: namely, VP, NP and PP. Afterwards, a lexical head raises out of the Agr° ’s complement and adjoins to it in the overt syntax. This means that it is the host (whether V, N or P) that incorporates into the clitic in the Agr° head, and not the other way around. This is crucially different from the incorporation analysis in which it is the clitic that raises and incorporates into its host. Shlonsky also assumes that enclisis in Semitic is a consequence of a left adjunction process which strictly yields the surface linear word order as: [incorporated host > Agr°]. He assumes further that this process is imposed by the Head Movement Constraint (see Travis 1984), which involves a syntactic movement that renders Semitic clitics invariably suffixal.²⁸ Crucially, Shlonsky assumes that the clitic in Agr° agrees with a DP, or ‘a referential pro’, which bears the appropriate ϕ -features (i.e. person, number, gender) and agrees with the Agr° in a spec-head configuration, after ‘raising from some thematic position’ in the words of Shlonsky (1997: 191).²⁹ This is shown schematically in (46), where

²⁷ Recall that Fassi Fehri (1993) has argued that subject agreement can be viewed as instances of bound pronouns which feature pronominal incorporation resulting in their occurrence on verbs, as we have seen in the section 2.4.1.

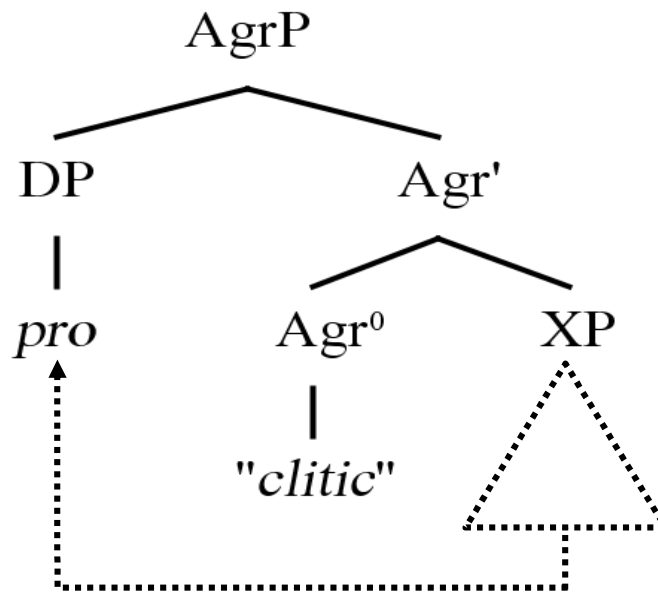
²⁸ The Head Movement Constraint (HMC) essentially states that head movement may not cross over one head and adjoin to a higher one, as shown in (i):

(i) An X° may only move into the Y° which properly governs it. (Travis 1984: 132)

²⁹ For discussion of the syntax of *pro* see, among others, Rizzi (1982, 1986); Borer (1986); Huang (1984, 1989); Kato (1999); Holmberg (2005), Roberts and Holmberg (2010); Camacho (2011).

X° can be any clitic-bearing host (i.e. N, P or V) and XP is the lexical projection (from Shlonsky 1997: 191, his (29)).

(46)



According to Shlonsky's (1997) analysis, whenever there is a clitic in Agr° , a *pro* raises out of the XP domain and moves to Spec, AgrP. In the context of the analysis outlined in (46), the clitic in the Agr head is identified and licensed by the DP in Spec, AgrP, namely, the *pro*, under Spec-head agreement. Shlonsky assumes that agreement takes place in AgrP, pointing out that 'AgrPs have one role to play: they enable feature checking to be carried out in a Spec-head configuration' (1997: 191). As a result, the clitic retrieves its content from the silent pronoun in its specifier. Following this, the lexical head X° raises and left-adjoins to Agr° , deriving the surface order as X° =host +clitic. Put another way, this operation between Agr° and its specifier results in suffixes on it, which show up on the lexical head (nouns, prepositions, etc.) when it undergoes movement (or head-to-head adjunction) to the left of Agr° . For Shlonsky, this means that these suffixal endings are really agreement markers.

2.5 Discussion of Shlonsky's (1997) inflectional agreement analysis

This section aims to shed light on some advantages of Shlonsky's analysis and discuss his proposal from Najdi Arabic viewpoint. As I will demonstrate, Shlonsky's agreement analysis makes the right prediction for Najdi Arabic possessive pronominal constructions, as will be discussed shortly in light of compelling data from this Arabic variety.

2.5.1 Advantages of Shlonsky's (1997) analysis

Shlonsky's (1997) agreement analysis has a number of advantages over the incorporation analysis. Firstly, it elegantly accounts for why there are no Case distinctions on the clitics which occupy Agr° heads, given that they are of X° categories and not XPs. As Shlonsky (1997: 191) puts it, 'this explains the absence of Case distinctions on these Agr° heads. One expects Case distinctions to show up on nominals—on XPs—and Standard Arabic indeed manifests a robust system of morphological Case, but on DPs, not on clitics.' Thus, the absence of Case distinctions on pronominal suffixes follows naturally from this important theoretical assumption.³⁰ Secondly, such an analysis offers an interesting account for the question of why Semitic clitics are always enclitics, given that it involves left adjunction of the lexical head, incorporating it into the functional head, Agr° , as discussed above. Another advantage of the inflectional agreement analysis is that it explains why pronominal suffixes (or Semitic clitics) appear on all lexical elements, as alluded to above. An additional advantage of Shlonsky's analysis is that it is compatible with the Linear Correspondence Axiom (LCA) of Kayne (1994), given that movement under this analysis undergoes leftward movement, that is, always left-adjoints to the functional head Agr° and never to its right.

Importantly, we have seen in section 2.4 that there are two competing analyses of pronominal suffixes in Semitic: the pronominal incorporation and the inflectional agreement analysis. While Fassi Fehri (1993) argues for the idea that they are incorporated pronouns, i.e. actual DPs (based on data from Modern Standard Arabic), Shlonsky (1997) argues extensively that they are pure agreement markers, agreeing with a silent *pro* (depending on data from Semitic languages: Palestinian Arabic, Hebrew, Modern Standard Arabic, and Cairene Arabic; and non-Semitic languages including Berber and French). One reason that may lead to this discrepancy between the two analyses could be related to the idea that there has been a lack of direct empirical evidence which supports either views put forth by Fassi Fehri and Shlonsky. This chapter aims to fill this gap by adding crucial data from Najdi Arabic to the database, as we will see momentarily. Under the inflectional agreement approach, we have seen in subsection 2.4.2.3 that Shlonsky (1997) predicts the existence of a (silent) *pro* possessor, which bears the relevant ϕ -features and the functional head Agr° agrees with it. This prediction is empirically borne out by emphatic constructions in NA, as shown by the following data in (47).

³⁰ Note that Shlonsky's assumption finds further support from Cardinaletti and Starke (1999) Roberts (2010a, b), who point out that clitics lack Case features.

- | | |
|--|---|
| <p>(47) a. <i>kitaab-i</i> <i>ana</i>
 book-1SG I.1SG
 ‘My book’ (lit., ‘my book I’)</p> | <p>e. <i>kitaab-ah</i> <i>huu</i>
 book-3SG.M he.3SG.M
 ‘His book’ (lit., ‘his book he’)</p> |
| <p>b. <i>kitaab-ha</i> <i>hii</i>
 book-3SG.F she.3SG.F
 ‘Her book’ (lit., ‘her book she’)</p> | <p>f. <i>kitaab-kum</i> <i>antum</i>
 book-2PL.M you.2PL.M
 ‘Your book’ (lit., ‘your book you’)</p> |
| <p>c. <i>kitaab-ik</i> <i>ant</i>
 book-2SG.M you.2SG.M
 ‘Your book’ (lit., ‘your book you’)</p> | <p>g. <i>kitaab-na</i> <i>hinna</i>
 book-1PL we.IPL
 ‘Our book’ (lit., ‘our book we’)</p> |
| <p>d. *<i>kitaab-ha</i> <i>huu</i>
 book-3SG.F he.3SG.M</p> | <p>h. *<i>kitaab-ha</i> <i>ana</i>
 book-3SG.F I.1SG</p> |

The constructions in (47) show that possessive pronominals can be expressed with emphatic constructions in Najdi Arabic.³¹ For example, in the emphatic possessive construction in (47a), the head noun *kitaab* ‘book’ is suffixed with the possessive suffix *-i* ‘my’ and appears with the overt freestanding pronoun *ana* ‘I’, which refers back to the possessive pronoun *-i* ‘my’, and is coindexed with it. Crucially, the ungrammaticality of (47d) and (47h) strongly suggests that the ϕ -features of the possessive suffix must not be different from those of the overt pronominal. The (Najdi) Arabic data in (47) thus provide crucial evidence, which unequivocally supports Shlonsky’s agreement approach to Semitic clitics.³² This is so because in (Najdi) Arabic the silent *pro*, i.e. the phonetically empty pronoun, can be spelled out in emphatic constructions via an overt pronominal, where the possessive suffix is in agreement with (I return to this point in section 2.6).

Apart from possessive pronominal constructions, there is another good reason to think that Shlonsky’s agreement analysis is on the right track. This pertains to the data in (33), reproduced below as (48), which according to Fassi Fehri (1993) are ungrammatical in MSA.

³¹ These constructions have an emphasis reading in case one wants to emphasize or express something explicitly, as in (ia), or in case there is a dispute as to who the ‘book’ in question belongs to, as in (ib).

<p>(i) a. <i>ħajaaat-i</i> <i>ana</i> (<i>muu ħajaaat-ik</i>) life-my I.1SG (not life-your) ‘(This/that is) my life (not yours!)’</p>	<p>b. <i>kitaab-i</i> <i>ana</i> (<i>muu kitaab-ik</i>) book-my I.1SG (not book-your) ‘(This is) my book (not yours!)’</p>
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³² In consultation with other native speakers of Arabic, it appears that these constructions are also found in other Arabic varieties. Ekhlas Mohsin (p.c.) and Raed Al-Janabi (p.c.) point out that the same phenomenon is found in Iraqi Arabic. Khansaa Martakush (p.c.) also informs me that this is true of Syrian Arabic. Bashayer Alotaibi (p.c.) confirms that in Kuwaiti Arabic, as well. It is in fact surprising that these constructions have gone unnoticed so far.

- (48) a. *jiʔ-na ʔal-banaat-u (MSA)
 come.PERF-3PL.F DEF-girls-Nom
 Literally: ‘They came the girls.’
- b. *jiʔ-na hunna
 come.PERF-3PL.F they.F
 Literally: ‘They they came.’

We have seen in subsection 2.4.1 that Fassi Fehri has argued that the constructions above are ill-formed given that ‘bound forms’ encoding ϕ -features serve as true arguments, and hence they cannot be expressed with the presence of other corresponding arguments (viz. the lexical subject *ʔalbanaat* ‘the girls’ and the subject pronoun *hunna* ‘they.F’). From the perspective of Najdi Arabic, these sentences are fully grammatical, however, as illustrated by the following data.

- (49) a. dzann al-banaat
 came.3PL.F DEF-girls
 ‘The girls came.’
- b. dzann hinn
 came.3PL.F they.F
 ‘They came.’
- c. dzaww ar-rdʒdʒaal
 came.3PL.M DEF-men
 ‘The men came.’

In the Najdi Arabic sentences above, we can see that the postverbal arguments, whether lexical or pronominal subjects, can co-occur with the verb. Thus, NA offers a completely different picture from Standard Arabic in this respect given that the ill-formed sentences in the latter can be perfectly formed in the former, as shown in (49a-c). Notice that the more orthodox view is that the suffixes on verbs are manifestations of subject-verb agreement, i.e. inflections showing up on the verb (and not incorporated pronouns), as extensively discussed in the literature on Arabic (see, e.g. Fassi Fehri 1988, 2012; Abd EI Moneim 1989; Mohammad 1988, 1989, 1990, 2000; Bahloul and Harbert 1993; Aoun *et al.* 1994; Shlonsky 1997; Benmamoun 2000; Harbert and Bahloul 2002; Soltan 2007, 2011; Aoun *et al.* 2010; and Al-Balushi 2011; Ouhalla 2013, to mention just a few).

Having established this, I assume below that the basics of Shlonsky's (1997) analysis are correct and can be extended to Najdi Arabic possessive pronominals. However, to the extent that his analysis is couched in early versions of Minimalism (Chomsky 1993, 1995), where the Spec-head relation has been the dominant tool of explaining agreement relations and the theory of Agree relation (Chomsky 2000, 2001) has not yet been introduced, in what follows I propose slight modifications to Shlonsky's analysis in light of recent developments in linguistic theory.

2.5.2 Suggested modifications to Shlonsky's (1997) analysis

In this section, I discuss some proposed adjustments to Shlonsky's (1997) analysis so that it can be compatible with the current understanding of Agree relation. First, let us consider the following text which Shlonsky (1997) writes while discussing the AgrP in his approach to Semitic clitics:

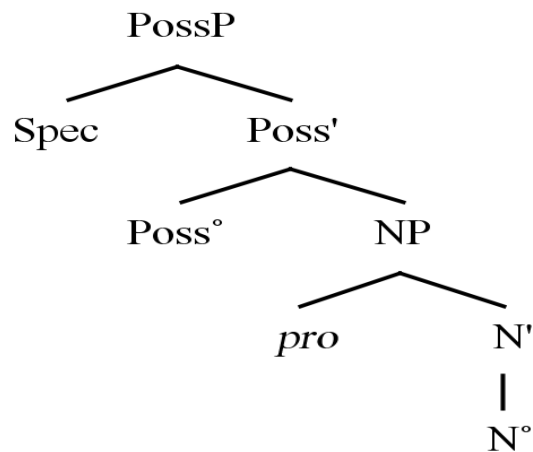
Contrary to other functional projections (such as TP, DP, AspP, or NegP), AgrP plays no coherent semantic role. Chomsky (1991), for example, crucially requires that AgrP delete in LF. But whether AgrP is inserted or deleted (essentially a theory-internal question), it plays no part in categorial or semantic selection. AgrPs have one role to play: they enable feature checking to be carried out in a Spec-head configuration. Beyond that they are entirely redundant. (p. 191)

In view of Shlonsky's statement above and in light of more recent approaches to agreement, where agreement does not need to have its own projection, I suggest to abandon the AgrP in favour of a PossP, as in (52). The elimination of AgrP is fully consistent with Chomsky (1995: Ch. 4), who suggests that AgrPs to be abandoned in favour of multiple specifier positions.³³ This is also in line with other analyses which argues that there is a PossP above the lexical projection NP in the possessive noun phrase (see Fassi Fehri 1993; Szabolcsi 1994; Cardinaletti 1998; Sportiche 1998; Julien 2005; Alexiadou *et al.* 2007; Holmberg 2018, among many others). Secondly, in keeping with Shlonsky's analysis, I assume that there is a referential *pro* which carries the relevant nominal features and which Poss^o can recover its content from. A technical detail that now requires attention is regarding the thematic position which the *pro* occupies. Although Shlonsky (1997: 191) points out that it raises from 'some thematic position', he does not name it. There are two possibilities: the complement of NP or the specifier of NP. I take this position to be Spec, NP.³⁴ The suggested structure thus far is as follows:

³³ Notice that, from a Minimalist viewpoint, the theoretical status of AgrP is controversial (cf. Chomsky 1991 vs. 1993, 1995).

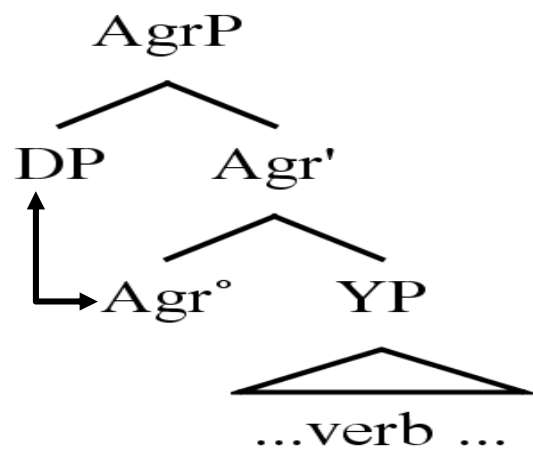
³⁴ Note that this standpoint is consistent with Shlonsky's treatment himself for other constructions, as we have seen in tree (45), where the possessor *Danl-o* is generated in Spec, NP.

(52) My modification of Shlonsky (1997)



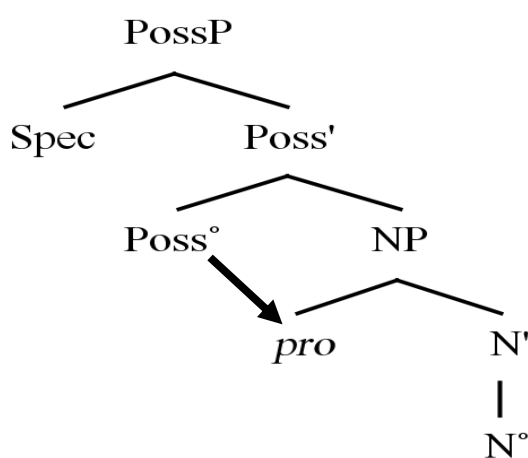
Thirdly, I assume further that an Agree relation (Chomsky 2000, 2001) takes place between the Poss° head and the silent *pro* in the specifier position of its complement NP. In Shlonsky's (1997) analysis, agreement obtains under a local Spec-Head relation (see, e.g. Kayne 1989; Pollock 1989; Picallo 1991 and Adger 1994). In a Spec-head analysis of agreement, this would require the movement of *pro* from Spec, NP to Spec, AgrP (or PossP in our terms), so that Agr° (or Poss°) can agree with it, as schematized in (53).

(53) Agreement as a function of Spec-Head relation (in a subject-verb agreement, for instance)



In the case of (53), and under Shlonsky's proposal, the Agr[°] (or Poss[°]) can be valued via a Spec-head configuration only. However, agreement in the analysis developed here involves an Agree operation which takes place exclusively under closest c-command (Chomsky 2000: 122). This means that there is no need for the *pro* to undergo movement from Spec, NP to Spec, AgrP (or PossP) so that it can establish agreement with Agr[°] (or Poss[°]) and check the latter's u ϕ -features. In an Agree relation (i.e. probe-goal mechanism), Agree can operate at distance, given c-command, as schematized in (54), (where Poss[°] is the probe and the *pro* in Spec, NP is the goal).

(54)



One final point concerning Shlonsky's (1997) approach to Semitic clitics is in order. This concerns the theory of agreement put forward by Roberts (2010a,b), who provides an analysis of Romance clitics. Roberts' (2010a, b) theory of agreement and incorporation can easily be transferred to Shlonsky's if the following points are taken into consideration. Within the theory of agreement articulated in Roberts (2010a,b), a probe and a goal form a chain of two copies, which is similar to the chain formed by movement, except that here, it is derived by an Agree relation only. Following Roberts (2010a, b), this means that, under the analysis developed here, the ϕ -features of the null pronoun (the lower copy) are a proper subset of Poss's features (the higher copy). Roberts (2010a, b) calls this type of agreement as 'incorporation' (not to be confused with Fassi Fehri's incorporation analysis given in section 2.4.1) in the sense that the ϕ -features of the lower copy, 'the goal', are incorporated into the higher copy, 'the probe', (or the Poss[°] head in our case). Following Nunes (2004), Roberts (2010b: 66-67, 84) hypothesizes that only one copy gets spelled out, which is generally the higher copy. This is so, because the ϕ -content of the lower copy are exhausted, following the Agree relation, and therefore the goal does not survive chain reduction (see Roberts 2010a, b for further details).

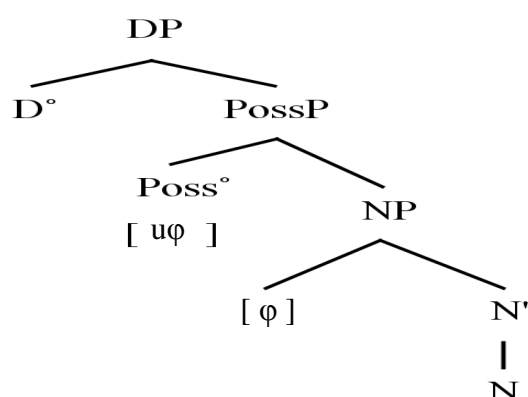
A crucial idea borrowed from Roberts (2010a, b) is that the null element which provides the valued phi-features is not a *pro* (à la Shlonsky 1997) but is a set of ϕ -features, i.e. it is just $[\phi]$. Following the practice of Roberts (2010a, b), I will refer to this element as a set of ϕ -features or just $[\phi]$ in what follows. Another crucial idea of Roberts is that, when the element in question is probed, its phi-features (in essence, the entire element) are copied on the probe, through the mechanism of agreement, which results in two identical copies, both of them consisting of the same set of phi-features. As usual in cases of double copies, only the higher one (in this case, the one on the probe) is spelled out.

Having established these adjustments to Shlonsky's (1997) proposal, the next section discusses the derivation of Najdi Arabic possessive constructions in more detail.

2.6 Deriving possessive constructions in NA

Following the mainstream assumptions widely accepted within the theory of phrase structure (Kayne 1994, Chomsky 1995, Roberts 2010a,b), and in the spirit of Shlonsky (1997) and Holmberg (2018), I assume that possessive pronominal suffixes in NA are heads (i.e. X° s) and not DP arguments (i.e. XPs). Given this assumption, a head X° (which is here Poss°) may agree with an argument XP within the lower lexical projection NP. The argument XP which Poss° agrees with may also be null. I assume that there is a set of valued ϕ -features in Spec, NP, which carries the relevant ϕ -features with which it can value the $u\phi$ -features of Poss° . I assume further that possessive pronominal constructions in NA have the structure in (55) (cf. Fassi Fehri 1993, Szabolcsi 1994, Cardinaletti 1998, Delsing 1998, Sportiche 1998, Julien 2005, Alexiadou *et al.* 2007, Holmberg 2018).

(55)

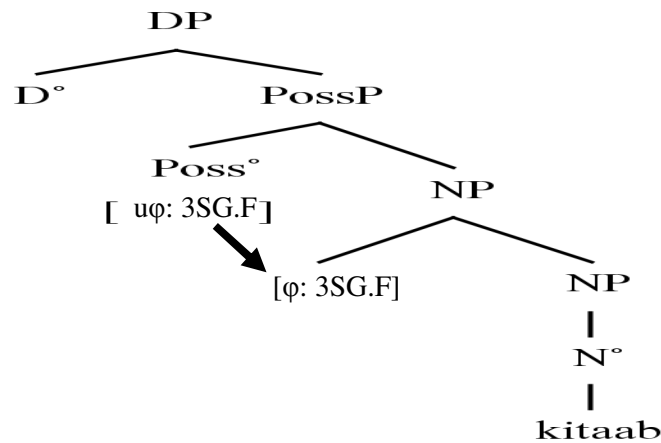


The Poss° head has $u\phi$ -features. Due to its $u\phi$ -features, Poss° probes downwards searching for matching interpretable features in its c-command domain and locates such features within its complement NP, which has a set of valued ϕ -features. Following this, an Agree relation is established between Poss° and $[\phi]$, which results in valuation of the unvalued ϕ -features of

Poss°. In NA, this results in the spell-out of the ϕ -features of Poss° as a possessive suffix. For example, the structure for (56a) in ordinary possessive pronominal constructions would be roughly as in (57).

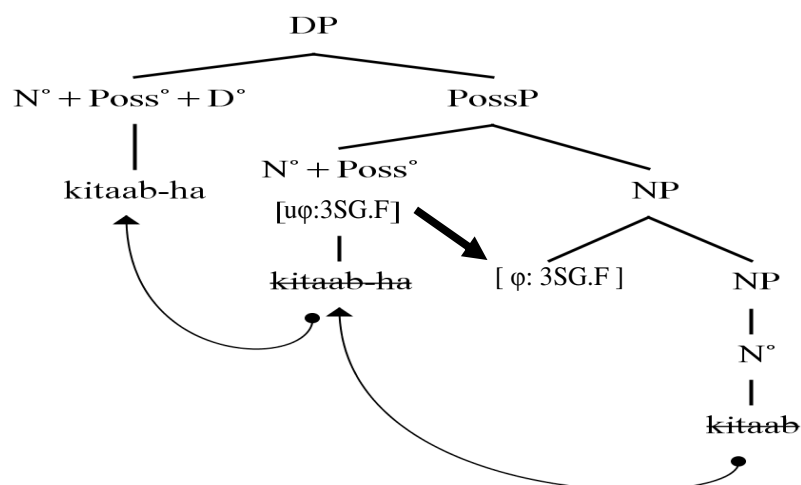
- (56) a. *kitaab-ha*
 book-3SG.F
 ‘Her book’
- b. *kitaab-ah*
 book-3SG.M
 ‘His book’

(57)



Afterwards, the head noun *kitaab* ‘book’ raises and left adjoins to Poss°, forming N°+Poss° where the possessive suffix *-ha* is spelled-out as a result of Agree relation. I assume further that the N°+Poss° complex *kitaab+ha* ‘her book’ moves further up to D° into the DP layer. The structure is therefore achieved by N-to-Poss-to-D movement in the syntax proper, as shown in (58). Such movement to D° explains why possessive suffixes cannot co-occur with the definite article *al* in this type of synthetic possession, as is also the case in Construct State (see Ritter 1991; Shlonsky 1997; Fassi Fehri 1999; Benmamoun 2000, among others).

(58)



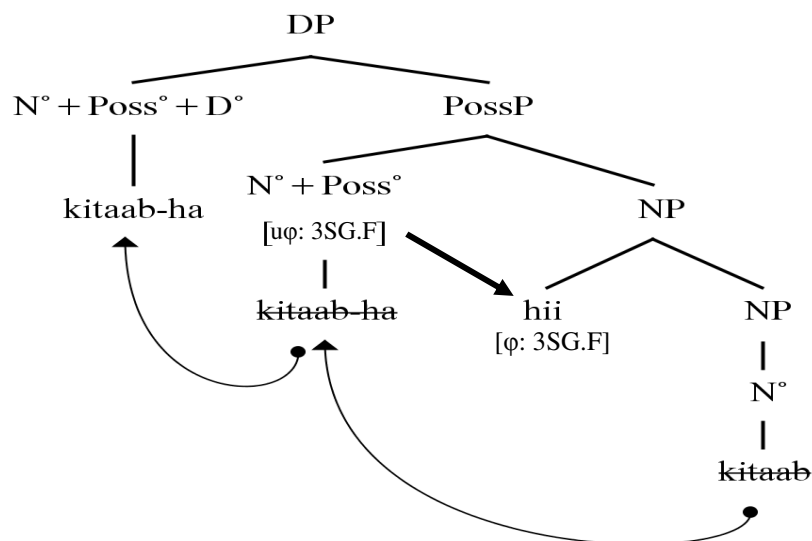
As NA is a head-initial language, the lexical element *kitaab* ‘book’ starts from the bottom as a head N to pick up the suffixal inflection so that the lexical item appears in a head-initial order

with the agreement suffix *-ha* ‘her’ showing up on its right after Spell-Out. It should be noted that this proposal is in line with several works, see, e.g. Baker (1985, 1988); Kayne (1994); Holmberg (2000); Embick and Noyer (2001); Julien (2002); Pereltsvaig (2006); Den Dikken (2007); Holmberg and Roberts (2013), which point out that suffixation in a head-initial order is a result of head movement.³⁵

The question which immediately arises here is how to derive the emphatic constructions in (47) above, where a possessive suffix is expressed with the presence of an overt freestanding pronoun, I repeat two relevant examples below. I assume that this pronominal pattern is derived along the lines of the same operation which obtains in ordinary possessive pronominal constructions, as shown in (58). Consider the following schematic derivation in (60) for the constructions in (59a).

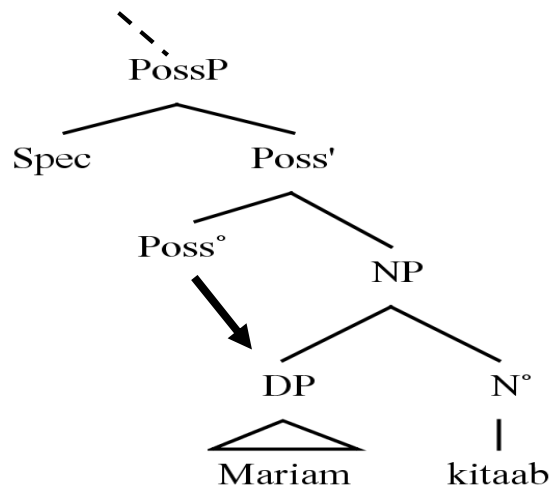
- (59) a. *kitaab-ha* (hii) b. *kitaab-ah* (huu)
 book-3SG.F she.3SG.F book-3SG.M he.3SG.M
 ‘Her book’ ‘His book’

(60)



In (60), the presence of $u\phi$ -features [3SG.F] on $Poss^\circ$ renders it active. $Poss^\circ$ searches or ‘probes’ its complement NP seeking the set of valued ϕ -features on *hii* ‘she’ and agrees with it in person, number and gender. This means that these emphatic constructions are derived just as in the ordinary possessive pronominals given in (56) above; the only difference being that the element

³⁵ Some of the works just cited (viz. Julien 2002; Holmberg and Roberts 2013) also highlight the idea that, while suffixation in a head-initial order is derived via head movement, in a head-final construction, it is achieved by phrasal movement. See also Tahir (2018) for a recent discussion of this matter in Central Kurdish, a head-final language.



If there is an Agree relation between Poss° and the set of ϕ -features in case of possessive noun phrases with a pronominal possessor as in *kitaab-ha* ‘her book’ (cf. (56a) above), why there is no such an agreement in a CS construction like *kitaab Mariam* ‘Mariam’s book’? At face value, there should be an agreement between Poss° and the lexical possessor, too, as Poss° in CS would probe downwards to find the needed ϕ -features of the lexical possessor *Mariam* and value the $u\phi$ -features on the probing head, just as in the case of pronominal possessors. However, the absence of an agreement suffix being spelled out on Poss° in such CS constructions suggests that no agreement is taking place between the DP possessor *Mariam* and Poss° .

One plausible approach to account for this issue is to view the absence of overt agreement between the probe Poss° and the lexical possessor as being similar to the absence of overt agreement between the verb and its object in Arabic, as illustrated in (62):

- (62) a. *ʃaaf* *al-bint*
 saw.3SG.M DEF-girl
 ‘(He) saw the girl.’
- b. *ʃaaf-ha*
 saw.3SG.M-her
 ‘(He) saw her.’
- c. **ʃaaf-ha* *al-bint*
 saw.3SG.M-her DEF-girl
 Intended: ‘(He) saw the girl.’

As can be seen in (62a,b), neither a DP object nor a pronominal object triggers the appearance of agreement on the verb. Any insertion of an agreement marker, as in (62c), results in ungrammaticality. This is also true of a preposition and its object, as illustrated in (63).

- (63) a. fi-l-beet
 at-DEF-house
 ‘At the house’
- b. fii-h
 at-it
 ‘At it’
- c. *fii-h l-beet
 at-it DEF-house
 Intended: ‘At the house’

In view of the fact that there is no overt agreement in Arabic between verb/preposition and its lexical DP object, the absence of agreement between Poss[◦] and the lexical possessor is not surprising. What may be at work is a parametrized condition, where the rule might be: if the possessor (i.e. the goal) is a lexical DP, no overt agreement is spelled out on Poss[◦] (i.e. the probe) and if it is a pronoun there is overt agreement and thus Poss[◦] is realized as an agreement suffix. If this is on the right track, it would explain why in the NA construct state there is no copying of ϕ -features of the lexical possessor to the probe Poss[◦], hence there is no overt agreement suffix spelled-out on Poss[◦] in possessive noun phrases with a lexical DP.

Summing up, although there is no agreement between Poss[◦] and the lexical possessor in the case of CS, such an agreement does show up, however, on Poss[◦] as a possessive suffix in NA possessive noun phrases with a pronominal possessor, as we have seen earlier in this section, and in other languages as is discussed in the next section.

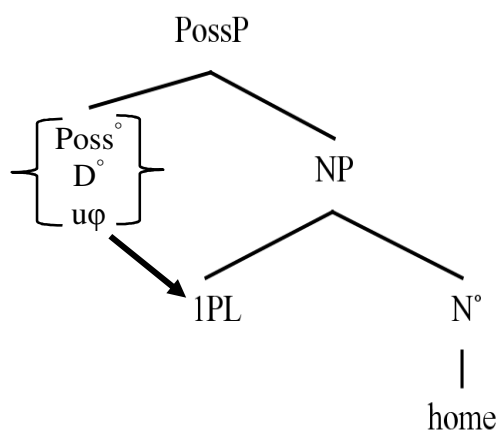
2.7 Pronominal possessors cross-linguistically

In the previous section, we have seen that possessive pronominal possessor constructions in (Najdi) Arabic are derived by Agree between Poss[◦] and the null pronoun within NP, resulting in the spell-out of Poss[◦] as an agreement suffix, which shows up ultimately on the possessum as a direct consequence of the latter’s head movement to this functional head. Cross-linguistically, the possessor agreement phenomenon is mainly found in languages which show a possessive suffix on the possessum agreeing with an overt pronominal, see, e.g. Szabolcsi

(1994), Zribi-Hertz (2003: 142) on Hungarian; Kornfilt (1997: 185, 230), Salzmann (2018: 26) on Turkish; Tallerman (2005: 866), Borsley *et al.* (2007: 201-202) on Welsh; Anderson (2005: 235-239), Huhmarniemi and Brattico (2015), Holmberg (2018) on Finnish. Additionally, it is arguably found in languages like English where the possessive pronoun can be viewed as a morphological form which is spelled out as a result of an agreement relation (Holmberg 2018). In this section, I briefly discuss two cross-linguistic cases from English and Finnish, in light of a recent work by Holmberg (2018). Let us consider English first.

While discussing agreement in possessive noun phrases in English, Swedish, Finnish and Hungarian, Holmberg (2018) analyses possessive pronouns (*his, her, your, my*, etc.) in English as the spell-out of Agree between Poss[°] and an abstract possessor DP in Spec, NP, which results in a weak form being realized on the functional head. Holmberg assumes that this pattern of agreement, where Poss[°] agrees with a null element, is just like subject-verb agreement in languages with rich agreement, whereby T[°] agrees with a null subject (Biberauer *et al.* 2010). According to Holmberg (2018), the structure of the English possessive construction *our home* would be as in (64), adapted from Holmberg (2018: 12); based on his (36).

(64)



In (64), the head of the possessive phrase consists of a possessive feature Poss[°], definite feature D[°] and uφ-features (person, number and gender). Holmberg assumes that Poss[°] in such a construction probes downwards to find the matching valued features [1PL] and its uφ gets valued as [1PL]. Afterwards, as Holmberg points out, a morphological rule (as originally suggested by Baker 1988) ensures that the complex features [Poss, D, 1PL] are spelled-out as *our*. This is shown by (65): (from Holmberg 2018: 13; his example 37)

(65) [PossP [POSS, D, 1PL] [NP [~~1PL~~] home]]] → *our home*

The claim that there is agreement between Poss° and an abstract element in Spec, NP in the case of English is less controversial in NA, as discussed in the preceding section, and in a language like Finnish, to be discussed below, as the pronominal element agreed with can be expressed overtly.

