

CASE IN STANDARD ARABIC: A DEPENDENT CASE APPROACH

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ABSTRACT

This dissertation is concerned with how structural and non-structural cases are assigned in the variety of Arabic known in the literature as Standard Arabic (SA). Taking a Minimalist perspective, this dissertation shows that the available generative accounts of case in SA are problematic either theoretically or empirically. It is argued that these problems can be overcome using the hybrid dependent case theory of Baker (2015).

This theory makes a distinction between two types of phases. The first is the hard phase, which disallows the materials inside it from being accessed by higher phases. The second is the soft phase, which allows the materials inside it to be accessed by higher phases.

The results of this dissertation indicate that in SA (a) the CP is a hard phase in that noun phrases inside this phase are inaccessible to higher phases for the purpose of case assignment. In contrast, vP is argued to be a soft phase in that the noun phrases inside this phase are still accessible to higher phases for the purposes of case assignment (b) the DP, and the PP are also argued to be hard phases in SA, (c) case assignment in SA follows a hierarchy such that lexical case applies before the dependent case, the dependent case applies before the Agree-based case assignment, the Agree-based case assignment applies before the unmarked/default case assignment, (d) case assignment in SA is determined by a parameter, which allows the dependent case assignment to apply to a noun phrase if it is c-commanded by another noun phrase in the same Spell-Out domain (TP or VP), (e) the rules of dependent case assignment require that the NPs involved have distinct referential indices.

The major conclusion of the dissertation is that the functional head v in SA is a soft phase head, due to its deficient ϕ -specification. That is why it is incapable of establishing an Agree

relation with the object and assigning the structural accusative case to it. The structural accusative case on the object is, therefore, always the result of the dependent case mechanism.

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ABBREVIATIONS USED IN GLOSSES

ABS	Absolutive
ACC	Accusative
DU	Dual
COMP	complementizer
CAUS	Causative
CONJ	conjunction
DAT	dative
DEF	Definite
EMPH	Emphatic
ERG	Ergative
F	feminine
GEN	genitive
IMP	imperative
IMPF	Imperfective
INDEF	indefinite
INDIC	Indicative
INF	Infinitive
INSTR	instrumental
JUSS	Jussive
M	masculine
NEG	negative particle
NEUT	Neutral
NOM	nominative
PART	Partitive
PASS	Passive
PL	plural
PRT	particle
PTPL	participle
Q	question particle
SG	singular
SUBJ	subjunctive

Case theory in Standard Arabic: A dependent case approach

Chapter One: Introduction

In this thesis, I address the issue of syntactic (structural and non-structural) as well as non-syntactic (default and semantic) case in a variant usually known in the literature on Arabic as Standard Arabic (SA).¹ SA is a nominative-accusative language, where the subject of transitives and the subject of intransitives pattern together in contrast to the object. This alignment contrasts, with other languages, ergative-absolutive languages, where the object of transitives and the subject of intransitives pattern together in contrast to the subject of transitives. SA is the language used exclusively as the medium of writing and orally in all forms of mass media in the Arab World although it is more common nowadays to use a form of educated Spoken Arabic in some programs (e.g. political shows or programs discussing social issues). Strictly speaking, there are no native speakers of SA, as this is not the language that children in the Arab World acquire from birth, but everyone is exposed to it from a very young age. However, Fassi Fehri (1999: 21) argues that while SA is not a first language for the speakers of the modern variants of Arabic, it is not a second language either, since the competence that speakers of the modern variants of Arabic have of their particular variant of Arabic actually forms part of the competence they develop later in SA. That is why, Fassi Fehri claims that SA is, for the speakers of the modern variants of Arabic, neither a first language nor a second language, but somewhere in between. The main reason for choosing this dialect of Arabic instead of others is because this variety of Arabic is the only one with morphological case. Throughout the thesis, I use my own grammaticality judgments as an educated speaker of SA, as well as other sentences taken from

¹ Throughout the thesis, I use the lower case term *case* to cover both kinds of cases, syntactic and non-syntactic.

different written resources. A number of examples offered in the thesis are also taken from what is sometimes known as Classical Arabic (CA) or Quranic Arabic, i.e. the Arabic variety that was used between the 7th century and the 9th century, the time that spans the Ummayyad and Abbasid caliphates. This variety of Arabic was used by Medieval Arab tribes. These examples are also documented in books that were written between the 8th century and the 13th century. I use these examples because the syntactic structures they exhibit are still part of the syntax of SA.

According to Bateson (1967, as cited in Bin Muqbil 2006: 15), “M[odern]SA is a descendant of CA and retains the basic syntactic, morphological, and phonological systems.” In terms of the differences between the two, Bateson (1967, as cited in Bin Muqbil 2006: 15), states that “MSA only uses a subset of the possible syntactic structures available in CA as well as a substantially reduced lexicon.”

This thesis is written in the framework of the Minimalist Program (Chomsky 1995 and subsequent work) as well as the dependent case theory of Baker (2015). The thesis addresses the issue of case assignment in SA. In particular, the thesis attempts to answer the following questions: (a) How are structural and non-structural cases assigned in this language? (b) What theory can best account for the facts of case assignment in this language? (c) Do the available Agree-based accounts of case actually explain the case facts of SA properly? Do accounts such as that of Fassi Fehri (1993), which is grounded in the case tier theory of Yip, Maling and Jackendoff (1987) fare better in explaining all the case facts of SA?

The major contribution of this thesis is to show that all the available accounts of case in SA are problematic either theoretically or empirically. Specifically, the thesis shows the following: (a) the available Agree-based accounts of case are problematic because they make the wrong predictions when it comes to case assignment in DPs, where the head D is occupied by a

process nominal.² In these structures, the theme object would be predicted to always bear the structural accusative case, contrary to the facts, (b) Fassi Fehri (1993) offers a much better account of case than the Agree-based account of case. However, his account can hardly be incorporated into the case tier theory, despite his attempt to do so, (c) Fassi Fehri's (1993) insight can best be accommodated in the dependent case theory of Baker (2015), (d) contrary to the claims of all the available literature on SA, *v* in SA is incapable of assigning the structural accusative case because it is impoverished for its ϕ -features being specified for a gender feature only, (e) structural accusative case in SA is the result of the dependent case assignment rather than the result of an Agree relation between *v* and the object, (f) case-assigning Agree does take place but only when the dependent case fails to apply, (g) there is a hierarchy of case assignment in SA such that the lexical case applies before everything else, the dependent case applies when no lexical case does, the Agree-based case applies when the dependent case fails to apply, and the unmarked/default case applies when nothing else applies, (g) case assignment in SA is determined by one of the parameters proposed in Baker (2015). The parameter states that XP is assigned the dependent accusative case if it is c-commanded by YP in any spell-out domain be it TP or VP, (h) *v*P is a soft phase in the sense of Baker (2015: 149) such that "the contents of its VP complement undergo Spell-Out (i.e. they may get their case features fixed) but they remain active in the derivation", (i) aside from *v*P, all other phases, namely CP, DP, and PP are shown to be hard phases in the sense of Baker (2015) such that case assignment is determined inside these phases alone, and the NPs inside these phases are inaccessible to subsequent syntactic derivations.

² Throughout the thesis, I use the terms NP and DP interchangeably to refer to the noun phrase. This choice is motivated by the fact that there is inconsistency in the literature as to the labels, and using both would allow us to maintain the original.

The thesis consists of eight chapters. This chapter (i.e. chapter one) is an introduction. Chapter two traces the development of case in Chomsky's thinking from the early days of the Government and Binding theory to the recent theoretical positions taken in what has come to be known as the Minimalist Program. This chapter also covers two important contributions to the generative understanding of case. The first such contribution is that of Woolford (2006), where the argument is made that there are two types of non-structural cases. These are lexical case, which is purely idiosyncratic case assigned by certain verbs and prepositions, and it is assigned strictly inside VP, and inherent case, which is thematically linked, and it is assigned strictly outside VP but inside vP. Another major contribution to the generative understanding of case is that of Schütze (2001), who argues that UG (=universal grammar) must allow for a case, which is provided when all other means of case assignment fail or are simply unavailable. Chapter three provides an overview of SA. It also discusses the previous generative accounts of case in SA and the problems that they face. Chapter four introduces alternative accounts of case, specifically the case tier theory of Yip, Maling and Jackendoff (1987), and the original version of the dependent case theory as developed in Marantz (1991). The chapter discusses the problems that these two accounts face. The chapter then introduces the updated version of the dependent case theory, as developed in Baker (2015), which forms the theoretical framework adopted in this thesis. The chapter also spells out other theoretical assumptions that are adopted in this thesis. Chapter five is a full exposition of how the dependent case theory of Baker (2015) can account for the cases of the core arguments in various structures of SA. Chapter six is an analysis of case assignment in structures with non-arguments (i.e. adverbial NPs and NPs in the left-periphery of the clause). Chapter seven shows how case assignment in the DP domain can be accounted for using Baker's dependent case theory. This chapter also demonstrates how the adopted theoretical framework

fares better than the Agree-based theory of case (Chomsky 2000, 2001) and the case tier theory (Yip, Maling and Jackendoff 1987) in this respect. Chapter eight is a conclusion and discussion with suggestions for further research.

Chapter Two

Case in generative grammar

2.1 Introduction

In this chapter, the history of case theory in the generative literature is discussed. In section 2.2, the first formulation of case theory, which is developed in Chomsky (1980) is discussed. In section 2.3, the Government and Binding approach to case developed in Chomsky (1986) is introduced. In section 2.4, the early Minimalist approach to case developed in Chomsky and Lasnik (1993) and Chomsky (1995) is discussed. In section 2.5, the later Minimalist approach to case as developed in Chomsky (2000, 2001, 2005, 2007, 2008) is introduced. Section 2.6 discusses other Minimalist approaches to case. In section 2.6.1, Woolford's (2006) account of two types of nonstructural case is introduced. In section 2.6.2 Schütze's (2001) approach to default case is introduced.

2.2 On binding (Chomsky 1980)

The first formulation of case theory appears in Chomsky (1980). It is an attempt to revise a former filter suggested in Chomsky and Lasnik (1977). The filter is stated in (1) below:

(1) “*[_{α} NP to VP], unless α is adjacent to and in the domain of Verb or *for* ([N])” (Chomsky 1980: 19).

The filter in (1) is meant to capture the ungrammaticality of (2a-b) and the condition in the filter is meant to capture the grammatical status of (2c-e):

- (2)
- a. *[John to come] is nice.
 - b. *It is nice [John to come].
 - c. For [John to come] is nice.
 - d. It is nice for [John to come].
 - e. I would like [John to come].

In a letter addressed to Chomsky and Lasnik, Vergnaud (1977) offers the formulation of case in (3) and (4):

(3) “English has three cases: Subject Case, Genitive Case, “Governed Case” (“the case of complements of verbs and of prepositions”).

(4) “The restrictions on subjects of infinitivals can follow from a general filter limiting the distribution of NPs in the canonical Case.” (Vergnaud 1977, as cited in Lasnik 2008: 18).

Using Vergnaud’s insight, Chomsky (1980: 24) formulates his theory of case as follows: “Suppose we think of Case as an abstract marking associated with certain constructions, a property that rarely has phonetic effects in English but must be assigned to every lexical NP”. He then offers the following general principles of Case Assignment:

- (5)
- a. “NP is oblique when governed by P and certain marked verbs;
 - b. NP is objective when governed by V;

c. NP is nominative when governed by Tense.” (Chomsky 1980: 25). Given that the above principles make reference to the structural relation of government, the latter is defined as follows:

(6) “ α is *governed* by β if α is c-commanded by β and no major category or major category boundary appears between α and β ” (Chomsky 1980: 25).

Given that all lexical NPs must have case, Chomsky offers the following filter:

(7) “*N, where N has no Case” (Chomsky 1980: 25).

Given the principles in (5) and the filter in (7), Chomsky can now account for the examples in (2). The examples in (2a-b) are ill-formed because the lexical NP, *John* does not get case. In (2a), the NP does not get case because it is the subject of an infinitival clause, and the latter does not assign case because it is Tenseless. In (2b), the NP does not get case in its infinitival clause, nor does it get case from the adjectival predicate, given that adjectives are not case assigners. In contrast, the sentences in (2c-e) are well-formed. In (2c-d), the NP gets objective case by (5a); in (2e), the NP gets objective case by (5b).

The account can also easily handle cases of control, as shown in (8)

- (8) a. John wants [PRO to work hard].
b. John tries [PRO to work hard].

The sentences in (8) are well-formed because the NP, PRO is not subject to the Case Filter in (7). In other words, *PRO* is not assigned case because it is a null rather than a lexical NP.

Chomsky (1980: 24) states that case assignment is clause-bound. Given this, he handles cases of non-control verbs like *believe* as being marked in the sense of having a [+F] feature, which enables them to assign objective case across a clausal boundary. This way, the examples in (9) are accounted for in this approach to case:

- (9) a. I believe [John to be a fool].
- b. John is believed [t to be a fool].
- c. who do you believe [t to be a fool].

The NP, *John* in (9a) is assigned objective case from the verb *believe* across a clausal boundary because the verb is marked for a [+F] feature. In (9b), the NP is not assigned case in the infinitival position and cannot get objective case from the verb, *believe*, given that the verb is passivized, hence loses its ability to assign case. Therefore, the NP raises to receive nominative case from the finite/Tensed clause. In (9c), the NP, *who* is assigned objective case in the infinitival position from the verb, *believe* before it raises to the finite clause for focus purposes.

As for why structures such as (10) are grammatical, Chomsky claims that the complementizer *for* may or may not be assigned the feature [+P(reposition)]. If it is assigned this feature, it assigns an oblique case and is undeletable. If it is not assigned a [+P] feature it does not assign case and is deletable. This is shown in (10):

- (10) [S'[COMP *for*] [S NP to VP]].
- a. For [John to do well on the exam] is nice.

- b. I want [_S' COMP (for_[+P]) [_S John to do well on the exam]].

In the example in (10a), the complementizer, *for* is assigned a [+P] feature; therefore, it assigns an oblique case to the NP, *John*. In (10b), the complementizer is assigned a [+P] feature; therefore, it assigns an oblique case to the NP, *John*. In this case, the complementizer is undeletable. If the complementizer is not assigned a [+P] feature, it does not assign case, and is deletable, and the NP receives objective case from the non-control verb, the latter has a [+F] feature, which enables it to assign objective case across a clausal boundary.

2.3 The Government and Binding (GB) approach to case

In the Government and Binding (GB) approach, Chomsky (1981: 175-176, citing Freidin and Lasnik (1979b) notes that not only lexical NPs seem to require case, but even variables. This is illustrated in (11):

- (11) a. *the man [_S' that [_S you tried [_S' [_S *t* to win]]]]
b. *the man [_S' that [_S I wonder [_S' what [_S *t* to see]]]] (Chomsky 1981, ex. 19: 176)

Based on examples such as those in (11), Chomsky argues that the Case Filter cannot be a PF filter. For Chomsky, a PF case filter will not rule out the examples in (11) on the grounds that the traces are not phonologically overt, and therefore, they do not need to acquire case. However,

the examples in (11) are ungrammatical, and the only reason to rule them out, according to Chomsky, is because the variables (traces of relativization), *t* lack case.

At the same time, Chomsky notes that other structures show that the Case Filter cannot be applying at LF. One such structure is the example in (12):

(12) *John tried [everyone to leave] (Chomsky 1981, ex. 20: 176)

Chomsky further notes that the LF representation of (12) is as in (13):

(13) John tried, for all *x*, *x* to leave (Chomsky 1981, ex. 21: 176).

Given that (12) does not get case in the surface structure, it should be saved if the Case Filter applied at LF, as shown in (13). However, (12) is clearly not saved at LF, given that the sentence is ungrammatical. It follows, Chomsky argues, that the Case Filter does not apply at LF.

To solve these problems, Chomsky (1981: 176) links case assignment with theta-role assignment in the following manner: “Let us assume that elements of the form [α β] are “invisible” to rules of the LF-component unless β contains some [case] feature. Thus, PRO is visible as is Case-marked trace, but [_{NP} *e*] is invisible when it contains no Case”. He then points to the fact that each NP has a grammatical function, GF₁ at the surface structure as well as a function chain (GF₁, ...GF_n), which represents the NP’s derivational history. He also uses the

distinction between A-positions (argument positions) and A'-positions (non-argument positions) to formulate the condition in (14) on theta-role assignment:

(14) “Suppose that α has the A-function chain $(GF_1, \dots GF_n)$. Then the chain is assigned a θ -role only if α has [case] features” (Chomsky 1981, ex. 33: 179). To illustrate how the condition works, Chomsky provides the examples in (15)

(15) John_i found a book [which_j he wanted [PRO_i to give t_j to Mary]]]

He points out that in (15), *which* has case features, but it is in an A'-position. But, the trace t_j is an element of an A-function, and that it is this that enables the assignment of θ -role to the A-function chain $\langle \text{which}, t_j \rangle$ via the tail of the chain t_j . The example in (15) contrasts with the example in (16):

(16) *John_i found a book [which_j he wanted it to seem [t_j to please Mary]]]

The example in (16), Chomsky argues, is ungrammatical because the trace t_j is an element of an A-function; yet, it does not receive case because neither the tail t_j nor the head *which* of the chain $\langle \text{which}, t_j \rangle$ is in an A-position, where they can receive case.

In Chomsky (1986a: 193), case theory is revised so that all lexical categories (V, N, A, P) are case assigners. A distinction is then drawn between structural case, which is assigned by V and INFL/AGR to an argument they govern and is assigned independently of theta-marking, and inherent case, which is assigned by prepositions (oblique cases), nouns and adjectives (genitive case) to their arguments only if the head also θ -mark their arguments, given that inherent case applies at D-structure.

In this revised model, therefore, “a noun phrase can receive a θ -role only if it is in a position to which case is assigned or is linked to such a position” (Chomsky 1986a: 94). The ‘or clause’ in the quotation covers cases of expletive-argument pair, where the expletive is in a case position and it transfers case to the associated argument, as in (17):

(17) There is a man in the room (Chomsky 1986a: 78).

In Chomsky (1986a: 135), the proposal is made that θ -roles and case are properties of chains. Based on this, Chomsky (1986a: 135) reformulates the definitions for case and the theta criterion, as in (18) and (19):

(18) “A CHAIN is Case-marked if it contains exactly one Case-marked position; a position in a Case-marked CHAIN is visible for θ -marking.”

(19) “A CHAIN has at most one θ -position; a θ -position is visible in its maximal CHAIN.”

Given the formulation of case and the theta criterion in (18) and (19), Chomsky (1986a: 136) points out that a chain must have exactly one θ -position and exactly one Case-position. Based on this, Chomsky (1986a: 137) formulates the condition in (20):

(20) “ If $C = (\alpha_1, \dots, \alpha_n)$ is a maximal CHAIN, then α_n occupies the unique θ -position and α_1 its unique Case-marked position.”

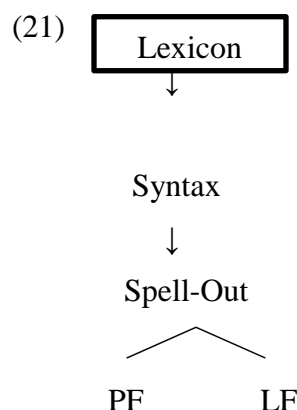
2.4 Case in Early Minimalism

To solve the problem of the visibility of PRO for the LF component, Chomsky and Lasnik (1993: 561) argue that PRO does have Case, which is null and which is licensed by nonfinite INFL.

Another proposal of the early stages of Minimalism (Chomsky 1993, Chomsky and Lasnik 1993, as cited in Chomsky 1995) is that all lexical items enter the derivation for syntactic computation fully specified for their features (phonological, morpho-syntactic and semantic). This is held to be the case for both lexical as well as functional categories. In this model, features of lexical items are of two types, [+Interpretable] and [-Interpretable]. Syntactic derivation is therefore driven by the need for lexical items with [-Interpretable] features to check their features against lexical items with matching but [+Interpretable] features. For example, the categorial feature N and the ϕ -features are [+Interpretable] on nouns, but [-Interpretable] on V and T. Therefore, V and T have to probe for nouns in order to check their [-Interpretable] N and ϕ -features. The syntactic relation that allows such probing is understood to be c-command.

Specifically, the probe must c-command the goal in order for checking to take place. In contrast, nouns have a [-Interpretable] case feature that requires checking against a V and T with the instructions [assign ACC] and [assign NOM] respectively. Note especially that unlike ϕ -features, case is a special feature in that it is [-Interpretable] on both the probe and the goal. Thus, even though V has the instruction [assign ACC] and T has the instruction [assign NOM], neither of them has a positive value for case. It follows that in this model, case has a unique status. Thus, Chomsky (1995: 278-279) describes this state of affairs by stating that “[c]ase differs from ϕ -features in that it is always –Interpretable, for both terms of the checking relation. Case is therefore the formal feature par excellence...” In this model, [-Interpretable] features have to delete and become invisible for further interface LF operations once checked. They, however, remain visible for the PF interface level since they have PF effects (Chomsky 1995: 279).

In sum, the early Minimalist model assumes that what enters the syntactic derivation are full-fledged lexical items. The architecture of this model can be schematized as in (21) below:



The architecture in (21) shows that lexical items come from the lexicon, which feeds the syntactic derivation. The syntactic component diverges at the point of Spell-Out and provides

input to two interface levels, the PF (informally the phonological interface level) and LF (informally the semantic interface level). Crucially, in this model, NPs enter the derivation fully specified for their case features (nominative, accusative), and all that they need is to check these cases against matching case features on functional heads, particularly T for nominative case and v^* for accusative case.

2.5 Case in later Minimalism

In Chomsky (2000), case is an uninterpretable feature on a goal (i.e. DP), which is checked and valued only against a probe (v or T). The case feature of the goal will be given a value depending on the probe, nominative if the probe is finite T, accusative if the probe is v , and null if the probe is control infinitival (Chomsky 2000: 122-126). This is illustrated in the following examples:

(22) [TP John T_[+FINITE, uCase: NOM] [_{vP} <John_[uCase: __]> v_[uCase: ACC] likes Mary_[uCase: __]]].

(23) John tried to [_{CP} PRO_[uCase: __] T_[-FINITE, uCase: NULL] to [_{vP} <PRO> win the game]]

In (22), the subject DP *John* has an uninterpretable and unvalued case feature. This feature is checked and valued against the uninterpretable but valued nominative case feature of finite T. Similarly, the object *Mary* has uninterpretable and unvalued case feature. This feature is checked and valued against the uninterpretable but valued accusative case feature of the functional head v^* . In (23), the subject of the embedded CP is *PRO*, which has an uninterpretable case feature. This feature is checked and valued against the uninterpretable but valued null case feature of the non-finite T.

The uninterpretable case feature of the goal will only be checked and valued against a probe with the full complement of ϕ -features. Thus, if the probe is v , v is defective lacking the feature [person], as in participial and adjectival probes, and the goal will delete the ϕ -features of the probe, but the probe will not be able to delete the uninterpretable case feature of the goal. In this scenario, the goal remains active and is accessed by higher probes. The goal will have to move towards the higher probe in order to check its uninterpretable case feature. Similarly, if the probe is a defective T, as in control infinitivals, the probe is defective in that it has only a [person] feature. The result of Agree is that the goal will delete the uninterpretable [person] feature of the probe, but the probe will not be able to delete the uninterpretable case feature of the goal. Therefore, the goal remains active and is accessed by higher probes. The goal will have to move to the higher probe in order to have its uninterpretable case feature deleted. In the case of a weak expletive, its ϕ -feature is uninterpretable. This renders this feature unnecessary for the expletive; therefore, a case feature is also rendered unnecessary for the expletive (Chomsky 2000: 122-126).