Let us now consider how the pronominal possessive system works in Finnish. Finnish is a particularly interesting language as pronominal possession is formed similarly to NA, as exemplified in (66a-b):

- (66) a. (meidän) koti-mme (Finnish)
 Our home-1PL
 ‘Our home’
- b. (minun) kirja-ni
 my book-1SG
 ‘My book’

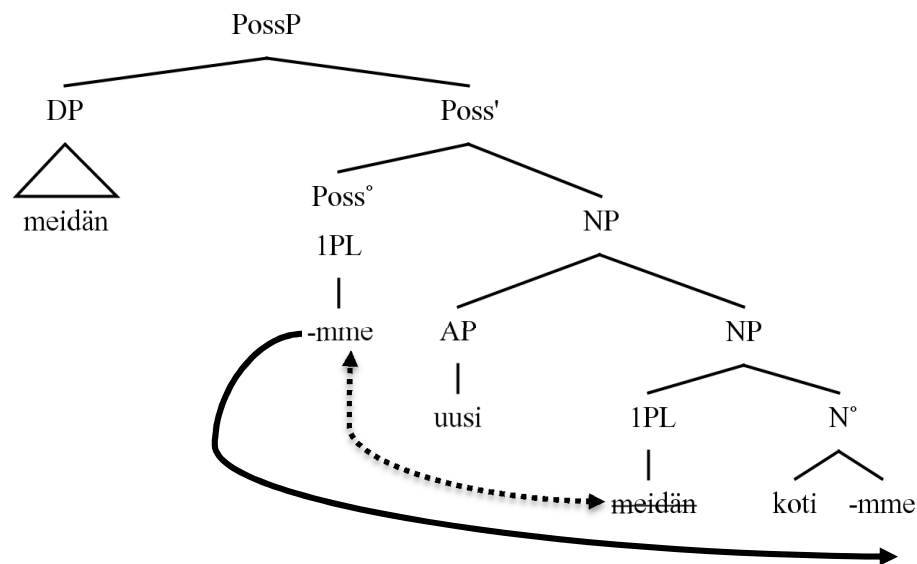
In (66a-b), just as in NA, we can see that the possessum *koti* ‘home’ and *kirja* ‘book’ are suffixed with the agreement marker *mme* [1PL] and *ni* [1SG], respectively. Finnish also optionally realizes an extra pronoun *meidän/minun* as shown by (66). As for syntactic derivation, Holmberg (2018) points out that this type of possession is derived from the same structure for English, as illustrated by the tree in (64) above. Given that Finnish is an article-less language (see Bošković 2009), Holmberg (2018) assumes that the category D° is missing in the possessive DP structure. He then considers a simple possessive instance like *koti-mme* in (66a), where the construction can show up without the optional pronoun *meidän* ‘our’, pointing out that in such cases Poss° , just like the situation in English, probes its complement to find the valued ϕ -features [1PL] and value its $u\phi$ -features as *-mme* ‘our’. It may seem at first sight that such constructions could plausibly be derived by raising the possessum *koti* ‘home’ to Poss° to left-adjoin to the agreement morpheme *mme* ‘our’ to derive the surface order as *koti-mme* ‘our home’, just as in the case of NA. However, Holmberg (2018) points out that this is not the case given that adjectives in Finnish are prenominal, as shown in (67), and not postnominal as in NA (see section 2.2). As Holmberg observes: ‘While it may be attractive to think that the suffixation is a result of head movement of the noun to Poss (in particular as Finnish has head-movement in other constructions; see Holmberg *et al.* 1993), the fact that adjectives and quantifiers precede the noun militates against such an analysis’ (2018: 13-14). Note that if N° has undergone movement to Poss° , it would render the word order as: $\text{N}+\text{suffix} > \text{Adj}$, contrary to fact (cf. (67)).

- (67) (meidän) uusi koti-mme (Finnish)
 Our new home-1PL
 ‘Our new home’ (from Holmberg 2018: 14; his 39)

Holmberg (2018) then proceeds to propose that Poss[°] head moves down to N[°] to give the right word order, assuming that this is an instance of affix lowering (as found, for instance, in English).

The last question that needs an explanation here concerns cases when the optional pronoun *meidän* is present in a construction like (67). As Holmberg (2018) has shown, this construction is derived along the lines of the structure in (68) (adapted from Holmberg 2018: 14; his example 40).

(68)



In (68), the derivation starts by merging the pronoun *meidän* with the head noun *koti* ‘home’. Assuming that adjectives merge as adjuncts to the lexical projection, the adjective *uusi* ‘new’ is then left-adjoined to the NP. In the next step of the derivation, the Possessive head is combined with the NP. Here we can see that Poss[°] overtly agrees with the freestanding pronoun *meidän* (as indicated by the dotted arrow). This results in the spell-out of the ϕ -features of Poss[°] as the agreement suffix *-mme*, which is subsequently lowered to N[°] (as shown by the solid line arrow). Afterwards, the pronoun *meidän* undergoes movement from Spec, NP to Spec, PossP, triggered by an EPP-feature on the category Poss[°], deriving thus the word order as *meidän uusi kotimme* ‘our new home’.

To sum up this section, (Najdi) Arabic, English and Finnish are three unrelated languages which show possessor agreement in the case of pronominal possessors, but not when the possessor is

a lexical DP. Comparison of the above-mentioned languages reveals that the word order in Arabic is derived by head movement of N° to $Poss^\circ$ and subsequently to D° . In Finnish, the possessive suffix in $Poss^\circ$ is lowered to N° to derive the inflected noun; hence yielding the correct word order. In English, on the other hand, no movement of N° takes place given that the possessive suffix (or the weak ‘independent’ form) precedes the possessum, unlike the case in Arabic and Finnish. Another point of variation between these languages is that the category D° in Arabic is a separate head further above the possessive phrase (PossP), whereas in English it is bundled with $Poss^\circ$ head, while it is absent in Finnish, a language with no (in)definite articles.

2.8 Conclusion

In this chapter, we have seen that Shlonsky (1997) has argued that possessive suffixes (and pronominal suffixes in general) in Semitic are heads of category X° , not XPs, suggesting that they agree with a silent *pro* (i.e. referential DP) in a specifier-head agreement relation. Building on this proposal, I have developed an analysis which involves an agreement of c-command, i.e. a probe-goal relation (Chomsky 2000, 2001), between $Poss^\circ$ and the silent *pro* in Spec, NP, which assigns feature values to the $u\phi$ -features of $Poss^\circ$. In NA, this results in the spell-out of the ϕ -features of $Poss^\circ$ as a possessive suffix. Although Shlonsky (1997) makes the important prediction that (possessive) suffixes in Semitic agree with a *pro*, he leaves open the discussion of its exact nature. In NA, this prediction is explicitly corroborated by the overt pronominal forms such as *huu/hii* in emphatic constructions like: *kitaab-ah (huu)* (book-3SG.M he) ‘his book’ and *kitaab-ha (hii)* (book-3SG.F she) ‘her book’ versus *kitaab-ah (*hii)* and (book-3SG.M she) ‘his book’ (*she). In NA, this naturally suggests that overt agreement morphology can co-occur with an overt pronominal, which results in an agreement inflection (a possessive suffix) being spelled-out on the lexical head (the possessum). In view of this, Fassi Fehri’s (1993) incorporation analysis does not seem to hold true of NA as far as possessor agreement in this Arabic variety is concerned.

Chapter 3. Analytic Free State: Hagg Possessive Constructions

3.1 Introduction

The previous chapter discussed the syntax of possessive noun phrases with a lexical and pronominal possessor in Najdi Arabic (NA). We have seen that this type of ‘synthetic’ possession has distinctive properties, most notably that the head noun ‘the possessum’ of such possessive constructions cannot be marked with the definite article *ʔal* and its modifying adjective cannot immediately show up after it. A strict adjacency between the possessum and the possessor DP must be maintained and any modifying adjective must be placed at the end of the construction; otherwise the construction is ungrammatical.

This chapter investigates a specific type of ‘analytic’ possession, where all of these properties are absent. First, the possessum can be prefixed with the definite article and second any adjective associated with the head may directly modify it; breaking, thus, the strict adjacency between the possessum and the following DP (the possessor). These constructions are often referred to in the literature as Free State (see Siloni 1997; Borer 1999). Another important property of Free State is that the possessum (with its modifying adjective) is separated from the possessor DP by a unique possessive marker that is inflected for the number and gender of the possessum. This word is *ħagg* ‘of’ in NA. The presence of *ħagg* ‘of’ and its analytic counterparts in other Arabic varieties is said to be a ‘dialectal innovation’ (Harning 1980: 10), given that such possessives are not present in Modern Standard Arabic. It is the aim of the current chapter to investigate such analytic possessive constructions, addressing their syntactic derivations within the nominal phrase.

In order to account for *ħagg*-possessum agreement facts, I will propose a syntactic analysis of *ħagg* possessive constructions where this pattern of DP-internal agreement is established via an Agree operation (Chomsky 2000, 2001) between the possessive preposition *ħagg* and the possessum DP it closely c-commands in the structure [_{DP} D [_{POSSP} POSS [_{PP} P]]]; this is how the preposition gets an inflected form (i.e. it is marked with a suffix that is identical to the phi-features of the possessum). As explained later, *ħagg*-possessum agreement is reminiscent of subject-verb agreement in clauses, hence agreement within the DP obtains under the same syntactic mechanism as agreement within clauses, supporting, thus, the view that the structure of (possessive) noun phrases mirrors clausal structure, in the sense of Abney (1987) and Szabolcsi (1994), among others.

The chapter is organized as follows. Section 3.2 provides descriptive facts about possessive preposition *ħagg* ‘of’ constructions in NA. It focuses mainly on the distribution of the possessive preposition *ħagg* ‘of’ as well as the similarities between this preposition and other prepositions in Semitic, such as *li* in Modern Standard Arabic and *ʕel* in Modern Hebrew. This section also deals with the question what is *ħagg*: a preposition or a noun? Using language-internal diagnostics, it will be shown that *ħagg* is closer to the preposition side. Section 3.3 investigates the structural ambiguity exhibited in construct state and the role that *ħagg* ‘of’ plays in disambiguating any structural ambiguities which may arise due to the use of such constructions. Section 3.4 discusses one previous account of Free State constructions in Arabic dialects, namely Mohammad’s (1999) approach to *tabaʕ* ‘of’ in Palestinian Arabic (which equals *ħagg* for the most part). The discussion will reveal that his approach suffers from assumptions left without empirical backing; hence stipulative, and falls short of accounting for several relevant facts that ultimately cast doubt on its validity. Section 3.5 provides an account of Free State constructions in NA, arguing that *ħagg* ‘of’ Case marks the possessor (with Genitive Case; cf. Siloni 1997) but agrees with the possessum under the postulated condition that the ϕ -features of the possessor DP are inaccessible to Agree in NA. Section 3.6 concludes the chapter.

3.2 Possessive *ħagg*: basic descriptive facts

In this section, I provide a brief description of analytic possessive *ħagg* ‘of’ as well as the categorical status of this marker.

3.2.1 Preliminaries

As pointed out in the previous chapter (2.2), possession in NA, as in other Arabic varieties, can be synthetically expressed using the so-called Construct State (CS). Consider the following example:

- (1) *beet* *ar-radʒdʒaal*
 house DEF-man
 ‘The man’s house’

In (1), the possessum *beet* ‘house’ and the possessor *ar-radʒdʒaal* ‘the man’ are juxtaposed without any intervening element (see previous chapter for a fuller discussion of CS and their properties).

This section explores a rather different strategy of encoding possession, where this relation is analytically formed using a so-called Free State (FS). In a FS, an overt possessive preposition,

ħagg ‘of’, intervenes between the possessum and possessor, conveying a possessive relation, as shown in (2).³⁸ This is unlike the case in CS (1), where the relationship between the two members is not mediated by a possessive preposition.

- (2) al-beet ħagg ar-radʒdʒaal
DEF-house of DEF-man
‘The man’s house’

Here the possessum and the possessor are separated by *ħagg* ‘of’ that breaks the adjacency between them. Note also that in *ħagg* FS constructions, the possessum and the possessor are independently marked for definiteness; this is unlike the CS, where the possessum must be indefinite. Consider the contrast in (3):³⁹

- (3) a. (*al)galam al-walad (Synthetic CS)
 pen DEF-boy
 ‘The boy’s pen’
- b. al-galam ħagg al-walad (Analytic FS *ħagg*)
 DEF-pen of DEF-boy
 ‘The boy’s pen’

Additionally, in *ħagg* FS constructions the possessor and the possessum must be followed directly by their own nominal modifiers, i.e. adjectives are not stacked at the end of the construction as is the case in CS. Consider the following examples:

- (4) a. al-beet al-kabiir ħagg ar-radʒdʒaal al-ʔani
 DEF-house DEF-big of DEF-man DEF-rich
 ‘The rich man’s big house’
- b. *al-beet ħagg ar-radʒdʒaal al-ʔani al-kabiir
 DEF-house of DEF-man DEF-rich DEF-big
 Intended meaning: ‘The rich man’s big house’

In (4a), the possessum and the possessor are directly followed by their nominal modifier. The ungrammaticality of the example in (4b) is due to the fact that the nominal modifier of each

³⁸ *ħagg* literally means ‘right’ or ‘truth’, as in *I have the right to vote* or *he is telling the truth*. Under its use as a possessive preposition, *ħagg* ‘of’ is best treated as a grammaticalized item that emerges from a lexically meaningful word to become a functional element whose syntactic role and function mediate a possessive relationship between a possessum and a possessor (see section 3.2.2 for further discussion on the nature of *ħagg*).

³⁹ To a large extent, it should be noted that the CS and the FS can both express the same meaning, as illustrated in (3). How (Najdi) Arabic speakers choose between synthetic and analytic genitive expressions lies beyond the scope of this thesis; see, however, Harming (1980); Brustad (2000) and Boumans (2006), among others, for attempts to explain how Arabic speakers choose between the two constructions.

member is stacked towards the end of the analytic construction, i.e. after the second member, mimicking the way nominal modifiers are positioned in CS constructions (see 5).

- (5) beet ar-rad3d3aal al-γani al-kabiir
house DEF-man DEF-rich DEF-big
‘The rich man’s big house’

Drawing on its position intervening between the possessor and the possessum, it is clear that *ħagg* ‘of’ is similar to other analytic prepositions in Semitic languages such as *li* ‘of’ in Modern Standard Arabic (henceforth, MSA) and *fel* ‘of’ (also transcribed as *šel*) in Modern Hebrew (hereafter, MH), as exemplified in (6a) and (6b) respectively (the analytic preposition appears in boldface).

- (6) a. al-kitaab-u f-fahiir-u **li**-l-ħaqqaad-i (MSA)
DEF-book-NOM DEF-famous-NOM of-al-Aqqad-GEN
‘The famous book of Al-Aqqad’ (Fassi Fehri 2012: 174)
- b. ha-bayit **fel** ha-mora (MH)
DEF-house of DEF-teacher
‘The teacher’s house’ (Borer 1999: 46)

In the vast literature on possession in Semitic (see Ritter 1991; Fassi Fehri 1993, 2012; Shlonsky 1997, 2004; Siloni 1997, Borer 1999; Benmamoun 2000, inter alia), *li* and *fel* have been viewed as genitive Case markers that do not vary in different contexts. This means that these prepositions have invariant forms, irrespective of the ϕ -content of the possessum. The following examples demonstrate this fact.

- (7) a. al-kutub-u **li**-l-ħaqqaad-i (MSA)
DEF-books-NOM of-al-Aqqad-GEN
‘The books of Al-Aqqad’
- b. ha-targumim **šel** ha-odise'a (MH)
DEF-translations of DEF-Odyssey
‘The translations of the Odyssey’ (Siloni 1997: 99)

However, the possessive *ħagg* ‘of’ of NA differs from these markers in that it obligatorily shows agreement in number and gender with the preceding DP, i.e. the possessum, as shown in (8a-d).⁴⁰ For completeness, I have shown the phi-features on the possessum, as well.

⁴⁰ It should be noted that *ħagg* ‘of’ does not inflect for the third person of the possessum. Some studies, including Mohammad (1990, 2000) and Fassi Fehri (1993), mention that Agree relations within Arabic noun phrases lack the 3rd person of a lexical DP. See also Harley and Ritter (2002); Nevins (2007), who point out that the 3rd person, as opposed to 1st and 2nd person features, lacks a positive specification for person, i.e. no person.

- (8) a. al-beet ħagg-Ø/*ħagg-at/*ħagg-aat/*ħagg-iin al-bint
 DEF-house.SG.M of-SG.M/of-SG.F/of-PL.F/of-PL.M DEF-girl
 ‘The girl’s house’
- b. as-sijjaarrah ħagg-at/*ħagg-Ø/*ħagg-aat/*ħagg-iin Muħammad
 DEF-car.SG.F of-SG.F/of-SG.M/of-PL.F/of-PL.M Muhammad
 ‘Muhammad’s car’
- c. as-sijjaaraat ħagg-aat/*ħagg-Ø/*ħagg-at/*ħagg-iin Muħammad
 DEF-cars.PL.F of-PL.F/of-SG.M/of-SG.F/of-PL.M Muhammad
 ‘Muhammad’s cars’
- d. al-ḡimmaal ħagg-iin/*ħagg-Ø/*ħagg-at/*ħagg-aat al-mazraʕah
 DEF-workers.PL.M of-PL.M/of-SG.M/of-SG.F/of-PL.F DEF-farm
 ‘The workers of the farm’/ ‘the workers belonging to the farm’

Here we can see that the inflected forms of *ħagg* have a morphological link with the possessum: when the possessum is [SG.F], *ħagg* must inflect for the same number and gender features of it to become *ħagg-at* ‘of-SG.F’, and so on. In (9), the paradigm of the inflected forms of the NA possessive marker *ħagg* ‘of’ is given.

(9) Paradigm of inflected possessive *ħagg* ‘of’ in Najdi Arabic

ħagg ‘of’	Possessum
ħagg-Ø	SG.M
ħagg-at ⁴¹	SG.F
ħagg-aat	PL.F
ħagg-iin	PL.M

⁴¹ It should be pointed out that the feminine singular agreement suffix *-at* on *ħagg* resembles the feminine marker *-at* (or the *t-marbutah*) on feminine singular nouns. Consider the following examples:

- (i) a. imdarrs-ah b. al-imdarrs-ah
 teacher-SG.F DEF-teacher-SG.F
 ‘A female teacher’ ‘The female teacher’
- c. imdarrs-*(at) al-fasul d. imdarrs-*(at) Muħammad
 teacher-SG.F DEF-class teacher-SG.F Muhammad
 ‘The female teacher of the class’ ‘Muhammad’s female teacher’

In (i a-b), the feminine marker *-ah* is suffixed to the noun (*al*)-*imdarrs-ah* (the/a teacher.F). However, when the noun *imdarrs-ah* is followed by a possessor DP, as in (i c-d), the feminine suffix *-ah* must show up as *-at*. This fact has been taken as evidence that the first member (i.e. the head noun) and the DP that follows it form a construct state, where the two members are phonologically one single word, i.e. they form a prosodic unit (see, e.g. Mohammad 1999: 30; Benmamoun 2003: 755). Extending this line of reasoning to *ħagg*, the feminine suffix *-at* appearing on the possessive marker should be compared with the feminine marker *-at* on the noun *imdarrs-at* (i c-d). As is made clear in the next section (see, especially, footnote 44 below), *ħagg* originally was a noun and could be in a construct state with a following DP *ħagg Muħammad* (‘the property of Muħammad’). This is the origin of the feminine suffix *-at* on *ħagg*. It is difficult to examine the behaviour of the feminine suffix *-at* appearing on *ħagg* in other syntactic environments as this possessive marker only occurs in a construct state with the possessor DP.

The fact that *ħagg* ‘of’ agrees in number and gender with the possessum DP suggests that this possessive marker has a set of unvalued ϕ -features whose valuation is morphologically realized as an inflectional suffix appearing on *ħagg* ‘of’. This means that *ħagg* ‘of’ is an agreeing head, whose features are different from those of other genitive markers such as *li* in MSA or *fel* in MH. It should be noted here that *ħagg*-possessum agreement is not surprising as its equivalent possessive markers across Arabic varieties show the same behaviour (see, e.g. Harning 1980 and Brustad 2000 for a survey). The descriptive works just cited show that analytic *ħagg* counterparts in other Arabic varieties are sensitive to morphological agreement with the preceding DP (the possessum) in number and gender. Within the framework of generative grammar, there are only three studies which investigated this aspect of possession: namely, Mohammad’s (1999) analysis of *tabaʕ* ‘of’ in Palestinian Arabic, Soltan’s (2006) study of *bitaaʕ* ‘of’ in Egyptian Arabic and Ouhalla’s (2011) predication approach to *dyaʕ* ‘of’ in Moroccan Arabic. Thus, the investigation of this phenomenon is still incomplete; and more significantly NA has not been investigated in this context, to the best of my knowledge. This chapter aims to bring such analytic possessives, represented by *ħagg*, to the fore, attempting to explore their syntactic contribution in the constructions where they occur. As such, this endeavour is a continuation of the ongoing research in the field of Arabic noun phrases in general and possessive noun phrases in particular. In the following subsection, I shed light on the categorical status of this element. This discussion is important in order to demonstrate that the analytic genitive *ħagg* ‘of’ is a preposition rather than a noun as would be expected under Mohammad’s proposal for *tabaʕ* ‘of’ in Palestinian Arabic, as will be discussed in section (3.4).

3.2.2 What is *ħagg*?

This section attempts to determine the category of *ħagg*. Specifically, it addresses the following questions: what is *ħagg*? Does it behave as a noun, an adjective or a preposition? Let us start with the question what *ħagg* is. *ħagg* appears to be historically derived from the noun *ħaqq*, which means ‘right’, ‘truth’ or ‘property’ (cf. Bardeas 2009), as illustrated in the following examples where *ħagg* is used as a lexical element (rather than a functional element) both in MSA and NA:

- (10) at-taʕliim-u **ħaqq-un** min **ħuquuq-i** al-muwaatʕin-i (MSA)
DEF-education-NOM right-NOM from rights-GEN DEF-citizen-GEN
‘Education is (one) right of the citizen’s rights.’
- (11) ?iħguugg-na
rights-our
‘Our rights’

Notice that *ħagg* as a lexical element bears structural Case (cf. 10), which is a general property of nouns in MSA. Note also that *ħagg* as a lexical item may have a plural form, see *ħuqquuq* ‘rights’ in (10) and *ʔiħguugg* ‘rights’ (11) above. The question that concerns us now is the evidence that *ħagg* is not a noun (but rather a preposition) when it is used as a functional item in NA. There are several pieces of evidence that point to the idea that *ħagg* ‘of’ seems to be a preposition (and not a noun) when it is employed to encode analytic possession constructions. First of all, unlike nouns but like prepositions, *ħagg* ‘of’ as a genitive marker cannot be prefixed with the definite article **ʔal-ħagg* (*the *ħagg*). Second, prepositions in Arabic differ significantly from nouns in not appearing with plural forms (**ħaguug*). Possessive *ħagg* would also be expected to have such a plural form if it were a noun, in the same way as an ordinary noun (e.g. *kitaab* ‘book’ → *kutub* ‘books’). In addition, *ħagg* cannot be modified by adjectives, although again this would be possible if it were a noun in such possessive constructions.

- (12) al-kitaab al-aħmar
 DEF-book.SG.M DEF-red.SG.M
 ‘The red book’

At this point, one might argue that *ħagg* could be an adjective (or adjective-like particle), especially since adjectives in Arabic show agreement in number and gender with the DP they modify (12); this is important given the fact that *ħagg* also agrees with the possessum in ϕ -features (cf. (8) above). However, to the extent that *ħagg* cannot bear definiteness marking, this possibility is precluded. This is so, because possessive *ħagg* would be prefixed with the definite article *al* if it were an adjective.

Note that the assumption that *ħagg* ‘of’ is a preposition is consistent with Bardeas’ (2009) treatment of this element in Makkan Arabic, a sub-variety of Hijazi Arabic spoken in Makkah city in Saudi Arabia. Bardeas’ discussion is relevant in the present context as *ħagg* in Makkan Arabic behaves the same way as *ħagg* in NA.⁴² Bardeas similarly concludes that *ħagg* is not a noun but rather a preposition with agreeing forms, claiming that it ‘has acquired an additional categorial status as a preposition in Makkan Arabic’ (2009: 120).

It should also be noted that the idea that *ħagg* ‘of’ is a preposition with agreeing forms finds further support from its analytic counterparts in other Arabic varieties. For example, Choueiri (2014: 75-76) labels the possessive particle *tabaʕ* ‘of’, which is the analytic counterpart of NA *ħagg* in Lebanese Arabic, as a preposition (more on *tabaʕ* in section 3.4). Likewise, Ouhalla (2009a, b, 2011) treats the possessive particle *dyaʕ* ‘of’, the analytic counterpart of *ħagg* in

⁴² It should be noted, however, that Bardeas’ (2009: 119-122) discussion of *ħagg*-constructions is descriptive.

Moroccan Arabic, as a preposition rather than a noun. In view of all this, we are led to the conclusion that *ħagg*'s behaviour is closer to the preposition side. In the remainder of this chapter, I will refer to *ħagg*, and its analytic counterparts in the relevant Semitic varieties, as a preposition, or just a 'particle'.

Before closing this discussion, let me make a slight digression to note that there are several studies on Arabic which attribute the presence of analytic possessive noun phrases in Arabic dialects to grammaticalization (see, e.g. Harning 1980; Versteegh 1997/2014; Brustad 2000; Heath 2002; Ouhalla 2009a, 2015).⁴³ These works, among others, point out that grammaticalization played a crucial role, which eventually resulted in the emergence of the analytic type of noun phrases with a prepositional genitive. In this regard, Brustad (2000) mentions that the presence of analytic possessive, or the so-called 'genitive exponents' (à la Harning 1980), in modern Arabic varieties indicates that 'spoken Arabic has long been in the process of shifting from a synthetic language to an analytic one whose syntactic relationships are expressed through strings of discrete morphemes' (Brustad 2000: 70). A similar insight is advanced by Versteegh (1997/2014: 136), who observes the following:

In some syntactic constructions, the Arabic dialects developed towards a more analytical type of language, in which syntactic functions were expressed by independent words rather than by morphological means. Often, these independent words were subsequently grammaticalised and became new morphological markers. In the nominal system, the declensional endings have disappeared, and in the place of the Classical Arabic possessive construction with a genitive an analytical possessive construction has developed, in which a genitive exponent expresses the meaning of possessivity.

Grammaticalization arguably involves a process, by which an erstwhile noun has undergone change in category to become a preposition (see Ouhalla 2009a). If this reasoning is correct, it would explain the rise of the analytic type in NA with the preposition *ħagg*, on a par with its

⁴³ The term 'grammaticalization' is generally used to refer to a process in languages, where lexical items undergo change in category into functional items, which usually results in the development of independent functional elements (see, e.g. Hopper 1991; Heine and Kuteva 2002; Hopper and Traugott 2003; Roberts and Roussou 2003; Stassen 2009).

analytic counterparts in other Arabic dialects (see Harning 1980), where the lexical origin of this preposition is hardly disputed (see (10) & (11) above).⁴⁴ , ⁴⁵

In the next section, I explore what appears to be the ‘procedural’ role of *hagg* ‘of’ and the ambiguity which may arise due to the use of CS. I also draw on the conclusions of some related works, including Ingham (1994); Mohammad (1999); and Fassi Fehri (2012).

3.3 Structural ambiguity in CS vs analytic possessive *hagg*-constructions

In Arabic literature, it has been widely pointed out that the use of CS yields ambiguity in the presence of nominal modifiers as well as the number of embedded nouns in a given CS. Let’s begin with the latter. The more embedded nouns in a CS, the more ambiguous the construction is. Consider the following example from Palestinian Arabic, adapted from Mohammad (1999: 29).

- (13) ʔibin ʒaal abu l-walad it^ʕ-t^ʕawiil
son uncle father DEF-boy DEF-tall

As Mohammad points out, the example in (13) is ambiguous given that it yields the following four readings depending on the associate of the nominal modifier *it^ʕt^ʕawiil* ‘tall’, which appears in boldface.

- (14)a. ‘the **tall** son of the uncle of the father of the boy’
b. ‘the son of the **tall** uncle of the father of the boy’
c. ‘the son of the uncle of the **tall** father of the boy’
d. ‘the son of the uncle of the father of the **tall** boy’

Fassi Fehri (2012: 175) reports the same ambiguity in MSA. Consider the following example:

⁴⁴ It should be pointed out that these sources largely overlook the point of how exactly this grammaticalization of possessive markers like *hagg* could have happened. Inspired by a suggestion made by van der Wurff (personal communication, February 7, 2019) on the possible historical development of *hagg*, I assume that this way has happened in structures like *al-beet hagg ar-radʒdʒaal* ‘the house property the man’, where *hagg ar-radʒdʒaal* was a construct state (‘the property of the man’) and was in some kind of apposition to *al-beet*, and agreed in number (‘house.SG’ and ‘property/possession.SG’). Frequent use of this construction could have led language learners to think that *hagg* was some kind of functional marker, i.e. a preposition, but still agreeing with the possessum (also in gender, later); more on this in chapter six, 6.2. See also Ouhalla (2009a: 331-333; 2015: 160-161) for discussion of the formal details of this process in Moroccan Arabic, where a lexical item, i.e. a relational noun, develops through grammaticalization into a genitive preposition, namely the change of category from N-to-P.

⁴⁵ The possessive marker *hagg* may have undergone a historical process of reanalysis, from noun to functional marker, i.e. a preposition expressing possession. This would make it an example of the type of grammaticalization discussed by Roberts and Roussou (2003), who point out that many cases of grammaticalization involve reanalysis of a lexical head as a functional head (through a head movement relation), so that the former comes to be analysed as an exponent of the latter, viz. the higher functional head (see Roberts and Roussou 2003 for discussion).

- (15) χ aatam-u δ ahab-i ?ahmad-a
ring-NOM gold-GEN ?ahmad-GEN
'The ring of gold of Ahmad'
'The ring of Ahmad's gold'

In (15), there are two possible readings that can be assigned to this structure, resulting in a two-way ambiguity which is structurally represented by the bracketing given in (16).

- (16)a. [χ aatam-u [δ ahab-i ?ahmad-a]]
ring-NOM gold-GEN ?ahmad-GEN
- b. [[χ aatam-u δ ahab-i] ?ahmad-a]
ring-NOM gold-GEN ?ahmad-GEN (Fassi Fehri 2012: 176)

That there is a structural ambiguity is obvious from the examples provided above in (13-16). Let us now see what happens when the possessive preposition *ħagg* is used in equivalent constructions from NA in (17).

- (17)a. χ aatam δ ahab \hbar agg- \emptyset ?ahmad
ring gold of-SG.M Ahmad
'The ring of gold of Ahmad'
- b. χ aatam \hbar agg- \emptyset δ ahab ?ahmad
ring of-SG.M gold Ahmad
'The ring of Ahmad's gold'

As can be seen, no structural ambiguity arises in the presence of the possessive preposition *ħagg* 'of'. When *ħagg* 'of' is used in constructions like (17a-b), there is only one reading provided that *ħagg* 'of' intervenes between the two NPs. For instance, in (17a) *ħagg* 'of' appears between *xaatam* *ḍahab* and *Ahmad*, forcing the reading that *Ahmad* has a ring of gold. In (17b) *ħagg* 'of' appears between *xaatam* and *ḍahab Ahmad*, forcing the reading that there is a ring which is part of Ahmad's gold (collection).

Another type of ambiguity is when the possessum and the possessor are identical with respect to their ϕ -content, since when either of them is being modified it is difficult to determine whether the nominal modifier is associated with the possessor or the possessum. Consider (18):

- (18) *galam al-walad al-ḥilu*
 pen DEF-boy DEF-wonderful
 First possibility: ‘The wonderful boy’s pen’
 Second possibility: ‘The boy’s wonderful pen’

Here, the two readings are valid and there is actually no syntactic way to determine the associate of the nominal modifier *al-ḥilu* without making recourse to the context. Now let’s explore how use of the possessive preposition *ḥagg* ‘of’ resolves this problem. When *ḥagg* ‘of’ is used in (18), it appears between the two members of the CS and each nominal modifier is forced to follow its referent directly, as can be seen in examples (19a-b):

- (19) a. First possibility: The wonderful boy’s pen:
al-galam ḥagg-∅ al-walad al-ḥilu
 DEF-pen of-SG.M Def-boy DEF-wonderful
- b. Second possibility: The boy’s wonderful pen:
al-galam al-ḥilu ḥagg-∅ al-walad
 DEF-pen DEF-wonderful of-SG.M DEF-boy

In view of this, it can be postulated that *ḥagg* ‘of’ plays an important role in avoiding any structural ambiguity that can emerge due to the use of a CS with more than two members or nominal modifiers whose referents are similar in \varnothing -content.

By way of concluding this section, I cite an illuminating extract from Ingham (1994: 58), who rightfully observes the role that possessive particles play with regards to the clarity of meaning in NA:

The possessive particles are especially useful where both of the nouns involved in a genitive expression are qualified since it avoids the piling up of qualifiers referring to different nouns, which would result at the end of the noun phrase. It also helps to make the meaning more explicit where the two nouns agree in number and gender since without them there would be the possibility of ambiguity.

Having established the role that *ḥagg* ‘of’ plays in disambiguating certain meanings, I discuss in what follows one previous proposal of FS: Mohammad’s (1999) approach to *tabaʕ* in Palestinian Arabic, aiming to determine whether it can account for FS in NA.

3.4 A previous approach to analytic possessive noun phrases in Arabic dialects

In this section, I introduce and scrutinize one previous approach advanced to account for analytic possessive noun phrases in Palestinian Arabic, namely Mohammad (1999). The main

thrust of this section is that this approach proves inadequate of accounting for the main syntactic aspects related to analytic (Free State) noun phrases because of its stipulative character.

3.4.1 Mohammad (1999) on *tabaʕ* in Palestinian Arabic

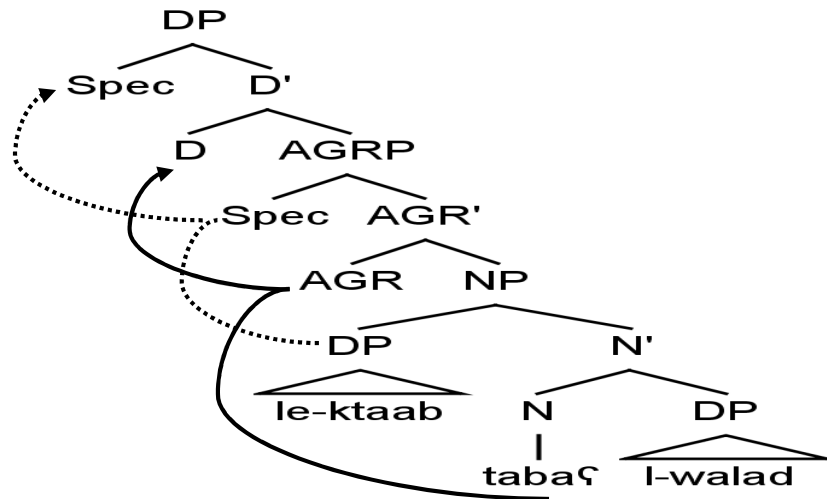
Mohammad (1999) considers the parallelism between noun phrases and sentences, an idea that is advocated by a number of Semitic researchers, including Ritter (1987, 1988, 1991); Mohammad (1988); Ouhalla (1991, 1999, 2011); Fassi Fehri (1993, 2005) and Benmamoun (2003). Mohammad (1999) argues that the structure of FSs in Palestinian Arabic (PA) mimics that of sentences, claiming that agreement in FSs is parallel to that of clauses in SVO order. As Mohammad (1999: 28) puts it, ‘full agreement obtains between [Spec, DP] and D in exactly the same way it obtains between [Spec, IP] and I in SVO’. By way of illustration, let us look at the following examples from PA, taken from Mohammad (1999: 34-35), where the gloss is slightly modified to be consistent with the conventions used in this thesis.