Thus, case in this model is an off-shoot of ϕ -feature checking and valuation. If a probe v has the full-set of ϕ -features, it can agree with a goal (i.e. object DP) in ϕ -features, and the result is that the goal has interpretable ϕ -features, which check and value the uninterpretable ϕ -features of the head v . In return, the probe v can check and value the uninterpretable case feature of the goal, object DP. All core functional categories in this model (C, T and v) may have ϕ -features. These features are obligatory for v and T but not so for C (Chomsky 2000: 102). Chomsky (2000: 121), posits that the uninterpretable features of functional heads are the sole driving force of movement in natural language grammar. This is in contrast to the GB model, where case is conceived as the driving force of movement.

In Chomsky (2001), the idea that v^*P (i.e. a vP , which c-selects an external argument) and CP are strong phases is introduced. Crucially, phasal v^* assigns accusative case. These are distinguished from TP and vP (i.e a vP which lacks an external argument as in passives and unaccusatives, and which does not assign accusative case). , which are weak phases.

Chomsky (2005) makes the following proposals:

- (a) The head of a lexical item is the only element capable of acting as a probe, as it is the only element visible for further syntactic computations (Chomsky 2005: 14).
- (b) There are probably three phases, CP, vP with the full argument structure, and DP (Chomsky 2005: 17-18).

Chomsky (2007) makes the following claims:

- (a) C and v^* are phasal heads which bear inherent uninterpretable functional features which they transfer to their labels (i.e. immediately selected heads). The label of C is T, and the label of v^* is V. The labels probe for a matching goal. For V, the matching goal is the uninterpretable case feature of the object DP; for T, the matching goal is either the subject DP of v^*P or the object of V if V is passive or unaccusative. The uninterpretable features of the label receive the values of the goal and the uninterpretable feature of the goal is assigned based on the properties of the phase head, nominative if the label is T and the phasal head is C and accusative if the label is V and the phasal head is v^* . In case there are several goals, they all receive the same values in the same manner the probe does (Chomsky 2007: 22).
- (b) Unlike A-movement, A'-movement is successive-cyclic phase by phase (Chomsky 2007: 24-25).

Chomsky (2008) makes the following claims:

- (a) TP only has phase-like properties when it is selected by C (Chomsky 2008: 144).
- (b) Only phasal heads trigger operations (such as IM), and even raising to Spec, TP is thus possible because the latter inherits features from the phasal head, C (Chomsky 2008: 144).

2.6 Refinements to case theory

In addition to the Minimalist approaches to case developed in Chomsky and Lasnik (1993), Chomsky (1995, 2000, 2001, 2005, 2007, 2008), the theory of case has been refined in two other works. In the next two subsections, I discuss these two refinements.

2.6.1 On two types of nonstructural cases (Woolford 2006)

In Chomsky (1981, 1986), the only division is between structural cases (those that are assigned in certain structural configurations) and nonstructural cases (those that are related to certain thematic roles). Woolford (2006) argues that nonstructural cases are of two types, namely lexical case and inherent case. For Woolford, lexical case is a purely idiosyncratic case that has the two properties in (24):

(24)

- (a) It is strictly assigned inside the VP domain by particular lexical heads such as certain Vs and certain Ps.
- (b) It is assigned only to internal arguments.

As examples of purely idiosyncratic cases on internal arguments that are grammatical subjects, Woolford provides the following examples (Woolford 2006, exs. 7a-c: 114) from Icelandic:

- (25) a. Bátnum hvolfdi.

 boat-DAT capsized

 ‘The boat capsized
- b. Bátnum rak á land

 boat-ACC drifted to shore

 ‘The boat drifted to the shore.’
- c. Jóns nýtur ekki lengur við.

 John-GEN enjoys not longer at

 ‘John is no longer available.’

The examples in (25) show that none of the grammatical subjects receive a structural case, namely the nominative case based on their grammatical position. Instead, these subjects receive a purely idiosyncratic lexical case assigned to them by the particular verbs given inside the VP domain before they raise to the TP domain. Semantically, the common feature that these subjects share is that they are internal arguments of the verb.

As for the other type of nonstructural cases, namely the inherent case, Woolford argues that this type has the two properties in (26):

(26)

(a) It is strictly assigned outside the VP domain but inside the vP phase.³

(b) It is only assigned to external arguments (e.g. goals, agents, cause, etc.). This case is licensed only by little/light v heads.

As examples of nonstructural inherent case, Woolford offers the following pairs (examples 16-17 adapted from Woolford 2006: 118):

(27) a. þeir skiluðu Maríu bókinni.
they returned Mary-DAT book-the-DAT

‘They returned the book to Mary.’ (Icelandic)

b. Maríu var skilað þessari bók.
Mary-DAT was returned this book-DAT

³ Woolford assumes that goal arguments are assigned the inherent case by a functional head v, which intermediates VP and a higher v, which is the head of the phase vP.

‘The book was given to Mary.’ (Icelandic)

(28) a. Sie hilft ihm.

she helped him-DAT

‘She helped him.’ (German)

b. Ihm wird geholen.

he-DAT is helped

‘He is being helped.’ (German)

The examples in (27) and (28) are cases of inherent case given that they are preserved under A-movement. Woolford (2006) shows that unlike lexical cases, which are purely idiosyncratic and unpredictable, inherent cases are regular and predictable. Thus, all external arguments in Icelandic receive the dative case when they do not receive the structural nominative case.

Woolford (2006) provides some diagnostic tests that can be used to separate structural from nonstructural cases, and argues that once certain interfering factors are controlled for, one can see that although inherent cases are thematically connected, inherent case is always associated with external arguments as broadly construed rather than with the specific thematic role of agents. For example, one of the most widely used diagnostic tests to distinguish syntactic structural cases from syntactic non-structural cases is case preservation under A-movement. However, Woolford argues that this diagnostic test might give misleading results when there are some interfering factors. One such factor that Woolford mentions is the fact that in languages

such as Japanese, dative cases are prohibited in intransitive constructions. According to Woolford, if one were to apply the test of case preservation under A-movement to the Japanese pair in (29), one might falsely conclude that datives are structural cases in Japanese:

- (29) a. John-ga Mary-ni soodansita.
 John-NOM Mary-DAT consult-PAST
 ‘John consulted Mary.’
- b. Mary-ga John-ni soodans-(r)rare-ta.
 Mary-NOM John-DAT consult-PASS-PAST
 ‘Mary was consulted by John.’

For Woolford, the reason why the dative in the monotransitive sentence in (29a) switches to nominative in (29b) is simply the result of the fact that Japanese prohibits dative cases in intransitive constructions. Once one controls for this factor, Woolford argues, as in the diatransitive sentence in (30a), one can see that dative cases are non-structural cases given that they preserve their case in passive constructions:

- (30) a. John-ga Mary-ni sono hon-o okutta.

John-NOM Mary-DAT that book-ACC send-PAST

‘John sent Mary that book.’

b. Mary-ni sono hon-ga okur-are-ta.

Mary-DAT that book-ACC send-PASS-PAST

‘Mary was sent that book.’

To conclude, Woolford (2006) splits nonstructural cases into two types, the purely idiosyncratic lexical case, which is assigned by V to its internal arguments inside VP, and the inherent case, which is assigned by v to its external arguments outside of VP and inside vP.

2.6.2 On default case (Schütze 2001)

Schütze (2001) argues that Universal Grammar (UG) must have in its inventory a form of case, which is spelled out when all other ways of assigning case in the syntax proper fail. This type of case is what Schütze (2001) calls default case. Schütze (2001: 206) defines this case as in (31):

(31) “The default case forms of a language are those that are used to spell out nominal expressions (e.g. DPs) that are not associated with any case feature assigned or otherwise determined by syntactic mechanisms.”

This situation, according to Schütze (2001), describes cases where DPs enter the syntactic derivation without any case features. Therefore, they survive to the PF and LF interface levels without causing the derivation to crash. In the morphophonological component of the grammar, which Schütze (2001) assumes, the caseless DP would receive a morphological case realization, which varies from one language to another. Crucially for Schütze (2001), default case is not assigned by anything to anything. This means that an argument NP cannot receive default case. Therefore, it cannot save a derivation from crashing; if it did, this would render the Case Filter (i.e. the requirement that NPs in certain surface positions get case) vacuous. This is shown by the fact that the accusative case, which is argued by Schütze (2001) to be the default case of English, cannot save the derivation in the following ungrammatical sentences:

- (32)
- a. *It seems him/he to be tired.
 - b. *It/*There was believed he/him.
 - c. *Him/*He to leave would be rude.
 - d. *It is important he/him to be on time.
 - e. *My desire he/him to succeed led me stray.
 - f. *Me/*I, Tuesday is fine. (Schütze 2001: 208-209)

Schütze (2001: 209-210) further defines default case by what it is not. He points out four other possible ways of assigning case, all take place in the syntax although he believes that nothing would change if some or all of these four ways of case assignment turn out to be taking place in the morphology before default case is supplied. The first way of assigning case is that which is assigned by a syntactic head (e.g. a verb or Infl). Schütze (2001) points out that this is not the same as syntactic licensing of arguments (i.e. abstract case, which is concerned with the restrictions on the surface positions of certain arguments). He gives as an example Infl in Icelandic, which may structurally license a dative subject, while at the same time assigning nominative case to the object or other cases, where the verb (or *Agro*) would structurally license a nominative object and fail to assign its accusative case at all. The second type of case assignment is that of a semantically related constituent such as a left-dislocated NP, which might get a case, which matches that of its syntactically related argumental NP. The third type of case is that of the case, which is assigned to the D head of a DP, and is then percolated to all other material inside the DP in what is known as concordial case. The fourth type of case is what is called semantic or adverbial case. This is the case of bare NPs that serve an adverbial function, and their particular meaning is dependent on the particular case they receive such as the dative of duration and the ablative of instrumental. Default case, argues Schütze (2001), is the case received by an NP when none of the other mechanisms of case assignment is applicable.

2.7 Summary

This chapter traces the developments of case in Chomsky's thinking from the early days of the Government and Binding theory (Chomsky 1980) to the recent developments (Chomsky

2008). It is shown that in the early days of the Government and Binding theory, case is perceived by Chomsky as a PF requirement on all lexical (phonetically realized) NPs. In the later days of the Government and Binding (Chomsky 1986), case is now perceived as an LF requirement on arguments so that they can be readable by the LF component of the grammar. In early Minimalism, goals (i.e. NPs) enter the derivation fully specified for their case features, but they require checking against matching case features of the probes (i.e. T or v). In later Minimalism, goals enter the derivation without a case value, and they only acquire valuation through an Agree relation with a probe that must be ϕ -complete. Thus, ϕ -defective probes cannot assign case in this model. In *derivations by phase* (Chomsky 2001), goals of a lower strong phase are still accessible even if their features are deleted; they only freeze (cease to be accessible) when a higher strong phase is introduced. In *three factors in language design* (Chomsky 2005), only the head of the phase is accessible for further syntactic computations. In *upproaching UG from below* (Chomsky 2007), C and v* have uninterpretable functional features, which they transfer to their labels (i.e. immediately selected heads). Thus, the label of C is T, and the label of v* is V. In this model and in *on phases* (Chomsky 2008), CP, v*P and DP are phases.

Two other refinements to case theory are also introduced. Woolford (2006) splits non-structural cases into two. The first is the purely idiosyncratic lexical case which is assigned by certain verbs and prepositions to their complements. This case is assigned strictly inside VP. The second non-structural case is the inherent case which is linked to thematic roles and is assigned outside VP but inside vP exclusively to external arguments. Schütze (2001) further refines case theory by claiming that there is another case which is assigned whenever all other case assignment mechanisms fail. He calls this case the default case which is assigned at PF.

Chapter Three

Introduction to SA and previous accounts of case

3.1 Introduction

This chapter introduces some aspects of SA that are relevant for this thesis. The chapter also gives an overview of how medieval Arab grammarians accounted for the case alternations on nouns. Then, the previous generative accounts of case in SA are introduced and critically discussed.

3.2 The syntax of SA: A brief overview

Below I introduce some of the relevant structures of SA. These particular syntactic structures are the ones that will be discussed when the case assignment facts of SA are addressed in chapter five. Introducing these particular structures will thus set the stage for the analysis of case assignment to be developed in chapter five.

(a) There are two major orders in SA. These are VSO and SVO. All of the other possible orders are also instantiated in the language with various pragmatic effects (e.g. Focus and Topic). The examples in (1a-b) show the VSO and SVO orders. The example in (1c) shows the order when the object is focalized, and the example in (1e) shows when the preverbal DP is a base-generated topic. The example in (1f) is an example where the object is shifted to a position preceding the postverbal subject for reasons of topicalization or focalization. The example in (1g) is an example, where the object *ʔal-masʔalat* ‘the problem’ is not one of the arguments of the sentence, but is adjoined to the sentence.

- | | | | | | |
|-----|----|-----|---|-----------------|-----------------|
| (1) | a. | VSO | ħall-a | l-ṭaalib-u | l-masʔalat-a. |
| | | | solved-3MSG | the-student-NOM | the-problem-ACC |
| | | | ‘The student solved the problem.’ | | |
| | b. | SVO | l-ṭaalib-u | ħall-a | l-masʔalat-a. |
| | | | the-student-NOM | solved-3MSG | the-problem-ACC |
| | | | The student solved the problem’ | | |
| | c. | OVS | L-MASʔALAT-A | ħall-a-(haa) | l-ṭaalib-u. |
| | | | the-problem-ACC | solved-3MSG-it | the student-NOM |
| | | | ‘It was the problem that the student solved.’ | | |
| | e. | OVS | l-masʔalat-u, | ħall-a-*(haa) | l-ṭaalib-u. |
| | | | the-problem-NOM | sloved-3MSG-it | the-student-NOM |
| | | | ‘As for the problem, the student solved it.’ | | |
| | f. | VOS | ħall-a | L-MASʔALAT-A | l-ṭaalib-u. |
| | | | sloved-3MSG | the-problem-ACC | the-student-NOM |
| | | | ‘It was the problem that the student solved.’ | | |
| | g. | OSV | l-masʔalat-u, | l-ṭaalib-u | ħall-a-*(haa) |
| | | | the-problem-NOM | the-student-NOM | solved-3MSG-it |

‘The problem, the student, he solved it.’

(b) There is an agreement asymmetry in SA so that the number feature is realized on the verb only in the SVO order but not in the VSO order. The verb in (2a) is singular even though the subject is plural. This contrasts with the example in (2b), where the plural feature on the verb matches that of the subject. This contrasts with the the gender feature, which is manifest on the verb in both orders.

(2) a. hall-**a/*-uu** l-ṭullaab-u l-masʔalat-a.

solved-**3MSG/*3PLM** the-students-NOM the-problem-ACC

‘The students solved the problem.’ (VSO)

b. l-ṭullaab-u hall-**uu/*-a** l-masʔalat-a.

the-students-NOM solved-**3MPL/*3MSG** the problem-ACC

‘The students solved the problem.’ (SVO)

(c) SA has two major types of sentences. The first is the verbal sentence (3a), and the second is the ‘verbless sentence’ (i.e. clauses lacking any verbal predicates) (3b).⁴

(3) a. hall-a l-ṭullaab-u l-masʔalat-a.

solved-3MSG the-students-NOM the-problem-ACC

⁴ The term ‘verbless sentences’ is used to describe sentences that lack a verbal predicate (cf. Benmamoun 2008 and Hazout 2010).

‘The students solved the problem.’ (Verbal sentence)

b. l-ṭullaab-u mujtahid-uun.

the students-NOM hardworking-PLM.NOM

‘The students are hardworking.’ (Verbless sentence)

(d) In addition to verbal and verbless sentences, SA has complex tense structures (i.e., structures with auxiliary verbs as well as lexical verbs), as in (4).

(4) kaan-at l-ṭaalibaat-u y-alṣab-na.

was-3FSG the-students.F-NOM 3-play-FPL

‘The students were playing.’

(e) SA has structures with encliticized backgrounding topics. This is shown in (5), where the encliticized backgrounding topic *-hu* ‘it’ is used. This particular structure is interesting because the status of the clitic *-hu* is not agreed upon. It is a backgrounding topic for Fassi Fehri (2012), but a preverbal expletive clitic for Mohammad (2000: 108) and Aoun et. al. (2010: 17). This makes this structure interesting from a case-theoretic perspective. Mohammad (2000) and Aoun et.al. (2010) argue that that there are two structural cases here, the accusative case is assigned to the preverbal expletive clitic *-hu* ‘it’ by the complementizer and the nominative case is assigned to the postverbal subject *ʔal-musaafir-uun* ‘the passengers’ by T.

- (5) qul-tu ?inna-*(**hu**) waʃal-a l-musaafir-uun.⁵
 said-1SG that.EMPH-it.ACC arrived-3MSG the-passenger-MPL.NOM

‘I said it that indeed the passengers have arrived.’

- (f) SA has structures with *there*-type expletives, as in (6). The important question that these structures raise is the following: what is the status of *hunaaka* ‘there’, and does it receive case?

- (6) **hunaaka** rajul-un fii l-daar-i.⁶
 there man-NOM in the-house-GEN

‘There is a man in the house.’

- (g) SA has exceptional case marking (ECM) structures. In (7), the embedded DP subject, *?al-musaafir-iina* ‘the passengers’ does not receive the nominative case; rather, it is marked for morphological accusative case. The SA embedded clause of ECM constructions is finite both morphologically (having ϕ -features) and semantically (having a distinct tense specification from that of the matrix clause). The question here is what sort of case the subject of the embedded clause receives, and where it receives this case from.

⁵ The counterpart of (5) without a backgrounding topic is as shown in (i)

- (i) qul-tu ?inna l-l-musaafir-iina waʃal-uu
 Said-1Sg that.EMPH the-passenger-MPL.ACC arrived-3PLM
 ‘I said that passengers indeed have arrived.’

⁶ Strictly speaking, the *-an* part of the NP *rajulun* ‘a man’ is two morphemes. The *-a* marker is an accusative case morpheme, and the *-n* marker is either an indefinite marker (Kouloughli 2007) or the head of a possessive phrase, which marks the absence of the possessor (Fassi Fehri 2012, fn 2: 294). Throughout this chapter, I gloss the *-n* morpheme as part of the case marker unless the separation is essential for the point under discussion, as will be shown when case assignment in PPs is discussed later in the thesis.

- (7) *ḍanan-tu* ***l-musaafir-iina*** *waṣal-uu.*
- believed-1SG the-passenger-MPL.ACC arrived-3MPL
- ‘I believed the passengers to have arrived.’

(h) SA instantiates double-object constructions. The DPs *ʔibnat-a-haa* ‘her daughter’ and *laban* ‘yogurt’ are both objects of the complex verb *ʔa-ṭṣam* ‘cause to eat/feed’ in (8), and both objects receive the accusative case. The question is why both objects receive the accusative case and what happens in the context of passive sentences.

- (8) *ʔa-ṭṣam-at* *l-ʔumm-u* ***ʔibnat-a-haa*** ***laban-an.***
- CAUS-eat-3FSG the-mother-NOM daughter-ACC-her yogurt-ACC
- ‘The mother fed her daughter yogurt.’

(i) SA instantiates two aspectual forms of the verb, the imperfective and the perfective. The imperfective form of the verb is characterized by encoding mood markers, as in (9a-c). Three major types of mood are encoded, and these are the indicative, as in (9a), the subjunctive, as in (9b), and the jussive, as in (9c).⁷ The perfective form of the verb in SA bears no morphological marking of mood, as in (9d). In this form of the verb, all the phi-features are realized as a suffix. The imperfective verbs in (9a-c) are marked for mood as a suffix, and the phi-features appear as

⁷ According to Wright (1967, as cited in Al-Balushi 2011: 61), there are other moods in SA, and these are the imperative and the energetic (or emphatic).

both prefixes and suffixes. In contrast, the perfective verb in (9d) is not marked morphologically for mood, and the phi-features are all realized as a suffix:

- (9) a. **y-arsum-Ø-u** l-ṭaalib-u lawḥat-an.
 3-draw-SG-**INDIC** the-student.MSG-NOM picture-ACC
 ‘The student usually draws pictures/The student is drawing a picture.’
- b. l-ṭullaab-u lan **y-arsum-uu-Ø** lawḥat-an.
 the-students-NOM NEG.FUT 3-draw-PL-**SUBJ** picture-ACC
 ‘The students will not draw a picture.’
- c. l-ṭullaab-u lam **y-arsum-uu-Ø** lawḥat-an.
 The-students-NOM NEG.PAST 3-draw-MPL-**JUSS** picture-ACC
 ‘The students did not draw a picture.’
- d. **rasam-at** l-ṭaalib-at-u lawḥat-an.
 drew-3FSG the-student-FSG-NOM picture-ACC
 ‘The student drew a picture.’

(i) SA instantiates pronominal copulas. These are pronouns that can be used as pronominal linking verbs by linking the subject and the predicate in a clause. Their use in these structures is

one of disambiguation, as it is through them that clauses are distinguished from noun phrases.⁸ In the examples in (10a-e), the third person pronoun is used as a linking verb, and it always agrees with the preverbal subject in number and gender, but not person.

- (10) a. huwa **huwa** l-muʕallim-u.
 he be. MSG the-teacher-NOM
 ‘He is the teacher.’
- b. ʔanaa **huwa** l-muʕallim-u.
 I be. MSG the-teacher-NOM
 ‘I am the teacher.’

⁸ For example, names can only be modified inside the NP by a postnominal definite NP modifier. Thus, the expressions *zayd-un l-muhandis-u* ‘zayd, the engineer’ and *zayd-un l-muḥaasib-u* ‘zayd, the accountant’ are both definite NPs with postnominal modifiers which agree with the head noun in definiteness. They both lack the pronominal copula in (i); therefore, they can only be understood to be NPs with postnominal definite NP modifiers. The use of the copula in (ii), however, makes the only reading available that of the clause. In (iii), the only available reading of the example is that of a clause, given that the postnominal predicate is indefinite, hence, does not agree with the head noun in definiteness, and no NPs need to be disambiguated from clauses. Therefore, no pronominal copula is needed in (iii):

- (i) zayd-un l-muhandis-u waʕal-a, ʔamma zayd-un l-muḥaasib-u
 Zayd-NOM the-engineer-NOM arrived-3MSG as.for Zayd-NOM the-accountant-NOM
 fa-lammaa y-aʕil-Ø-Ø baʕdu.
 FA-NEG 3-arrive-MSG-JUSS yet
 ‘Zayd, the engineer arrived. As for Zayd, the accountant, he has not arrived yet.’
- (ii) zayd-un huwa l-muhandis-u.
 Zayd-NOM be.3MSG the-engineer-NOM
 ‘Zayd is the engineer.’
- (iii) zayd-un muhandis-u-n.
 Zayd-NOM engineer-NOM-INDEF
 Zayd is an engineer.’

On the use of the pronominal copular verbs as a means of disambiguating NPs from clauses in SA, the reader is referred to Al-Naḥas (1995: 13-34) and Eid (1983).

c. ?anta **huwa** l-muʕallim-u.
 you be.MSG the-teacher-NOM

‘You are the teacher.’

d. ?anti **hiya/*huwa** ?anaa
 you.F be. **FSG**/*be.MSG I.NOM

‘You are me.’ (i.e., you are playing me in a play, etc.)

e. ?anta **huwa/*hiya** hiya.
 you.MSG be. **MSG**/*be.F.SG she.F.NOM

‘You are her.’ (i.e., you are playing her in a play, etc.)

(j) There are two major complementizers in SA. The first is the indicative complementizer. This has two forms. The first of these forms is the emphatic (or assertive) form, *?inna*. This form is characterized by being able to introduce root clauses (11a), matrix or embedded verbless clauses (11b-c), and tensed embedded clauses (11d), and it typically follows verbs of saying in embedded contexts. This complementizer assigns the accusative case to its adjacent NP.