- (20) a. li-ktaab tabaʕ-Ø ʔaħmad (PA)
 DEF-book of-SG.M Ahmad
 ‘Ahmad’s book’
- b. it^ʕ-tʕaawle tabaʕ-at ʔaħmad
 DEF-table of-SG.F Ahmad
 ‘Ahmad’s table’
- c. ʔil-ʕanzaat tabaʕ-aat ʔaħmad
 DEF-goats of-PL.F Ahmad
 ‘Ahmad’s goats’
- d. ʔil-kalb tabaʕ-Ø ʔaħmad
 DEF-dog of-SG.M Ahmad
 ‘Ahmad’s dog’

In the examples above, the possessive particle *tabaʕ* ‘of’ agrees in Number and Gender with the c-commanding possessum which, as Mohammad observes, is the same syntactic mechanism as agreement found in the clausal domain, where the verb fully agrees with the subject in the SVO order (see Fassi Fehri 1993, 2012; Aoun *et al.* 1994; Ouhalla 1994, 2013; Mohammad 2000; Soltan 2007; Aoun *et al.* 2010 for subject-verb agreement in Arabic). Consider the schematic derivation in (17), which Mohammad (1999: 40) provides for the example in (16):

- (16) *li-ktaab tabaʕ-∅ l-walad*
 DEF-book of-SG.M DEF-boy
 ‘The boy’s book’

(17)



Mohammad (1999: 39ff.) assumes that the structure of analytic possessive noun phrases has a midlevel functional projection AgrP which intervenes between DP and NP, as illustrated in (17). In saying this, Mohammad (1999) draws on the proposals made by Ritter (1991) and Siloni (1997) that there is a functional category between D° and N° . According to the derivation above, *tabaʕ* ‘of’ raises to D° , via Agr $^{\circ}$. Mohammad assumes, following Siloni (1997) and along the lines of Chomsky (1995), that D° contains strong features, and hence must be lexically supported, which forces *tabaʕ* to move to it. Additionally, Mohammad hypothesizes that the possessor DP *l-walad* ‘the boy’ remains in-situ, just like an object in a normal transitive sentence. As is shown in the tree, the possessum DP *li-ktaab* ‘the book’ also undergoes movement first to Spec, AgrP on its way to Spec, DP. As Mohammad (1999) points out, both movements of *tabaʕ* and *li-ktaab*, through AgrP, to D° and Spec, DP, respectively, are in compliance with Chomsky’s (1995) Minimal Link Condition.⁴⁶

Under Mohammad’s (1999) approach, agreement between the possessum and *tabaʕ* occurs under Spec-head configuration in the highest projection of the derivation, on the grounds that D° must be licensed by full agreement with the possessum DP in its specifier.

⁴⁶ The Minimal Link Condition (MLC) can be stated as follows:
 MLC: K attracts α only if there is no β , β closer to K than α , such that K attracts β (Chomsky 1995: 311). The MLC implies that derivations with shorter links are preferred over derivations with longer links; this is also known as the ‘Shortest Link’ or ‘Shortest Move’.

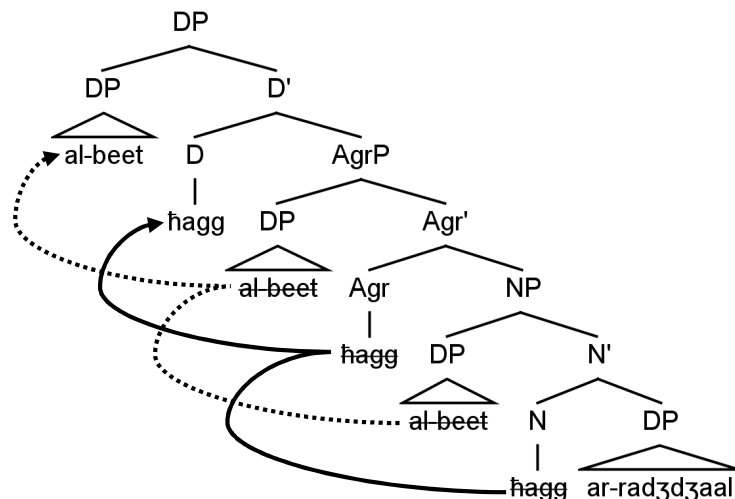
This is Mohammad's (1999) DP version of the VP-internal subject hypothesis. The question that arises here is to what extent this approach is capable of accounting for the facts of corresponding FS constructions in NA. It will become clear below that Mohammad's approach to *tabaʕ* in PA is unable to account for the distribution and syntactic properties of *ħagg*-possessive noun phrases in NA, as many issues remain unresolved.

3.4.2 Mohammad's (1999) approach to analytic possessive noun phrases: drawbacks and complications

To begin, given that the NA FS possessive marker *ħagg* 'of' is similar to the PA FS possessive marker *tabaʕ* 'of' as they appear between the possessum and the possessor, it is tempting to suggest that *ħagg* 'of' in NA occupies the same structural position as *tabaʕ* 'of' in PA. This suggestion is strengthened by the observation that these two possessive particles both inflect for Number and Gender with the possessum (i.e. the DP that immediately precedes them). If we were to adopt this suggestion, the NA example in (18) would have the syntactic structure in (19), where the possessive marker *ħagg* is base-generated in the same structural position as that of *tabaʕ* in PA, as argued for by Mohammad (1999), as the head of NP.

- (18) al-beet ħagg-Ø ar-rad3d3aal
 DEF-house of-SG.M DEF-man
 'The man's house'

(19)



In (19), the possessive marker *ħagg* starts as the head of the NP whose complement contains the possessor *ar-rad3d3aal*, 'the man', and whose specifier contains the possessum *al-beet*, 'the house'. Possessive *ħagg* looks like a mediator between the possessor and the possessum. According to Mohammad (1999), the head of the lexical projection, which here is *ħagg*, raises

to D° , via Agr° . As Mohammad (1999: 39; 43, fn. 19) claims, this movement is forced under the assumption that D° has a strong feature that needs to be checked, which is achieved through the movement of *ħagg* to it.

What appears as problematic for Mohammad's approach to FS is the assumption that agreement between *ħagg* and the possessum takes place in the derivation when *ħagg* adjoins to D° and the possessum moves to Spec, DP. Although $AgrP$, which appears as an intermediate projection between DP and NP, is the place where agreement occurs (Pollock 1989; Chomsky 1991; Adger 1994; Giusti 2006; Zwart 2006), Mohammad (1999) assumes that agreement between the possessum and *tabaʕ* occurs under a Spec-head relation in the highest projection of the relevant DP tree; namely, the DP layer. If agreement between the possessive particle and the possessum in (17) and (19) obtains in the DP projection, the Agreement projection becomes then redundant. The function of $AgrP$ remains a mystery under Mohammad's approach.⁴⁷

Another apparent problem for Mohammad's (1999) approach to FS in PA concerns the Case assignment to the possessor.⁴⁸ Mohammad suggests, without discussion, that it is assigned at LF in which case the possessor is supposed to raise up to a higher position (that is not derivationally shown by Mohammad (1999)).⁴⁹ Aside from the complication that Case is assigned at LF where uninterpretable features are not expected to survive (see Chomsky 1995), Mohammad does not specify which head assigns Case to the possessor, beyond rejecting the possibility that *tabaʕ* 'of' assigns Case to the possessor. As mentioned earlier in the descriptive section (3.2), the relation between *ħagg/ tabaʕ* and the possessor is robust, evidenced first by the strict adjacency between them and second by the fact that *ħagg/ tabaʕ* is ungrammatical

⁴⁷It seems to be the case that it is the DP layer which parallels IP in clauses for Mohammad (1999), especially that he mentions (p.39) 'By analogy to I, D (...)'. However, this assumption is at odds with the well-established proposals according to which the DP is structurally parallel to CP, where D° corresponds to C° and it is the intermediate functional category which is equivalent to \bar{I}/T° (Abney 1986, 1987; Horrocks and Stavrou 1987; Ritter 1991; Szabolcsi 1994; Siloni 1997: 7-8, 126; Carstens 2000: 320, 2001: 154; Giusti 2006: 166; Alexiadou *et al.* 2007; Ouhalla 2009a: 314, 2011: 117). If it is true that D° is parallel to C° and given that CP is cross-linguistically located above TP in the clausal domain, it follows then that agreement should take place in the intermediate projection which parallels TP and not higher in the DP layer, as claimed by Mohammad (1999). See also Aboh (2004), Haegeman (2004); Giusti (2005, 2006); Alexiadou *et al.* (2007); Lenzlinger (2010, 2017), who argue further that the DP layer is decomposed into two or more functional projections in a parallel fashion to the clausal split CP Hypothesis (Rizzi 1997).

⁴⁸ As for the structural Case of the possessum, Mohammad (1999) mentions that it is assigned in Spec, DP, the last structural position that the possessum occupies in the derivation (see (19) above). Although no motivation for this idea (i.e. that the possessum receives its Case in Spec, DP) is given, it can be said that this idea seems licit on the grounds that the possessum bears the Case of the entire possessive DP (whose value depends on its position with respect to other sentential elements). The possessum might be a subject, an object or an object of a preposition. It is thus theoretically possible to claim that the possessum receives its structural Case in Spec, DP, where the possessum is 'sensitive' to the effects from outside the DP (but see section 3.5.1).

⁴⁹ Mohammad (1999: 40, fn. 16) specifically suggests that it is raised up either to a hypothetical $AgrOP$ or, as he himself puts it (p.43) 'a new projection is created'.

without the possessor. Although this strong relation between *tabaʕ* and the possessor is admitted by Mohammad, under Mohammad’s approach there is no Case relation between *tabaʕ/ ħagg* and the possessor.

It is plausible, however, to assume that the possessor is assigned Case by the possessive particle, a matter that can be backed up by the MSA equivalent counterparts, where Case is morphologically overt (cf. Aoun *et al.* 2010; Fassi Fehri 2012). In MSA, the possessor is assigned Genitive Case by the preposition *li* ‘of’. Consider the following example from Fassi Fehri (2012: 174):

- (20) al-kitaab-u ʃ-fahiir-u li- l-ʕaqqad-i (MSA)
 DEF-book-NOM DEF-famous-NOM of- al-Aqqad-GEN
 ‘The famous book of al-Aqqad’

The possessor *ʕaqqad* is assigned Genitive Case by the preposition *li* ‘of’. Given that the preposition *li* ‘of’ appears in the same structural environment as that where *ħagg/ tabaʕ* occurs in NA and PA respectively (i.e. intervening between the possessum and the possessor), it can be suggested that the possessor in NA and PA is assigned Case by the possessive particle. Note also that Siloni (1997, 2002) and Shlonsky (2004) argue extensively that the Genitive Case in Semitic is assigned by a head to its complement under the condition that no element can intervene between them, which is exactly the case with *ħagg/ tabaʕ* and the following DP (I return to this point in the next section).

In view of all this, Mohammad’s (1999) proposal appears to have certain problems. It firstly fails to account for the strong relation between the possessive particle and the possessor, and secondly requires the projection of a (vacuous) phrase (i.e. AgrP) without an obvious reason; bringing, thus, an unnecessary complication to the structure and derivation of analytic possessive noun phrases in PA and other relevant Arabic varieties.

These points suggest that a different approach is needed. In the next section, I elaborate on a proposal to FS which, I claim, can account for the facts of NA (and other relevant Arabic dialects) without requiring a stipulation that is not theoretically or empirically motivated.

3.5 The derivation of *ħagg*: setting the scene

In the previous section, I have shown that Mohammad’s (1999) approach to FS in PA suffers from some drawbacks, mostly pertaining to Case assignment and the postulation of a superfluous AgrP. Specifically, under such an approach, it is not clear how Case is assigned to

the possessor. In addition, agreement between the possessive particle and the possessum obtains in the highest projection (i.e. the DP layer) and not in the intermediate projection (AgrP), which is the nominal inflectional layer, that is parallel to the IP layer in the clausal structure (see, e.g. Abney 1987; Ritter 1991; Siloni 1997; Giusti 2006). In so doing, Mohammad (1999) postulates an AgrP that actually does no work.

Let us first discuss the relation between *ħagg* and the possessor. Given the strict adjacency between *ħagg* and the possessor, it is tempting to follow Siloni's (1997) analysis of Hebrew *fel*, proposing that *ħagg* and the possessor merge as sisters (cf. Mohammad 1999; Ouhalla 2011). I propose that *ħagg* is a Case-assigning head that is endowed with a Case feature which must be discharged before the derivation is passed on to the LF interface and prior to Spell-Out.⁵⁰ According to Chomsky (1995: Ch.4, 2000, 2001), every DP enters the derivation with an unvalued Case whose PF value is specified by the context (i.e. syntactic environment) rather than being determined from the lexicon. Along these lines, it can be assumed that the possessor DP is endowed with an unvalued Case feature, which is valued by *ħagg* under sisterhood (cf. Siloni 1997, 2002: 180-181). This proposal helps us to account for the observation that no element (e.g. PPs) can intervene between *ħagg* and the possessor, as shown in the following example:

- (21) *al-beet ħagg bi-l-madiinah Muħammad
 DEF-house of in-DEF-city Muhammad

The ungrammaticality of the example in (21) demonstrates that *ħagg* should be followed by a DP to assign Case to. The PP *bilmadiinah*, 'in the city', is an element that does not receive Case and prevents *ħagg* from assigning Case to the possessor. This results in the Case of *ħagg* not being discharged, yielding ungrammaticality of the relevant construction.⁵¹ In this way, I propose that *ħagg* assigns (Genitive) Case to the following complement (i.e. the possessor DP), in a fashion similar to *li* 'of' in MSA and *fel* 'of' in MH (cf. (6) & (7) above) which are

⁵⁰ This is in compliance with the demands of the principle of Full Interpretation (FI), which can be stated as follows: 'The principle FI is assumed as a matter of course in phonology; if a symbol in a representation has no sensorimotor interpretation, the representation does not qualify as a PF representation. This is what we called the "interface condition". The same condition applied to LF also entails that every element of the representation have [*sic*] a (language independent) interpretation' (Chomsky 1995: 27).

⁵¹ Assuming Kayne's (1984) binary branching, *ħagg* in the ill-formed construction in (21) would be expected to take the PP *in the city* (forming a kind of syntactic unit) as its sister. The possessor *Muħammad* would be merged higher than *ħagg*+PP, hence it will not be c-commanded by the possessive marker. This would conceivably lead to *ħagg* not assigning Case to the possessor DP, resulting thus in ungrammaticality of the construction in (21). Another possible reason for accounting to the ill-formedness of strings like the one in (21) could be that *ħagg* in (21) is unable to assign a theta-role to the possessor DP *Muħammad*, hence the possessor DP *Muħammad* is left without a theta role.

DEF-workers.PL.M of-PL.M/of-SG.M/of-SG.F/of-PL.F DEF-farm

‘The workers of the farm’/ ‘the workers belonging to the farm’

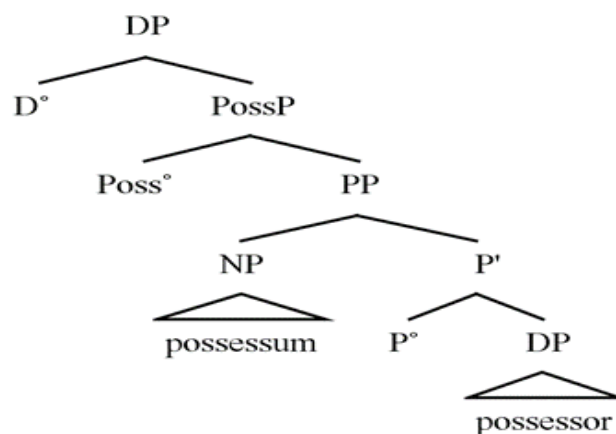
The examples above clearly show that *ħagg* agrees in Number and Gender with the possessum. For instance, in (22a) *ħagg* is SG.M since the ϕ -content of the possessum is singular and masculine. In (22b), *ħagg* is suffixed with the agreement inflection *-at* [SG.F] as the possessum is singular and feminine. Each ungrammatical example is ill-formed because *ħagg* expresses a different ϕ -content than that of the possessum.

The examples in (22) raise several questions. Why does *ħagg* agree with the possessum in the first place? Why does *ħagg* not agree with the possessor to which *ħagg* assigns Case? At face value, *ħagg* assigns Case to the possessor, while it agrees with the possessum. This state of affairs is seemingly problematic, as the head is expected to agree with the DP which it assigns Case to (see Chomsky 2000, 2001; Carstens 2000, 2001). In order to account for this, I propose that a probe cannot agree with the complement that receives Genitive Case from it. That is tantamount to the assumption that *ħagg*-possessum agreement or concord, as I will call it, is forced because the ϕ -features of the possessor are not available to *ħagg*. The next section is devoted to motivating this assumption.

3.5.1 Deriving Nominal concord in NA: the proposal

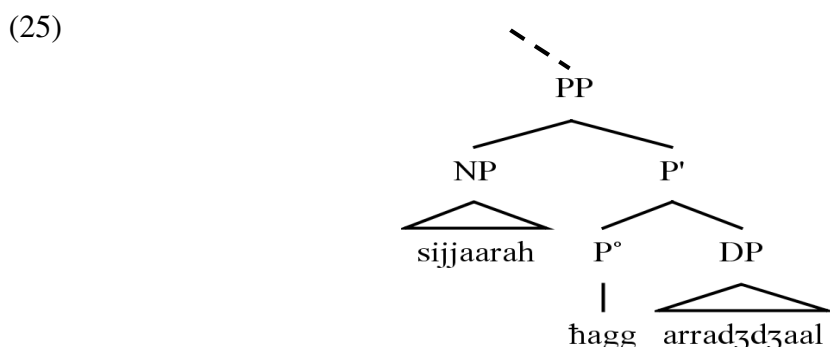
The answer to the question of how to derive nominal concord in NA analytic possession is significant, as it provides us with insight on how *ħagg* is licensed in the DP where it occurs. Given that *ħagg* agrees with the possessum, I assume that it bears unvalued, uninterpretable ϕ -features, which must be eliminated in the course of the syntactic derivation (Chomsky 1995: Ch. 4, 2000, 2001). As a point of departure, I propose that NA analytic possessive constructions have the structure in (23).

(23)



Given this structure and drawing on Chomsky’s (1995, 2000, 2001) derivational minimalist theory, the *ħagg* construction in (24) can plausibly be derived as shown in (25).

(24) as-sijjaarah ħagg-at ar-radʒdʒaal
 DEF-car of-SG.F DEF-man
 ‘The man’s car’



In (25), the possessive preposition *ħagg* merges with the possessor DP *arradʒdʒaal*, ‘the man’, followed by the merger of the possessum *assijjaarah*, ‘the car’, in the specifier of P. It should be noted at this juncture that while I concur with Mohammad (1999) that the possessor is merged as a complement of the possessive particle (see Ouhalla 2011 for a more recent incarnation), I do not label *ħagg* as a noun, as he does for *tabaʕ*.⁵⁴ Instead, I have argued above that *ħagg* is a preposition, hence it is labelled as ‘P’. Following my discussion above that *ħagg* is a Case-assigner, the possessor receives its Genitive Case internally and it remains trapped in its merge position; hence there is no need for it to move out of the lexical layer to seek Case elsewhere. Note that my proposal is in line with the Earliness Principle of Pesetsky and Torrego (2001: 400), stated below, given that the uninterpretable Case feature of the possessor is immediately valued by the Case assigning head as soon as it finds the latter’s valued Case feature.

(26) Earliness Principle: An uninterpretable feature must be marked for deletion as early in the derivation as possible.

⁵⁴ Mohammad Mohammad (personal communication, March 31, 2017) informs me that his treatment of the possessive particle *tabaʕ* ‘of’ as a noun is to be in line with traditional Arab grammarians’ view (see, e.g. Siibawayhi 8th century; Ibn S-sarraaj 10th century; Ibn Jinni 10th century), who treat many prepositions as nouns. According to this view, many words like *ʕala* ‘on’ and *taħta* ‘under, below’ have been traditionally classified as nouns in Arabic. Apart from the fact that both *tabaʕ* and *ħagg* are glossed as ‘of’ in English, I have shown earlier in section (3.2.2), that NA *ħagg* ‘of’ behaves like a preposition rather than a noun (see also Choueiri 2014, who labels the possessive particle *tabaʕ*, the analytic counterpart of *ħagg* in Lebanese Arabic, as a preposition). It should be also noted that the gender agreement of *ħagg* poses a problem for an analysis of *ħagg* (and *tabaʕ*) as a noun (à la Mohammad 1999), given that nouns in Arabic do not have different genders, depending on the gender of the preceding noun. If *ħagg* (or *tabaʕ*) is a preposition, the fact that there is number/gender agreement of the possessive particle is not immediately expected but there are other languages where agreement shows up on prepositions (see, e.g. Borsley *et al.* 2007; McCloskey and Hale 1984; Brennan 2008, 2009 for discussion of agreeing prepositions in Welsh and Irish).

The question that arises here is why *ħagg* does not enter into an Agree relation with the possessor. Put differently, why are the unvalued uninterpretable ϕ -features of *ħagg* not valued by those of the possessor? Since the possessor has valued ϕ -features, *ħagg* could in principle target them. However, as an initially plausible possibility, it can be assumed drawing on Rezac (2008) and Preminger (2011, 2014) that the possessor's ϕ -features are inaccessible (to *ħagg*) due to Case Opacity. Rezac (2008: 83), defines Case Opacity as follows:

(27) A DP with theta-related case may not agree in ϕ -features.

If we assume that the ϕ -features of the possessor are blocked by Case Opacity, these features would thus be invisible to agreement with *ħagg*. This discussion implies that the Case assigned to the possessor in FS is inherent in NA. As mentioned above, there is good reason to adopt this assumption in Semitic. Siloni (1997: 9; 14; 41-42; 59; 102, fn. 5) argues that the preposition *fel* assigns an inherent Genitive Case to the possessor. She follows Chomsky's (1986) proposal that inherent Case is assigned in situ under sisterhood.⁵⁵ Although the possessor does not receive a strict theta-interpretation (i.e. the possessor might be a Theme, Experiencer, etc.), Siloni points out that the range of the possible thematic roles which might be assigned to the possessor are delimited by the head noun itself (i.e. the possessum). For instance, if the possessum is the DP *the writing/the drawing*, the possessor is most likely to be an Agent rather than a Patient. Following this, Siloni claims that the possessor can be regarded as an inherent Case assignee. If we extend Siloni's proposal that the possessor is assigned inherent Case in FS in NA, the fact that *ħagg* does not agree in Number and Gender with the possessor follows. However, to the extent that the theta-role is assigned by the possessum and not by the preposition *ħagg* (or *fel*), the plausibility of referring to the Genitive Case assigned to the possessor as 'inherent' seems questionable, particularly since, as Siloni herself mentions, it is not tied to a particular theta-role assignment.

Apart from the issue whether or not the Case assigned by *ħagg/fel* is 'inherent', there is good reason to think that (Genitive) Case assignment by itself suffices to block agreement in ϕ -features with the Case-assigned DP (i.e. the possessor). This idea has been proposed by many authors (e.g. Thrainsson 2005; Legate 2008; Caha 2009; Preminger 2011; McFadden 2014; Holmberg 2018). For instance, Holmberg (2018: 15) proposes that agreement in possessive noun phrases in Finnish and English is blocked by Genitive Case assigned to the lexical

⁵⁵ Chomsky (1986) draws a distinction between structural Case and inherent Case. The latter is assigned by α to DP when α θ -marks DP, whereas the former does not demand this thematic marking. Siloni (1997) indicates that this means that Nominative and Accusative are instances of structural Case because they are not thematically related, whereas Genitive Case is inherent Case in Semitic.

possessor DP. In view of this, it is reasonable to suggest that Genitive Case-marked possessors are inaccessible to agreement in ϕ -features in NA (and presumably other Arabic dialects).⁵⁶ Note that this assumption finds further support from Chomsky (2004) who points out that ‘[i]f the internal argument receives Case (...) [w]e can assume that once Case of α is checked, α is "frozen"; it cannot enter into further agreement relations’ (2004: 126, fn. 36). This line of argument receives a plausible explanation in the present context following my claim that once the Case feature of possessor (i.e. the internal argument) is valued by the head of the PP, its ϕ -features are rendered inactive.⁵⁷

Let us now turn our attention to the point of how *ħagg* agrees in ϕ -features with the possessum. In order to account for *ħagg*-possessum agreement facts, I propose that nominal concord in NA arises through a syntactic operation which is established by a probe/goal Agree relation (see Chomsky 2000, 2001; Carstens 2000; Adger 2003; Pesetsky and Torrego 2007). For example, Chomsky (2000, 2001) argues that for a probe to agree with a goal, the former must c-command the latter, i.e. operation Agree obtains downwards only. Chomsky also argues that the goal must have matching interpretable ϕ -features and be active by having its Case feature unvalued.⁵⁸ With this information in mind, when *ħagg* cannot find a suitable goal with matching ϕ -features within its c-commanding domain, it must look elsewhere to find an element that bears

⁵⁶ The restriction on the accessibility of Φ -features for Agree is also found in several other languages; for instance, in elements with dative Case in the clause structure in Icelandic (see, e.g. Rezac 2008; Norris 2014), the possessor DP with Genitive Case in Finnish (see, e.g. Laitinen and Vilkkuna 1993; Holmberg 2010b: 209), Oblique Case-marked possessor DPs in nominal concord in Zazaki (see, e.g. Toosarvandani and van Urk 2014).

⁵⁷ An alternative is that what blocks agreement of *ħagg* with the possessor might involve parametrization where the rule might be as follows: if the Case assignee/the possessor (i.e. the goal) is a lexical DP, there is no overt agreement spelled out on the Case-assigning head and if it is a pronoun there is overt agreement (hence, the probe is realized as an agreement clitic). This case is somewhat similar to the issue we encountered in synthetic possessives (chapter two, section 2.6), where there is no overt agreement on the probe when the possessor (the goal) is a lexical DP whereas there is overt agreement when it is a pronominal possessor. It might be thought that this analysis could plausibly apply to *ħagg*-possessive constructions, as well. However, this cannot be the case, since *ħagg* agrees with the possessum to its left regardless of whether the possessor is pronominal or lexical DP, as shown in (i-ii):

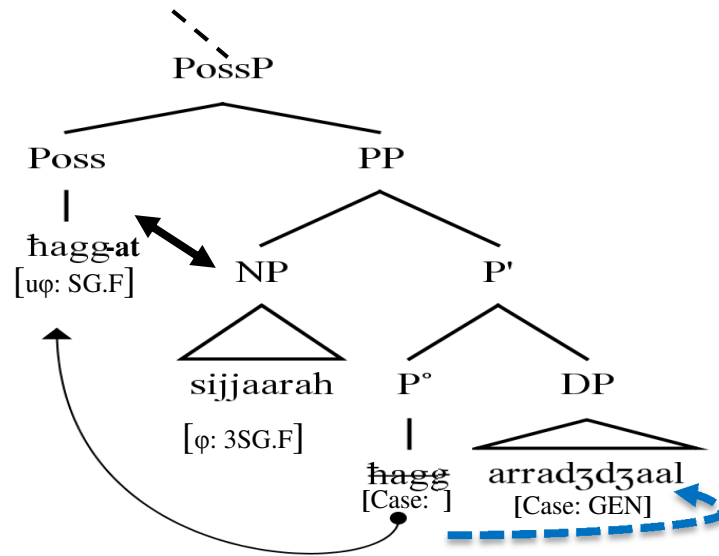
- | | | | | | | | |
|---------|---|------------------|--------------------|----|---|------------------|---------------|
| (i) a. | as-sijjaarah | ħagg-t-i | | b. | as-sijjaarah | ħagg-at-na | |
| | DEF-car.SG.F | of-SG.F-mine.1SG | | | DEF-car.SG.F | of-SG.F-ours.1PL | |
| | ‘The car of mine’/‘my car’ | | | | ‘The car of ours’/‘our car’ | | |
| | c. | as-sijjaaraat | ħagg-aat-ha | | d. | al-mazraʕah | ħagg-at-kum |
| | | DEF-car.PL.F | of-PL.F-hers.3SG.F | | | DEF-farm.SG.F | of-SG.F-2PL.M |
| | ‘The cars of hers’/‘her cars’ | | | | ‘The farm of yours’/‘your farm’ | | |
| (ii) a. | as-sijjaarah | ħagg-at | Muhammad | b. | as-sijjaaraat | ħagg-aat | Muhammad |
| | DEF-car.SG.F | of-SG.F | Muhammad | | DEF-car.PL.F | of-SG.F | Muhammad |
| | ‘The car of Muhammad’/ ‘Muhammed’s car’ | | | | ‘The cars of Muhammad’/ ‘Muhammed’s cars’ | | |

In (i) and (ii), it can be seen that *ħagg* always shows agreement with the possessum, irrespective whether the possessor is a lexical DP or a pronoun. It should also be pointed out that the analysis proposed for *ħagg*-constructions with the lexical possessor, to be discussed below, poses a problem of accounting for *ħagg*-possessum agreement when the possessor is a pronoun (i) since it is not clear whether it should be assigned the same syntactic representation as its lexical counterpart or it has a different structure. I leave this issue open for further research (see chapter six, 6.2).

⁵⁸ See the Introduction to this work, section 1.3 for discussion of the operation Agree.

interpretable ϕ -features to agree with. As far as the derivation in (25) proceeds and upon Poss merger, *ħagg* moves to it to lexicalise it. Following *ħagg* movement to the functional head, the valued ϕ -features of the possessum become available to Agree. Consequently, the possessive *ħagg* probes downwards to find these features and is valued by them, as shown in the following schematic representation:

(28)



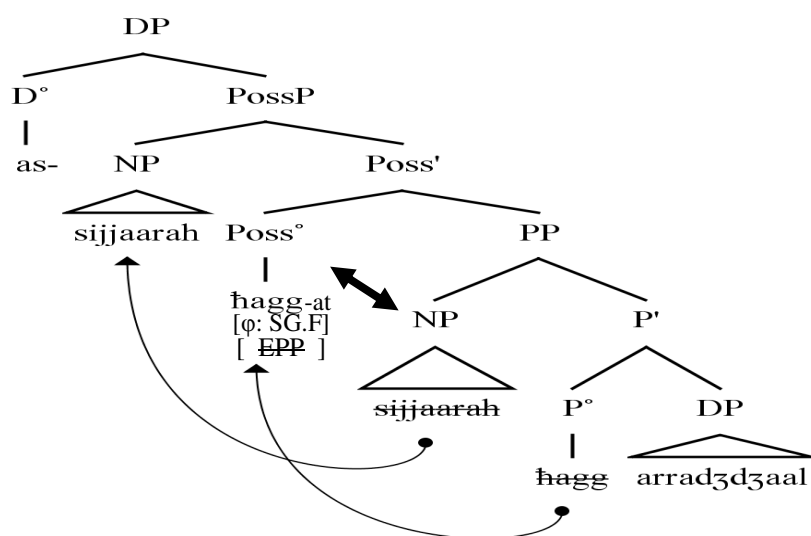
The main idea here is that *ħagg* first assigns Genitive Case to the possessor and then moves to Poss to probe downward for the ϕ -features of the possessum, agreeing with it in number and gender. It should be noted that the analysis developed here is consistent with Chomsky's (2000, 2001) Agree operation, whereby agreement obtains between a probe and a goal according to which the former must c-command the latter; and not the other way around.⁵⁹ For instance, in (28), the possessive marker *ħagg* in Poss is the probe and the possessum *as-sijaarah* 'the car' in Spec, PP is the goal. Under this scenario, given that *ħagg* has unvalued phi-features, it probes downwards looking for a goal with a matching valued phi-features. Following this, the probe locates such valued features on the possessum NP in its c-command and values its unvalued features; deriving thus an inflected form of the preposition, namely *ħagg-at*.

At this point of the derivation, the order between the elements forming the analytic possessive construction does not match the surface word order of the *ħagg* possessive construction shown

⁵⁹ It should be pointed out that in the literature on generative syntax, there appears to be no general consensus over the directionality of Agree. For example, several proposals argue, contra Chomsky (2000, 2001), that Agree takes place in a bi-directional fashion: upwards or downwards (see, e.g. Adger 2003; Baker 2008; Béjar and Rezac 2009; Al-Balushi 2011; Toosarvandani and van Urk 2012, 2014; Carstens 2016; Tahir 2018); whereas other proposals argue extensively that the direction of agreement obtains upwards only (see, e.g. Zeijlstra 2012; Wurmbrand 2012, 2014, 2017). The current research, however, makes use of Chomsky's (2000, 2001) downward Agree as a viable mechanism/framework of accounting for NA DP-internal agreement facts.

in (24), in that the possessum *as-sijjaarah*, ‘the car’, precedes *ħagg*. Assuming that Poss has an EPP feature (Chomsky 2000, 2001), this feature will trigger movement of the possessum to its specifier. Note that the probe-goal configuration established between *ħagg* and the possessum *as-sijjaarah* is not enough to satisfy the EPP feature on Poss, whose Spec must be occupied in overt syntax. Therefore, if the possessum does not move to Spec of Poss, lexicalised by *ħagg*, the derivation crashes, given that the EPP feature is not a legitimate object at PF (see Chomsky 1995: Ch. 4). The derivation is shown in (29), where the outer DP layer, headed by the definite article, is also added.

(29)

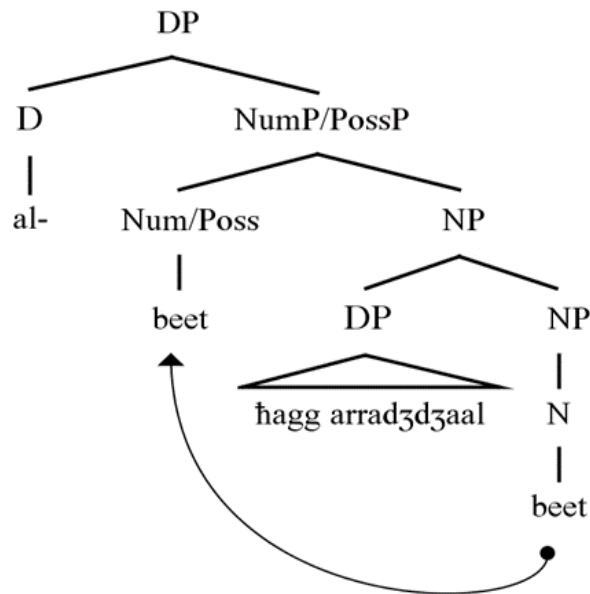


In the present framework, the movement of the possessum NP to Spec, PossP is plausibly attributed to an EPP feature on Poss, which parallels in the relevant respects the EPP feature on the inflectional category T in sentences (I return to the parallelism between noun phrases and clauses below). Note that this movement may also be motivated by the need of the possessum NP to value and remove its uninterpretable Case feature, as it is still active. This time the possessum enters into another Agree relation with the higher D, whose Case value is determined from outside, and gets assigned structural Case (Nom, Acc, etc.) according to its position in the respective sentence (see Ouhalla 2011: 119, 124 for further discussion). It appears, thus, that the Agree relation established between *ħagg* and the possessum does not result in the valuation of the Case feature of the latter; hence Structural Case of the possessum is not simply a reflex of Agree relation, as argued by Chomsky (2000, 2001) (more on this in section 3.5.2).

Before closing the discussion, I address two important points relating to the analysis developed here. Firstly, it should be pointed out that my analysis of *ħagg* possessive constructions is inconsistent with the traditional analysis of FSs in Semitic, which views the possessum as a head noun (X°) and the word order is derived by raising the head noun across the possessor,

located in [Spec, NP] (Ritter 1991; Fassi Fehri 1993, 1999; Siloni 1997; Borer 1999; Benmamoun 2000; Ouhalla 2009a). Such an analysis can be schematically represented in the following structure:

- (30) al-beet ħagg-∅ ar-radʒdʒaal
 DEF-house of-SG.M DEF-man
 ‘The man’s house’



I argue that the syntactic analysis above must be ruled out for a number of reasons. To begin with, *ħagg* is an agreeing head, as discussed above, and not just a genitive preposition that is inserted at PF for Case-considerations (see Ritter 1991; Siloni 1997; Ouhalla 2009a: 321). More importantly, such an analysis must be ruled out following the observation that the possessum (and the possessor) in NA and other Arabic varieties can be routinely modified by a number of nominal modifiers, which have been taken as evidence that the associating noun is a part of the possessum NP/DP rather than a bare noun (cf. Ouhalla 2011: 116, 120). Consider the following example:

- (31) al-beet al-kabiir ħagg-∅ ar-radʒdʒaal al-ʔani
 DEF-house DEF-big of-SG.M DEF-man DEF-rich
 ‘The rich man’s big house’/‘the big house of the rich man’

The presence of the nominal modifier *kabiir* to the right of the possessum entails that it is an NP/DP rather than a bare noun, which holds true of the possessor as well. Further supporting evidence for this idea comes from the fact that the possessum can be preceded and followed by

a dedicated demonstrative pronoun whose existence is a direct clue for the DP status of the possessum (the same applies to the possessor). Consider the following examples in (32):

(32)a. haḏa al-beet al-kabiir ḥagg-∅ haḏaak ar-radʒdʒaal al-ʔani
 this DEF-house DEF-big of-SG.M that DEF-man DEF-rich
 ‘This big house of that rich man’

b. al-beet al-kabiir haḏa ḥagg-∅ ar-radʒdʒaal al-ʔani haḏaak
 DEF-house DEF-big this of-SG.M DEF-man DEF-rich that
 ‘This big house of that rich man’

In (32a-b), a different demonstrative is associated with the possessum and the possessor, the demonstrative is alternated to appear to the left and to the right of the possessum; the predicted behaviour is that the possessum is an NP/DP rather than a bare noun. Thus, the proposal I developed here to capture *ḥagg*-possessum agreement is different from the traditional analysis put forward for the Free State constructions (contra Ritter 1991; Siloni 1997; Borer 1999; Benmamoun 2000; Ouhalla 2009a, but in line with Mohammad 1999; and Ouhalla 2011), given that it departs away from proposals considering the possessum as a bare noun.