(11) a. **?inna** l-?amṭaar-a ?a-ḡraq-at l-madiinat-a
 that.EMPH the-rains-ACC CAUS-flooded-3FSG the-city-ACC

‘Indeed, the rain flooded the city.’

- b. **ʔinna** ʔal-ʔaqs-a ɥaar-un l-yawm-a.
 that.EMPH the-weather-ACC hot-NOM the-day-ACC
 ‘Indeed, the weather is hot today.’
- c. qul-tu **ʔinna** l-ʔaqs-a ɥaar-un l-yawm-a.
 said-1SG that.EMPH the-weather-ACC hot-NOM the-day-ACC
 ‘I said that the weather is indeed hot today.’
- d. qult-tu **ʔinna** l-ʔamʔaar-a ʔa-ɣraq-at
 said-1SG that.EMPH the-rains-ACC CAUS-flooded-F
 l-madiinat-a
 the-city-ACC
 ‘I said that the rain has indeed flooded the city.’

The second form of the indicative complementizer is the neutral form, *ʔanna*, which can introduce only embedded tensed clauses (12a) and embedded verbless sentences (12b).⁹ This variant also assigns the accusative case to its adjacent NP.

⁹ Traditional Arab grammarians treat the complementizer *ʔanna* as an emphatic (assertive) particle on a par with *ʔinna*. However, Muṣṭafa (1957: 5) and Al-Maxzuomy (1986) argue that *ʔanna* does not bear any emphatic or assertive force. Al-Maxzuomy (1986: 316-317), in particular, shows that *ʔanna* cannot possibly emphasize that the eventuality expressed in its clause actually took place because this particle can introduce embedded sentences that express the meaning of doubt, as in (i):

(i) ʔ-ašukk-u ʔanna-ka muṣiib-un.
 1SG-doubt-INDIC that-you.MSG right-NOM
 ‘I doubt that you are right (Al-Maxzuomy 1986: 317)

I follow Muṣṭafa (1957) and Al-Maxzuomy (1986) on this issue. Note further that *ʔanna*, but not *ʔinna* can be found in conditional clauses, which encode hypothetical situations, as in (ii):

(ii) law *ʔanna* /**ʔinna* zayd-an saʔal-a-n-ii, la-ʔajab-tu-hu.

- (12) a. *ʕalim-tu ʔanna l-ʔamṭaar-a ʔa-ḡraq-at*
 learned-1.SG that.NEUT the-rains-ACC CAUS-flooded-3FSG
 l-madiinat-a
 the-city-ACC
 ‘I learned that the rain had flooded the city.’
- b. *ʕalim-tu ʔanna l-ʔamṭaar-a ḡaziirat-un.*
 learned-1SG that.NEUT the-rains-ACC heavy-NOM
 ‘I learned that there is heavy rain.’

The second major type of complementizers in SA is the subjunctive complementizer, *ʔan*, which obligatorily introduces embedded clauses in the subjunctive form, as in (13) below:¹⁰

- (13) *ʔaraad-at l-ṭaalibat-u ʔan t-arsum-Ø-a/*u/*Ø*
 wanted-3FSG the-student-NOM that.SUBJ F-draw-SG-SUBJ/*INDIC/*JUSS
 lawḥat-an.
 picture-ACC

if that.NEUT/that.EMPH Zayd-ACC asked-3MSG-n-me CONJ-answered-1SG-him
 ‘Had Zayd asked me, I would have answered him.’

The sentence in (ii) confirms the proposal that *ʔanna*, but not *ʔinna* has a neutral sense, for one can only confirm things that took place, not things that might have taken place, but did not.

¹⁰ I will argue in Chapter 5 that both the indicative complementizers *ʔinna/ʔanna* and the subjunctive complementizer *ʔan* have phasal status.

‘The student wanted to draw a picture.’

(1) SA has structures equivalent to obligatory control structures in other languages, where the subject of the null category in the embedded clause is controlled by the referent in the matrix clause, as in (14):

- (14) a. ḥaawal -a **zayd-un_i** [CP ?an *e_{i/*j}* y- uḡaadir-Ø-a.]
- tried-3MSG Zayd-NOM that.SUBJ 3-leave-MSG-SUBJ
- ‘Zayd tried to leave.’
- b. ?istataaʕ-a **zayd-un_i** [CP ?an *e_{i/*j}* y- uḡaadir-Ø-a.]
- managed-3MSG Zayd-NOM that.SUBJ 3-leave-MSG.SUBJ
- ‘Zayd managed to leave.’

This type of sentences is important, as the status of the subject of the embedded clauses (*pro*, *PRO* or NP-trace) has consequences from a case-theoretic perspective.

3.3 Case in Medieval Arabic grammar

Medieval Arab grammarians of the 8th century and their followers had their account of case alterations on nouns in SA. The major contribution of the Medieval Arab grammarians of the 8th century is the discovery that certain lexical items can influence the case of the nouns. Thus, case endings on nouns (*raʕʕ* ‘nominative case’, *naʕb* ‘accusative case’, and *jarr* ‘genitive case’) can be determined by the presence or lack thereof of certain lexical items that precede

them, which the Medieval Arab grammarians called operants (see Baalabaki 2008: 32-33). The following is just a quick overview of the basic ideas expressed in this rich tradition:

(a) The subject is obligatorily postverbal (this is the view of the predominant Baṣrah grammarians of the 8th century, specifically Sibawayhi and his followers). The subject in this view is assigned the nominative case by the operant, the verb, as can be seen in the following example (cf. Ibn ʿaqqil 13th c./1980, Vol.2: 76):

(15) ʔataa **Zayd-un.**

 came.3MSG Zayd-NOM

 ‘Zayd came/Zayd has come’ (Ibn ʿaqqil 13th century/1980: 76)

(b) When the NP appears before the verb, the NP is not a subject but a preverbal topic phrase, and the subject is a covert pronoun (this is also the predominant view of the Baṣrah grammarians of the 8th century, specifically Sibawayhi and his followers) (cf. Ibn ʿaqqil 13th c./1980, Vol.2: 77). This is illustrated by the example in (16):

(16) **Zayd-un** qaam-a (*huwa)

 Zayd-NOM stood.up-3MSG (*he)

 ‘Zayd, he stood up.’

In (16), the Baṣrah grammarians of the 8th century propose that the preverbal NP *Zayd* ‘Zayd’ is a topic phrase (called a *mubtadaʔ* in their terminology), and the true subject of the sentence is the obligatorily covert (phonetically unpronounced pronominal subject *huwa* ‘he’). In this view, the preverbal NP *Zayd* ‘Zayd’ receives its nominative case as a reflex of the fact that it introduces

the sentence and nothing else precedes it. Since no overt operant seems to influence the nominative case of the topic phrase, Medieval Arab grammarians propose that there is a covert operant which determines the nominative case on the topic phrase, and they term this covert operant *ʔal-ʔibtidaaʔ* ‘being the first lexical item that introduces the sentence and no overt operants precede it’. As for why nominative case should mark topic phrases, they propose that nominative case is the first state of the nouns (i.e. the origin), and any other cases including nominative cases on NPs other than preverbal topics are to be explained by the influence of either an overt or a covert operant (cf. Baalabaki 2008: 76).

(c) The subject of verbless (or nominal sentences in Medieval Arabic grammar) is also a topic phrase (termed *ʔal-mubtadaʔ*) rather than a subject. The NP predicate is termed *ʔal-xabar* ‘the comment’. This is illustrated in (17):

(17) **Zayd-un ʕaalim-un.**

Zayd-NOM scientist-NOM

‘Zayd is a scientist.’

In this tradition, the NP *Zayd* ‘Zayd’ is a topic phrase and the NP predicate *ʕaalim* ‘scientist’ is a comment. The nominative case on the topic phrase is assigned by the covert operant ‘*ʔal-ʔibtidaaʔ*’ (i.e. being the first lexical item that introduces the sentence and is not preceded by any overt operants), and the nominative case on the NP predicate is assigned by the topic phrase itself (cf. Ibn ʕaqiil 13th c. 1980, Vol. 2: 200).

(d) The subject of passive sentences is assigned the nominative case by the verb (cf. Ibn ʕaqiil 13th c. 1980, Vol. 2: 111). This is illustrated in (18):

(18) qutil-a **Zayd-un**

killed-3MSG Zayd-NOM

‘Zayd was killed.’

(e) The active transitive verb can assign the accusative case to one object, two objects or three objects (cf. Hasan 1962: 7). This is illustrated in (19):

(19) a. ?ištary-tu **qamḥ-an**

bought-1SG wheat-ACC

‘I bought wheat.’

b. ḡann-a l-ṭayyaar-u **l-biyuut-a** **?akwaax-an**

believed-3MSG the-pilot-NOM the-houses-ACC cottages-ACC

‘The pilot believed the houses to be cottages.’ (Hasan 1962: 7)

c. ?-aray-tu **l-xubaraa?-a** **l-?aaṭaar-a** **kunuuz-an**

CAUS-showed-1SG the-experts-ACC the-ruins-ACC treasures-ACC

‘I showed the experts that the ruins were treasures.’ (Hasan 1962: 58)

In (19a), traditional Arab grammarians hold that the object NP *qamḥ* ‘wheat’ is assigned the accusative case by the verb. In (19b), they hold that the NPs *l-biyuut* ‘the houses’ and *?akwaax* ‘the cottages’ are both objects of the matrix verb *ḡann* ‘to believe’, and that the verb assigns accusative case to both objects. In (19c), traditional Arab grammarians hold the view that the NPs *l-xubaraa?* ‘the experts’, *l-?aaṭaar* ‘the ruins’, *kunuuz* ‘treasures’ are all objects of the

matrix verb *raʔara* ‘to show/to cause to see’, and that the matrix verb assigns accusative cases to all three objects (cf. Hasan 1962: 150).

(f) The auxiliary verb ‘k-w-n’ can be added to verbless (i.e. nominal sentences in Medieval Arabic grammar), and it assigns the nominative case to the topic phrase and the accusative case to the NP predicate (or adjectival predicate). Other verbs which belong to the same class are the verbs *ḍalla*, *baata*, *ʔaḍḥaa*, *ʔaṣbaḥa* ‘to change from one state to another’, *zaala*, *baraḥa*, *fatiʔa*, *ʔinfakka*, and all have the meaning of ‘to continue’. To illustrate, consider the following example with the auxiliary verb ‘k-w-n’:

- (20) *kaan-a* **Zayd-un** **ʕaalim-an**
 was-3MSG Zayd-NOM scientist-ACC
 ‘Zayd was a scientist’

Traditional Arab grammarians hold the view that the auxiliary verb assigns nominative case to the first NP *Zayd* ‘Zayd’, and accusative case to the predicate nominal *ʕaalim* ‘scientist’ (cf. Ibn ʕaqiil 13th c./1980, Vol. 1: 261).

(g) Grammarians of the Baṣrah school of grammar hold the view that the particles *ʔinna* ‘that of emphasis’, *ʔanna* ‘that’, *laakinna* ‘but’, and the verbs *layta* ‘wish’, *laʕalla* ‘beseach’ can all be added to verbless sentences, and they have the opposite effect to that of the auxiliary ‘k-w-n’ and the other verbs in its class in that they assign the accusative case to the topic phrase and the nominative case to the predicate nominal (cf. Ibn ʕaqiil 13th c./1980, Vol. 1: 345). This is shown in the following example:

(21) ʔinna **Zayd-an** **ʕaalim-un**
 that.EMPH Zayd-ACC scientist-NOM

‘Indeed, Zayd is a scientist.’

In contrast to the view of the Baṣrah grammarians, grammarians of the Kuufa school of grammar hold the view that the nominative case of nominal predicate in examples such as (21) is not assigned; instead, this case for them is the result of the absence of any overt operants that assign case to the predicate nominal (cf. Ibn ʕaqiil 13th c./1980, Vol. 1: 348).

(h) To account for those cases where the topic phrase receives the accusative case instead of the predicted nominative case assigned by the covert operant ‘*ʔal-ʔibtidaaʔ*’ (i.e. being the first lexical item that introduces the sentence and is not preceded by any overt operants), traditional Arab grammarians claim that the topic phrase in such constructions is assigned accusative case by a covert verb, which is identical to the overt verb that preceded the overt postverbal subject. Thus, they propose that the sentence in (22a) is covertly understood as (22b):

(22) a. **Zayd-an** ḍarab-tu-**hu**
 Zayd-ACC hit-1SG-**him**

‘Zayd, I hit him’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 156)

 b. (*ḍarab-tu) **Zayd-an** ḍarab-tu-**hu**
 hit-1SG Zayd-ACC hit-1SG-**him**

‘I hit Zayd, I hit him.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 156)

(i) The accusative case borne by the cognate object (called absolute object in traditional Arabic grammar) is assigned to it by either the nominized verb (23a), the verb (23b) or the participle (23c) (cf. Ibn ʿaqqil 13th c./1980, Vol. 2: 170):

- ‘I was shocked by your brutal hitting of Zayd.’ (Ibn Saqiil 13th c./1980, Vol. 2: 150)

- ‘I brutally hit Zayd.’ (Ibn ʿaqqil 13th c./1980, Vol. 2: 150)

c. ʔanaa ɖaarib-un Zayd-an **ɖarb-an**

I hit.PTPL-NOM Zayd-ACC hitting-ACC

‘I am hitting Zayd brutally/I will be brutally hitting Zayd.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 150)

In (23a), traditional Arab grammarians hold that the absolute object (=cognate object) *ɖarb* ‘hitting’ is assigned the accusative case by the nominalized verb *ɖarb-i-ka* ‘your hitting’. In (23b), they hold the view that the absolute object is assigned the accusative case by the verb, and in (23c), it is assigned the accusative case by the present participle *ɖaarib* ‘hitting’.

(j) The object of reason or purpose is assigned the accusative case by the preceding verb (24a):

(24) jud-Ø-Ø **ʕukr-an**

be.generous-2MSG-JUSS gratefulness-ACC

‘Be generous as a gesture of gratefulness.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 192)

(k) The object of accompaniment (i.e. comitative object) is assigned the accusative case either by the preceding verb (25a) or the preceding participle (25b):

(25) a. siir-ii wa **l-ɖariiɖ-a**

walk-2FSG and the-road-ACC

‘Walk along the road.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 202)

b. Zayd-un saaʔir-un wa **l-ɖariiɖ-a**

Zayd-NOM walk.PTPL-NOM and the-road-ACC

‘Zayd is walking along the road/Zayd will be walking along the road.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 202)

(l) Adverbial NPs are assigned the accusative case either by the verb (26a) or by the nominalized verb (26b) (cf. Ibn ʕaqiil 13th c./1980, Vol. 2: 192):

- (26) a. ɖarab-tu Zayd-an **yawm-a** **l-jumuʕat-i**
 hit-1SG Zayd-ACC day-**ACC** the-Friday-GEN

‘I hit Zayd on Friday.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 192)

- b. ʕajib-tu min ɖarb-i-ka Zayd-an
 shocked-1SG by hitting-GEN-your.MSG Zayd-ACC
 yawm-a **l-jumuʕat-i**
 day-**ACC** the-Friday-GEN

‘I was shocked by your hitting of Zayd on Friday.’ (Ibn ʕaqiil 13th c./1980, Vol. 2: 192)

3.4 Previous generative accounts of case in SA

Various treatments of case in SA have been offered in Agree based accounts of case, as in Raḥḥali (2003), Ouhalla (2005), Soltan (2007), Al-Balushi (2011, 2012), and Leung (2011). Another account is that of Fassi Fehri (1993), which is the only work in the literature on SA where a hierarchical case account is proposed. The following subsections address these accounts and discuss the problems that they encounter.

3.4.1 Agree-based account of case in SA

Raḥḥali (2003: 147) proposes that in SA, structural nominative case is licensed by T, and he proposes that case on an NP is checked in one of two ways.¹¹ Assuming Chomsky (1998, 1999), Raḥḥali (2003: 147) proposes the nominative parameter in (27):

(27) The nominative parameter:

The nominative feature is checked:

- (a) Either via Agree, or
- (b) via incorporation

Raḥḥali (2003: 147) proposes that in the VSO order, the subject does not raise to Spec, TP. Instead, it is in Spec, vP, and nominative case is checked via an Agree relation between the functional head T and the subject in Spec, vP. This is illustrated by (28):

(28) [TP naam-a T [vP l-ʔawlaad-u v VP]]

slept-3MSG the-boys-NOM

‘The boys slept.’ (Raḥḥali 2003: ex. 45a: 147)

¹¹ There is controversy in the literature on whether the SA verbal inflection shows a tense distinction (traditional Arab grammarians) or an aspectual distinction (Caspari 1859, as cited in Fassi Fehri 1993: 141). Following Fassi Fehri (1993, chapter 4: 141-212), I assume that the verbal inflection in SA shows tense, aspect and mood features.

The author claims that the subject DP *l-ʔawlaad* ‘the boys’ checks its [uCase: NOM] feature against the [uCase: NOM] feature of the functional head T via the relation Agree.

For Raḥḥali (2003), another way of checking the structural nominative feature of the subject DP is via incorporating the subject into the functional head T, and this will yield the null subject cases (i.e. cases with no overt lexical subject postverbally). This is illustrated in (29):

(29) [TP naam-uu [_{VP} <-uu> v VP]].

slept-3MPL

‘They slept.’ (Raḥḥali 2003, ex. 45b: 147)

Following Fassi Fehri (1990, 1993), Raḥḥali (2003) assumes that pronominal subjects incorporate into the functional head T, which hosts the lexical verb, the latter raises to T from v-V. The pronominal subject in (29) is in Spec, vP, and it raises to incorporate to T in order to check its [uCase: NOM] feature against the matching [uCase: NOM] feature of the functional head T. As for the SVO order, Raḥḥali (2003) treats the preverbal lexical DP as a topic in a left-peripheral position.

The major problem with Tense as the locus of case licensing is that it is not tenable cross-linguistically. A number of linguists argue that DPs bear nominative case even when the functional head T is non-finite (where finiteness is defined morphologically and semantically as

the availability of tense and agreement). For example, McFadden and Sunderasen (2011) provide the example in (30) from Tamil:

- (30) a. [vasu poori porikk-a] raman maavu
 vasu.NOM poori.ACC fry-INF Raman.NOM flour.ACC
 vaangi-n-aan
 buy-PST-M.3SG

‘Raman bought flour for Vasu to fry pooris’ (McFadden and Sunderasen (2011, ex. 7a: 5)

- b. [naan poori porikk-a] raman maavu
 [I.NOM poori.ACC fry-INF Raman flour.ACC
 vaangi-n-aan
 buy-PST-M.3SG

‘Raman bought flour for me to fry pooris’ (McFadden and Sunderasen (2011, ex. 7b: 5)

The authors point out that in (30a), the DP *Vasu* gets nominative case even though it cannot be said to have agreed with the embedded verb, since the latter is clearly an infinitive, heading a tenseless clause. The example in (30b) shows that even agreement with the matrix verb is ruled

out, since the pronoun *naan* ‘I’ and the agreement markers on the matrix verb are not the same. In addition, the embedded clause in the examples above is an adjunct clause, therefore, any argument that the DP in the embedded clause gets its nominative case via Agree with the matrix verb does not hold.

McFadden and Sunderasen (2011: 6) provide the examples in (31) from Icelandic, which point to the same conclusion:

- (31) a. Jóni ?*virðist/virðast vera *talið/taldir
 John.DAT seem.SG/PL be believed.NT.SG/M.PL
 líka hestarnir.
 like horses.NOM.M.PL

‘John seems to be believed to like horses.’ (McFadden and Sunderasen (2011, ex. 10a: 6)

- b. Mér virðist/?*virðast Jóni líka hestarnir.
 Me.DAT seem.SG/PL John.DAT like horses.NOM.M.PL

‘It seems to me that John likes horses.’ (McFadden and Sunderasen (2011, ex. 10b: 6)

In (31a), the object DP *hestarnir* ‘horses’ is unambiguously in a nonfinite clause. The subject DP *Jóni* starts in the embedded clause and gets a dative case before raising to the matrix clause, since the matrix predicate is clearly a raising verb that does not assign a theta role. According to the authors, one can clearly claim that the subject DP fails to trigger agreement, being dative. In this case, the object DP establishes an Agree relation with the matrix clause, triggers agreement and gets nominative case as a result. However, (31b) shows that the object DP is still nominative even when there is a dative subject intervening between the object DP and the matrix verb. In other words, the object DP still gets the nominative case even when agreement is blocked by the intervening dative subject *Jóni* ‘John’. That agreement is blocked is obvious from the fact that the matrix verb gets default agreement. Crucial to this example is the fact that the object DP does not lose its morphological nominative case when blocking takes place and no agreement is established with the matrix verb.

Another argument against the view that Tense is the locus of structural nominative case comes from sentences with participials in SA, as can be shown in (32):

- (32) zayd-un qaari?-un l-kitaab-a
 Zayd-NOM reading.PTPL-NOM the-book-ACC
 ‘Zayd is reading the book.’
 ‘Zayd will be reading the book sometime in the future.’
 *‘Zayd was reading the book.’

The problem can be stated as follows. Fassi Fehri (1993: 181-184) and Al-Balushi (2011: 262-264) offer convincing evidence that sentences with participials lack a tense specification in SA.

Al-Balushi derives this conclusion from the fact that participials do not encode the [\pm Past] distinction, as can be seen in (33)

- (33) a. l-mudarris-aa-t-u řaarif-aa-t-un l-xabar-a
 the-teacher-p-f-Nom knowing-p-f-Nom the-news-Acc
 ‘the female teachers know the news today.’
 *‘the female teachers knew the news yesterday’
 ?? ‘the female teachers will know the news tomorrow’ (Al-Balushi 2011, ex. 140:
 263)
- b. l-malik-u řaazil-un řibn-a-hu
 the-king-Nom firing-Nom son-Acc-his
 ? ‘The king is firing his son today’
 * ‘the king was firing his son yesterday’
 ‘the king will be firing his son tomorrow’ (Al-Balushi 2011, ex. 141: 263)

Given examples such as (33), Al-Balushi establishes that participials lack the interpretable feature [Precedence], which, according to Cowper (2005), T must have. Assuming this analysis to be on the right track, we can proceed by raising the following question: If sentences with participials such as those in (33) lack a tense specification (or a tense projection

in the case of Al-Balushi 2011), how is the nominative case of the subject of those sentences licensed? In other words, if sentences with participials lack a tense specification, how can this be reconciled with the claim that Tense is the locus of structural case? Clearly, the subject of the sentences in the examples above receives nominative case despite the fact that the sentences do not encode a tense specification. If this the case, then examples such as these run counter to the predictions of the proposal that tense is the locus of case licensing in SA. Note that T in SA may encode the features of T(tense and ϕ), Mood, and Aspect (cf. Fassi Fehri 1993: 151-152). In principle, each of these features can license the nominative case of the subject. I take this as evidence that the nominative case in (33a-b) is not default case, since default case is the case mechanism that is bled by Agree-based case rather than vice versa (more on this in chapter 4).

The same arguments laid out against Raḥḥali (2003) also carry over to Benmamoun (1999), where structural nominative case is also the result of an agreement relation between T and the subject DP.