Note that my analysis of Free State constructions accounts for the position of the nominal modifiers of the possessum (and the possessor). As mentioned above (section 3.2), any nominal modifiers must accompany their associated noun and cannot be stacked at the end of the two members of Free state construction as is the case with adjectives in Construct State (CS) (see chapter two, section 2.2 for further details on CS). Consider the following examples:

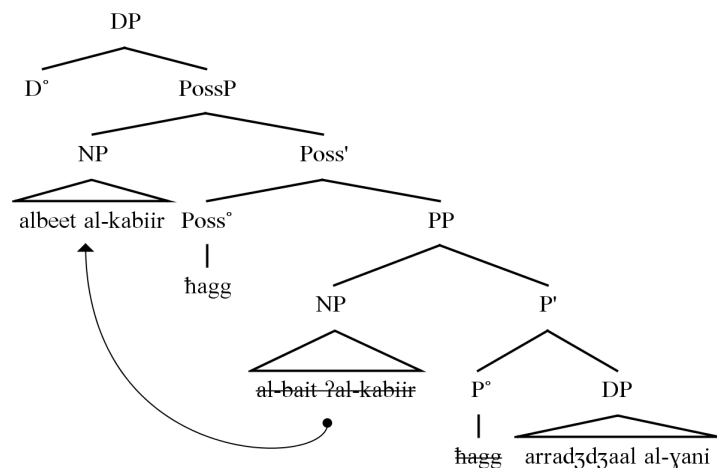
(33)a. al-beet al-kabiir ḥagg ar-radʒdʒaal al-ʔani
 DEF-house DEF-big of DEF-man DEF-rich
 ‘The rich man’s big house’

b.*al-beet ḥagg ar-radʒdʒaal al-ʔani al-kabiir
 DEF-house of DEF-man DEF-rich DEF-big
 Intended meaning: ‘The rich man’s big house’

c.*al-beet ḥagg ar-radʒdʒaal al-kabiir al-ʔani
 DEF-house of DEF-man DEF-big DEF-rich
 Intended meaning: ‘The rich man’s big house’

According to the syntactic analysis adopted here, the possessum and the possessor enter the derivation as NPs/DPs and they do not merge with one another but in different positions; the possessum in the Spec of PP and the possessor as an internal argument which occupies the complement position of P. When the possessum *albeet* in (33a) moves to the Spec of the PossP to satisfy the EPP feature on Poss, it moves as a whole (i.e. together with its nominal modifier simply as the latter is part of the possessum), as shown in (34). Therefore, the derivation does predict that the nominal modifiers of the possessum and the possessor cannot be stacked, the desired conclusion.⁶⁰

(34)



The last point I address in this section concerns the parallelism between the structure of (possessive) noun phrases and that of clauses. As mentioned in the previous section (3.4), several Semitic researchers (see, e.g. Ritter 1988, 1991; Mohammad 1988, 1999; Ouhalla 1991, 1999, 2011; Benmamoun 2003; Fassi Fehri 2005) adopt the idea that the structure of noun phrases parallels that of clauses (cf. Abney 1987). As far as the structure of *ḥagg* is concerned, I believe that this idea is fundamentally correct. This is so, given that the structure of (possessive) noun phrases supports this view and maintains a transparent parallelism with the

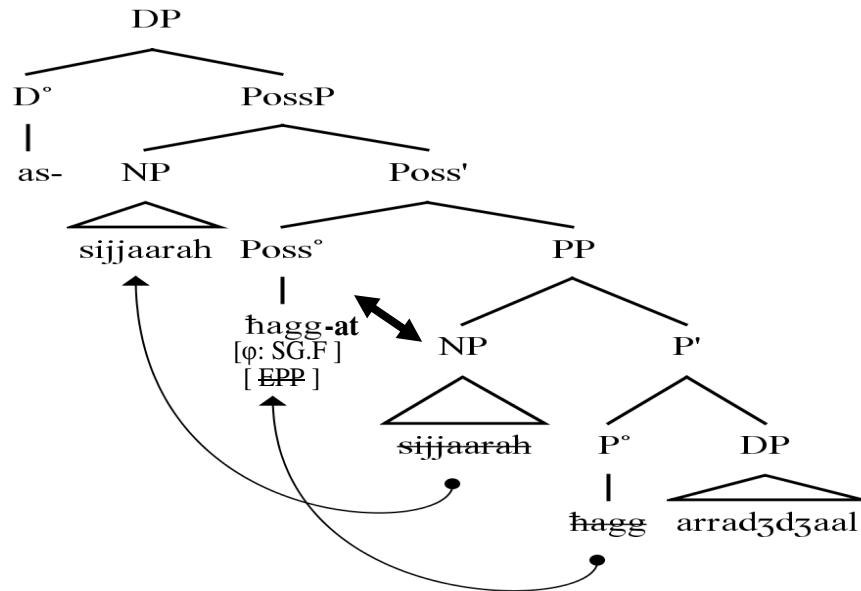
⁶⁰ A question that arises here is how to derive the above Free state construction with the presence of a demonstrative pronoun *haḏa* ‘this’ in a construction like (32a), reproduced below as (i) for convenience:

- (i) haḏa al-beet al-kabiir ḥagg-∅ ar-radʒdʒaal al-ʔani
 this DEF-house DEF-big of-SG.M DEF-man DEF-rich
 ‘This big house of the rich man’

One plausible answer is that it occupies the D head of the highest DP layer (see, e.g. Ouhalla 2011: 120). An alternative plausible possibility is that it is the head of a dedicated functional (Dem)onstrative projection (in the sense of Shlonsky 2004), which in the present context would be situated below the outer D and above the PossP; see Alrasheedi (2016), who entertains the latter view while analysing demonstratives in (Haili) Arabic simple DPs. I will however leave this issue open without taking a position here.

clausal structure in several respects. Consider first the analysis adopted here for analytic *ħagg* possessive constructions roughly shown in (29), repeated below in (35):

(35) as-sijjaarah ħagg-at ar-rad3d3aal
 DEF-car of-SG.F DEF-man
 ‘The man’s car’



First, consider the relationship between *ħagg* and the possessor. As alluded to above, *ħagg* forms a constituent with the possessor DP, which in a way recalls the relationship between verbs and their complements. In this respect, I argued above that *ħagg* assigns Genitive Case to the possessor and the latter remains in its merge position; this state of affairs is reminiscent of the object DP, which receives an Accusative Case from the verb and remains in-situ. Second, we have seen that the possessive particle shows morphological concord in number and gender with the possessum which strongly resembles subject-verb agreement in the clausal domain, where the verb agrees in number, gender (and person) with the subject in the SV order.⁶¹ Furthermore, *ħagg*'s movement to Poss resembles the verb head-raising to T in clauses. Therefore, *ħagg*-possessum agreement mimics, in the relevant respects, subject-verb agreement in the clausal structure, especially that this Agree involves the operation Move (Chomsky 2000, 2001); whereby the possessum raises to Spec, PossP, which is associated with an 'EPP'-like feature on Poss that parallels subject-raising to Spec, TP in sentences.

In view of this, my analysis of analytic *ħagg* constructions constitutes an important parallelism between the structure of possessive noun phrases and clauses, whereby the former mimics that

⁶¹ For discussion of subject-verb agreement in Arabic see Fassi Fehri (1993), (2012); Aoun *et al.* (1994); Ouhalla (1994), (2013); Mohammad (2000); Soltan (2007); Aoun *et al.* (2010). See also Ouhalla (2011), who argues extensively that agreement within analytic possessive noun phrases in Moroccan Arabic arises under the same derivational conditions as agreement found within clauses.

of the latter. Crucially, note that my analysis is in line with several authors who argue that agreement patterns within the DP should obtain under the same way as agreement within clauses (see Szabolcsi 1994; Mallen 1997; Carstens 2000, 2001; Giusti 2006; Koopman 2006; Baker 2008; Danon 2011; Ouhalla 2011).⁶² Thus, assigning a parallel syntactic structure to them is both promising and plausible.

3.5.2 *Theoretical implications*

The discussion above reveals that Genitive Case blocks the Agree operation. When the goal (i.e. the possessor) has Genitive Case, it resists valuing the ϕ -features of any probe even if the head that assigns it the Genitive Case. The question to ask here is why this should be the case. The answer to this question, I think, lies in the conceptual necessity or function of the Agree relation. It is obvious that Agree is used to maintain a syntactic relation between two elements (or more, cf. Hiraiwa 2001). It is plausible to think that for this relation to occur the elements that it links should not have an already-established relation; otherwise Agree becomes vacuous. If we grant the assumption that Genitive Case assignment is by itself enough to maintain a syntactic relation between two elements, especially since Case assignment is standardly viewed as an instance of Agree relation in the minimalist program, it follows that the co-occurrence of Genitive Case assignment and Agree in ϕ -features is theoretically unmotivated as each does the job. Following this line of syntactic theorizing, a head (i.e. a probe) enters either into Genitive Case assignment or an Agree relation with the same element, a condition that is borne out by *ħagg*.

The second issue to address here concerns the syntactic relation between *ħagg* and the possessum. As mentioned above, despite the fact that the possessive particle agrees with the possessum, such an agreement does not result in the structural Case assignment (i.e. Nom, Acc, etc.) to the possessum. This runs counter to the standard theory of Agree (Chomsky 2000, 2001), whereby the verb agrees with subject DP in person and number and the latter gets assigned Nominative Case by T as a reflex of Agree relation; hence agreement and Case assignment work in tandem (see Adger and Harbour 2008: 6; Brattico 2012: 30, 53). This issue may seem, at first glance, problematic to my analysis of *ħagg*-possessum agreement; hence cause theoretical consequences. However, it has been reported in the literature that agreement does not seem to depend on Case assignment in several languages (see, e.g. Carstens 2000, 2001 for Bantu; Julien 2005: 148-9 for varieties of Scandinavian; Brattico 2012 for Finnish; McFadden and Sundaresan 2011; Baker 2015 for a variety of languages). These authors point

⁶² But see Norris (2011) for a different view based on data mainly from Icelandic that nominal concord behaves differently; hence does not arise through the same agreement conditions found in verbal domain.

out, contra Chomsky (2000, 2001), that phi-agreement is independent of structural Case assignment. For example, Carstens (2000, 2001) argues that structural Case is not a reflex of an uninterpretable phi-set probe, as posited by the standard minimalist theory of Agree (this condition is stated below in 36). Brattico (2012) makes essentially the same observation in Finnish.

(36) Structural Case is a reflex of a c-commanding uninterpretable phi-set probe. (Chomsky 2000: 122)

On the whole, this condition imposed on agreement has been proven to be too strong and evidence has been accumulated in several languages that structural Case (e.g. Nominative Case) is not a reflex of ϕ -Agree in the same way that it occurs in subject-verb agreement in a language like English (cf. Carstens 2000, 2001; Julien 2005; McFadden and Sundaresan 2011; Brattico 2012; Baker 2015 for discussion).

3.6 Conclusion

In this chapter, I have addressed the morpho-syntactic behaviour of the possessive particle *ħagg*. The main assumption advocated is that *ħagg* is a Case assigning head that bears unvalued ϕ -features. Possessive *ħagg* first assigns Genitive Case to the possessor DP, which occupies its complement position. In order to account for the fact that *ħagg* agrees with the possessum in Number and Gender, I have developed a syntactic analysis of *ħagg* possessive constructions, arguing that an Agree operation (Chomsky 2000, 2001) is established between the preposition and the possessum it closely c-commands after *ħagg* has moved to Poss; this results in deriving an inflected form of *ħagg* that agrees with the possessum in number and gender. The probing between *ħagg* and the possessum is forced by the postulated condition that a probe may not agree with a goal already assigned Genitive Case or with the goal which it assigns Genitive Case to. That is, the ϕ -features of the possessor DP are inaccessible to *ħagg* due to Genitive Case assignment which blocks such features. Finally, I have adopted the idea that *ħagg*-possessum agreement should be viewed similar to subject-verb agreement, hence agreement within possessive noun phrases should be handled under the same derivational conditions as agreement within clauses.

Chapter 4. Analytic Free State: abu and umm Possessive Constructions

4.1 Introduction

In the previous chapter, I explored the syntactic analysis and derivation of the possessive constructions formed by the analytic Free State possessive marker *ħagg*. I repeat in (1) one relevant example necessary for the discussion of the other possessive constructions to be investigated in this chapter.

- (1) al-beet Possessum ħagg ar-radʒdʒaal Possessor
DEF-house of.SG.M DEF-man
'The man's house'

In (1), the possessive particle *ħagg* appears between the possessum and the possessor. The possessum must appear first in sequence, followed by *ħagg*, which is in turn followed by the possessor, as shown in the following representation:

- (2) possessum -- *ħagg* -- possessor

In this chapter, I will investigate other analytic possessive particles which are used in Najdi Arabic (henceforth, NA). It is clear that analytic DP-internal possessive formation in this Arabic variety is not restricted to *ħagg*-constructions. There are other types of constructions, where the element understood to be the possessor precedes the element understood to be the possessum, with a further element in between. The main similarity between these markers and *ħagg* is that they have a possessive reading. These possession markers are *abu* and *umm*, exemplified in (3). Unlike *ħagg*, *abu* and *umm* are preceded by the possessor and followed by the possessum.

- (3) a. ar-radʒdʒaal abu iʃjuun zurg
DEF-man with.SG.M eyes blue
'The man with blue eyes/ the blue-eyed man'
- b. al-bint umm ʃaʃar tʕawiil
DEF-girl with.SG.F hair long
'The girl with long hair/the long-haired girl'

This sequence can be linearly diagrammed as follows:

- (4) possessor -- *abu/umm* -- possessum

If the order between the possessor and the possessum is inverted, the resulting construction, as in (5), is ungrammatical.

- (5) *iʕjuun zurg abu ar-radʒdʒaal
 eyes blue with.SG.M DEF-man
 Intended meaning: ‘The man with blue eyes’

The structure of the two analytic possessive constructions in NA seems to be as follows:

- (6) a. HEAD ATTRIBUTE
 [al-baab al-ʔaħmar]_{possessum} [ħagg]_{relator} [al-beet]_{possessor}
 DEF-door DEF-red of DEF-house
 ‘The red door of the house’
- b. HEAD ATTRIBUTE
 [al-beet]_{possessor} [abu]_{relator} [al-baab al-ʔaħmar]_{possessum}
 DEF-house with DEF-door DEF-red
 ‘The house with the red door’

As can be seen in (6), one main difference between the two analytic possessives is that in *ħagg* possessive constructions the possessum DP is syntactically the head of the possessive phrase, whereas in *abulumm* possessive constructions it is the possessor. Put differently, in *ħagg*-constructions the possessor DP is the attribute of the possessum (i.e. the head), whereas in *abulumm*-constructions the possessor DP is the head whose attribute is the possessum.

The possessor-initial constructions formed with *abu* and *umm* possessives find a close parallel in English. As shown in the translations given in (3), in English, the same type of possession can be expressed by the preposition *with* as in *the girl with blonde hair* or *the table with three legs*, where these constructions are best viewed as expressing possession, rather than the comitative or instrumental meaning that *with* generally has. Taking a careful look at the literature reveals that this type of possession has received only a limited amount of attention in the literature (but see e.g. Stolz 2001a, Stolz *et al.* 2008 for studies from a typological perspective; Levinson 2011 for a generative study; Rapoport 2014 for a semantic analysis). Specifically, the *abu* and *umm* possessive markers of NA have received little or no attention at all.⁶³ The current chapter aims to fill this gap by first providing a descriptive account of these markers and then presenting an analysis of their internal make-up as well as syntactic derivation.

The discussion below is thus devoted to exploring this type of possessive construction, which is referred to in the literature as ‘attributive possession’ (see Stolz 2001a; Stassen 2009; and

⁶³ The only work that I am aware of is Mohammad (1999: 40), who mentions some examples of *abu* and *umm* markers in Palestinian Arabic (see the discussion of (65) in section 4.3.2 below).

Levinson 2011). The chapter is organized as follows: section 4.2 provides a syntactic description of NA *abulumm*-possessives, partly by comparing them with the English *with*-possessive. It will become clear that although there are some interesting similarities between the NA markers and the English marker, there are certain differences which clearly distinguish them from each other. The syntactic analysis of these data follows in section 4.3. In section 4.3.1 I will first discuss an analysis of possessive *with* in Germanic put forth by Levinson (2011). This is then followed by 4.3.2 where I explore the applicability of Levinson’s proposal to NA *abulumm*-possessives. Section 4.3.3 discusses possessor-initial constructions formed with *duu* in Modern Standard Arabic, where the particle shows similar syntactic behaviour to the markers in NA. Finally, section 4.4 concludes the chapter.

4.2 *abu, umm* and *with* possessives: basic semantics and syntax

4.2.1 Preliminaries

As pointed out above, in addition to *ħagg* possessive constructions, the notion of possession in NA can be expressed attributively through the use of *abu* and *umm* possessive markers, as in (7a-b).

- (7) a. ar-radʒdʒaal atʕ-tʕawiil abu aʃ-ʃanab al-aswad
 DEF-man DEF-tall.SG.M with.SG.M DEF-moustache DEF-black
 ‘The tall man with the black moustache’
- b. al-bint atʕ-tʕawiilah umm iʃjuun zurg
 DEF-girl DEF-tall.SG.F with.SG.F eyes blue
 ‘The tall girl with blue eyes’

The NA *abu* and *umm* possessive constructions, illustrated above, share with the analytic Free State (FS) a number of properties, which we have already discussed in the previous chapter. Firstly, just like the FS, the head of *abulumm*-possessives, which is the possessor, is marked by the definite article *al*; secondly, any adjective immediately follows the noun it modifies; and thirdly a possessive particle *abulumm* intervenes between the two members of FS, separating the head noun (and its modifying adjective) from the following DP (the possessum). Note that this construction is found not only in NA but also in other varieties of Arabic.

Descriptively, in NA and other varieties of Arabic, the possessive markers show agreement in gender and number with the possessor DP: if the possessor is feminine singular, *umm* ‘with.SG.F’ is obligatorily used (8a) and when it is masculine singular *abu* ‘with.SG.M’ must be employed (8b), while the feminine plural form *ummahaat* ‘with.PL.F’ must be used with feminine plural possessors (8c).

- (8) a. al-bint umm /*ummahaat/*abu iʕjuun zurg
 DEF-girl with.SG.F/ with.PL.F / with.SG.M eyes blue
 ‘The girl with blue eyes’
- b. ar-radʒdʒaal abu /*umm /*ummahaat ʃaʕar tʕawiil
 DEF-man with.SG.M /with.SG.F/ with.PL.F hair long
 ‘The man with long/big hair’
- c. al-banaat ummahaat /*umm /*abu iʕjuun zurg
 DEF-girls with.PL.F /with.SG.F/ with.SG.M eyes blue
 ‘The girls with blue eyes’

With regard to the alteration between *abu* and *umm*, there is no semantic/pragmatic difference between them. The choice between them is solely determined by the gender of the possessor: *abu* is used with masculine possessors, as in example (8b), whereas *umm* is used with feminine possessors, as shown by (8a) and (8c). Interesting enough here is the fact that *abu* and *umm* literally mean ‘father of’ and ‘mother of’, respectively. This observation suggests that there is an agreement relation between the possessive particle and the DP to its left. What should be emphasized at this juncture is that, unlike *umm*, there is no plural form of *abu*, as shown in (9).

- (9) a. *ar-rdʒaal abu iʕjuun zurg
 DEF-men with.SG.M eyes blue
 Intended meaning: ‘The men with blue eyes’
- b. *ar-rdʒaal abu as-sijjaarah al-ħamra
 DEF-men with.SG.M DEF-car DEF-car
 Intended meaning: ‘The men with the red car’

The incompatibility of *abu* and plurality is a significant clue to its featural grid (as will be discussed in section 4.3.2).⁶⁴

As mentioned earlier, English has an interesting parallelism formed by the possessive preposition *with* as in (10), where it makes use of the preposition to convey a possessive relation rather than the comitative or instrumental meaning that *with* usually has (as detailed in section 4.2.2).

⁶⁴ It should be pointed out that the meaning of (9a, b) can be expressed in NA through the particle *ʔasʕħaab*, as in (i). In the current work, I will confine myself to the discussion of the *abulumm*-possessives only (see chapter six, 6.2).

(i) ar-rdʒaal ʔasʕħaab as-sijjaarah al-ħamra
 DEF-men with.PL.M DEF-car DEF-car
 ‘The men with the red car’

- (10) a. The man with the black moustache
 b. The girl with the beautiful face
 c. The cat with three legs

In this way, what English represents with one word, NA represents in two allomorphs of the possessive marker, viz. *abu* and *umm*. It is these two markers that we will compare and contrast with English *with* in the following section.

4.2.2 On certain similarities and differences between NA *abu*, *umm* and English *with*

This section compares the NA *abulumm*-possessives with the English *with*-possessive. The first interesting similarity between the Arabic and English constructions concerns the (in)definiteness status among the members of the *abu* and *umm* constructions, on the one hand, and English possessive *with* constructions, on the other hand. Let us first consider the following examples from English.

- (11) a. The girl with the tattoo
 b. The man with the black moustache
 c. The girl with the red scarf
 d. The man with the beard
 e. The guy with the funny voice

- (12) a. A girl with a tattoo
 b. A man with a beard
 c. A guy with a funny voice
 d. A man with a temper
 e. A room with a view

As a first approximation, the English examples above may suggest that there is agreement in (in)definiteness between the two members of the possessive ‘with’ constructions as the definite article *the* of the possessum in (11) seems to agree in definiteness with that of the possessor. In case of indefinite constructions, as in (12), the indefinite article of the possessum also seems to correspond to the indefinite article of the possessor. Also note that if the possessor is indefinite, the possessum cannot be definite as illustrated by the ungrammatical examples in (13). Thus, in English indefinite constructions (12a-e) and (13a-e), we can observe that an indefinite possessor is only consistent with an indefinite possessum.

- (13)a. *A man with the beard
 b. *A girl with the tattoo
 c. *A guy with the funny voice
 d. *A cat with the three legs

- e. *A man with the umbrella

Interestingly, the same observation holds true for NA *abu* and *umm* constructions with respect to definiteness, as the examples in (14) demonstrate.

- (14)a. ar-radʒdʒaal abu al-liḥjah
 DEF-man with.SG.M DEF-beard
 ‘The man with the beard’
- b. al-bint umm aḥ-jaḥar at^ʕ-t^ʕawiil
 DEF-girl with.SG.F DEF-hair DEF-long
 ‘The girl with the long/big hair’
- c. al-bint umm al-waḥim
 DEF-girl with.SG.F DEF-tattoo
 ‘The girl with the tattoo’

Additionally, notice that in NA, like English, it is not possible to use the definite article *ʔal* ‘the’ on the possessum when the possessor is indefinite, as in (15), as compared with (13):

- (15)a. *bint umm aḥ-jaḥar at^ʕ-t^ʕawiil
 girl with.SG.F DEF-hair DEF-long
- b. *bint umm al-waḥim
 girl with.SG.F DEF-tattoo
- c. *radʒdʒaal abu al-liḥjah
 man with.SG.M DEF-beard

However, the existence of cases where the possessor is definite and the possessum is indefinite shows that such an agreement in (in)definiteness is not on the right track. This is clearly borne out by the examples in (16) and (17) from English and NA, respectively.

- (16)a. The man with a beard/ moustache
 b. The man with a funny voice
 c. The girl with a tattoo
 d. The room with a view
- (17)a. ar-radʒdʒaal abu liḥjah
 DEF-man with.SG.M beard
 ‘The man with a beard’
- b. al-bint umm jaḥar t^ʕawiil
 DEF-girl with.SG.F hair long
 ‘The girl with long/big hair’

- c. al-bint umm wajim
 DEF-girl with.SG.F tattoo
 ‘The girl with tattoo’

Thus, there is an (in)definiteness asymmetry in the contexts of the English and NA examples in (16) and (17). I assume, following Levinson (2011), that there is no difference in interpretation between the NA examples in (17) and (14) (cf. the English constructions in 16 with the instances in 11).⁶⁵

The (in)definiteness status of the possessor and possessum formed by *abu*, *umm* and *with* within the possessive DP constructions can be summarized as follows (where d=definite and in=indefinite):

- (18)a. dDP *abu / umm / with* dDP (possible)
 b. inDP *abu / umm / with* inDP (possible)
 c. dDP *abu / umm / with* inDP (possible)
 d. inDP *abu / umm / with* dDP (impossible)

The four logically possible combinations of (in)definiteness are given in (18). As is evident from (18d), the possessor in NA and English cannot be indefinite when the possessum is definite.

The second similarity between the NA markers and the English possessive *with* is the expression of family relations. Examples of these usages are given in (19-21).

⁶⁵ While comparing Icelandic attributive possessive constructions with their English counterparts, Levinson (2011) notes that in the former the definite article of the possessum is in definiteness concord with that of the possessor, as in (ia) and (ib) (from Levinson 2011: 368, 369). She points out that the Icelandic construction in (ib), compared with the English example in (iib), must have the definite article in the complement, otherwise the construction is ungrammatical (ib). This is unlike English where both (iia) and (iib) are acceptable. Following this, she points out that this is one of the main differences between Icelandic and English possessive ‘with’ constructions, stating, nevertheless, that there is not any interpretative difference between the two constructions (Levinson’s 2011 approach is discussed in section 4.3.1). Here it suffices to note that the NA *abu* and *umm* examples, unlike Icelandic, are identical to their English counterparts with respect to the (in)definiteness marker on the possessor/possessum, as we have seen above.

- | | |
|---|---|
| (i) a. Maðurinn með skeggið
man-the.NOM with beard-the.ACC
‘The man with the beard’ | b. ?*Maðurinn með skegg
man-the.NOM with beard.ACC
‘The man with a beard’ |
| (ii) a. The man with the beard | b. The man with a beard |

(19)a. The woman with ten children
 b. al-ħurmah umm ʕafur ʔiʕijjal
 DEF-woman with.SG.F ten children
 ‘The woman with ten children’

(20)a. The man with three brothers
 b. ar-radʒdʒaal abu θalaaθ aχwaan
 DEF-man with.SG.M three brothers
 ‘The man with three brothers’

(21)a. The girl with three brothers
 b. al-bint umm θalaaθ aχwaan
 DEF-girl with.SG.F three brothers
 ‘The girl with three brothers’

As illustrated in (19-21), the NA *abulumm*-possessives and the English *with*-possessive can all express family relations (or kin terms); this naturally follows from the fact that English and NA both express possession via *abulumm/with* markers and that is why they are both used with the same types of elements (except for a few cases like expressing possession of illnesses, as we will see shortly).

The third aspect/domain in which the two markers are in a close relationship to one another is the expression of body-parts/part-whole relations. Examples are given in (22) and (23).

(22)a. ar-radʒdʒaal abu iʕjuun zurg
 DEF-man with.SG.M eyes blue
 ‘The man with blue eyes’

b. al-bint umm ʕaʕar tʕawiil
 DEF-girl with.SG.F hair long
 ‘The girl with long/big hair’

c. al-ʕanz umm garneen
 DEF-goat.F with.SG.F horn.DL
 ‘The goat with two horns’

(23)a. The man with blue eyes
 b. The girl with the beautiful face
 c. The dog/the cat with three legs

In (22) and (23), *abu*, *umm* and *with* possessives are used to form body-part relations, where the (animate) possessor is identified by one of its body parts. Nevertheless, part-whole relations

can also be used with inanimate possessors as in (24) and (25), from NA and English, respectively.

(24) a. as-sajkal abu kafareen
 DEF-bicycle with.SG.M wheel.DL
 ‘The bicycle with two wheels/the two-wheel bicycle’

b. al-dzawwaal abu kamira
 DEF-mobile with.SG.M camera
 ‘The mobile with (one) camera’

c. al-bluzah umm kuum tʿawiil
 DEF-blouse with.SG.F sleeve long
 ‘The blouse with long sleeves/the long-sleeve blouse’

d. al-kamri umm al-loon aḏ-ḏahabi
 DEF-camry with.SG.F DEF-colour DEF-golden
 ‘The Camry with the golden colour’

- (25) a. The tree with (many) branches
 b. The book with the red cover
 c. The table with three legs
 d. A flower with three petals (from Stolz 2001a: 326)
 e. The house with the yellow door
 f. The blue shirt with the white collar

In (24-25), *abu*, *umm* and *with* are used to link something with its part(s). Additionally, *abu/umm* and *with* seem to signal a partitive relation, where the entity is identified by one of its defining parts.

In sum, we have seen above that there are interesting similarities/parallelism between NA *abu/umm* and English possessive *with* constructions. Nevertheless, there are some cases where the latter can express possessive relations that the former cannot. First, unlike *with*, it is not possible to express possession of illnesses using *abu* and *umm*, as in (26b and 27b).⁶⁶

- (26) a. The man/ the patient with cancer/ headache
 b. *ar-radʒdʒaal / al-mariidʿ abu sʿaratʿaan/ sʿadaaʿ
 DEF-man / DEF-patient with.SG.M cancer / headache
 Intended meaning: ‘the man/the patient with cancer/ with headache’

⁶⁶ The following NA example seems to be an exception (if we take baldness to be a condition/an illness):

(i) ar-radʒdʒaal abu sʿalʿah
 DEF-man with.SG.M baldness
 ‘The man with baldness/(the) bald head’

- (27)a. The girl with autism
 b. *al-bint umm tawahħud
 DEF-girl with.SG.F autism
 Intended meaning: ‘The girl with autism’

As the above examples demonstrate, it is not possible to use NA *abu* and *umm* to express that someone has a disease, an illness or a condition, whereas such constructions are fully compatible with the English *with*. English *with* seems to have a wider range of usages compared with the NA *abu/umm*.

While this chapter is primarily concerned with *abu*, *umm* and *with* possessive constructions, it is important to first shed some light on other usages of the English *with* (i.e. comitatives and instrumentals), before discussing the second type of difference between the two languages. This is important in order to examine how this preposition behaves in other environments. This is equally important to capture the contrast between *abu*, *umm* and *with*, as it will provide an explanation as to why the NA markers are not involved in the expression of such relations. In addition to possession, the English preposition *with* can express instrumental and comitative relations as well. For example, in (28a), the usage of the preposition *with* is not possessive but rather expresses a comitative relation, where *the boy* is understood to be (together) with *Mary*. This is also true of (28b-c).⁶⁷

- (28)a. The boy is with Mary.
 b. I saw [John with a girl/ his wife/ a child]
 c. He ate [the rice with a bottle of wine].

⁶⁷ It should be pointed out that the picture for the English preposition *with* is less clear in other examples such as (i), where it is hard to tell whether *with* conveys comitative or possessive relations.

(i) [Woman with baby] attacked with razor in attempted robbery.

The bracketed example in (i) is ambiguous, as it could mean possessive *with* or comitative (together) *with*, hence the *woman* in question can be the mother of the baby, a sister or a nanny. In this way, the reading of the English *with* oscillates between a comitative one (i.e. English together *with*) and a possessive one (i.e. English possessive *with*). This is not an unexpected state of affairs, given the dual nature of *with* as a preposition, which can be used in both types of construction. In other contexts, however, we can tell that *with*-constructions explicitly encode possession rather than being an instance of comitativity as in: *John is dating [a woman with a child]*, where the *woman* is unlikely to be a nanny or a sister to the child, but rather his/her mother. Note also that the interpretation of ‘with’ constructions depends, to a large extent, on the verb (if present), as the following examples (from Svenonius 2007: 79) demonstrate:

(ii) a. We sprayed the dog with a fire extinguisher. b. We advertised the dog with tomato juice.
 c. We left the dog with tomato juice. d. We fattened the dog with tomato juice.

A further usage of the preposition *with* is in instrumental constructions, as shown below.⁶⁸

- (29) a. The suspect stabbed the victim **with** a knife.
b. Mary ate the spaghetti **with** a fork.
c. He wrote the letter **with** a pencil.

In (29a-c), it can be seen that the function of the English preposition *with* is clearly not possessive or comitative. Rather, *with* is used here for the expression of instrumentals. In these contexts, the *with*'s complement (the object) is being used as a 'means' by the *with*'s subject (the possessor). A careful examination of relevant data reveals once more that English *with* seems to have a broader range of use in English than *abu/umm* has in NA.

We have seen above that English makes use of the preposition *with* to encode possession, comitativity and instrumentality. This is one main difference between the NA *abu/umm* markers and the English preposition *with*, as the former may not be used to express instrumental or comitative relations whereas the English preposition *with* can. It is not an accidental correspondence, however, that *abu/umm* are restricted to possession relations, as NA utilises other strategies to express these constructions. For instance, in order to express instrumental meanings, NA makes use of the preposition *bi-* 'with', as in (30):

- (30) al-midzrim t'aʃan Muḥammad **bi**-s-sikkiin
DEF-criminal stabbed.3SG.M Muhammad with-DEF-knife
'The criminal stabbed Muhammad with the knife.'

Additionally, *abu* and *umm* are not used in comitative contexts, as NA has a distinct marker for the expression of comitativity. A typical comitative construction in NA is formed by the locative (comitative) preposition *maʃ*, which is similar to the English (*together*) *with*, as illustrated in (31).⁶⁹ The NA sentence in (31) is very similar to its English counterpart in (28a). In both cases, *alwalad/the boy* is understood to be with Sarah/Mary, who are the objects of the comitatives *maʃ* and *with*, respectively. Therefore, *Sarah* and *Mary* may serve as a 'location', or what is referred to in the literature as 'animate location' (see Levinson 2011: 362).

⁶⁸ There is another use of the preposition *with* in English, where the relation involved is neither possessive, nor comitative, nor instrumental, as in (i a-f):

- (i) a. He turned to his son with a tired look (on his face).
c. I ate the pasta with gusto (from Kidd and Cameron-Faulkner 2008).
e. He flattered her with a foxy face!
b. The fans shouted with joy.
d. He went with a cheeky smile.
f. He spoke with difficulty.

In these constructions, the English preposition *with* expresses manner (cf. Rapoport 2014). I will not discuss this use any further here.

⁶⁹ The preposition *maʃ* 'with', as well as the locative preposition *ʃind* 'at', will be discussed in more detail in the next chapter, which is devoted to answering the question of how these prepositions are employed as markers of predicative possession in NA.

(31) al-walad **maʕ** Saara
 DEF-boy with Sarah
 ‘The boy is with Sarah.’

Thus, in NA, as can be seen in (30) and (31), *bi-* ‘with’ and *maʕ* ‘with’ are employed in these contexts for the expression of instrumental and comitative constructions which *abu* and *umm* do not (and cannot) convey. Despite the fact that the NA prepositions *bi-* and *maʕ* are both translated into English as *with* in the present contexts, it should be noted, however, that this does not mean that the NA markers are synonyms. Rather, the former is exclusively used with instrumentals and the latter with comitatives and not vice versa. In doing so, while English makes use of the preposition *with* for the expression of both comitative and instrumental relations, NA makes use of two different prepositions, *bi-* and *maʕ* to express such relations. This would place NA on a par with Maltese, Finnish and Basque in this respect, where a clear formal distinction is made between comitatives and instrumentals.⁷⁰ This asymmetry of the various types of relations in NA can be represented as follows:

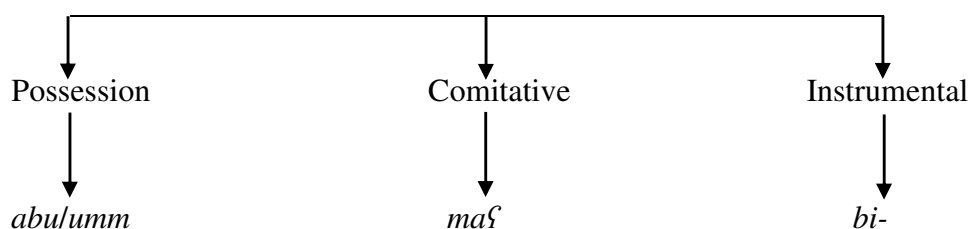


Figure 4.1 Taxonomy of NA (attributive) possessive, comitative and instrumental constructions

To reiterate, we have seen that NA differs from English in that it employs two distinct markers for the expression of instrumentals (*bi-*), and comitatives (*maʕ*), which is unlike English which utilises the preposition *with* to express both relations. This may seem at first sight as problematic for the overall similarities between English and Arabic possession constructions. However, as alluded to above, there is cross-linguistic evidence from several languages belonging to different language families that comitatives and instrumentals are kept apart. Specifically, in analysing comitatives and instrumentals from a typological perspective, Stolz (2001a: 326) points out the following:⁷¹

⁷⁰ Maltese, just like NA, utilises *bi* and *ma* to express instrumental and comitative relations, respectively (see, e.g. Borg and Azzopardi-Alexander 1997: 139-170). In Finnish, *-ine-* and *kanssa* are used to derive comitatives, while *-lla* and *-llä* are employed to produce instrumentals (see, e.g. Stolz *et al.* 2006). As for Basque, instrumental constructions are formed by *-ez* and comitatives are expressed by *-ekin* (see, e.g. Stolz 2001b).

⁷¹ Stolz (2001a: 322-327) arrives at this conclusion on the basis of empirical data from a worldwide sample that includes 323 languages presented in Stolz (1996), as well as an additional sample presented in Stolz (2001a), which comprises 65 European languages and regional varieties.

The vast majority of the world’s languages keeps comitatives and instrumentals formally distinct. “Syncretistic” relators such as, for example, the English preposition *with*, which combines the functions of comitative and instrumental, are relatively rare birds, so to speak.

It is therefore English, rather than (Najdi) Arabic, which has a peculiar combination, in this respect, as it makes use of the preposition *with* for the expression of comitatives, instrumentals and attributive possession. Put differently, it would mean that NA behaves in this respect as the majority of world’s languages. I summarise the various relations presented thus far of possessives, comitatives, and instrumentals with respect to the usages of *with*, *abu* and *umm* in both NA and English in the following table.

Table 4.1 Matrix of combinations in Najdi Arabic and English (1)

Language	Relator	Possessive	Instrumental	Comitative
NA	abu/umm	+	-	-
English	with	+	+	+

Thus far, we have seen that *abu/umm* can never be used for comitatives/instrumentals and this is unlike the English preposition *with* which can be used in these constructions. Another difference between the NA markers *abu*, *umm* and the English marker *with* pertains to the expression of origin, nationality or descent. Specifically, *abu* and *umm* can express origin, nationality or descent, which *with* cannot. In NA, it appears that there are two ways of expressing origin/descent/nationality using *abu* and *umm* markers. The first way is to use *asʕal* ‘origin’ followed by the nationality of the possessor as in (32a-c), or simply by saying *abu* or *umm* followed by the country/descent (33a-b).

- (32)a. al-laaʕib abu asʕal jamani
 DEF-player with.SG.M origin Yemeni
 ‘The player of Yemeni origin’
- b. al-fannaan abu asʕal ʔiʕraaqi
 DEF-actor with.SG.M origin Iraqi
 ‘The actor of Iraqi origin’
- c. al-fannanah umm asʕal masʕrii
 DEF-actress with.SG.F origin Egyptian
 ‘The actress of Egyptian origin’

- (33)a. dʒaa [abu jaman]
 came.3SG.M with.SG.M Yemen
 Approximately: ‘The one of Yemen came’/ ‘the one from Yemen came.’⁷²
- b. abu ʃaam
 with.SG.M/of.SG.M Levantine
 Approximately: ‘Of Levantine (origin)’/ ‘a person from Levantine’

In English, unlike NA, it is not possible to form these constructions using the possessive *with*; instead, the *of*-genitive is used. Examples are given in (34a-c) and (35a-f).

- (34)a. It was announced that among the dead was [a woman of Spanish origin].⁷³
 b. The building of/ (*with) Spanish heritage
 c. A discussion of/ (*with) a political nature
- (35)a. British people of Indian descent/ *British people with Indian descent
 b. Individuals of African descent/ *Individuals with African descent
 c. A British actress of Indian descent/ *A British actress with Indian descent
 d. Mo Farah is [a British athlete of/ (*with) Somali descent].
 e. She is of Puerto Rican decent.
 f. Mo Farah is the champion again. [Jake Robertson of New Zealand] in second place.⁷⁴

Thus far, we have seen that there are certain differences between the NA *abulumm* markers and the English *with* marker, where the two languages behave differently when it comes to the expression of comitative/instrumental constructions and origin/descent constructions. A third difference between the two markers concerns the expression of prices of items, as in (36) and (37).

- (36)a. *The pen with ten dollars
 b. al-galam abu ʕaʃrah ʔirjaal
 DEF-pen.M with.SG.M ten Riyal
 ‘The ten-Riyal pen’ (lit., ‘The pen with ten Riyals’)
- (37)a. *The bag with £200 (if possessive meaning is intended)
 b. aʃ-ʃantʔah umm miteen ʔirjaal
 DEF-bag.F with.SG.F hundred.DL Riyal
 ‘The two-hundred Riyal bag’ (lit., ‘The bag with two hundred Riyals’)

⁷² In these constructions, the possessor is elided both in NA and English. While this comes as no surprise in NA given that it is a null subject language, in English a certain strategy must be used by insertion of the particle *one*, which follows from the non-null subject nature of English. The issue of ellipsis in possessive noun phrases is not investigated in the present work as it would take us far away from the aim of this thesis. See, however, Barbiers (2005) for discussion and proposed analysis of elided constructions in mainly English and Standard Dutch.

⁷³ Note that there are a few related constructions in which the use of *with* is acceptable, as in: *This is a proposal/an idea with its origin in the eighteen-century/medieval philosophy.*

⁷⁴ As heard from the commentary on ‘The Great North Run’ marathon (2017).

In (36-37), *abulumm*, unlike the English *with*, seems to express the price of the pen/the bag. This would mean that *abu* and *umm* are used as markers for pricing items. For lack of a better term, I will call such usages of *abu* and *umm* here as ‘item-pricing’ marker. As can be observed in the (a) alternant, it is not possible to use the English possessive marker *with* to express the price of *the pen/the bag*, whereas it is completely possible in the (b) alternant NA with the possessive marker *abulumm*. Therefore, the NA markers can express an item’s price which the English *with* cannot.

The final apparent difference between NA *abulumm*-constructions and English *with*-constructions is that the NA markers do not have a direct negative counterpart as compared with the English preposition *with* (*with* vs. *without*), as the following examples demonstrate.

- (38)a. The man **without** legs
 b. A two-year old boy locked in [a house **without** food] for two days.
 c. [Married couples **without** children] are happier than those with children.
 d. He has been **without** work for over a year.
 e. A shirt **without** sleeves

The NA markers do not use negative counterparts of the possessive markers *abulumm* as their corresponding English marker *with* does. Instead, NA has three distinct markers to express *without*, namely *biduun*, *minyajr* and *bla*. Consider the following examples:

- (39)a. al-bint biduun ʃaʃar/ nazʕzʕaaraat
 DEF-girl NEG hair/ glasses
 ‘The girl without hair/glasses’
 b. sijjaarah biduun kafaraat
 car NEG wheels
 ‘A car without wheels’
 c. hurmah biduun ʔiʃjaal
 woman NEG children
 ‘A woman without children’

- (40)a. zoodʒ bla masʔuulijjah
 husband NEG responsibility
 ‘A husband without responsibility’
 b. ʃajj bla sikkar
 tea NEG sugar
 ‘A tea without sugar’

- (41) a. radʒdʒaal minyajr ʃanab / lihjah
 man NEG moustache / beard
 ‘A man without moustache/a beard’
- b. bint minyajr malaabis
 girl NEG clothes
 ‘A girl without clothes’

As can be seen in (39-41), NA makes use of three negative markers to negate *abulumm* possessives.⁷⁵ Recall from the preceding discussion that, in positive contexts, NA keeps instrumentals, comitatives and possessives formally distinct. Hypothetically, it is expected that a language like NA, by keeping the above-mentioned relations apart, also has distinct negative expressions of its own (cf. Stolz *et al.* 2006: 167ff.). This is manifested in the three negative forms *biduun*, *minyajr* and *bla*. Interesting here is the fact that *biduun* is comprised of the prepositions *bi-* ‘with’ and *duun* ‘not’. Similarly, *minyajr* consists of the prepositions *min* ‘from’ and *yajr* ‘not, except’, and *bla* comprises *b-* ‘with’ and *la* ‘no’, suggesting that the three negative markers are morphologically complex prepositions. Note also that the negative properties of these elements are attributed to the second elements or morphemes, *duun*, *yajr* and *la* respectively, which are the negative components that render the prepositions negative forms.⁷⁶

Going back to the negative counterpart in English, we have seen in (38a-e) that the strategy used in English is *without*. Upon closer inspection however, there is another possibility to form the negated constructions of the possessive *with* constructions in English, as shown in (42), where the possessive *with* and the negative marker *no* are realized separately.

⁷⁵ This raises the question whether there is any difference in use between *biduun*, *minyajr* and *bla* in NA. In consultation with other native speakers there seems to be no difference in usage between these markers as NA speakers use them interchangeably. Some speakers, however, have mentioned that *biduun* and *bla* are more formal than *minyajr*. These negative markers also raise the obvious question as why NA has three markers as compared with the English negative marker *without*, for instance. The existence of these negatives in abundance seems to be related to the fact that Arabic does not have similar strategies, viz. *-less*, *-non* and *un-* morphemes, which English has, as the following constructions illustrate:

- | | | |
|--|--|--|
| (i) a. bla nafas
NEG breathe
‘Breathless’
(lit., ‘without a breathe’) | b. minyajr koħool
NEG alcohol
‘Non-alcoholic’
(lit., ‘without alcohol’) | c. biduun tʻaʃam / maʃna
NEG taste / meaning
‘Tasteless/ meaningless’
(lit., ‘without a taste/meaning’) |
| d. yajr maʃqool
NEG believable
‘Unbelievable!’ | e. yajr al-ʃarab
NEG DEF-Arabs
‘The non-Arabs’ | f. yajr sʻahiiħ
NEG true
‘Untrue/not true’ |
| g. la ʔiradii
NEG voluntary
‘Non-voluntary’ | h. yajr maʃħoor
NEG famous
‘Not famous/unknown/unpopular’ | |

⁷⁶ In so doing, (Najdi) Arabic makes use of *duun*, *yajr* and *la*, which are under-studied negative forms as compared with the well-known single negation marker *maa* and the bipartite negation construction *maa-...-f* in Arabic varieties or the *laysa* marker in MSA (see, e.g. Benmamoun 2000; Hoyt 2006; Al-Horais 2009; Lucas 2010 and Alqassas 2015 for discussion).

- (42) a. A man **with no** daughters
 b. The man **with no** legs
 c. A shirt **with no** sleeves
 d. A man **with no** name
 e. She looks good **with no** clothes.
 f. My fiancé cries **with no** tears.
 g. I am a 33 year old married woman **with no** children.
 h. Many men abandon their children **with no** provision.

On comparing the constructions in (38) with those in (42), we can see that the negative markers *without* or *with no* are semantically synonymous. Thus, it appears that there are two ways of forming the negative forms of *with* in English: *without* and *with no*.⁷⁷ In the following table, I summarise the various combinations expressed by the NA *abulumm* and English *with*.

Table 4.2 Matrix of combinations in Najdi Arabic and English (2)

Language	Relator	Possessive	Item pricing	Origin/ Descent/ Nationality	Negative counterpart
NA	abu/umm	+	+	+	-
English	with	+	-	-	+

Summing up this descriptive account, we have seen that while the preposition *with* in English can be used as possessive, instrumental or comitative, the NA *abulumm* can never be used in these contexts except for possessive relations. On the other hand, the NA possessive markers may be used to express origin/nationality and item pricing; this is unlike English possessive *with*, which cannot express such relations.

In the next section, I discuss the syntactic derivation of *abu* and *umm*. I will argue that Levinson's (2011) analysis of English *with* possessives can also be applied to the *abulumm* possessives of NA, though one modification is needed to account for the NA agreement facts. First, let us introduce Levinson's (2011) approach to Germanic predicative and attributive possession.

⁷⁷ One question that remains unanswered in the present work is how to derive these negative markers within a possessive noun phrase and whether or not NA negatives share the same syntactic derivation as their English counterparts. I leave this issue open for further research (see chapter six, 6.2).

4.3 The syntactic derivation of possessive *with* constructions

4.3.1 Levinson's (2011) approach to possessive-WITH in Germanic: an overview

This section considers a proposal by Levinson (2011), which discusses the issue of HAVE verbs and the role that possessive prepositions like *with*, *mit* and *með* play in English, German and Icelandic respectively, in both predicative and attributive possession. In light of data from Icelandic, Levinson (2011) argues that previous approaches in which a unified structure is assigned to all types of possessive constructions is untenable. Specifically, she argues, contra Freeze (1992) and Den Dikken (1995, 1998), that possession is derived from a non-locative preposition, along the lines of Kayne (1993/2000) and Harley (2002). She points out that one reason that the Freezean unified approach to possession is still adopted is due to the lack of direct empirical evidence that support Kayne's and Harley's proposals (Levinson 2011: 356). This empirical evidence concerns the Icelandic *vera með* construction, as exemplified in (43).

- (43) a. Hún er með bækurnar fimm.
she.NOM is with books-the.ACC five
'She has five books.'
- b. Jón er með blá augu.
John.NOM is with blue eyes.ACC
'John has blue eyes.'
- c. Jón er með gleraugu.
John.NOM is with glasses.ACC
'John is wearing glasses.'/'John has glasses.'
- d. Jón er með kvef.
John.NOM is with cold.ACC
'John has a cold.' (Levinson 2011: 360)

Syntactically, the *vera með* construction comprises the copula *vera* 'to be', which serves as the main verb of the construction and takes the possessor as its subject, and the possessive preposition *með* 'with' which is the head of a prepositional phrase (PP) and embeds the possessum as its complement. In (43), we can see that the Icelandic complex *vera með* construction expresses a wide range of possessive relations, including both alienable possession (43a and 43c) and inalienable possession: body parts (43b) and illnesses (43d).

Levinson (2011) argues that the *vera með* construction in Icelandic poses problems for Freeze's (1992) locative possessive structure. First, Levinson observes that the Icelandic possessive preposition *með*, as in (45) and the English possessive *with* in (44), are non-locative prepositions (from Levinson 2011: 356).

- (44) a. The man with a beard is fun.
 b. *The man is with a beard.
- (45) a. Jón er með barnið sitt. (Icelandic Levinson 2011: 360)
 John is with child-the.ACC his
 'John has his child' (i.e. holding baby, baby in a carriage, leading by hand, etc.)
- b. Jón er með barnið sitt. (Icelandic Levinson 2011: 361)
 John is with child-the.DAT his
 'John is together with his child' (child is accompanying John by free will).

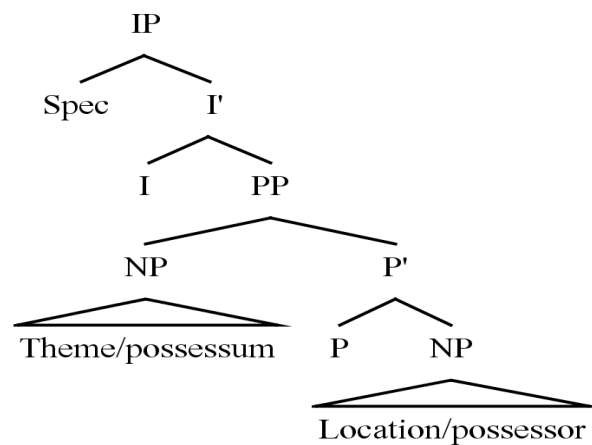
This is unlike other prepositions in English, where the construction is perfect with a locative preposition, as in (46) (from Levinson 2011: 356).

- (46) a. The man **in** the park is fun.
 b. The man is **in** the park.

Levinson also notes that *með* in possessive constructions assigns Accusative Case to its complement (the possessum). Crucially, Levinson (2011: 361), points out that 'the complement of accusative-assigning *með* is never interpreted as a location'.⁷⁸ This is Levinson's first justification for the argument that the Icelandic *vera með* construction cannot be plugged into Freeze's (1992) structure, as illustrated schematically in (47).

⁷⁸ According to Levinson (2011:360-361), the complement of *með* can surface as either Accusative or Dative. She further argues, based on this fact, that this must mean that there are two different types of p heads in Icelandic: Pcontrol which assigns Accusative Case and Psymmetric which assigns Dative Case (Levinson 2011: 380). See also Stolz (2001a: 335) for similar discussion of the issue.

(47) Freeze's (1992) unified D-structure of locative, existential and possessive constructions (adapted from Freeze 1992: 558)



The structure in (47) represents Freeze's (1992) proposal where he attempts to derive all types of possession (i.e. locative, existential and possessive constructions) from one unified structure. Levinson argues that Freeze's analysis, which is posited to account for clausal possession in English, Russian, Hindi and Finnish, among other languages, cannot account for Icelandic possessive *vera með* constructions. In particular, Levinson (2011) points out that the Icelandic *vera með* construction (48b) does not fit with Freeze's (1992) proposal when it comes to the order of constituents as compared with locative possession languages such as Russian, as in (48a) (from Levinson 2011: 366).

- (48) a. [U **menja**] byla sestra. (Russian)
 at 1SG.GEN was sister.NOM
 'I had a sister.'
- b. Jón er [með **blá augu.**] (Icelandic)
 John.NOM is with blue eyes.ACC
 'John has blue eyes.'

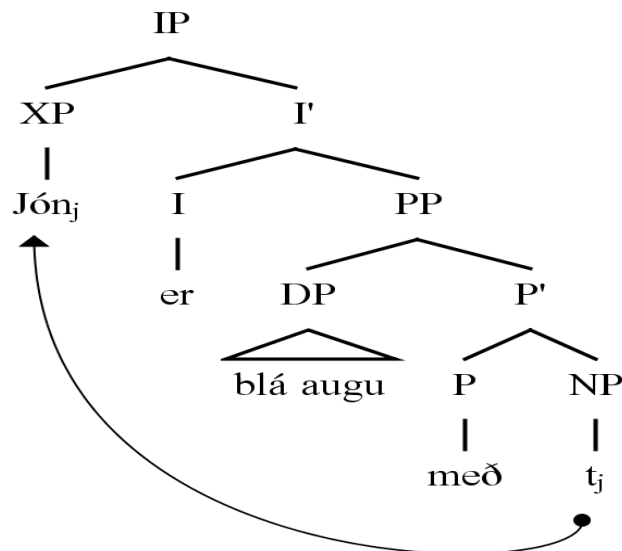
In (48a), the possessor *menja* (lit. 'me') appears in the complement position of the locative preposition *u* 'at', while in Icelandic it is the possessum *blá augu*. 'blue eyes' that is the complement of the preposition *með* 'with'. Although Freeze (1992) mentions other languages which have similar possessive systems to the Icelandic *vera með* construction, as in Portuguese (49) and Chichewa (50), Levinson (2011: 366-367) maintains that Freeze's approach is problematic given that it makes wrong predictions when it comes to word order and Case assignment in the above-mentioned languages.

(49) O menino esta com fome. (Portuguese)
 the child is with hunger
 ‘The child is hungry.’ (Lit. ‘The child is with hunger.’)

(50) Ka-mwa-ana k-anga ka-li ndi njala. (Chichewa)
 12-1-child 12-my 12SB-be with 9-hunger
 ‘My small child is hungry.’ (Lit. ‘My small child is with hunger.’)

To illustrate the issue of constituent structure, let us apply the Icelandic possession sentence *Jón er með blá augu*. ‘John has blue eyes’, to Freeze’s structure in (47). The resulting structure would be as schematized in the following diagram (from Levinson 2011: 367).

(51)



Freeze (1992) suggests that possession in languages like Portuguese and Chichewa (and Icelandic, presumably) can be derived in a similar fashion to other locative possession languages, except that the preposition in these languages remains in situ and it is the possessor which undergoes movement to spec, IP. However, Levinson (2011) points out that if we apply this line of analysis to possession constructions in the above-mentioned languages, the word order yielded is wrong, as illustrated in (51). Freeze (1992) also does not discuss the possibility of any further movements in these languages. An issue of particular importance, as Levinson (2011) notes, is that the Icelandic *vera með* construction raises a challenge for Freeze’s structure, given that it is not understood how the preposition *með* ‘with’ can be reordered to end up in a position before the possessum DP *blá augu* ‘blue eyes’ under Freeze’s structure. Levinson (2011) also points out that even if we ignored the word order issue in these languages, Freeze’s proposal would still be problematic regarding the Case of the possessor. Contrary to

Russian (where the possessor is Genitive), the Icelandic possessor is Nominative, as witnessed in (48a-b) above.

Levinson (2011: 367-368) provides further evidence that *vera* and *með* can be separated by the negative marker *ekki* ‘not’ in Icelandic sentential negation constructions, as in (52). This runs counter to Freeze’s (1992) claim that languages which have the possessive preposition *with* and the copula BE should not be separated by other elements of the clause. This is so, because under Freeze’s (1992) proposal the possessive *with* can be reanalysed as one complex head with the copula BE; implying that the two should not be separated by other sentential elements such as adverbs or negative markers. However, the Icelandic negative possessive sentence in (52) is at odds with such a claim.⁷⁹

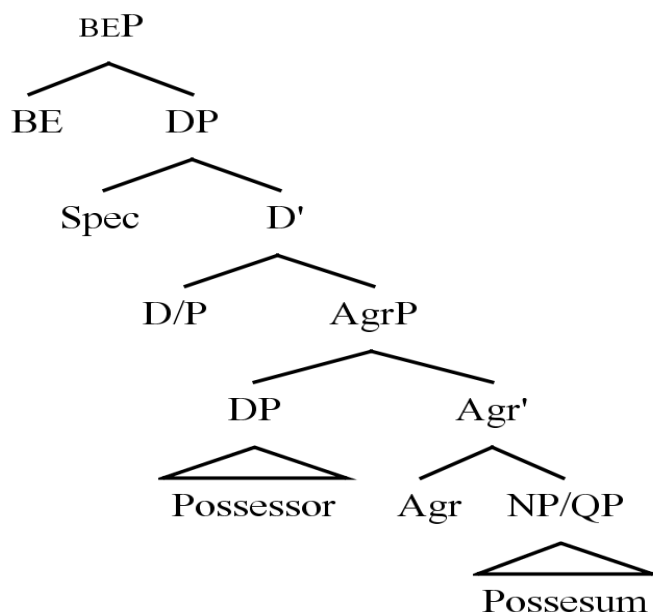
- (52) Skrímslið er **ekki** með augu.
monster-the.NOM is not with eyes.ACC
‘The monster doesn’t have eyes.’ (Levinson 2011: 367, citing Irie 1997)

Thus far, we have seen that there are three problems that Levinson (2011) observes for the *vera með* construction if it is analyzed following Freeze, namely: the non-locative nature of the preposition *með*, the issue of word order and Case differences in Icelandic and other languages that Freeze discusses. Levinson (2011) points out that these problems do not arise under Kayne’s (1993/2000) proposal for possessive sentences given that Kayne initially analyzes the possessor to c-command the possessum. Kayne’s (1993/2000) structure is shown schematically in the following tree (where D/P is a prepositional determiner).

⁷⁹ It is worthwhile to point out that Freeze’s (1992) unified approach to possession suffers from one theoretical drawback reported in the literature. Harves (2002: 174), for instance, observes that Freeze (1992) has suggested that in Russian possessives the P’ moves to the Specifier position of IP, running afoul of the violation of one of the constraint of Structure Preservation put forward by Chomsky (1986), building on an earlier work by Emonds (1976). The constraints imposed on movement are stated below in (i) (from Chomsky 1986: 4).

- (i) a. There is no movement to complement position.
b. Only X° can move to the head position.
c. Only a maximal projection can move to the specifier position.
d. Only minimal and maximal projections (X° and X'') are “visible” for the rule Move- α .

(53) Kayne's (1993/2000) D-structure for possessive sentences

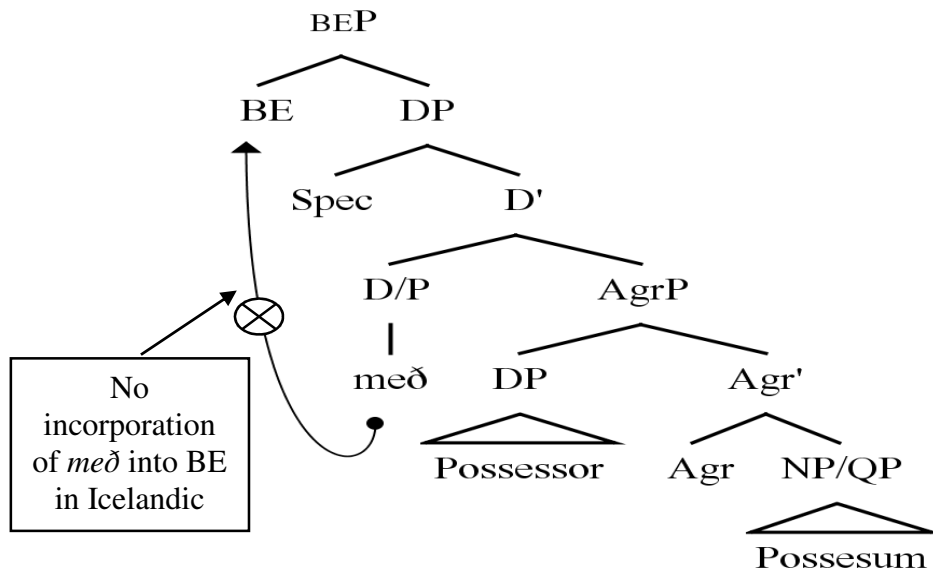


In this structure, which is inspired by Szabolcsi's (1981, 1983, 1994) views on Hungarian possessive noun phrases, Kayne (1993/2000: 108ff.) proposes that the possessor c-commands the possessum underlyingly before any movement takes place, as shown in (53). Although Kayne (1993/2000) follows Freeze's (1992) idea of incorporation, he departs from his proposal by deriving possession from a DP-internal structure (i.e. from a non-locative preposition). The main tenet of Kayne's approach is that the possessor undergoes movement to spec, DP before moving entirely out of the DP to spec, BEP, i.e. the subject position, and the incorporation of D/P (viz. the abstract preposition) into BE spells out the possessive verb *have* in a language like English. The latter incorporation is said to facilitate the movement of the possessor to the subject position, which would otherwise violate the constraint of improper movement.⁸⁰ However, as Levinson (2011: 374-375) points out, Kayne's proposed structure cannot directly account for the *vera með* construction, given that it depends on incorporation of the D/P head into BE to allow the possessor to reach the subject position. Crucially, in the *vera með* construction in Icelandic, which is a type of BE language and not a HAVE language, this sort of incorporation is not possible. Given that no incorporation is permitted in the Icelandic construction (as shown in 54), there is no answer to the question of how the necessary movement of the possessor to the subject position is allowed under Kayne's approach. Thus,

⁸⁰ According to Kayne (1993/2000: 110-111), this is so because spec, DP is an A-bar position (in a fashion parallel to spec, CP), hence movement of the possessor DP from it to spec, BEP position 'an A-position' is prohibited. Kayne posits that the incorporation of D/P into BE renders the spec, DP as an A-position and allows the possessor DP to move further to spec, BEP.

Kayne's proposed structure of HAVE constructions does not provide an account for the *vera með* construction in Icelandic.

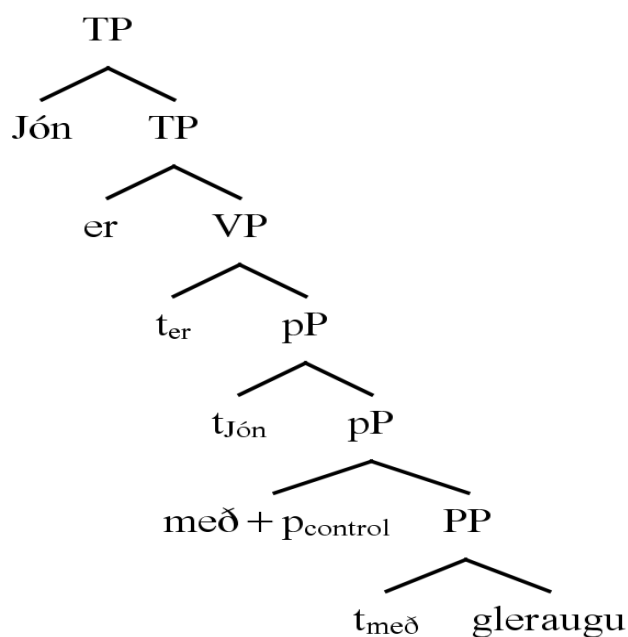
(54)



Based on all this, Levinson (2011) concludes that neither Freeze (1992) nor Kayne (1993/2000) can account for the *vera með* construction.⁸¹ Instead, Levinson (2011) argues that the Icelandic *vera með* construction is derived from a non-locative structure where the order of the arguments is possessor > possessum, which is the same linear order at the surface clausal level. Levinson's (2011: 381) proposed structure of the *vera með* construction is shown in (55).

- (55) Jón er með gleraugu.
 John.NOM is with glasses.ACC
 'John has glasses.'

⁸¹ Levinson also discusses other approaches to possession (Den Dikken 1995, 1998, 2006; and Harley 2002), casting doubt on their applicability to the Icelandic *vera með* (be with) construction as well. See Levinson (2011: 369-373) for a critique of Den Dikken's work on predicate inversion; see also Chapter 5 of the present work for discussion of Harley's (2002) proposal.



In (55), the possessor *Jón* ‘John’ is the subject and the possessum *gleraugu* ‘glasses’ is the complement. The structure is built as follows. The possessive preposition *með* ‘with’ merges with the possessum *gleraugu* to form a lexical PP. The PP merges with little p_{control} , which assigns Accusative Case to the complement, just like little v is responsible for Case assignment in the extended VP projection.⁸² In the next step of the derivation, the possessor *Jón*, which is the external argument of p , is merged in spec, pP and moves to spec, TP. The verb *vera* is merged in V and then moves to T. Levinson (2011) assumes that the possessive preposition moves from P to little p , which is analogous to little v , given that it is weak and affixal in nature, and hence needs to be incorporated into p , which serves as a host of *með* ‘with’ (see also Levinson 2011: 391, who provides further evidence and motivation for the proposed analysis based on the syntax of incorporated prepositions in English, namely, *into* as in the construction: *into the woods*, arguing that it is a complex preposition, i.e. consisting of two elements, which is derived via head movement of the lexical P to the functional little p).⁸³

Levinson then goes on to discuss predicative possession in English (and German), noting that although the possessive *with* in English is very similar to the possessive preposition *með* in Icelandic, the former cannot be used with the verb ‘to be’, as the ungrammatical construction in (56a) illustrates (from Levinson 2011: 384):

⁸² According to Levinson (2011: 382), there is no need to posit a vP layer in the Icelandic predicative possession structure, given that Case has already been assigned to the DP complement by little p within the pP domain. This is not the case, however, in English (and German) predicative possession constructions where she posits that there is little v , as will become clear shortly.

⁸³ Note that Levinson’s (2011) suggestion that there is a little p in the extended PP projection is not new. Rather, it has already been argued for in the literature (see, e.g. Koopman 1997 and Svenonius 2003, 2007, 2008).

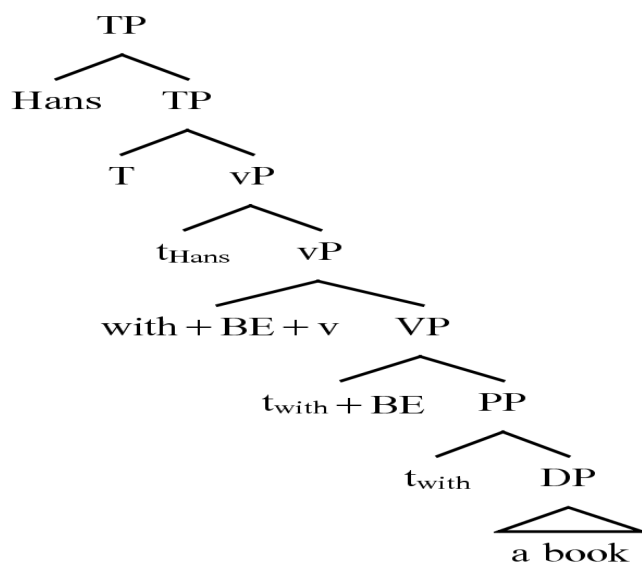
(56) a. *The man is with a beard.

b. The man has a beard.

Levinson (2011) claims that the reason for the ungrammaticality of (56a) is that English has another way of encoding possession as in (56b), where the verb HAVE is used.

In order to account for this asymmetry between Icelandic and English, or the ‘mysterious fact’ as Levinson (2011: 356) puts it, Levinson (2011: 385) suggests that, while there is no incorporation of the *með* ‘with’ into the copula *vera* ‘be’ in Icelandic, possessive *with* does incorporate into BE in English, spelling out the possessive verb *have* as illustrated in (57), which is based on Levinson’s (2011: 388) discussion of entirely similar facts in German.

(57) Hans has a book.



Levinson (2011) argues that the English (and German) predicative constructions are derived from the incorporation of the possessive preposition *with* (and *mit*) into BE (with+BE=HAVE). In doing so, she maintains that HAVE is a complex verb, along the lines of Kayne (1993/2000) and Harley (2002). In her system, however, English and German HAVE-constructions differ from the Icelandic *vera með* structure in (55) in that there is no little p in the former languages, which would otherwise block the incorporation of the preposition into BE. Instead, there is a little v, which assigns Accusative Case to the complement (the possessum), and the preposition obligatorily incorporates into it.

Thus far, we have seen how possession is formed predicatively under Levinson’s (2011) proposal. Since the main concern of this chapter is attributive possession, I will leave aside for

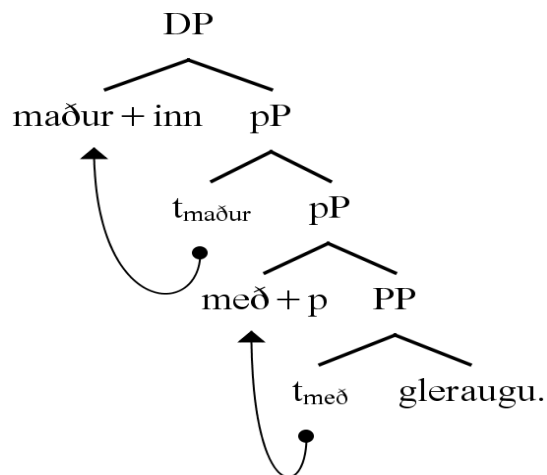
now the discussion of predicative possession under Levinson’s (2011) approach and discuss attributive possession (the next chapter will further elaborate on predicative possession).

Turning to Icelandic and English attributive possession, Levinson (2011) observes that the preposition *með* in Icelandic can be used in attributive possession, where the preposition *með* appears in possessive constructions without the verb *vera*, as exemplified in (58 a-b).

- (58) a. [Maðurinn með skeggið] er skemmtilegur.
 man-the.NOM with beard-the.ACC is fun.NOM
 ‘The man with the beard is fun’ (from Levinson 2011: 368)
- b. Maðurinn með gleraugu.
 man-the.NOM with glasses.ACC
 ‘The man with glasses’ (from Levinson 2011: 382)

Levinson suggests that in Icelandic attributive contexts, the structure is the same as in the *vera með* structure, as in (55), except that there is no verbal layer (VP or TP). Instead, she assumes that there is a DP layer which merges with the pP projection. The derivation of the Icelandic construction in (58b) would be as in (59) (from Levinson 2011: 382).