The second Agree-based account of case is that of Ouhalla (2005). In a novel attempt to derive categorial features from independently needed features, and specifically from agreement features, Ouhalla (2005) makes two major claims: (a) he uses data essentially from Berber to advance the proposal that feature matching and deletion is categorization by computation. In other words, following Chomsky's (2001) claim that categorial features such as [N] and [V] have no theoretical status, Ouhalla (2005) argues that categories such as [N] and [V] are not primitives, which are transferred from the lexicon to the syntactic component; rather, these labels are determined in the syntactic component of the grammar during the syntactic processes of matching and deletion. This way, categories such as [N] and [V] are the result of checking abstract features in the syntax. Subject-verb agreement, according to this view, reduces to the

process of matching and deleting the abstract agreement features of the verb and its related functional heads against those features of the subject. Ouhalla provides arguments to claim that the nominal category can be reduced to the feature [CLASS] and the verbal category, to the feature [PERSON], and (b) the agreement properties normally associated with T in some languages (e.g. English) is associated with an intermediate functional head, which Ouhalla calls Pred, as in Berber. In this account, subject-verb agreement is essentially the result of an agreement relation between a subject with the features [CLASS, PERSON, NUMBER] and a functional head Pred/T with the features [PERSON, CLASS]. In the process of agreement, the [PERSON] feature of the subject matches with the [PERSON] feature of the Pred/T. The result of matching is that the [PERSON] feature must survive in the feature content of the Pred/T; otherwise, Pred/T would fail to be categorized as a verbal category. By the same token, the feature [PERSON] must be deleted from the feature content of the subject; otherwise, the subject would fail to be categorized as a nominal category. Similarly, the feature [CLASS], which can have different values in different languages (e.g. GENDER), must survive in the feature content of the subject; otherwise, the subject would fail to be categorized as a nominal category, and the feature [CLASS] must be deleted from the feature content of Pred/T; otherwise they would fail to be categorized as verbal categories. In other words, both Pred/T and the subject have conflicting categorial features, [CLASS], which is a nominal feature, and [PERSON], which is a verbal feature. The only way to resolve the categorial conflict and be categorized as a verbal or a nominal category is for the subject to delete its verbal [PERSON] feature and retain its nominal [CLASS] feature, and for Pred/T to eliminate their nominal [CLASS] features and retain their verbal [PERSON] features. Ouhalla (2005: 672) argues that the difference in subject-verb agreement relative to T and the verb can be captured, as in (34):

- (34) a. Pred_[Person, Class] (LP)
- b. T_[Person, Class] (UP)

According to Ouhalla (2005: 672), the distribution of agreement features in (34a) describes languages such as Berber and SA, where the subject does not raise to Spec, TP, and instead remains in the lower phase (LP). By contrast, the distribution in (34b) describes languages such as English, French and German, where the subject raises to Spec, TP, and agreement takes place between T and the subject; therefore, agreement takes place in the upper phase (UP).

Ouhalla (2005: 681) argues that the feature [CASE] is likely to match with the verbal feature [\pm Past] of T and the aspectual feature [\pm perfective] of Aspect. This means, Ouhalla argues, that [CASE] is a verbal feature on nouns, and must therefore be deleted so that nouns can be categorized as nominal categories.

Ouhalla (2005: 682) further claims that the feature [CASE] is available for nouns, but not for pronouns, which only need [PERSON]. He states that “[t]here is a straightforward sense in which [PERSON] plays a role in the interpretation/reference of personal pronouns, and there is an equally straightforward sense in which the interpretation/reference of nouns does not depend on [PERSON].” This, according to Ouhalla, is what justifies the existence of the verbal feature [PERSON] alongside the verbal feature [CASE]. Ouhalla (2005: 682), moreover, claims that the conclusion that pronouns are unspecified for [CASE] does not necessarily mean that the distinction in the forms of the grammatical functions between the subject and the object cannot be maintained. This distinction, Ouhalla argues, can still be maintained in terms of the feature with which [PERSON] is matched. He writes that “[t]he subject form [of pronouns] is the result

of matching [PERSON] with the tense feature of T and the object form the result of matching [PERSON] with the aspectual feature of the verb.”

This account also faces problems. Consider first the following problem with Ouhalla’s (2005) account of case. Assume that pronouns are unspecified for [CASE], and that they have a [PERSON] feature instead. Assume further that the subject and object forms of the grammatical functions of pronouns can still be maintained in terms of the feature with which [PERSON] is matched. Let us also assume with Ouhalla (2005: 682) that that “[t]he subject form [of pronouns] is the result of matching [PERSON] with the tense feature of T and the object form the result of matching [PERSON] with the aspectual feature of the verb.”

Given the above set of assumptions, the null subject of imperative sentences which lack a tense specification would end up not being categorized according to the following reasoning: the grammatical function of subject in this account can only determined by checking the [PERSON] feature of the null subject pronoun against the tense feature of T. However, since T in imperative sentences lack a tense feature, it follows that the null subject pronoun of imperatives would not be determined. It is worth noting here that imperative sentences also cause a problem for the claim that it is the tense feature of T that checks the nominative case on the subject (see Raḥḥali 2003 above), since these sentences lack a tense specification, and have instead a mood specification.

Let us consider a second problem for Ouhalla’s (2005) account. Ouhalla (2005: 681) claims that there is “[e]vidence that noun phrases seek out the category with a verbal feature nearest to them [...]” He uses the data in (35) from SA to illustrate his point:

- (35) a. Kaanat Zaynab-u **mudarrisat-an.**
 be.3F.S Zaynab-NOM teacher-F.ACC
 ‘Zaynab was a teacher.’ (Ouhalla 2005, ex. 38a: 681)
- b. Zaynab-u **mudarrisat-un.**
 Zaynab-NOM teacher-F.NOM
 ‘Zaynab is a teacher.’ (Ouhalla 2005, ex. 38b: 681)

Ouhalla (2005: 681) claims that the nominal predicate in (35a) appears with the accusative case because the [CASE] feature of the nominal predicate is matched with the aspectual feature of the verb ‘be’, given that this verbal feature is the structurally closest one to the predicate nominal. He also claims that in (35b), the predicate nominal appears with the nominative case because there is no verb in the sentence; therefore, the [CASE] features of the predicate nominal and the subject are both matched with the tense feature of T. He claims that the verbal tense feature of T can be targeted twice in (35b) given that it is a verbal feature on T, which needs not be deleted, as T is a verbal category.

Keeping Ouhalla’s claims in mind, let us now consider sentences with psychological predicates, where both the subject and the object are assumed to be base-generated in the lexical domain VP (Chomsky 1995 and subsequent work). This is illustrated in (36):

- (36) y-axšaa **zayd-un** **l-dalaam-a**

3-fear.3MSG Zayd-NOM the-darkness-ACC

‘Zayd fears darkness.’

On standard accounts (see Chomsky 1986, Baker 1997), the predicate in (36) is unaccusative, the subject is base-generated in Spec, VP and the object is base-generated in the complement of VP position. Ouhalla’s (2005) account would predict that the [CASE] feature of the subject of (36) would appear as accusative, given that the aspectual feature of Asp would be structurally closer to both the subject and the object than the tense feature of T. However, this is not borne out by the facts, as the subject appears with nominative case rather than with accusative case. Notice that Ouhalla (2005) might object by claiming that the unaccusative-unergative distinction does not hold in SA. While this might turn out to be true, abandoning the idea that psychological verbs are internal to VP would also mean abandoning the The Universal Theta Role Assignment Hypothesis UTAH (Baker 1997), an unwelcome result.

The third Agree-based account of case is that of Soltan (2007), who makes the following claims:

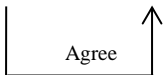
- (a) Phi-feature/CLASS agreement is the locus of case licensing. In Soltan (2007: 16-17), case is not a probing feature on case checking/valuation heads.
- (b) There is no evidence of any type of A-movement in SA. Particularly, SA does not show any evidence for A-movement in typical A-movement structures such as passives and raising constructions of the *seem*-type.

(c) An Agree-based syntax properly tackles the facts of SA. Agree can establish a relation between a probe and a goal, the only constraint being minimality considerations such as closest c-command. This way, agreement and case in SA can be established without either of these being driven by A-movement.

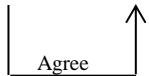
(d) T in SA has the following inventory of uninterpretable features: (i) ϕ features for person and number, which may also be realized as default; (ii) the peripheral P-feature (i.e. the EPP feature), (iii) CLASS feature, which surfaces as a gender feature in many languages. Following Ouhalla (2003, 2005, as cited in Soltan 2007), Soltan (2007: 69) points out that gender may be able to probe separately if it is not part of the ϕ -complex.

(e) The well-established asymmetry in agreement between the SV and VS orders are the result of two distinct syntactic derivations. The example in (37) (based on Soltan 2007:70-71) illustrates that T in the SV order agrees with a null subject, *pro*, hence the full agreement on T, and the preverbal DP is a topic phrase, situated in Spec, TP. The example in (38), on the other hand, illustrates that T agrees with a phonetically realized DP, and agreement in person and number on T is therefore default, but Agree does take place between T and the postverbal lexical subject in CLASS, which is realized in SA as GENDER:

(37) SV order: [CP C [TP DP T $\text{EPP}/\phi/\text{CLASS}$ [v^*P ***pro*** v^* [VP V...]]]]



(38) VS order: [CP C [TP T $\text{DEFAULT}/\text{CLASS}$ [v^*P **DP** v^* [VP V...]]]]



Unfortunately, Soltan (2007) does not address structures with first and second person subjects. However, given his system, these would fall into the SV order in (37), as agreement in person and number is realized in these structures. The fact that the EPP feature is available in the SVO order but not the VSO order seems to indicate that T in Soltan's system can be lexically specified differently in the two orders of SA.

(d) Following Uriagereka (2006, as cited in Soltan 2007), Soltan (2007:76) maintains that the left periphery is a zone rather than a position. Based on this conjecture, Soltan argues that the left periphery in SA is any position higher than v^*P . He therefore maintains that the Spec positions of the functional projections, TP, NegP, Mod(ality)P, AspP are all left peripheral positions. This assumption will become relevant when we address some of the problems with this account of case.

Soltan's account (2007, 2011) also faces some problems. This account considers that the preverbal DP is a topic situated in Spec, TP (or Spec, TopicP in Soltan 2011), which, for Soltan (2007), is an A'-position. Consider first the following problem: Soltan (2007) does not address what happens when the subject of the sentence happens to be a first or second person. However, given his system, this type of structures will presumably have a postverbal null subject *pro*, which is identified by agreement in ϕ , which is person and number as well as CLASS, i.e. GENDER which probes separately from ϕ in this system. To conform with the representation proposed for the SV order, the structure will also have a preverbal null *pro*, which is a topic in Spec, TP. This is illustrated by the following examples of structures with first and second person subjects:

- (39) a. *pro*_i katab-naa/*katab-a/*katab-at *pro*_i l-risaalat-a.
wrote-1PLM/*wrote-3MSG/*wrote-3FSG the-letter-ACC
‘We wrote the letter.’
- b. *pro*_i katab-tunna/*katab-ti *pro*_i l-risaalat-a
wrote-2FPL/wrote-3FSG the-letter-ACC
‘You (F.PL) wrote the letter.’

Note that sentences such as (39) cannot have a postverbal lexical subject. When this happens (as in 40), the sentences are ill-formed; they are only well-formed on a reading where the postverbal lexical pronominal subjects are interpreted as topics or focalized DPs:

- (40) a. *katab-naa naḥnu l-risaalat-a.
wrote-1PLM we.NOM the-letter-ACC
‘We wrote the letter.’ (on a neutral reading of *naḥnu* ‘we’)
- b. *katab-tunna ʔantuna l-risaalat-a¹²
wrote-3FPL/wrote-3FSG you.FPL.NOM the-letter-ACC
‘You (F.PL) wrote the letter.’ (on a neutral reading of *ʔantuna* ‘you’)

This means that these structures will have the representation given in (37) and repeated below as (41):

¹² These examples are perfectly grammatical on a focalized reading of the pronouns.

- (43) a. *kaan-at* ***l-banaat-ui*** *y-alṣab-na* *pro_i*
 was-3FSG the-girls-NOM 3-play-FPL
 ‘The girls were playing.’
- b. **kaan-at* *pro_i* *y-alṣab-na* *pro_i*
 was-3FSG 3-play-FPL
 ‘They (F.PL) were playing.’

Sentences such as (42) and (43) raise the following question: if the DP *l-ṭawlaad* ‘the boys’ in (42a) and *l-banaat* ‘the girls’ in (43a) are topical elements, then why are they obligatory?