(59)

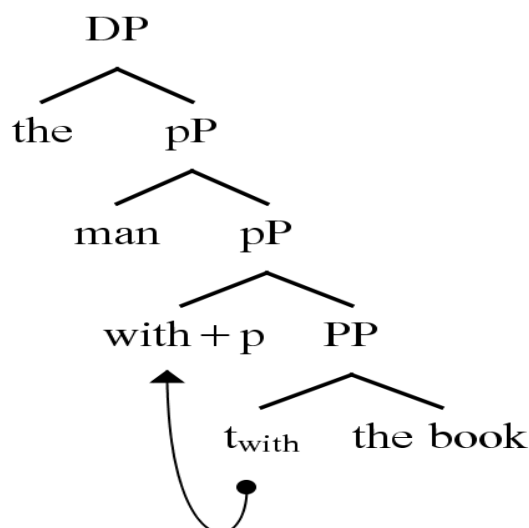


As shown in the schematic structure above, the possessive preposition *með* ‘with’, incorporates into little *p*, which assigns Accusative Case to the complement *gleraugu* ‘glasses’. The possessor *maður* ‘man’, incorporates into the D element *inn*, yielding the surface word order *maðurinn með gleraugu* ‘the man with glasses’ in Icelandic attributive possession.⁸⁴

⁸⁴ For more discussion of the semantics and syntax of Icelandic possession, see Irie (1997), Levinson (2011) and Myler *et al.* (2014). See also Svenonius (2002) for a thorough discussion of Case assignment in Icelandic.

Levinson goes on to analyze the English possessive *with* constructions in the same way as the Icelandic attributive *með* structure above. Given the parallelism between English and Icelandic in attributive possession, Levinson (2011: 384) assigns the same structure as in (59) to the English possessive construction in (60).

(60) The man with the book



Taking all this to be a reasonable approach to possession in Germanic, I will now apply this analysis to the corresponding *abu/umm* constructions in NA. As we will see, some adjustments will be necessary in order to capture the agreement relation with the possessor in the NA possessive constructions.

4.3.2 The structure of NA abu/umm-possessives: Extending Levinson's (2011) approach

This section presents an analysis of possessive *abu* and *umm* in NA. I assume that Levinson's (2011) proposals for English (and Icelandic) attributive possession can be extended to NA possessives. However, as stated above, a slight modification on the proposal is necessary to accommodate the NA agreement facts.

In the previous section, we have seen that the first piece of evidence that Levinson (2011) provides against Freeze's (1992) unified structure is that the preposition *með* 'with' in Icelandic cannot be used in locative contexts. This is straightforwardly also the case for NA *abu* and *umm* as they can never be used in locative contexts, as we have already seen in section 4.2.2.

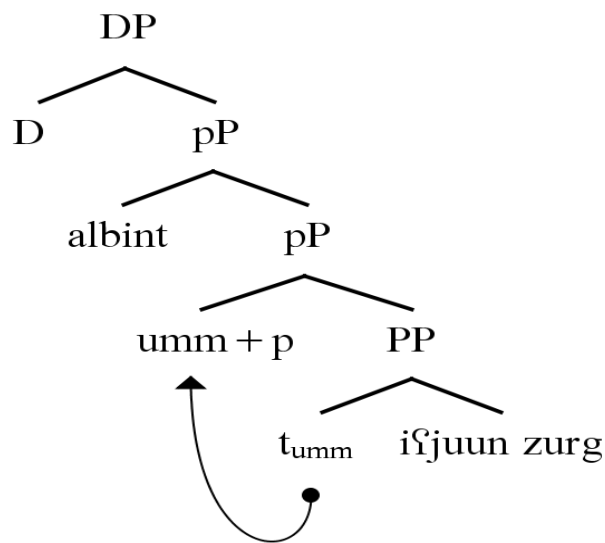
Another reason that Levinson's approach to Germanic possessive constructions is worth adopting also for (Najdi) Arabic *abulumm* possessives pertains to the agreement of these

possessive markers with the possessor. With regard to the alternation between *abu* and *umm*, we have seen in section 4.2 that *abu* is employed when the ϕ -content of the possessor is SG.M, whereas *umm* is used when the ϕ -content of the possessor is SG.F. Consider the following examples which again illustrate this fact.

- (61)a. al-bint umm /*ummahaat /*abu iŕjuun zurg
 DEF-girl with.SG.F / with.PL.F / with.SG.M eyes blue
 ‘The girl with blue eyes’
- b. al-banaat ummahaat /*umm /*abu iŕjuun zurg
 DEF-girls with.PL.F /with.SG.F / with.SG.M eyes blue
 ‘The girls with blue eyes’
- c. al-ħariim ummahaat /*umm /*abu al-malaajjin
 DEF-women with.PL.F /with.SG.F / with.SG.M DEF-millions
 ‘The women with millions’
- d. ar-radzdzaal abu /*umm /*ummahaat lihjah
 DEF-man with.SG.M /with.SG.F / with.PL.F beard
 ‘The man with a beard’

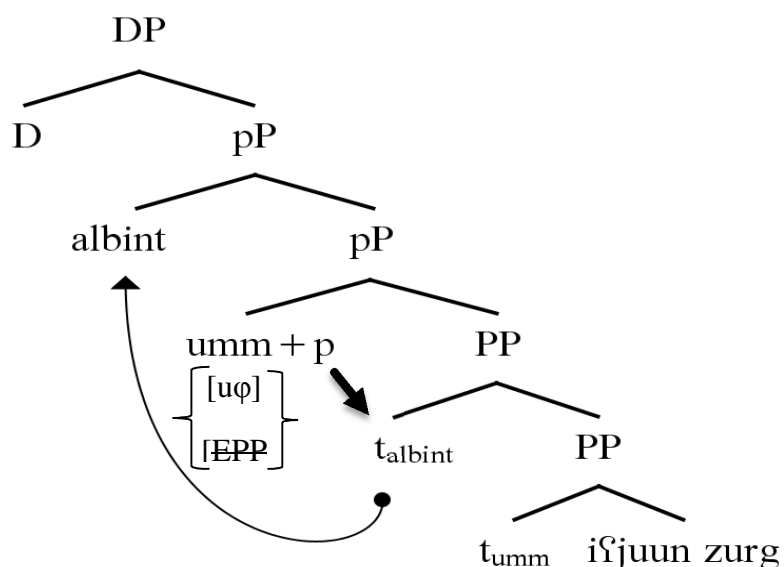
In (61a), the possessor is [SG.F], hence the default form of *umm* must be used, whereas in (61 b, c) *umm* displays the plural feminine form since the possessor is [PL.F]. The same observation extends to (61d). Syntactically, there is thus one significant difference between NA possessives and the English *with* possessive. The difference is that NA possessives obligatorily agree in ϕ -features with the preceding DP, as shown in (61), while English *with* doesn’t show this. This amounts to saying that there is an Agree relation between *abulumm* and the possessor DP to its left. Following this, I assume that Levinson’s (2011: 376ff.) Agree-based structure, which is mainly posited to account for Case assignment in Germanic possessive constructions, can also account for NA *abulumm* agreement relations. In keeping with Levinson’s (2011) analysis of the English possessive *with*, the structure of the NA construction in (61a), repeated below, would be as follows:

- (62) al-bint umm iʕjuun zurg
 DEF-girl with.SG.F eyes blue
 ‘The girl with blue eyes’



In (62), we can observe that *umm* is merged with the complement (the possessum) *iʕjuun zurg* ‘blue eyes’ and then head moves to little p. We can also see that the possessor DP *albint* ‘the girl’ is merged higher in spec, pP. Although Levinson (2011: 355) claims that her suggested proposal works beyond Germanic, this proposal, however, does not straightforwardly account for the NA *abulumm* agreement relations with the possessor DP. In the context of this analysis, the possessor is merged higher in pP projection. There is good reason to think, unlike Levinson (2011), that the possessor in NA is merged lower in the lexical projection PP and not higher in the functional projection (pP) as suggested for the English *with*. This reason follows from the conditions on the Agree operation (Chomsky 2001) which demands that the probe (the head), which is here little p lexicalized by *umm*, must c-command the goal (i.e. the possessor *albint*) in order for the former to probe downwards and find the matching ϕ -features of the latter and get its $u\phi$ -features valued (see the Introductory chapter, section 1.3 for more on the conditions of the Agree operation). In view of the discussion above, it is plausible to suggest that the proposed structure of the English preposition *with* needs to be modified, as in (63), in order to account for the NA Agreement facts.

(63)



In (63), we can see that the possessor DP *albint* ‘the girl’ is merged in the specifier position of the PP. Operation Agree (Chomsky 2001) is established between the little p and the possessor in spec, PP. This operation assigns feature values to the $u\phi$ -features of little p according to those of the possessor DP *albint* and yields the singular feminine form *umm* ‘with’. In case the possessor is [PL.F] or [SG.M], as in (61b,c) and (61d) respectively, the same operation takes place but results in the spell-out of the plural feminine marker *ummahaat* and the singular masculine marker *abu*, respectively. Assuming that the head of the pP has an EPP feature, this feature triggers movement of the possessor *albint* from PP to the spec of pP, deriving the surface word order in (61a). NA possession constructions thus vary in the first-merge position of the possessor as compared with their English and Icelandic counterparts.

Before closing the discussion, a few remarks about a technical detail that requires our attention are in order. It was mentioned in section 4.2.1 that when the possessor is plural masculine in NA, *abu* cannot be used in its plural form, the same way *umm* does. This is illustrated by the following examples.

- (64)a. *ar-rdzaal ʔaabaa /ʔibwaan iŋjuun zurg
DEF-men with.PL.M eyes blue
Intended meaning: ‘The men with blue eyes’

b. *ar-rdzaal ʔaabaa/ʔibwaan as-sijjaarāh al-ḥamra
 DEF-men with.PL.M DEF-car DEF-car
 Intended meaning: ‘The men with the red car’

It seems that the particle *abu* has a fixed/valued NUMBER feature as SINGULAR. As a result, it does not occur with PLURAL NUMBER possessors. This said, it is worth mentioning that in some Arabic varieties, a plural form of possessive *abu* does appear to be allowed. Mohammad (1999: 40) reports the following possessive construction from Palestinian Arabic, where the marker *abu* exhibits the plural form.⁸⁵ (The gloss is Mohammad’s)

(65) le-wlaad ʔabbayaat ʃ-faʃar it^ʕ-t^ʕawiil
 the-boys fathers the-hair the-long
 ‘The boys with the long hair’

In light of these data, it seems that *abu* in NA has a fixed number feature valued as [singular] and that only the gender feature is the uninterpretable/unvalued feature, which probes and agrees separately (cf. Béjar 2003, 2008; Rezac 2004; Soltan 2007 who argue that each feature acts as a separate probe based on facts from subject-verb agreement in the clausal domain). On the other hand, *abu* in Palestinian Arabic has uninterpretable/unvalued number feature which is valued either as singular or plural depending on the plurality/singularity of the possessor.⁸⁶

In the next section, I investigate the Modern Standard Arabic constructions formed by the particle *ḍuu* ‘with’, which is also sensitive to the phi-features of the possessor DP.

4.3.3 Modern Standard Arabic *ḍuu*-possessive constructions

In Modern Standard Arabic (MSA), the possessor-initial constructions can be formed in a similar way to NA and English by using the particle *ḍuu* ‘with’.⁸⁷ The MSA genitive marker *ḍuu* is used to express a concrete entity, a quality or a characteristic that the possessor possesses.

⁸⁵ According to Bashayer Alotaibi (p.c.), Kuwaiti Arabic patterns the same as NA in disallowing the use of the plural form of *abu*. However, Ekhlas Mohsin (p.c.) and Khansaa Martakush (p.c.) inform me that it is possible to use the plural form of the masculine marker in Iraqi Arabic and Syrian Arabic, respectively.

⁸⁶ This obviously still needs further investigation, something I leave for future research.

⁸⁷ In Hebrew, too, similar possessive constructions can be formed analytically by means of *im* ‘with’. For example, Siloni (1997: 24) reports the following construction from Hebrew (the free state marker appears in boldface):

(i) ha-bayit ha-yafe **im** ha-'aruba (Hebrew)
 DEF-house DEF-beautiful **with** DEF-chimney
 ‘The beautiful house with the chimney’

Here, it does not become apparent whether or not the Hebrew marker shows agreement on a par with its Arabic counterparts (note that this is the only example provided in this work for *with*-constructions). Tal Siloni (p.c.), however, informs me that the preposition *im* ‘with’ does not show agreement, behaving thus in a similar fashion as *fel* ‘of’ in this language (see 2.2 in the previous chapter).

The particle *ḏuu* shows agreement in number and gender with the DP it follows, as illustrated by the following examples:⁸⁸

- | | | | | | |
|---------|--|------------------|----------------|-------------------|------------|
| (66) a. | rajul-un | ḏuu | maal-in | (MSA) | |
| | man.Msg-Nom | Poss.Msg | wealth-Gen | | |
| | ‘A man with money’ | | | | |
| | | | | | |
| b. | jumlat-un | ḏaat | wajhayn | | |
| | clause.Fsg-Nom | Poss.Fsg | face.DL | | |
| | ‘An ambiguous sentence (lit., ‘a sentence with two faces’) | | | | |
| | | | | | |
| c. | ʔar-radzul-u | ḏuu | ʔal-maal-i | | |
| | DEF-man-NOM | with.SG.M | DEF-money-GEN | | |
| | ‘The man with the money’ | | | | |
| | | | | | |
| d. | ʔal-bint-u | ḏaat | ʔaf-ʔaʕr-i | ʔal-dʒamiil-i | |
| | DEF-girl-NOM | with.SG.F | DEF-hair-GEN | DEF-beautiful-GEN | |
| | ‘The girl with the beautiful hair’ | | | | |
| | | | | | |
| e. | ʔal-banaat-u | ḏawaat | ʔaf-ʔaʕr-i | ʔal-dʒamiil-i | |
| | DEF-girls-NOM | with.PL.F | DEF-hair-GEN | DEF-beautiful-GEN | |
| | ‘The girls with the beautiful hair’ | | | | |
| | | | | | |
| f. | ʔar-radzul-u | ḏuu | ʔal-wazn-i | ʔaθ-θaʕiil-i | |
| | DEF-man-NOM | with.SG.M | DEF-weight-GEN | DEF-heavy-GEN | |
| | ‘The man with the heavy weight/the heavy-weight man’ | | | | |
| | | | | | |
| g. | ʔar-riɖʒaal-u | ḏawuu | ʔal-wazn-i | ʔaθ-θaʕiil-i | |
| | DEF-men-NOM | with.PL.M | DEF-weight-GEN | DEF-heavy-GEN | |
| | ‘The men with the heavy weight/the heavy-weight men’ | | | | |
| | | | | | |
| h. | ʔat ^ʕ -tʕifl-u | ʔal-ʔafriiqijj-u | ḏuu | ʔaθ-θalaaθat-i | ʔaʕwaam-in |
| | DEF-baby-NOM | DEF-African-NOM | with.SG.M | DEF-three-GEN | years-GEN |
| | ‘The three-year old African baby’ | | | | |

The examples in (66) above show that the MSA genitive marker *ḏuu* agrees in NUMBER and GENDER with the possessor DP. This means that *ḏuu* and its plural masculine form *ḏawuu* are used only with masculine possessors, as shown in (66a, c, f, g, h). On the other hand, *ḏaat*, the singular feminine form of *ḏuu*, and the plural feminine form *ḏawaat* are used with feminine possessors as in (66b, d, e). This amounts to saying that this marker inflects for agreement in gender and number based on those of the possessor. The full paradigm of inflected forms of the MSA genitive marker *ḏuu* is given in table (67).

⁸⁸ Examples (66a-b) are found in Wright (1898, II) and taken from Hoyt (2008); the gloss is Hoyt’s.

(67) Paradigm of inflected genitive marker *ǰuu* ‘with’ in MSA

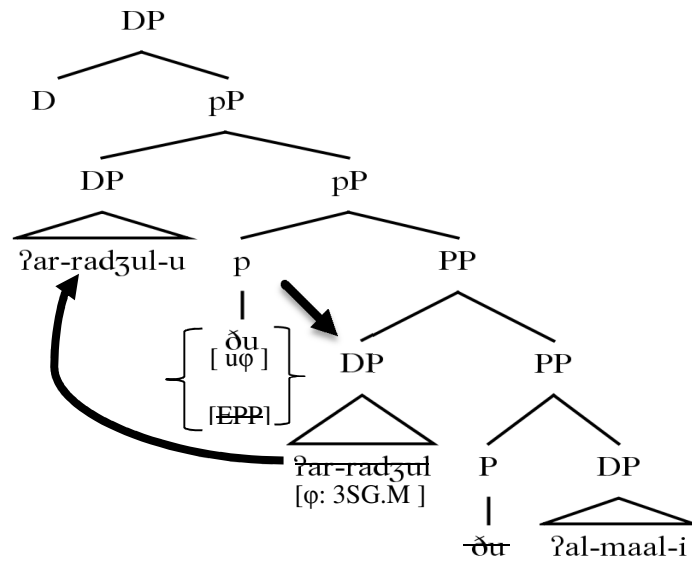
Possessor	<i>ǰuu</i> ‘with’
SG.M	<i>ǰuu.SG.M</i>
SG.F	<i>ǰaat.SG.F</i>
PL.M	<i>ǰawuu.PL.M</i>
PL.F	<i>ǰawaat.PL.F</i>

We can see that the inflected forms of *ǰuu* show agreement in ϕ -features with the possessor; if it is SG.M, *ǰuu* shows SG.M, hence the default case, and if it is SG.F, *ǰuu* gets morphologically changed to *ǰaat*, and so on. It appears thus that while MSA employs *ǰuu* to express possession with both masculine and feminine possessors, NA uses *abu* with masculine possessors and *umm* with feminine possessors. Put another way, what MSA represents in one (inflected) word, NA represents in three allomorphs of the possessive marker, namely *abu*, *umm* and *ummahaat*.

When we compare the MSA *ǰuu* marker with its equivalents in NA, it is clear that they have a strong resemblance, particularly since they are both used to express possession. Additionally, these two types of particles show agreement in ϕ -features with the preceding DP (i.e. the possessor), as discussed above. This does not come as a surprise since these languages are genetically closely related to one another. Moreover, the word order in possessives containing the MSA genitive marker is the same as that of *abulumm*-possessive constructions; the possessor must appear first, followed by the particle *ǰuu* ‘with’, which is in turn must be followed by the element understood as the possessum. In view of this, I assume that *ǰuu*-constructions have the same syntactic structure as their NA possessive *abulumm* counterparts. If this is on the right track, then the structure of (66c), repeated below as in (68a), can be represented schematically as follows in (68b).

- (68)a. ʔar-radʒul-u *ǰuu* ʔal-maal-i
DEF-man-NOM with.SG.M DEF-money-GEN
‘The man with the money’

b.



Along the lines of the proposed analysis posited for *abu* and *umm*, *δuu* agrees with the possessor while the latter is in the Spec position of the PP via a probe-goal relation (Chomsky 2000, 2001). Probing downwards, *δuu* finds the possessor DP as an active goal whose structural Case is still unvalued and is endowed with matching valued ϕ -features. Following this, the MSA marker establishes an Agree relation with the possessor *ʔarradʒul* ‘the man’, which results in the valuation of its number and gender features based on those of the latter. In the final step of the derivation, the possessor DP moves to the Spec of pP to satisfy the EPP feature on the functional head. The syntactic structure of *δuu*-possessive constructions thus indicates that this particle has unvalued/uninterpretable ϕ -features, which have to be eliminated before the derivation is sent to the LF interface (see Chomsky 1995: Ch. 4). Although this assumption is not immediately clear in the above structure as *δuu* displays SG.M, i.e. the default form of the genitive marker, this is, however, transparently manifested in constructions involving feminine singular possessors, as in (66d), where the MSA marker *δaat*.SG.F is specified with the same phi-content of the possessor, viz. *ʔalbint*.SG.F ‘the girl’. The same reasoning applies to all other examples in (66).

Based on the discussion above, it can be noted that the English possessive *with* is different from *abu*, *umm* and *δuu* markers in that it does not have unvalued/uninterpretable ϕ -features, which accounts for the lack of any inflected form of *with* due to the ϕ -features of the possessor. What this basically means is that the invariant preposition *with* does not enter an Agree relation with the possessor, given that it has no $u\phi$ -features, making it an active probe. Additionally, the constructions with *abu*, *umm* and *δuu* all have an [EPP] feature, forcing the possessor to move to the Spec position of their maximal projection; this is unlike English *with* which also lacks

this feature given that the possessor is first-merged/generated higher in spec, pP as argued for by Levinson (2011).

Uninterpretable phi-agreement and EPP features in possessor-initial constructions formed by NA *abulumm*, English *with* and MSA *ḍuu* can be represented as in the following table:

(69) $u\phi$ and EPP features of possessor-initial constructions in NA, MSA and English

Particle	$u\phi$	EPP
NA <i>abu</i> and <i>umm</i>	√	√
English possessive <i>with</i>	X	X
MSA genitive marker <i>ḍuu</i>	√	√

It is clear that all particles share EPP, $u\phi$ features, except for possessive *with* which lacks both features.

4.4 Conclusion

In this chapter, I discussed the syntax of the English possessive *with* and the NA *abulumm*-possessives. First, I provided a descriptive account of such possessives, pointing out certain similarities and differences between the NA *abulumm* markers and the English *with* marker. Additionally, I discussed Levinson's (2011) proposal, arguing that her proposed analysis of English possessive *with* can be extended to their NA counterparts, but her argument for the possessor-merge needs to be modified in order to capture the NA possessive constructions agreement relations with the possessor. Following this, I argued that *abu* and *umm* agreement facts can be accounted for with the use of a probe/goal agreement operation (Chomsky 2000, 2001). Finally, I discussed the possessor-initial constructions formed with *ḍuu* 'with' in MSA, proposing that the *ḍuu*-possessive constructions have the same syntactic structure as their NA possessive counterparts.

Part II. Predicative Possession

Chapter 5. Predicative Possession

5.1 Introduction

Having investigated the major syntactic aspects of nominal possession in Najdi Arabic (NA), our attention turns now to a distinct, but related, type of possession in this Arabic vernacular; namely, predicative possession (as in English *John has a car*). The investigation of predicative possession, also referred to as ‘sentential possession’ or ‘clausal possession’, is motivated on the grounds that it shares certain syntactic properties with nominal possession, including, but not limited to, movement of the possessor as well as use of a ϕ -inflected possessive preposition. Given that predicative possession in NA is predominantly expressed with the use of the preposition *ʕind*, this chapter is devoted to exploring the syntactic derivation of sentences that contain this preposition.

In this chapter, we will see that when the preposition *ʕind* is employed to encode predicative possession, a pronominal suffix shows up on the preposition, which cross-references the ϕ -features of the possessor. We will see that there are a number of facts (including the behaviour of such pronominal suffixes on other heads such as complementizers) pointing to the conclusion that it should be treated as an agreement suffix. It will be shown that cross-linguistic data in Stassen (2009) support the analysis of the pronominal element on the preposition as an agreement marker.

The chapter is organized as follows. Section 5.2 sets the scene for the entire chapter by briefly introducing the two main types of predicative possession cross-linguistically. Section 5.3 introduces the relevant descriptive facts of NA possessive clause formed with *ʕind* and the variant *maʕ*. Section 5.4 provides a syntactic analysis of *ʕind*-possessive sentences, building on Harley’s (2002) proposal for predicative possession. This section also addresses the issue of copula agreement variation and provides an analysis for it, along the lines of Adger and Smith (2005). Section 5.5 discusses ‘agreeing’ prepositions as a cross-linguistic phenomenon. It will become clear in this section that NA is not an isolated case as there are other languages, including Maltese, Swahili, Lokono and Ngbaka, where prepositions show a similar pattern of agreement as NA when they are employed as markers to encode predicative possession. Section 5.6 concludes the chapter.

5.2 Setting the scene

Predicative possession concerns expressions of possession where the possessor and the possessum are not contained in the same maximal projection; in other words, they are not part of the same DP. Consider the following example:

(1) John has a car.

In sentence (1), the possessor *John* and the possessum *a car* are not contained locally within the same DP, unlike the case presented in the following example:

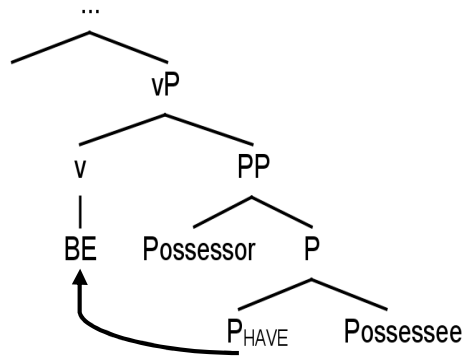
(2) I saw John's car.

In (2), the possessor *John* and the possessum *car* are contained within the DP object of the verb *saw*. Note that the possessive relation between the possessor and the possessum in (2) is mediated through the genitive marker ('s). Conversely, the possessive relation between the possessor and the possessum in predicative possession in English, as in (1), is mediated through the verb *has*, whose semantic content denotes possession. In his typological study of predicative possession, Stassen (2009) reports that the verb HAVE is used for the encoding of possession in many languages in European and beyond. He points out that such possessives form one major type of predicative possession, which he labels HAVE-Possessive. Stassen describes its main properties as follows: 'the construction contains a transitive predicate, the possessor NP is constructed as the subject/agent and the possessee NP is constructed as the direct object/patient' Stassen (2009: 62).

From a generative perspective, the possessive verb HAVE is widely assumed to be underlyingly a preposition rather than a true verb, an idea first formulated by Benveniste (1966). In this type of analysis, HAVE is treated as a complex head which is comprised of BE + a locative preposition (see Freeze 1992; Kayne 1993, 1994; Den Dikken 1995; Guéron 1995; Harley 2002, 2008; Levinson 2011; among many others). The question that arises now is whether all natural languages have an equivalent for this prepositional verb to express predicative possession. According to Harley (2002), languages differ with respect to the availability of the verb HAVE. Several languages, including English, express possession using verbal *have* where the abstract head P_{HAVE} incorporates into the copula BE, as illustrated in (4) for the sentence in (3):

(3) Mary has a book.

(4)



(Harley 2002: 46)

Note that here the possessor and the possessum are originally contained within a PP whose complement houses the possessum and whose Specifier houses the possessor. As shown in (4), the relation between possessor and possessum is mediated through a preposition P_{HAVE} , which then moves to adjoin the copula head, resulting in the pronounced form *have*. The possessor undergoes movement to Spec, vP to yield the surface word order, where it precedes the incorporated head *have*.

However, Harley (2002) points out that there are languages which do not allow the incorporation of P_{HAVE} into the copula. Consequently, they do not have lexical HAVE as in such languages, the locative preposition and the copula are realised separately instead.⁸⁹ This is the case also in NA, which is therefore a HAVE-less language. Consider the following sentences:

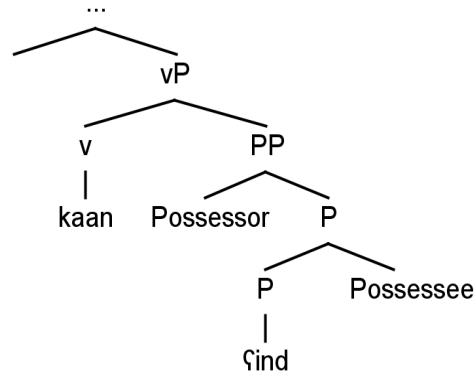
- (5) a. *kaan* Muḥammad *ʕind-ah* *sijjaarah*
was Muhammad at-3SG.M car
'Muhammad had a car.'
- b. Muḥammad *kaan* *ʕind-ah* *sijjaarah*
Muhammad was at-3SG.M car
'Muhammad had a car.'

Under Harley's (2002) proposal, sentence (5a) would be schematically represented as in (6), where there is no incorporation of the preposition *ʕind* and the (past) tense copula *kaan*.⁹⁰

⁸⁹ Recall from section 1.2.2 that in NA, like other Arabic varieties, the copula BE is not overt in the present tense. In the past tense, though, it appears in the overt form of *kaan* 'was'.

⁹⁰ This structure is somewhat simplified and will be developed and modified in section 5.4.1, where I return to Harley's (2002) account of possessive sentences.

(6)



However, this is only the tip of the iceberg in accounting for predicative possession in NA. We need to account for, among other things, the pronominal element suffixed to the preposition *ʕind* when it is used to derive predicative possession (cf. 5a-b) and the syntactic constraints that are observed in predicative possession, such as the condition that the possessor should be definite while the possessum should be indefinite. To achieve a better understanding of these issues, the most relevant syntactic facts are introduced next.

5.3 Descriptive facts

As mentioned above, NA is a HAVE-less language where predicative possession is formed using the locative preposition *ʕind*, which is not incorporated into the copula. This section aims to provide the main descriptive facts regarding the preposition *ʕind*, highlighting its various properties. A first point to note about predicative possession expressed through the use of the preposition *ʕind* is that it includes various types of possession, as illustrated in (7a-c).

(7) a. Muḥammad ʕind-ah sijjaarah / beet / kitaab
Muhammad at-3SG.M car / house / book
'Muhammad has a car/a house/a book.'

b. Saara ʕind-ha θalaaθ atʕfaal / aḡu
Sarah at-3SG.F three kids / brother
'Sarah has three kids/ a brother.'

c. Ronaldo ʕind-ah mawhibah / mahaaraat / fikrah / fluus / muʕklah
Ronaldo at-3SG.M talent / skills / idea / money / problem
'Ronaldo has a talent/ skills / an idea/ money/ a problem.'

As can be observed from these examples, *ʕind* in NA is productive and compatible with alienable possessed nouns (concrete properties) (7a), inalienable (kinship) relationships (7b), and (abstract) notions (7c).

ʕind may also express other notions of predicative possession, as in (8a-d).

- (8) a. Muḥammad ʕind-ah sʕadiig
 Muhammad at-3SG.M friend
 ‘Muhammad has a friend.’
- b. ʕind-i sʕadaaf
 at-1SG headache
 ‘I have a headache.’
- c. ʕamm-i ʕind-ah adʕ-dʕayatʕ
 uncle-my at-3SG.M DEF-high blood pressure
 ‘My uncle has hypertension.’
- d. Muḥammad ʕind-ah ḥaraarah /as-sakkar
 Muhammad at-3SG.M temperature/ DEF-diabetes
 ‘Muhammad has a fever/ diabetes.’

In (8a), *ʕind* is used to express what Mazzitelli (2017: 16) refers to as ‘social possession’, whereas it expresses the possession of an illness or a disease in (8b-d).

At this juncture, it should be noted that not every instance of the preposition *ʕind* expresses predicative possession, as it can also appear in locative and existential constructions with altogether distinct properties and syntactic conditions. In such constructions, the preposition *ʕind* does not have the agreement marking showing up in (7) and (8). Consider the following example where the preposition *ʕind* denotes a locative relationship between the subject of the sentence and the post-*ʕind* DP.

- (9) Muḥammad ʕind al-madrasah
 Muhammad at DEF-school
 ‘Muhammad is near/next to the school.’

In (9), the preposition *ʕind* is used to physically locate the subject DP *Muhammad* in relation to the preposition’s complement, *al-madrasah*. The preposition *ʕind* performs this function in the same way as other locative prepositions, such as *fooq* ‘above’, *ʕala* ‘on’ and *fii* ‘in’, do.

- (10) a. al-kitaab fooq / ʕala at^ʕ-t^ʕaawlah
 DEF-book above/ on DEF-table
 ‘The book is above/ on the table.’
- b. Saara fii al-beet
 Sarah in DEF-house
 ‘Sarah is in the house.’

Furthermore, the preposition *ʕind* can be used in existential constructions, which in NA are formed with the expletive element *fiih* ‘there’ (cf. Mohammad 1998, 2000; Boneh and Sichel 2010 on similar elements in other varieties). Witness the following examples:

- (11) a. fiih ʔarbaʕ kuwar ʕind ʔif-ʕadʕarah
 EXP four balls at DEF-tree
 ‘There are four balls near the tree.’
- b. fiih ʕalaaθ at^ʕfaal ʕind Saara
 EXP three kids at Sarah
 ‘There are three kids at Sarah’s (house/company).’

The presence of the expletive *fiih* results in the reading that there exist four balls next to (or near) the tree in (11a). The same kind of interpretation holds in (11b). Note that in such *ʕind* existentials the subject is always indefinite, just like in the existentials of English and other languages (cf. Lasnik 1995):

- (12) a. *There are the men at our house.
 b. *There is the computer next to my bag.
- (13) a. There are men at our house.
 b. There is a computer next to my old bag.

In NA, the expletive *fiih* can be dropped from sentences like (11), provided the PP (*ʕind*+DP) appears sentence-initially:

- (14)a. ʕind ʔif-ʕadʕarah ʔarbaʕ kuwar
 at DEF-tree four balls
 ‘There are four balls near the tree.’

- b. ζ ind Saara θ alaa θ at^ffaal
 at Sarah three kids
 ‘There are three kids at Sarah’s (house/company).’

In such constructions, it can be suggested, following Boneh and Sichel (2010), that the inverted PP (*ζ ind*+DP) is in Spec, TP, and hence there is no need for an expletive element to fill Spec, TP (see Mohammad 1998, 2000 and Boneh and Sichel 2010 for discussion of existentials in Palestinian Arabic).

Let us now consider in more detail instances where *ζ ind* is used as a marker of predicative possession. In this case, *ζ ind* appears with a pronominal clitic attached to it that is inflected for the ϕ -features of the possessor. Note that the pronominal element attached to *ζ ind* is obligatory to generate the possessive reading, as illustrated in the following examples:

- (15)a. Muḥammad ζ ind-*(uh) sijjaarah
 Muhammad at-3SG.M car
 ‘Muhammad has a car.’

- b. al-bint ζ ind-*(ha) beet
 DEF-girl at-3SG.F house
 ‘The girl has a house.’

If the pronominal clitic on *ζ ind* inflects for the ϕ -features of the possessum, the above sentences would be ungrammatical, as demonstrated below:

- (16)a. *Muḥammad ζ ind-ha sijjaarah
 Muhammad at-3SG.F car.SG.F
 Intended: ‘Muhammad has a car.’

- b. *al-bint ζ ind-ah beet
 DEF-girl at-3SG.M house.SG.M
 Intended: ‘The girl has a house.’

If the pronominal clitic is removed from examples as in (15), they will have a locative, not possessive, reading, as shown in (17).

- (17)a. Muḥammad ζ ind sijjaarah
 Muhammad at car
 ‘Muhammad is next to a car.’

b. al-bint *ʕind* sijjaarah
 DEF-girl at car
 ‘The girl is next to a car.’

This means that the presence of a pronominal clitic on the preposition is necessary for the well-formedness of the possessive sentence. To this can be added the fact that the possessum is typically indefinite, as it is in the examples in (15). According to Ouhalla (2000), the indefiniteness of the possessum is not accidental, but appears to play an important role in imposing a strict condition to force a possessive reading. Specifically, he points out that when the possessum is indefinite, a permanent possessive reading is yielded; by contrast, when it is definite, a temporary/transitory reading is forced (see the relevant paper for discussion).

Before concluding this section, there is one more relevant aspect of *ʕind* as a possessive preposition to discuss. It concerns sentences as in (18) in which *ʕind* is not suffixed with a pronominal clitic.

(18)a. *ʕind* Muḥammad sijjaarah
 at Muhammad car
 ‘Near/next to Muhammad is a car’/ ‘there is a car next to Muhammad’

b. *ʕind* Saara ṯalaaṯ banaat
 at Sarah three girls
 ‘At Sarah’s (house) are three girls’

These sentences can certainly express locative meaning, as shown in the translations provided. The question is: can they also express possession? Despite claims to the effect that comparable sentences in other Arabic dialects allow possessive readings (see Ouhalla 2000; Naïm 2008 and Eid 2008), this is not the case in NA. The above constructions are degraded in NA if a possessive reading is intended, as in (19a-b):⁹¹

(19)a. ?? *ʕind* Muḥammad sijjaarah
 at Muhammad car
 ‘Muhammad has a car.’

⁹¹ See note 95 regarding this construction and the discussion of (55) in section 5.5.

- b. ?? *ʕind* Saara θalaaθ banaat
 at Sarah three girls
 ‘Sarah has three girls.’

One difference between existential *ʕind* and possessive *ʕind* is that existential *ʕind* forms a constituent with the following DP (19a-b), whereas possessive *ʕind* does not form a constituent with the possessor DP (20a) and can be separated from it by the past-tense copula *kaan* ‘was’ (20b).

- (20)a. Muḥammad *ʕind*-ah sijjaarah
 Muhammad at-3SG.M car
 ‘Muhammad has a car.’

- b. Muḥammad *kaan ʕind*-ah sijjaarah
 Muhammad was at-3SG.M car
 ‘Muhammad had a car.’

From these facts, it may be concluded that there are two distinct *ʕinds* in NA: a locative/spatial/existential *ʕind* and a possessive *ʕind*. The latter must be suffixed with a pronominal clitic, which is not true of the former.

5.3.1 *Comitative maʕ and predicative possession*

In the preceding section, we have seen that predicative possession is expressed chiefly through the possessive preposition *ʕind*; the so-called ‘Locational Possessive’ (Stassen 2009) or the ‘Location Schema’ (Heine 1997). This subsection explores another preposition which NA makes use of to form possessive constructions, which are similar in their meaning to the possessive verb HAVE in English. In addition to a *ʕind*-possessive, NA exhibits a *maʕ*-possessive construction (‘with’-possessive).⁹² Consider the following examples:

- (21)a. Muḥammad *maʕ*-ah sijjaarah / galam / ʕaʕrah ʔirjaal
 Muhammad with-3SG.M car / pen / ten Riyal
 ‘Muhammad has a car/ a pen/ ten Riyals.’ (with him/ at his disposal).
- b. ar-radʒdʒaal *maʕ*-ah ʔimsaddas

⁹² The ‘with-possessive’ corresponds to what Heine (1997) calls the ‘Companion schema’. However, I refer to *maʕ*-possessive constructions as ‘with-possessive’, following the practice of Stassen (2009). A familiar instance of the with-Possessive is provided by the Icelandic *vera með* constructions discussed by Levinson (2011) and presented in Chapter 4 of the present work.

DEF-man with-3SG.M gun

‘The man has a gun.’ (with him/ at his disposal).

c. Umm-i maʕ-ha fluus
mother-my with-3SG.F money

‘My mother has money.’ (with her/ in her hands)

These possessive sentences formed with the use of the preposition *maʕ* ‘with’ as in (21a-c), would fall into the categories that Heine (1997) calls ‘temporary possession’ and ‘physical possession’, which are defined below (Heine 1997: 34-35):

(22) Temporary possession: The possessor can dispose of the possessum for a limited time but cannot claim ownership to it.

(23) Physical possession: The possessor and the possessum are physically associated with one another at reference time.

In the *ʕind*-possessive constructions discussed above, the various relations expressed by *ʕind* are typically associated with ‘permanent possession’, where the possessum is a property of the possessor. However, unlike *ʕind*-possessive constructions, *maʕ*-possessive constructions do not involve such a ‘permanent’ relation. Instead, they are usually associated with ‘temporary’ or ‘physical’ possession, as demonstrated in (21). For instance, the NA construction in (21b) *ar-radʒdʒaal maʕ-ah ʔimsaddas* ‘the man has a gun’ implies that ‘he has a gun (right now)’, or ‘he is holding it now’,⁹³ a relationship described precisely by Viberg (2010), while discussing the definition of temporary/physical possession in Swedish, as the ‘availability for immediate use’. In this way, while *ʕind* can freely express any type of predicative possession, including kinship terms, body parts, permanent ownership, abstract possession, social possession and possession of an illness, as shown in examples (7) and (8) above, *maʕ* is exclusively used for ‘temporary possession’ (compare (21a-c) with (24)), in addition to the possession of an illness, as illustrated in (25).

⁹³ Stassen (2009: 19), while discussing temporary or physical possession, states that (during a fight in a pub) one might shout saying the following English possessive construction in (i):

(i) Look out! That guy has a knife!

Stassen points out that the question whether the guy (permanently) owns the knife in question is not what the sentence is about. He further points out ‘what the speaker wants to convey is the fact that, at this moment, a certain person has a knife at his disposal, and the question of whether or not that person is actually the owner of that knife is largely irrelevant. Thus, cases of Temporary Possession can be characterized in terms of availability at a certain point in time.’ (Stassen 2009: 19). The *maʕ*-possessive sentences in (21a-c) largely fall under Stassen’s statement.

(24) *Muḥammad maʕ-ah aḫu / fikrah
 Muhammad with-3SG.M brother/ idea
 Intended: ‘Muhammad has a brother/ an idea.’

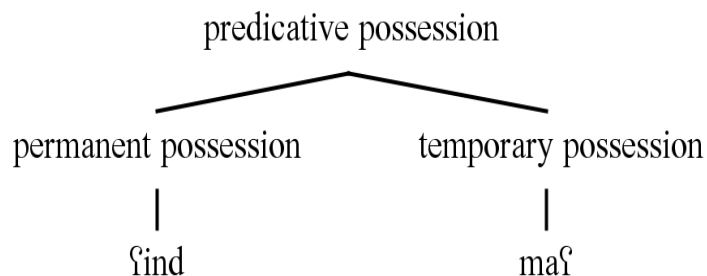
(25) Muḥammad maʕ-ah ḥaraarah
 Muhammad with-3SG.M temperature
 ‘Muhammad has a fever.’

Altogether, it can be seen there is a clear distinction between *ʕind* and *maʕ* in expressing predicative possession, in terms of the type of possession conveyed. However, there is some competition between the two possession markers in NA for expressing the possession of an illness (compare (25) with (8b-d)).⁹⁴

It should be noted that by employing *maʕ* ‘with’, NA has a similar system of expressing possession predicatively as that found in Icelandic, Portuguese and Bantu languages (see, e.g. Irie 1997 and Levinson 2011 for the *með* ‘with’ construction in Icelandic; Freeze 1992 and Stolz 2001 for *com* ‘with’ in Portuguese; Halpert and Diercks 2013, Creissels 2013 and Myler 2014 for *na* ‘with’ in Zulu and Swahili).

In diagram (26), I summarise the predicative possessive constructions schematically.

(26) The (Najdi) Arabic predicative possession system



The discussion below provides a syntactic account of possessive *ʕind* clauses, emphasising its syntactic derivation as well as its interaction with the possessor and the past-tense copula *kaan*. I will confine myself to the possessive *ʕind* with a strict understanding that the derivation of *maʕ* is identical.

⁹⁴ This competition in NA predicative possession constructions recalls certain meaning effects in French inalienable possession, see Le Bruyn (2014) and references cited there for details. It also recalls a similar pattern of competing prepositions, *gan* and *gyda*, which are used in predicative possession constructions in modern Welsh (see Stolz 2001a: 342-344).

5.4 Syntactic account of possessive *ʕind*

While several studies have investigated the role of locatives in expressing possession in sentences in Arabic (see Ouhalla 2000 for Moroccan Arabic, Naïm 2008 for Levantine Arabic, Eid 2008 for Egyptian Arabic and Boneh and Sichel 2010 for Palestinian Arabic), the understanding of this phenomenon remains incomplete. Additionally, no investigation, to my knowledge, has been conducted into Najdi Arabic in this context. Furthermore, a gap left by the above-mentioned studies is that no account has been provided for the (categorical) nature and derivation of the agreeing suffix that must appear on the possessive *ʕind*, as shown in examples (27).

- (27)a. Muḥammad ʕind-ah kitaab
Muhammad at-3SG.M book
'Muhammad has a book.'
- b. al-bint ʕind-ha kitaab
DEF-girl at-3SG.F book
'The girl has a book.'
- c. Saara ʕind-ha θalaaθ banaat
Sarah at-3SG.F three girls
'Sarah has three girls.'

It should be noted that predicative possession in NA is typically formed by the possessor DP followed by the preposition *ʕind*, which contains a pronominal suffix and then the possessum DP and not the preposition *ʕind* followed by the possessor DP and then the possessum, as reported for some Arabic dialects (see the works just cited above). This is demonstrated in the following minimal pair.

- (28)a. ?? ʕind Muḥammad kitaab
at Muhammad book
'Muhammad has a book.'
- b. Muḥammad ʕind-ah kitaab
Muhammad at-3SG.M book
'Muhammad has a book.'

The most natural way to express possession predicatively in NA is to start with the possessor DP, which is followed by *find*+suffix and then the possessum, as in (28b), and not as in (28a).⁹⁵ The use of the locative preposition *find* ‘at’ to encode predicative possession suggests a ‘locative’ analysis (in the sense of Freeze 1992); however, such a locative account to *find* possessive sentences falls short of accounting for certain syntactic properties of NA predicative possession, especially the fact that *find* has a pronominal suffix (see the previous chapter, section 4.3.1 for an overview of Freeze’s 1992 proposal and Myler 2014: 138-146 for more thorough discussion of the proposal; see also Harves 2002; Levinson 2011: 364-369; Myler 2014: 147-152 for criticisms of Freeze’s locative analysis). For the purpose of the present chapter, I find Harley (2002) as the most important previous proposal that can account for predicative possession in NA. After reviewing her key points, I will apply her proposed structure to the NA data.

5.4.1 Harley’s (2002) proposal

In section 5.2, Harley’s (2002) analysis of predicative possession has been touched upon briefly. In this subsection, we will investigate her proposal in more detail.

Harley’s (2002) proposal, which is concerned primarily with the syntax of the double object constructions, investigates the structure of predicational possessives in several languages, including English, Hindi, Scots Gaelic, Irish, Diné (Navajo), Hiaki and Japanese.⁹⁶ Unlike Freeze (1992), Harley argues that the sentences with HAVE are derived from an underlying

⁹⁵ The degraded construction (28a) *find Muhammad kitaab* in NA recalls the following ungrammatical possessive construction in Maltese Arabic, a ‘sister language’ of NA:

- (i) *Ghand Pawlu ktieb (Maltese, Semitic language)
 at Pawlu book (from Stassen 2009: 98, citing Comrie 1989: 221)

Stassen (2009) points out that Maltese Arabic used to encode predicative possession through the use of the standard Locational possessive, as in (i), which is similar to the case in Classical Arabic and Tamazight, stating that such a ‘standard Locational Possessive is not – or perhaps no longer – possible in South Semitic, and in Maltese.’ (Stassen 2009: 98). Additionally, Stassen points out that the above possessive construction has undergone an ‘intricate’ grammaticalization process from the Locational possessive to an intermediary stage of ‘Topic-Locational’ hybrid and then to a final stage which he labels as ‘Have-Drift’, yielding the possessive construction to become as in (ii).

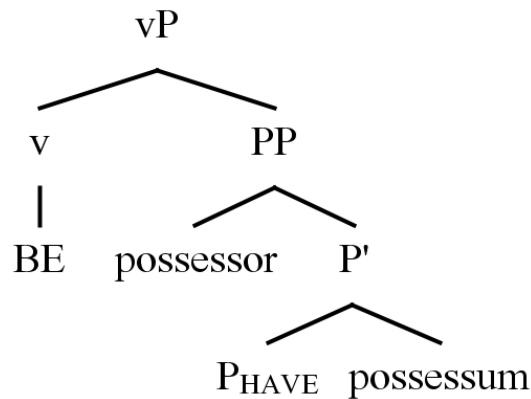
- (ii) Pawlu ghand-u ktieb
 Pawlu at-3SG.M book
 ‘Pawlu has a book.’ (from Stassen 2009: 237, citing Comrie 1989: 221)

According to Stassen (2009: 209), the Have-Drift ‘aims at turning an intransitive construction into a transitive one: it is a process of transitivization, in which the possessor NP is – or comes to be – the subject.’ A crucial part of the grammaticalization process of ‘transitivization’, as Stassen argues, is that the Locational marker gets reanalyzed as a verbal element which has a ‘transitive status’, taking the possessor as its subject and the possessum as its direct object. Stassen points out further that the possessive element in the newly created construction behaves like a verb and may agree with the possessor ‘the subject’, a state of affairs which seems to be true of NA (cf. 28b). In addition to Maltese Arabic, Stassen also provides other cases like this from Celtic languages: Breton and Cornish (See Stassen 2009: Ch. 6 for detailed discussion). See also the discussion of (55) in section 5.5 where Stassen extends this line of analysis to modern Arabic dialects (Tunisian Arabic, in particular).

⁹⁶ For discussion of double object constructions see, e.g. Larson (1988); Pesetsky (1995); Harley (2002); Haddican and Holmberg (2012, 2019); Harley and Jung (2015); Harley and Miyagawa (2016); Al-Janabi (2019).

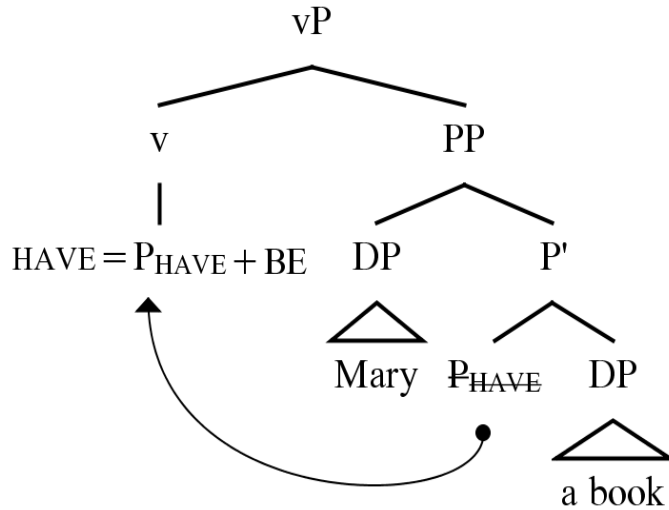
structure in which the POSSESSOR is higher than the POSSESSUM, just like it is at surface level. This is illustrated in (29) (Harley 2002: 46; her (30a)).

(29) The structure of possession sentences in English



In (29), the abstract head P_{HAVE} takes the possessum DP as its complement and the possessor DP as its specifier. Harley (2002) argues that in a language like English, which possesses a verb of possession, P_{HAVE} incorporates into the copula BE, resulting in spell-out as the verb ‘HAVE’, as schematically shown in (30) for a possessive sentence like *Mary has a book*:

(30)



Crucially, Harley posits a structure as in (29) also for clauses with a double object construction (e.g. *Muhammad gave Sarah a rose*), on the basis of the presence in those too of a semantic relation of possession (such that *Sarah* comes to possess a rose). Her analysis thus entails that the presence of P_{HAVE} in a given language depends on the availability of double object constructions in it; thus, in effect correlating the presence or absence of P_{HAVE} with the presence or absence of double objects. The hypothesis put forth by Harley entails that languages without P_{HAVE} do not allow possessors to c-command possessums, and show no evidence of double

object constructions (Harley 2002). NA has productive use of double object constructions, as shown in (31), so Harley’s prediction would be that NA has P_{HAVE} as well – and we have seen that it indeed has.

- (31)a. Muḥammad ʔaʕtʕa Saara wardah
 Muhammad gave.3SG.M Sarah rose
 ‘Muhammad gave Sarah a rose.’
- b. ʔaʕtʕa Muḥammad Saara wardah
 gave.3SG.M Muhammad Sarah rose
 ‘Muhammad gave Sarah a rose.’

Here, it is clear that the possessor *Muhammad* c-commands the theme in both double object complement alternations. Additionally, Harley (2002) writes the following text regarding the P_{HAVE} and its availability in a language:

If a language has P_{HAVE}, the possessor in the specifier c-commands the possessee in the complement. [...] If P_{HAVE} is not present in a given language, it will use P_{LOC} to express possession. [...] Irish and Diné (Navajo) are languages of this type, lacking P_{HAVE}, while Japanese, Hindi, Hebrew, and others, despite not conflating P_{HAVE} with BE, do use P_{HAVE}, as of course do languages with verbal *have*. (p. 47)

In view of this, NA would fall into Harley’s (2002) P_{HAVE} type, on a par with Japanese, Hindi and Hebrew, given that it lacks HAVE verbs and does not incorporate P_{HAVE} into the copula BE. This means that in NA, P_{HAVE} and the copula are realised separately, resulting in possessive copular constructions in which the possessor c-commands the possessum. Thus far, we have seen that the c-command relation under this proposal is based on whether a language has P_{HAVE}. If it does, the possessor c-commands the possessum and the structure is derived from the same linear order as possessive HAVE constructions (see 30).

Harley argues in some detail that this type of approach is preferable to that of Freeze (1992), which attempts to unify locatives, existentials and possessives. Freeze (1992) argues that the possessum (the theme) occupies Spec, PP and always c-commands the possessor (location), which is the complement of P. Freeze implements the idea of c-command relation, as Harley explains, by asserting that the possessum in existential/ possessive constructions must be indefinite cross-linguistically.⁹⁷ Harley (2002) points out that this view is problematic given

⁹⁷ It should be noted that this claim has been proven too strong to hold in some languages, including Irish (McCloskey 2014) and Catalan (McNally 1998) and is inaccurate even in languages like English where it is supposed to hold. For example, in English, where if the possessum has been previously mentioned, one can say

that ‘Freeze does not address the theoretical apparatus necessary to allow Minimality-violating movement of this type, driven by the definiteness of an intervening DP’ (2002: 48). When examining this point from a NA perspective, it makes sense to follow Harley in placing the possessor in a position higher than that of the possessum, given that the possessum in NA can be definite, as illustrated in (32a-c).

- (32) a. Muḥammad ʕind-ah al-kanz / al-kitaab
 Muhammad at-3SG.M DEF-treasure/ DEF-book
 ‘Muhammad has the treasure/the book.’
- b. al-ḥaris ʕind-ah al-kuurah
 DEF-goalkeeper at-3SG.M DEF-ball
 ‘The goalkeeper has the ball.’
- c. Muḥammad ʕind-ah as-sakkar
 Muhammad at-3SG.M DEF-diabetes
 ‘Muhammad has diabetes.’

In NA and other languages, if the possessor DP is generated in complement position of PP, when it moves to Spec, vP it would invoke Minimality issue crossing over the possessum DP, which is also definite. Deriving predicative possession from a representation in which the possessor c-commands the possessum therefore fares better than analyses like Freeze (1992) and Den Dikken (1995), which derive possession from a structure where the latter c-commands the former.

So far, we have introduced the main ideas of Harley’s (2002) proposal. The most crucial element of her analysis is that the possessor c-commands the possessum and that BE languages have the same structure as HAVE languages, except that there is no incorporation of the preposition into the copula in the former (see also, among others, Szabolcsi 1981, 1983, 1994; Kayne 1993/2000; Hoekstra 1994; Jung 2011; Levinson 2011). The NA possessive *ʕind* construction seems to fit straightforwardly into Harley’s analysis of HAVE, if *ʕind* is taken as an overt realization of P_{HAVE}.⁹⁸ However, this proposal does not account for the fact the

John has the book or *Mary has the diary*. In existentials, too, such an indefiniteness restriction does not seem to hold in constructions like (ib):

- (i) a. What shall we have for dinner?
 b. Well, there’s the chicken, or there’s the beef (from Myler 2014, citing Rando and Napoli 1978).

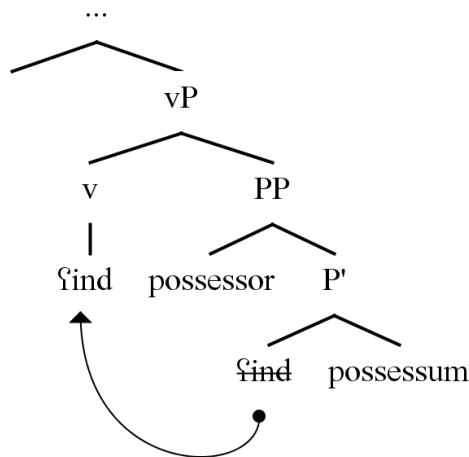
⁹⁸ This is in line with Levinson (2011: 375, 392), who similarly identifies Harley’s (2002) P_{HAVE} with the overt prepositions *međ*, *mit* and *with* in Germanic (see 4.3.1 in the previous chapter).

possessive preposition *ʕind* has an agreeing suffix, which varies according to the phi-features of the possessor. So a few slight adjustments are still needed.

5.4.2 Deriving predicative possession in NA

Along the lines of Harley's (2002) proposal for predicative possession, it can be assumed that the preposition *ʕind* originates as the head of PP, which houses the possessor and the possessum in its Spec and Comp positions, respectively. Afterwards, the possessive *ʕind* head moves to adjoin to little v° , which immediately c-commands PP, as in the following derivation:

(33)



If we follow Chomsky's (1995 and 2007) proposal that the little v° is an affix which needs a lexical host, the movement of the possessive *ʕind* to adjoin to little v° is syntactically motivated. *ʕind* provides lexical support to little v° . The case is somewhat similar to the movement of the lexical verb to little v° in Arabic, which is widely assumed and generally considered as a default option across Arabic dialects (see Al-Balushi 2011, Fassi Fehri 2012, among others).

We are now ready to turn to the outstanding question: What is the nature of the pronominal element found on *ʕind*? Should it be analysed as an agreement marker or a bound pronoun?

I propose that the pronominal element on *ʕind* is an inflectional agreement suffix. The first piece of evidence supporting the contention that the suffix on *ʕind* is an agreement marker comes from the behaviour of certain pronominal suffixes appearing on complementizers and adverbials in the language. Concerning the complementizer, it has been widely assumed that the pronominal element appearing on the complementizer *ʕinn* 'that' in Arabic varieties (e.g. *ʕinn-ah* 'that-3SG.M' and *ʕinn-ha* 'that-3SG.F'), is an inflectional agreement suffix which results from an agreement relation between the complementizer in C° and the closest XP element that it c-commands (see, e.g. Shlonsky 1997 and Mohammad 2000 for Palestinian

Arabic; Eid 1996: 17; Mohammad 2000 and Aoun *et al.* 2010 for Standard Arabic; Gad 2011 for Egyptian Arabic; Lewis 2013 for Najdi Arabic and Jarrah 2017 for Jordanian Arabic).⁹⁹

As regards pronouns on adverbials, the pronominal elements showing up on the adverbial *taww* ‘just’ in NA bear a strong resemblance to those on *ʕind*. This is shown in (35):

- (34)a. Saara taww-ha dzat
Sarah just-3SG.F came.3SG.F
‘Sarah has just came.’
- b. Muḥammad taww-ah dzaa?
Muhammad just-3SG.M came.3SG.M
‘Muhammad has just came.’

It should be pointed out that these (pronominal) suffixes have been taken as a manifestation of agreement. Specifically, Sowayan (1995: 252) says that in a pro-drop construction like (35a) in Najdi Arabic, ‘*taww* takes a pronominal suffix which agrees with and stands for the implied subject’. He adds that when the subject is ‘expressed’, as in (35b), the pronominal suffix also shows up on the adverbial *taww*, agreeing with the lexical DP *al-bazir* ‘the baby’ (see Sowayan 1995 for further discussion).

- (35)a. taww-ha mitzawjah
just-3SG.F married
‘She has just got married.’
- b. al-bazir taww-ah maft‘uum
DEF-baby.M just-3SG.M weaned
‘The baby (boy) has just been weaned.’

Further evidence supporting the assumption that the pronominal element on the preposition *ʕind* is an agreement marker can be gleaned from the following possessive sentences, where the inflected preposition *ʕind* co-occurs with an overt pronominal:

⁹⁹ Apart from Arabic, it has been argued in many languages that the suffix attached to the complementizer is an agreement marker (see, for example, Carstens 2003, Haegeman and van Koppen 2012 for proposals concerning the so-called ‘agreeing complementizer’ in West Flemish). See also Cottell (1995), Weiß (2005) and Diercks (2010) regarding complementizer agreement in Irish, Germanic and Bantu, respectively.

- (36) a. (ana) *ʕind-i qanaaʕah / ʔal-qoluun ʔal-ʕasabi / sʕadaaʕ / iltizamaat*
 I at-1SG contentment / DEF-colon DEF-nervous / headache / commitments
 ‘I have a contentment/ nervous colon/ a headache/ commitments.’
- b. (ana) *ʕind-i sijjaarah*
 I at-1SG car
 ‘I have a car.’
- c. (huu) *ʕind-ah sijjaarah*
 he at-3SG.M car
 ‘He has a car.’
- d. (hinna) *ʕind-na riħlah*
 we at-1PL trip
 ‘We have a trip.’

In all the examples in (36), the overt pronominal surfaces as a free standing pronoun which co-occurs with a bound element realized on *ʕind*. It is natural here to treat the free standing pronouns: *ana* ‘I’, *huu* ‘he’ and *hinna* ‘we’ as lexical DPs (i.e. overt pronominal arguments) and the bound forms on the preposition *ʕind* as inflectional agreement markers.

Recall that in Chapter 2, we have analysed bound forms appearing on the possessum, e.g. *kitaab-ah* ‘his book’ and *kitaab-ha* ‘her book’, as inflectional suffixes agreeing with a silent *pro* possessor (à la Shlonsky 1997). Such an analysis carries over readily to *ʕind*-constructions, especially given that in possessive sentences, the possessor can be left unexpressed, as in (37), where the suffix *-i* ‘1SG’ is arguably licensed by a silent head (i.e. an empty *pro*) (compare (36b) above with (37) below). As also discussed in Chapter 2, there are cases where the (normally silent) *pro* possessor is forced to show up overtly, in emphatic constructions like *kitaab-ah (huu)* (book-3SG.M he) ‘his book’ and *kitaab-ha (hii)* (book-3SG.F she) ‘her book’, which is true also of the possessive sentences in (36) above.

- (37) *ʕind-i sijjaarah*
 at-1SG car
 ‘I have a car.’

One rationale for analysing the pronominal suffix showing up on *ʕind* in possessive sentences as an inflectional agreement marker is, thus, achieve uniformity with other agreement suffixes appearing on the possessum, as discussed in chapter 2.

Further evidence supporting the idea that the element realized on *ʕind* is an agreement marker is provided by negative possessive sentences. There the element *ʕind*+suffix is negated by the negative particle *maa* ‘not’, just as if it is a verb. The following examples illustrate this fact:

(38)a. hind maa ʕind-ha sijjaarah
 Hind NEG at-3SG.F car
 ‘Hind does not have a car’

b. hind maa iʕtar-at sijjaarah
 Hind NEG bought-3SG.F car
 ‘Hind did not buy a car’

It can be seen in (38a) that *ʕind+ha* is negated by *maa*, which is also true of sentential negation, exemplified in (38b). It is plausible to suggest that a reanalysis has taken place of the preposition *ʕind* ‘at’ as an irregular verb (or pseudo-verb) given the fact that negation by the *maa* marker is exclusively reserved for verbs (see Comrie 1989: 219-224, 1991: 17-21; Borg and Azzopardi-Alexander 1997: 112-114; Lucas 2010: 174-175, 186-187, where similar facts and conclusions are presented for Maltese and Palestinian Arabic).

So far, I have proposed that the clitic on *ʕind* should be analysed as an agreement marker. It might be thought that another possibility for these particular sentences would be to regard this element as a resumptive pronoun and the possessor DP as a topic; this is especially important since Arabic always has a resumptive pronoun with fronted topics. However, despite its initial plausibility, the word order shown in (43a-b) below, where the sentence is in the past tense, reveals that this possibility is ruled out given the fact that the first element of the sentence in (43a-b) is not a topic but rather the past-tense copula *kaan* ‘was’, which precedes the possessor DP; this would not be obviously possible if the possessor were a topic.

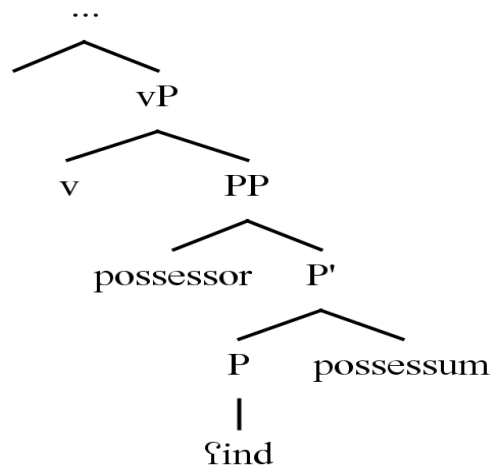
In view of all this, we are led to the conclusion that the pronominal element suffixed to *ʕind* is an inflectional suffix produced as a result of an Agree relation between the preposition and the possessor DP. Following this line of reasoning, I assume that the preposition *ʕind* bears unvalued ϕ -features, which are valued by the matching valued ϕ -features of the possessor. Recall that preposition *ʕind* agrees in ϕ -features (person, number and gender) with the possessor (not the possessum) and as a result of this Agree relation, *ʕind* must inflect for the same ϕ -features of the possessor; otherwise, the relevant construction would be ungrammatical. Consider the ill-formed examples in (16) above, reproduced below in (39). The ungrammaticality of the examples in (39) follows from the fact that *ʕind* agrees with the possessum rather than the possessor.

(39)a. *Muḥammad *ʕind*-ha sijjaarah
 Muhammad at-3SG.F car.SG.F
 Intended: ‘Muhammad has a car.’

b. *al-bint *ʕind*-ah beet
 DEF-girl at-3SG.M house.SG.M
 Intended: ‘The girl has a house.’

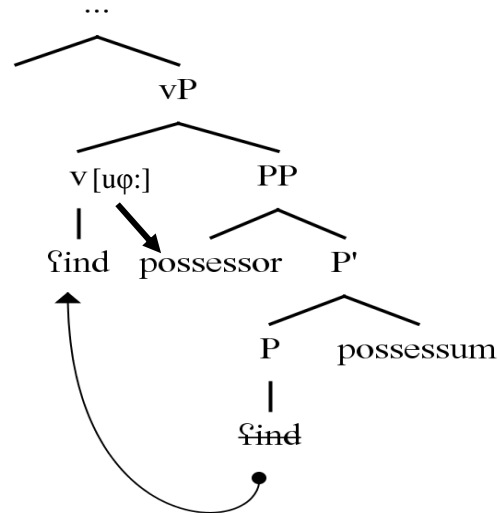
The question then arises how exactly this Agree relation between the possessor and preposition *ʕind* is implemented. Note that before the movement of the possessive *ʕind* to little v° , *ʕind* does not c-command the possessor as the latter is not within the c-command domain of the former, as schematically shown in the following representation.

(40)



However, when *ʕind* moves to adjoin little v° , the possessor becomes located within the new c-command domain of *ʕind*. It is at this point in the derivation that a probe-goal relation (Chomsky 2000, 2001) between *ʕind* and the possessor is established, as illustrated in (41).

(41)



Note that the possessive preposition *find* moves to little v° to lexically support it rather than solely having a probe-goal relation with the possessor. In other words, the main motivation for movement of the preposition *find* is not self-serving but constitutes ‘enlightened self-interest’, in the sense of Lasnik (1995).¹⁰⁰ This movement is also partly in line with Levinson’s (2011) analysis of Germanic predicative possession (i.e. German and English), whereby the possessive preposition *with/mit* moves from P and incorporates into v in a construction like *Hans has a book* (see chapter four, section 4.3.1 for details). Here, although there is no real possessive verb spelled-out, I entertained the idea that *find* behaves just like a possessive verb and hence it moves and incorporates into little v, establishing an Agree relation with the possessor, just like the verb *have* in English as in *She/Mary has a car* or *They/the men have a car*.

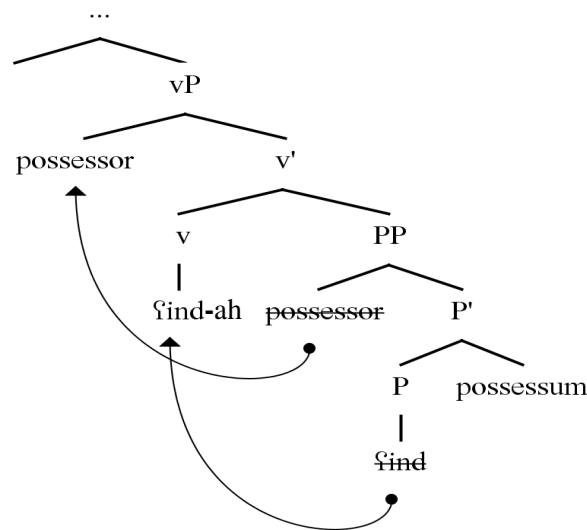
Following this line of analysis, we are now able to answer two theoretical questions. The first question is why preposition *find* does not agree with the possessum despite the fact that the latter enjoys a more local relation with the preposition than the possessor, and it already falls within its c-command. The answer is that *find* is not endowed with any ϕ -content; hence, it is not the preposition *find* that agrees with the possessor. Rather, what agrees with the possessor is little v° . Note that the assumption that little v° is endowed with ϕ -features is compatible with Chomsky’s (2007) view that it is little v° rather than the lexical V° which bears the unvalued ϕ -features. This means that little v° has a set of unvalued ϕ -features, which must be valued and deleted in the course of the syntactic derivation (Chomsky 1995: Ch. 4, 2000, 2001). Little v° locates the possessor, which is within its c-command domain. The possessor DP has matching

¹⁰⁰ Lasnik (1995) shows that elements might move not necessarily to check their own requirement but also for the requirements of other elements, a state of affairs called enlightened self-interest. See the relevant paper for details and motivation.

valued ϕ -features; hence, it is an eligible element to enter into an Agree relation with little v° . Given that v° is an affix in Arabic grammar (see Al-Balushi 2011, Fassi Fehri 2012), possessive *ʕind* raises to adjoin to it and provide lexical support for it. As a result of the relation between little v° and the possessor, the inflectional suffix *-uh* [3SG.M] is realized on *ʕind*, when the latter raises to v° .¹⁰¹ This interaction between the movement of possessive *ʕind* from P° to v° and the ensuing realization of the agreement suffix on the possessive element *ʕind* appears to be similar to the movement of the lexical verb from V-to-v (and then to T°) in Arabic (although there is no movement to T° in *ʕind*-possessive sentences given that the copula is assumed to occupy this position, as will be discussed in the next section).¹⁰²

The second question to answer here concerns the surface order between possessive *ʕind* and the possessor. The derivation thus far does not predict the right word order between the ϕ -inflected possessive *ʕind* and the possessor as the latter must precede the former, not the other way around. Drawing on Harley's (2002) proposal, it can be assumed that the possessor moves from Spec, PP to Spec, vP, to satisfy the EPP feature on v° (cf. Chomsky 2000, 2001; Roberts 2010b), deriving thus the correct word order. This is illustrated schematically in (42).

(42)



¹⁰¹ The NA *ʕind* might have been reanalyzed in this way to be consistent with Roberts and Roussou's (2003) generative view of grammaticalization. According to Roberts and Roussou (2003: 195-199), there are several instances of grammaticalization where a certain lexical item undergoes head movement to a higher functional head in order to reanalyse and be an element of the latter head.

¹⁰² In the literature on Arabic, there seems to be consensus that the verb always moves to T° (see Fassi Fehri 1993; Mohammad 2000 and Aoun *et al.* 2010 for discussion). See, however, Benmamoun (2000: 51-66) for a different view where the author argues that the verb in Arabic does not move to T° in the present and only does in the past tense. In sentences which involve the copula *kaan* and a main verb, the latter undergoes head movement to adjoin to little v° and is forced to remain in situ (cf. Rahhali and Souâli 1997; Ouhalla 2013); see also 5.4.3 below.

Evidence for the assumption that the possessor moves to Spec, vP (rather than, say, Spec, TP) in NA comes from instances where the past tense copula *kaan* ‘was’ is lexicalized. The expectation is that *kaan* precedes the possessor, which in turn precedes the ϕ -inflected possessive *ʕind*. This expectation is borne out in NA by the examples shown in (43a-b).

(43)a. *kaan* *Muhammad* *ʕind-ah* *sijjaarah*
 was.3SG.M *Muhammad* at-3SG.M *car*
 ‘Muhammad had a car.’

b. *kaan* *al-walad* *ʕind-ah* *liʕbah*
 was.3SG.M DEF-boy at-3SG.M *toy*
 ‘The boy had a toy.’

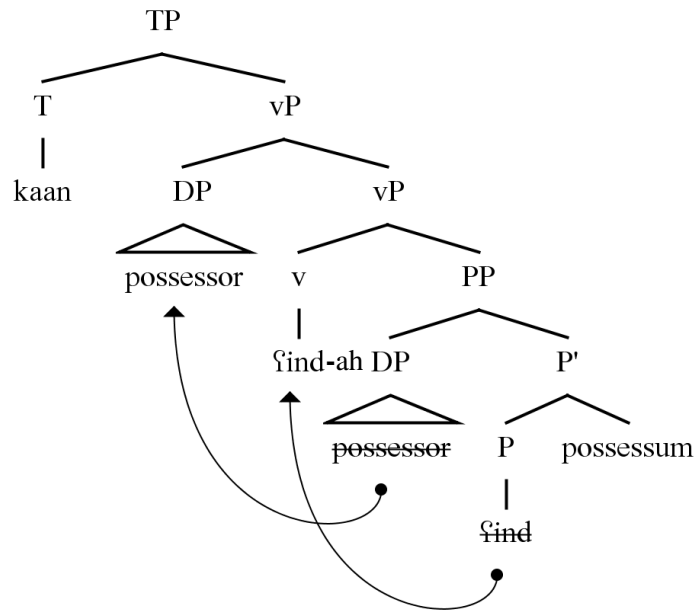
Before showing how the above sentences are derived, we need first to discuss in more detail the position of the past tense copula *kaan* ‘was’, a matter we take up in the next subsection.

5.4.3 *The copula kaan and ʕind-possessive sentences*

A flurry of work has responded to the challenging issue of the exact position of the copula *kaan* ‘was’ in various ways but with no consensus being reached (Bakir 1980; Fassi Fehri 1982, 1993, 2004, 2012; Bahloul 1993, 1994; Rahhali and Souâli 1997; Ouali and Fortin 2007; Benmamoun 2008; Ouhalla 2013; Ouali 2014; Al-Aqarbeh and Al-Sarayreh 2017; Alotaibi 2019, to mention just a few).

To illustrate, Fassi Fehri (1993) argues that *kaan* is in the V° head of VP and then moves to T° , via an Asp(ect) head. Bahloul (1993, 1994) argues that the copula occupies the head (M°) of the Modal Phrase (MP), which is situated above VP. Moreover, Fassi Fehri (2012) argues that *kaan* is externally merged in T° . Ouhalla (2013) and Alotaibi (2019) espouse a similar view. Ouali and Fortin (2007) and Ouali (2014), on the other hand, argue that the copula is located in a VP projection, which is sandwiched between two TP projections: a lower T° and a higher T° . Al-Aqarbeh and Al-Sarayreh (2017), in their turn, hypothesize that it is merged in little v° and then moves to T° . The key point here is that there is not even agreement about whether *kaan* is merged within the VP, between TP and VP, or in TP. None of these works considers the merge position of the copula in possessive sentences. This study obviously cannot resolve this hotly-debated issue. It seems best to assume that *kaan* is inserted directly under T° , following Baker (2003), Benmamoun (2008), Fassi Fehri (2012), Ouhalla (2013) and Alotaibi (2019). Under this assumption, the structure of the constructions in (43) will be as follows.

(44)



In (44), the derivation of clauses with the copula *kaan* + possessive *find* is given. As can be seen in the schematic representation, the copula *kaan* is merged in the head of the TP. As argued in detail above, the possessor has moved to Spec, vP after entering an Agree relation with little v° , to which possessive *find* has adjoined in overt syntax.

We can now consider instances where the possessor precedes both the past-tense copula *kaan* ‘was’ and the possessive *find*, as in the following examples:

(45)a. Muḥammad kaan find-ah sijjaarah
Muhammad was.3SG.M at-3SG.M car
‘Muhammad had a car.’

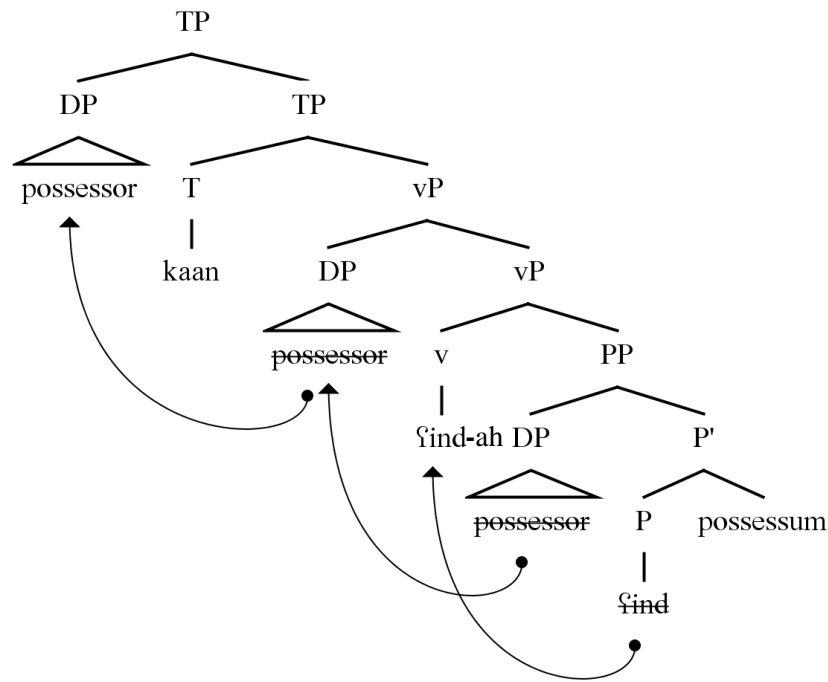
b. al-walad kaan find-ah liṣbah
DEF-boy was.3SG.M at-3SG.M toy
‘The boy had a toy.’

In possessive sentences like (45a,b), it can be suggested that the possessor DP undergoes further movement to Spec, TP. Assuming the presence of an EPP-feature on T° (Chomsky 2000, 2001), it will trigger movement of the possessor from Spec, vP to Spec, TP to check this feature.¹⁰³

¹⁰³ It should be noted that the movement of the possessor DP, which is the subject of the sentence, to the Spec of TP is optional in Arabic (see, among others, Fassi Fehri 1993; Benmamoun 2000; Aoun *et al.* 2010). Under this scenario, the subject can either remain in Spec, vP, deriving VSO order, or move to Spec, TP, giving SVO order. This matter is said to be independently determined by an optional EPP feature on T° (Ouhalla 2013). Another possibility is that in (43) there is a non-overt expletive element in Spec, TP (an unpronounced counterpart to the English expletive THERE seen in sentences like ‘there were 3 people in the room’).

This movement has the effect of yielding the word order seen in the *ʕind*-possessive sentences in (45).

(46)



So far, we have seen how predicative possessive sentences can be accounted for within the structure and derivation shown above. The next question that we need to answer is: where does the agreement on the copula *kaan* come from? As can be seen in (43) and (45) above, in addition to the agreement relation which exists between the possessor and *ʕind*, there is an agreement relation between the copula *kaan* and the possessor *Muhammadlal-walad* that holds irrespective of the position of the possessor relative to the copula. Initially, this agreement looks fairly easy to explain if we assume that the copula probes downwards to find the appropriate features on the possessor DP and gets valued as [3SG.M]. However, a more complex picture emerges when the agreement between the copula and the possessor in constructions (47a-b) is taken into consideration:

- (47) a. al-bint / Riim kaan-t ʕind-ha sijjaarah
 DEF-girl/ Reem was-3SG.F at-3SG.F car
 ‘The girl/ Reem had a car.’
- b. al-bint / Riim kaan ʕind-ha sijjaarah
 DEF-girl/ Reem was.3SG.M at-3SG.F car
 ‘The girl/ Reem had a car.’

We can see that there is variation in the form of *kaan*: in (47a) the copula agrees with the possessor whereas in (47b) it displays 3rd person singular masculine. The puzzle is why *kaan* agrees in the former and doesn't in the latter. Furthermore, the absence of agreement in (47b) is unexpected given the fact that the verb in NA generally fully agrees with the lexical DP. Comrie (1991) shows that exactly the same variation is found in sentences which involve the copula *kaan* and possessive *ʕind* in some other Arabic dialects, specifically, in the dialect of Tunis and the Moroccan dialect of Meknès. Illustrative examples of this, taken from Comrie (1991), are presented in (48):¹⁰⁴

- (48) a. Fat^ʕma kan-t ʕend-ha le-ktuba (Tunisian Arabic/Meknès Arabic)
 Fatima was-3SF at-3SF the-books
 'Fatima had the books.'
- b. Fat^ʕma kan ʕend-ha le-ktuba
 Fatima was-3SM at-3SF the-books
 'Fatima had the books.'

The behaviour of the copula in both Arabic varieties patterns the same as NA (cf. 48 with 47). Comrie (1991) points out that the copula in possessive constructions in (48) favours the default agreement, i.e. 3rd person singular masculine (48b), adding that it may agree with the possessor *Fatima*, as in (48a), but it is uncommon or 'less preferred'.¹⁰⁵ According to Comrie, this can be considered as a case of 'dialectal variation' among the two Arabic vernaculars.

Similar variation in agreement of the copula BE has been reported in a number of languages, including English.¹⁰⁶ For instance, while analyzing linguistic variation from a Minimalist perspective, Adger and Smith (2005: 154) give the following sentences from the Scottish variety of Buckie English to show *was/were* alternation.¹⁰⁷

¹⁰⁴ The gloss in the examples is Comrie's.

¹⁰⁵ Based on my intuition and in consultation with other NA speakers, this situation also holds true of NA. Although all the informants I consulted find both sentences in (47) as well as the constructions in (51-53) below acceptable, there seems to be a preference for the default [3SG.M] subject agreement.

¹⁰⁶ See Stassen (1995) for a survey of cross-linguistic variation.

¹⁰⁷ Buckie is a small fishing town in Scotland, which is located 60 miles to the north of Aberdeen (Adger and Smith 2005: 153).

- (49) a. He says: ‘I thoct you *were* a diver or somethin’
 ‘He said: I thought you *were* a diver or something.’
- b. ‘Aye, I thoct you *was* a scuba diver.’
 ‘Yes, I thought you *were* a scuba diver.’

To account for the apparent optionality of both constructions: *you was/you were*, Adger and Smith (2005) posit that there are two different types of T(ense) heads, which they call T and T2. According to them, the former bears an uninterpretable number feature whereas the latter does not, as shown in the specifications for these two elements in (50) (from Adger and Smith 2005: 166).

- (50) a. T [tense:past, *u*case:nom, *u*num:, *u*pers:]
 b. T2 [tense:past, *u*case:nom, *u*pers:]

Without going into the details, it can be noted how their framework straightforwardly explains *was/were* variation in Buckie agreement, given that as a result of the specification in (50a) T will have to agree in number, and while (50b) means that T2 will not. According to Adger and Smith, both Ts have the same meaning and the only difference between them is the absence of an uninterpretable number feature in T2. This proposal is attractive since it explains syntactic variation on the basis of feature optionality, without adding grammatical complexity elsewhere in the system. Adger and Smith (2005: 164) further state that their proposal embodies the spirit of the Minimalist Program (Chomsky 1995, and subsequent work): ‘Notice that this is a very minimal theory, since the idea that speakers have to choose lexical items is one which we simply cannot do without. Localizing morphosyntactic variation in choice of lexical items means that we do not have to posit any special mechanism to deal with variation: variation is precisely what we should expect.’

Going back to NA now, we have seen that *kaan* ‘was’ optionally shows agreement with the possessor:

- (51) a. ?al-ʕijjal kaan ʕind-hum sijjaraat
 DEF-guys was.3SG.M at-3PL.M cars
 ‘The guys had cars.’
- b. ?al-ʕijjal kaan-u ʕind-hum sijjaraat
 DEF-guys was-3PL.M at-3PL.M cars
 ‘The guys had cars.’

(52) a. al-banaat kaan ʕind-hin sijjaraat
 DEF-girls was.3SG.M at-3PL.F cars
 ‘The girls had cars.’

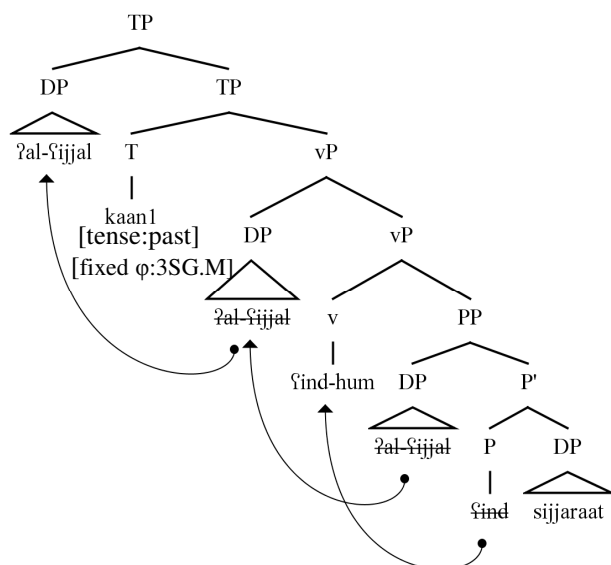
b. al-banaat kaan-in ʕind-hin sijjaraat
 DEF-girls was-3PL.F at-3PL.F cars
 ‘The girls had cars.’

(53) a. al-bint / Riim kaan ʕind-ha sijjaraat
 DEF-girl/ Reem was.3SG.M at-3SG.F cars
 ‘The girl/ Reem had cars.’

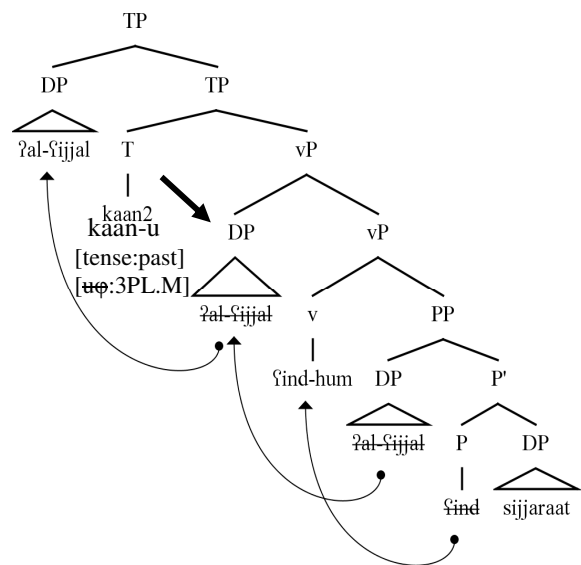
b. al-bint / Riim kaan-t ʕind-ha sijjaraat
 DEF-girl/ Reem was-3SG.F at-3SG.F cars
 ‘The girl/ Reem had cars.’

Examining the optionality of the copula *kaan* in NA from the perspective of Adger and Smith (2005), we can straightforwardly account for this optionality by positing the existence of two lexical items that have the same meaning: *kaan1* and *kaan2*. The only difference is that *kaan1* has interpretable ϕ -features, fixed as third person singular masculine, while *kaan2* has uninterpretable ϕ -features. When NA speakers choose *kaan1*, there is no agreement with the possessor and [3SG.M] is always used, in effect making this the default, irrespective of the ϕ -features of the possessor, as illustrated in tree (54a) for sentence (51a). However, when *kaan2* is selected, there is an agreement relation and the copula is morphologically sensitive to the possessor’s ϕ -features, as illustrated schematically in (54b) for sentence (51b).

(54) a.



b.



It has to be acknowledged of course that there are many other approaches to the issue of optionality and variability in grammar (see, e.g. Baker 1996, 2008b; Kayne 2005 for analyses which introduce a distinction between macro and microparameters and Kroch 1989a, 1989b; Santorini 1989; Henry 1995; Pintzuk 1999 for the idea that there can be competing grammars). As Adger and Smith (2005: 164) point out, the general approach represented in (54) has the virtue of not necessitating additions to the grammatical machinery that is required anyway.

This concludes the discussion of the main syntactic issues relevant to predicative possession in NA. To round off the picture, in the next section we briefly consider locative/comitative preposition agreement cross-linguistically.

5.5 Cross-linguistic evidence for agreeing locative/comitative prepositions

In the previous sections, we have seen that when *ġind* and *maġ* are used to encode predicative possession in NA, they bear an inflectional suffix, which agrees with the possessor. It should be noted that this agreement is by no means unique to NA. Cross-linguistically, there are quite a few languages whose predicative possession is expressed by a locative/comitative preposition, which shows agreement with the possessor. For instance, Maltese, which is a Semitic language closely related to NA, seems to have the same pattern. Like NA, Maltese employs a locative preposition, *għand* ‘at’, to derive predicative possessive constructions, as illustrated in (55).¹⁰⁸

- (55) Pawlu għand-u ktieb (Maltese, Semitic language)
 Pawlu at-3SG.M book
 ‘Pawlu has a book.’ (Stassen 2009: 237, citing Comrie 1989: 221)

In his extensive cross-linguistic study of predicative possession, Stassen (2009) points out that the element *għand* ‘at’ in Maltese behaves as a verb-like entity since it shows agreement with the possessor DP (not the possessum) and gets negated in the same way as other verbs in the language.¹⁰⁹ Stassen (2009) attributes this phenomenon to grammaticalization, which has

¹⁰⁸ According to Comrie (1991), the preposition *għand* in Maltese is etymologically related to *ġind* ‘at’ in Arabic.

¹⁰⁹ Stassen’s (2009) remark for Maltese is based on Comrie’s (1989) observation, who points out that ‘the possessive element *għand* behaves like a verb, in particular in that it negates like a verb. Note, moreover, that it agrees with the possessor NP’ (1989: 222). This observation is certainly true of NA as *ġind* agrees with the possessor (as we have seen in the previous sections) and can be negated by the negation marker *maa* ‘not’, as shown in (i):

- (i) Muhammad maa ġind-ah sijjaarah
 Muhammad NEG at-3SG.M car
 ‘Muhammad does not have a car.’

The negation of NA possessive sentence (i), where the combination (*ġind* + pronominal suffix) is negated by *maa* ‘not’, shows the same behaviour in verbal negation (ii):

- (ii) a. Muhammad maa jaab al-kutub b. Saara maa jaab-at al-kutub
 Muhammad NEG brought.3SG.M DEF-books Sarah NEG brought-3SG.F DEF-books
 ‘Muhammad did not bring the books.’ ‘Sarah did not bring the books.’

resulted in a shift of subjecthood from the possessum to the possessor and he in fact extends that to other Arabic varieties. As Stassen says:

In sum, one can say that the grammaticalization of the possessive construction in Maltese has resulted in the creation of a ‘have’-like verb, which has the possessor as its subject. It can be added that, in modern Arabic dialects, the transfer of subject properties from the possessee to the possessor in the original Locational Possessive is not limited to Maltese. Martin Haspelmath (p.c.) reports that in Tunisian Arabic the Locational Possessive has come to be challenged by an ‘innovative’ construction (...) (Stassen 2009: 237-238)

By way of illustration, Stassen provides the possessive sentences in (56), from Tunisian Arabic, pointing out that in example (56b), one can ‘observe that the predicate shows subject agreement with the possessor instead of with the possessee.’ (2009: 238)

- (56) a. Kaan ζ and-i X (Tunisian Arabic, Semitic language)
be.3SG.PAST at-1SG X
‘I had X’ (Martin Haspelmath p.c.)
- b. Kunt ζ and-i X
be.1SG.PAST at-1SG X
‘I had X’ (Martin Haspelmath p.c.)

On a par with Maltese, Stassen (2009) reports that Lokono, a language spoken in Surinam, has a parallel possessive construction, as exemplified in (57).¹¹⁰

- (57) Kakythinon k-amyn-ka khaboho (Lokono, Northern Maipuran)
people 3PL-have-PERF hand
‘People have hands’ (Stassen 2009: 238, citing Pet 1987: 32)

As can be seen in (57), the element *amyn* shows subject agreement with the possessor *kakythinon* ‘people’ by means of a prefix and shows aspectual marking by means of a suffix. Stassen points out that *amyn* in the above possessive sentence of Lokono, in which the word order is SVO, takes the possessor *kakythinon* as its subject and the possessum *khaboho* as its object. Stassen (2009: 239) explains further that ‘the erstwhile postpositional item may have been reanalysed as a verb with the meaning ‘have’, with its verbal status being clinched by the ability to take aspectual marking’.

This pattern of negation has been taken as evidence which lends support for the idea that *ghand* (or *find* in case of NA) has been reanalyzed/reinterpreted as a verb; for further details, see Comrie (1986, 1989, 1991) and Stassen (2009).

¹¹⁰ The gloss is Stassen’s. Stassen (2009: 238) mentions that the element *amyn* is a locational postposition, which literally means ‘near’, but he keeps it glossed as a verb ‘have’ as found in the cited source.

In addition to Maltese and Lokono, Swahili is another language where the comitative preposition *na* ‘with’ used in predicative possession is similar to NA *maɣ* ‘with’ (see Section 5.3.1). An example is (58) (from Stolz 2001a: 328, citing Kwon 1995: 186).¹¹¹

(58) Hamisi_{possessor} a-na ki-tabu_{possessum} (Swahili, Bantu language)
 Hamisi 3SG-with 7-book
 ‘Hamisi has a book.’

In (58), Swahili makes use of the comitative preposition *na* ‘with’ to encode predicative possession. Interestingly, the preposition *na* ‘with’ agrees in ϕ -features with the possessor *Hamisi*. Thus, Swahili is similar to NA in this respect except for the fact that the agreeing affix is a prefix (in line with the well-known prefixal preference of Bantu languages), while NA has a suffix.¹¹²

Another case where the ‘verbalisation’ of the comitative preposition is evident is found in Ngbaka (an African language spoken in the Central African Republic and the Republic of Congo). According to Stassen (2009), when the preposition *té* ‘with’ is used as a device for encoding predicative possession in Ngbaka, it shows up marked by a prefix which indicates tense/aspect and is identical to the prefix found on verbs. Consider the following examples (from Stassen 2009: 217, citing Thomas 1963: 200).¹¹³

(59) a. ʔé lí-té ngón (Ngbaka, Adamawa-Ubangian)
 he REM.PAST-with/have chicken
 ‘He had chickens.’
 b. ʔé lí-bū
 he REM.PAST-arrive
 ‘He had arrived.’

In the words of Stassen (2009: 217): ‘it appears that the item *té* has verbal traits when it is used in predicative possession. In particular, the item receives prefixed tense/aspect-marking’.

¹¹¹ The number in the gloss of the possessum indicates noun classes in Bantu languages. Note, also, Stolz’s (2001a: 348, fn. 16) inclusion of *na* as a ‘verboid’.

¹¹² Stolz *et al.* (2006: 148) points out that *na* ‘with’ in predicative possession context ‘behaves like a verb in the present tense’. They point out further that to the extent that there is a copula verb BE *kuwa* ‘to be’ which can be used in conjunction with the possessive element *na* in Swahili, it can be said that the latter ‘has not yet developed into a full blown verb’ (Stolz *et al.* 2006: 148).

¹¹³ REM in Stassen’s gloss stands for Remote Past.

All in All, Maltese, Lokono, Swahili and Ngbaka (genetically unrelated languages) show that the phenomenon of preposition-possessor agreement is widespread.

5.6 Conclusion

In this chapter, I have investigated the syntactic derivation of predicative possession in NA. We have seen that NA is a HAVE-less language as the preposition *ʕind* and the copula BE are realised separately in overt syntax. I first introduced the relevant NA facts of predicative possession. Afterwards, building on Harley's (2002) proposal, I provided a syntactic analysis for NA predicative possession, identifying her abstract preposition P_{HAVE} with the preposition *ʕind*. I proposed that *ʕind* heads a PP whose specifier contains the possessor, while its complement houses the possessum. Moreover, I claimed that *ʕind* head moves to adjoin to affixal little *v*^o and in that position establishes an Agree relation with the possessor it c-commands, resulting in an agreement inflectional suffix realised on *ʕind*. Hence it could be said that the preposition *ʕind*, syntactically speaking, behaves as a have-like verb, in particular it shows agreement in ϕ -features with the possessor (the subject). Independent motivation for the treatment of pronominal suffixes on *ʕind* as agreement markers comes from the behaviour of other pronominal suffixes appearing on the complementizer *ʔinn* 'that' and the adverbial *taww* 'just', which strongly resemble those on *ʕind*, and have been analysed as the spell-out of agreement in Arabic.

This chapter has also offered an analysis of the copula BE in possessive sentences in NA. We have seen that when the past-tense copula *kaan* 'was' appears in possessive sentences, there is agreement variation on the copula, i.e. agreeing *kaan* versus non-agreeing *kaan*. In order to account for this optionality, I developed a proposal, along the lines of Adger and Smith's (2005) framework, where there are two types of *kaan*: *kaan*₁, which contains interpretable ϕ -features and invariably appears in the fixed third person singular masculine form; and *kaan*₂, which inflects for agreement and has uninterpretable ϕ -features that must be valued by an Agree operation with the possessor. Further, I briefly discussed 'agreeing' prepositions in a number of languages, which provide strong cross-linguistic evidence that such prepositions may inflect for the ϕ -features of the possessor, when they are used to encode possession predicatively.

Chapter 6. Conclusions and Suggestions for Further Research

6.1 Conclusions

This thesis examined the syntax of possession in Najdi Arabic. It provided a detailed account of possessive constructions in a lesser-investigated language, which has several manifestations of possession, which have not been addressed before within syntactic theory. It also dealt with the various patterns of agreement within Najdi Arabic possessive constructions and offered a syntactic derivation of them, along the lines of Chomsky's (2000, 2001) probe/goal agreement operation. The thesis consists of six chapters. Chapter one offered an introduction of the thesis. It first presented a brief background on Najdi Arabic and provided some of its syntactic properties. This was then followed by previous research on Najdi Arabic, significance of the study and the research questions. This chapter also discussed the theoretical framework adopted in the current thesis and gave the organization of the study.

Chapter two investigated the syntax of synthetic possession in Najdi Arabic. I first discussed the syntax of Construct State and reviewed its key features and syntactic derivations. I then moved on to discuss the syntax of pronominal possession, which is the main focus of the chapter. It was revealed that this type of synthetic possession has not been subject to much research in the relevant literature. Following Shlonsky's (1997) proposal that Semitic clitics are realization of agreement probes, I argued that possessive suffixes in (Najdi) Arabic are best analysed as agreement markers, which are spelled-out on the functional head Poss° as a result of an Agree relation between Poss° and the null pronoun within NP. The chapter also showed that this pattern of agreement is corroborated by emphatic constructions as in *kitaab-ah huu* (book-3SG.M he) 'his book', where the possessive suffix shows overt agreement with the free standing pronominal. In (Najdi) Arabic, this naturally suggests that overt agreement morphology can co-occur with an overt pronominal. The chapter concluded with some cross-linguistic comparative discussion, with particular reference to Finnish, which shows a similar pattern of agreement, à la Holmberg (2018).

Chapter three discussed the syntax of analytic possessive noun phrases, i.e. possessum-initial constructions, formed with the possessive preposition *ħagg* 'of'. This chapter was mainly focused on the agreement with the possessum that *ħagg* 'of' shows within the nominal phrase. In this chapter, I first provided a brief syntactic description of the NA possessive *ħagg* 'of' constructions, partly by comparing them with the prepositions *li* 'of' and *fel* 'of' in MSA and Hebrew, respectively. I then argued that *ħagg* assigns Genitive Case to the possessor DP in a fashion similar to *li* and *fel*. However, unlike the MSA and Hebrew markers, the NA analytic

marker agrees in number and gender with the possessum. So the question arose, if *ħagg* is in a close syntactic relationship to the possessor, why and how does it agree with the possessum? This is a puzzling issue because in the standard ‘Agree’ theory spelled out in works by Chomsky (2000, 2001), *ħagg* would be expected to agree with the DP which it assigns Case to, i.e. its complement (the possessor). However, I went on to argue, drawing on Rezac (2008), Preminger (2014) and Holmberg (2018), among others, that what blocks this is the fact that *ħagg* assigns Genitive Case to the possessor DP which renders the latter’s ϕ -features inaccessible to *ħagg*; therefore, it must look elsewhere for agreement. As regards *ħagg*-possessum agreement, I developed a syntactic analysis of *ħagg* possessive constructions, proposing that an Agree operation (Chomsky 2000, 2001) is established between the possessive preposition and the possessum DP within its c-command domain, i.e. in Spec, PP, after *ħagg* has moved to Poss^o. This is how *ħagg* derives an inflected form of it, which has identical phi-features to the possessum DP. Finally, I pointed out that *ħagg* agreement in number and gender with the possessum DP resembles subject-verb agreement in the clausal domain, maintaining thus an important parallelism between the internal structure of possessive DPs and that of clauses (see Szabolcsi 1994; Carstens 2000, 2001; Baker 2008; Ouhalla 2011).

Chapter four was concerned with the other type of analytic noun phrases, expressed by *abulumm* ‘with’ possessives. In this chapter, I first presented a full descriptive account of the possessor-initial constructions formed with NA *abulumm*, partly by comparing them with the English *with*-possessive. Building on a proposal put forward by Levinson (2011) for Germanic possessive *with* constructions, I demonstrated that the NA *abulumm*-possessives have the same syntactic derivation as their English *with*-possessive counterparts. However, in order to capture the agreement relation with the possessor in the NA possessive constructions, I proposed that the possessor DP in NA is merged in the lexical projection PP and not in the higher, functional projection pP, as suggested by Levinson for English possessive *with*. This follows from the condition imposed on the Agree operation (Chomsky 2001) according to which the probe must c-command the goal. Additionally, the chapter discussed the possessor-initial constructions formed with *đuu* ‘with’ in MSA, where the particle agrees in phi-features with the possessor DP as well. Given the similarity between the NA *abulumm*-possessive constructions and the MSA *đuu*-constructions, I argued that the *đuu*-possessive constructions have the same syntactic structure as their NA possessive counterparts.

Chapter five dealt with possession expressed at the clausal level, where NA chiefly makes use of the preposition *ħind* ‘at’ to express possession predicatively. I first provided a brief description of the predicative possession data. It was discussed that the preposition *ħind* behaves

like a possessive verb when employed in possessive sentences, agreeing with the possessor DP. Building on a previous analysis of possessive HAVE by Harley (2002), I developed a proposal for *find*-possessive sentences in which the preposition *find* is an overt instantiation of Harley's (2002) P_{HAVE} in NA. Following this, I argued that *find* moves and incorporates into little *v*, establishing an Agree relation with the possessor DP in Spec, PP. This is how the preposition *find* gets suffixed with an agreement marker that is identical to the ϕ -features of the possessor DP. The chapter also dealt with the issues posed by the (non)agreeing past-tense copula *kaan* 'was' in NA possessive sentences, which has not been analysed before from a generative perspective, to the best of my knowledge. It was proposed, along the lines of Adger and Smith (2005), that there are two types of *kaan*: *kaan*₁ which has fixed interpretable ϕ -features, and therefore always shows the default form, i.e. [3SG.M]. The element *kaan*₂, on the other hand, has *u* ϕ -features, which need to be valued by the matching features on the goal, i.e. the possessor DP. The chapter concluded with some cross-linguistic data, coming in particular from Maltese, Swahili, Lokono and Ngbaka (see Stassen 2009), in which the prepositions show a similar pattern of agreement as *find* in NA when they are employed as markers to encode predicative possession.

Summing up, this thesis brought into focus some salient issues pertaining to nominal and clausal possession in NA, which have not been investigated before in this variety of Arabic.

The next subsection provides some possible topics for further research arising from the results of this research.

6.2 Suggestions for further research

This section highlights some issues that still need to be investigated in further research. Firstly, for reasons of space, this thesis has not dealt with constructions with double genitives, as in (1).

- (1) a. as-sijjaarah ħagg-it-ha
 DEF-car.SG.F of-SG.F-hers
 'The car of hers'
- b. al-kitaab ħagg-Ø-i
 DEF-book of-SG.M-mine
 'The book of mine'

As can be seen above, the possessor is expressed pronominally and is suffixed to possessive *ħagg*, which is also in agreement with the DP to its left, i.e. the possessum. It would be interesting to investigate how these double genitives are derived and what if any impact this

would have on the analyses proposed in the current work. Can these data be accounted for within the syntactic structure suggested for *ħagg* in the thesis or do they have a different derivation? However, such possessives are not examined in the current work and therefore await further research.

Secondly, this research also left open the issue of the syntax of the negative counterparts of possessive *with* both in English and Arabic (see chapter four, section 4.2), as it would take us far afield. It would be interesting, on the one hand, to see whether the (Najdi) Arabic and English negatives ‘without’ differ with respect to their internal structure or share the same derivation. It would also be interesting, on the other hand, to study the other English negative constructions formed by *with no* as in *the man with no money* and see whether or not they have the same structure as English negative *without*. Although this issue is left unanswered in the current thesis, this could be fruitfully addressed in further work.

In this chapter, we have also seen that the possessive masculine marker *abu* does not have a plural form of its own, as compared with the possessive feminine marker (i.e. *umm* ‘with.SG.F’ → *ummahaat* ‘with.PL.F’). I have assumed that the particle *abu* has a valued number feature fixed as singular; hence, it is incompatible with masculine plural number possessors. I have also mentioned that in order to derive constructions with masculine plural possessors, NA speakers resort to the possessive masculine plural marker *ħasħaab* ‘with.PL.M’, which can be regarded as a case of suppletion. However, this suppletive allomorph of the possessive marker also has a singular masculine form of its own, namely *sħaħib* ‘with.SG.M’. It would be interesting to see if there is any difference between the particles *abu* and *sħaħib* ‘with.SG.M’ when they are used in a possessor-initial construction.

Furthermore, the issue of ellipsis in possessive constructions is left unexplored in the current thesis. To illustrate, let us consider the following examples:

- (2) ~~al-beet~~ ħagg Muhammad
 DEF-house of.SG.M Muhammad
 Approximately: ‘(Its) Muhammad’s’ (lit., ‘Muhammad’s house’)

(3) a. ~~ar-radʒdʒaal~~ abu iʃjuun zurg
 DEF-man with.SG.M eyes blue
 ‘~~The man~~ / (the one) with blue eyes’

b. ~~al-bint~~ umm ʃaʃar tʻawiil
 DEF-girl with.SG.F hair long
 ‘~~The girl~~ / (the one) with long hair’

(4) ~~ar-radʒdʒaal~~ ʃind-ah sijjaarah
 DEF-man at-3SG.M car
 ‘~~The man~~ / he has a car.’

In (2), (3a-b) and (4) above, the DP to the left of *ħagg*, *abu*, *umm* and *ʃind* can be elided. It would be interesting to investigate under what conditions nominal and clausal ellipsis take place and how agreement on the possessive marker can be licensed and identified; however, I left this issue open here since a full discussion of it goes beyond the scope of this thesis.

A final issue to be noted here has to do not with synchronic derivation but with historical development. It concerns the grammaticalisation process of the possessive markers. We have seen in chapters three and four that analytic Free State constructions are formed by *ħagg*, *abu* and *umm*. These constructions look like examples of grammaticalisation, with lexical words, originally meaning ‘property/right’, ‘father’ and ‘mother’ respectively, having acquired the status of grammatical (i.e. possessive) markers. One could guess, in the case of *abu* and *umm*, that there must have been a change of meaning from ‘father/mother’ to ‘owner, possessor’, leading to phrases literally meaning something like ‘the man, the owner of blue eyes’, which then developed into simply a possessive construction, ‘the man with blue eyes’. It is interesting to see the parallelism between the probable source constructions of the *ħagg* and *abu/umm* possessives, with both featuring appositional structures, one with possessum-‘property/right’ and the other one with possessor-‘owner’. It would not be surprising if speakers at the time were somehow aware of the parallelism, and the rise of the two constructions was influenced by this. However, this issue requires a thorough diachronic investigation, which is clearly outside the scope of this synchronic study of possessives and their current properties and derivations in Najdi Arabic.

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