Third, one of Soltan’s (2007) major arguments is that structural case is licensed via a long-distance Agree between a probe and a goal in its c-command domain. Soltan (2007: 70) claims that “[b]y assumption, then, T can appear with ϕ , CLASS [which, for Soltan 2007, can probe separately from ϕ , and is realized in many languages as Gender], EPP, or any combinations of these three, subject to lexical parametrization.” Soltan (2007: 70-71) then claims that “agreement with a *pro* subject is only compatible with a full T, necessarily required so *pro* can be identified and the derivation converges at the interface.” Keeping these theoretical assumptions in mind, we can now consider how Soltan (2007) treats the case facts of verbless sentences. To illustrate this, we can consider the example in (44) (adapted from Soltan 2007, ex. 24a: 55):

- (44) *Zayd-un* *fii-l-dar-i*
 Zayd-NOM in-the-house-GEN
 ‘Zayd is in the house.’

Soltan (2007: 54) treats the DP *Zayd* ‘Zayd’ as a topic, which receives default nominative case. Given Soltan’s theoretical assumptions, the subject of (44) must then be a null *pro* in the Spec, position of some functional head. This assumption is necessary; without it, the sentence would end up without a subject. The question that we should ask now is the following: how is the structural case of the null subject *pro* licensed? Clearly, the structural case of the null subject is licensed because the derivation does not crash, and the sentence is fully grammatical. Let us note that this question is crucial given Soltan’s assumption that agreement with a *pro* subject is only compatible with a full T. This means, on Soltan’s assumptions, that T in (44) must have EPP, ϕ and CLASS features. For Soltan, the topic phrase *Zayd* ‘Zayd’ in Spec, TP is licensed by the EPP feature on T. This leaves us with uninterpretable ϕ and CLASS features that have to be checked, valued and deleted in order for the derivation to converge at LF. Now, the pressing question is the following: how is *pro* in (44) licensed given that there is no morphological evidence that T has checked, valued and deleted its ϕ and CLASS features? To put it differently, what evidence do we have that T in (44) checked, valued and deleted its uninterpretable ϕ and CLASS features? The answer is clearly none given that T in (44) does not host any lexical element that can bear ϕ and CLASS features.

It is crucial to note that the claim that structural case is inherently linked with agreement (i.e. ϕ -feature checking and valuation) has already been challenged in the literature (see Carstens 2001, Alboiu 2006, 2009).

The fourth Agree-based account of case is that of Al-Balushi (2011), who argues against Soltan’s (2007) account that ϕ /CLASS-feature agreement is the locus of case licensing in SA and

against the view that considers Tense to be the locus of case assignment in SA (as has been argued to be the case in Benmamoun 1999, Raḥḥali 2003).

Al-Balushi (2011, 2012) makes the following claims:

(a) Structural case licensing in SA is the result of an unvalued verbal case [VC] feature on both heads, I and v^* , which probe for a Goal, and they both receive valuation from a matching but valued [VC] feature on the head of finiteness, Fin, located in the C domain. As a result of this checking and valuation, a subject DP in Spec, v^*P with a [uCase] feature searches upwards for the probe I, which has now a valued [VC] feature and checks and values its [uCase] feature as structural NOM. Similarly, the object DP with a [uCase] feature searches upwards for the probe, v^* , which has now a valued [VC] feature. As a result, the object DP in the complement of V checks and values its [uCase] feature as structural ACC. In such a system, either element (Probe or Goal) may c-command the other.

(b) In disagreement with Chomsky (2001), where only a probe with the full set of ϕ -features can license the [Case] feature on the Goal, Al-Balushi (2011: 36-37) argues that the [Case] features of subjects and objects in SA are licensed even in the presence of a defective Probe (i.e. a Probe which does not have the full set of ϕ -features) in the VS order, which is the unmarked order in the language. The author takes this as evidence against the hypothesis that structural case licensing is a reflex of ϕ -agreement, contra Schütze (1997), Chomsky (2001 and subsequent work) and Soltan (2007).

The crucial argument of Al-Balushi (2011, 2012) is that argumental lexical DPs can only be case-licensed as a result of verbal licensing. Thus, for arguments to be licensed for case, both T and v must have a [V] feature, which needs to be valued before the latter can license case on

argumental DPs. For that to happen, the head, Fin^0 must c-select “an XP that has both a categorial [V] feature and at least one I-finiteness ([T], or [Mood], or [ϕ])” (Al-Balushi 2012: 10). Given this account, the categorial [V] features of T and v^* can only be valued against a valued [V] feature of Fin^0 . It is only after such valuation takes place that the functional heads, T and v^* can case-license their respective arguments, namely the subject DP and the object DP respectively.

There are a number of problems that can be pointed out here. First, Al-Balushi (2011, 2012) uses the idea that argumental DPs can only be case-licensed when verbs are case-licensed to argue that argumental subject *pro_s* in verbless sentences in SA need not be case-licensed. In other words, given that such sentences lack verbs, it follows, Al-Balushi argues, that the argumental subject *pro* in this type of sentences does not need to be case-licensed. Thus, Al-Balushi argues that the null subject, *pro* in the example in (45) is licensed and made visible at LF not by case, but rather by coindexation with the topic phrase, *ʔar-raqjul* ‘the man’.

- (45) **l-rajul-u_i** [**pro_i**] mariid -un.
the-man-NOM sick-NOM

'The man is sick.' (adapted from Al-Balushi 2012: ex.31: 8)

The problem with this argument can be stated as follows: Al-Balushi (2012: 1) states that he “assumes the Visibility Condition, under which *structural Case is necessary* to make arguments visible at LF for θ -role assignment[...] [emphasis added]” Yet, in his discussion of verbless sentences, he argues that the argumental *pro* does not need to receive case. In other

words, if arguments need case to be visible at LF, and if *pro* is an argument, then surely *pro* must also get case to be visible at LF.

Second, in his discussion of verbless sentences, which are c-selected by the emphatic complementizer, *?inna*, Al-Balushi (2012) offers the examples in (46) and states that “[t]hese sentences show that *?inna* assigns ACC to a following noun, *which always has the status of topic*[emphasis added]” (Al-Balushi 2012: 19).

- (46) a. *?inna* **l-mudarris-ii-n** mujtahd-uun.
 COMP the-teacher-PL.ACC hard.working-PL.NOM
 ‘Certainly the teachers are hardworking.’ (Al-Balushi 2012: ex.60: 19)
- b. *?inna* **l-mudarris-ii-n** ya-jtahid-uu-n.
 COMP the-teacher-PL.ACC IMP-work.hard-3MPL-INDIC
 ‘Certainly the teachers work hard.’ (Al-Balushi 2012: ex.61: 19)

As a matter of fact, there are contexts such as the example with the expletive in (47) in which the noun bearing ACC and following *?inna* can only be interpreted as an argumental subject DP rather than a topic, contrary to Al-Balushi’s claim.

- (47) *?inna* hunaaka **rajul-an** fii l-daar-i.
 that.EMPH there man-ACC in the-house-GEN
 ‘Indeed, there is a man in the house.’

Crucially, the subject in Spec, PP (or Spec, PredP on Al-Balushi's account), namely, *rajul* 'man' still gets ACC from the complementizer, the latter assigning lexical accusative case to the DP on Al-Balushi's account. Notice, though, that such sentences pose a problem for Al-Balushi for the following reasons. First, the DP, *rajul* 'a man' cannot be treated as a topic, because it has one reading in which it is non-specific indefinite. Second, the existential expletive, *hunaaka* 'there' cannot be a topic given that it lacks meaning. Given the above reasoning, the only option left on Al-Balushi's account is to argue that the DP, *rajul* 'a man' is a subject in Spec, PP, and it receives lexical ACC from the complementizer. As for the existential locative *pro*-form, the only option left on Al-Balushi's account is to argue that it occupies the Spec, TP position. If such is the case, the question immediately arises as to how the nonmodified indefinite subject, namely, *rajul* 'a man' in the Spec, PP position is licensed. Notice that this question is crucial, given that there are no verbs in the structure to license the subject in Spec, PP; yet, the sentence is grammatical. On Al-Balushi's account, the mechanism available for licensing the subject in Spec, PP has to be coindexation. Notice, however, that this is not possible here given the absence of a topic phrase that can license the subject via coindexation. On standard accounts (Chomsky 1991: 442-443), the existential expletive in such constructions is an LF affix, and the associate NP raises at LF to adjoin to the affix, and both form one NP. The only reasonable analysis of such sentences on Al-Balushi's account is to assume that the pleonastic expression is a topic phrase licensed at LF via the abstract feature [Topic] and coindexation is therefore possible between the pleonastic expression and the lexical DP in Spec, PP. However, pleonastic expressions cannot be topics because they are not referential.

Third, consider sentences such as (48):

(48) *fii* *l-daar-i* *rajul-un.*
 in the-house-GEN man-NOM

‘In the house is a man.’ (adapted from Fassi Fehri 1986, ex. 38: 113)

Fassi Fehri (1986: 113) treats the DP *rajul* ‘man’ in (48) as the subject of the sentence, and the PP *fii l-daar* ‘in the house’ as a topic phrase or a focus phrase. Assuming this analysis to be on the right track, this presents the following problem for Al-Balushi. The DP *rajul* ‘man’ is licensed for case without there being a coindexing topic that licenses it at LF. Also, the sentence lacks a verb with a [VC] feature that can license the subject. In other words, here we have a sentence in which the subject’s case is licensed neither by a [VC] feature nor by coindexation, contrary to Al-Balushi’s (2011) predictions. Notice especially that Al-Balushi (2011, 2012) might claim that both the PP *fii l-daar* ‘in the house’ and the DP *rajul* ‘man’ are topics in his account, and the subject is thus a null *pro* coindexed with the topic phrase *rajul* ‘man’ in (48). However, such a claim would create the following problem: the PP would have to be base-generated within the TP domain; otherwise, we end up with a sentence with no predicate. Given this scenario, the PP must have moved to its surface position in Spec, TopP from its base-position within TP. However, such a movement entails that the PP moved across another topic phrase, namely the DP *rajul* ‘man’, a movement which is barred on standard accounts.

The fifth Agree-based account of case is that of Leung (2011), who puts forward the hypothesis that Mood in the C domain is the locus of structural case assignment in SA. The author notices that there is a correlation in SA between the grammatical mood of the embedded clause and the choice of the embedded complementizer such that embedded clauses with the

indicative mood are associated with the embedded indicative complementizer *ʔinna* and its variant *ʔanna*. He also notices that embedded clauses with the subjunctive mood are associated with the subjunctive complementizer *ʔan*. The correlation can be shown by the pair of examples in (49) and (50):

- (49) *samiʕ-tu* **ʔanna**/**ʔan* *Zayd-an*
 heard-1SG that.**INDIC**/*that.SUBJ *Zayd-ACC*
 y-uriid-Ø-u/**y-uriid-Ø-a* *l-safar-a*
 3-want-MSG-**INDIC**/*3-want-MSG-SUBJ the-traveling-ACC
 ‘I heard that Zayd wanted to travel.’
- (50) *ʔaraad-a* *Zayd-un* **ʔan**/**ʔanna*
 wanted-3MSG *Zayd-NOM* that.**SUBJ**/*that.**INDIC**
 y-aktub-Ø-a/**y-aktub-Ø-u* *risaalat-an*
 3-write-MSG-**SUBJ**/*3-write-MSG-INDIC letter-ACC
 ‘Zayd wanted to write a letter.’

Leung (2011: 137-138) interprets this correlation as evidence that there is C-T agreement between the embedded T and the embedded complementizer in the feature [Mood], which, he argues to be uninterpretable on the embedded T but interpretable on the embedded C. Agreement and valuation in Mood, argues Leung (2011), is, therefore, the locus of structural case in SA. Adopting Chomsky (2000), Leung (2011) argues that C has a set of formal features, which are transferred from C to T. Mood is one of those features, and structural case is a reflex of C-T agreement in Mood. This model can be schematized as in (51) (from Leung 2011: 137):

(51) Stage one:

[TP DP	T ₁	[VP V [CP C	[TP DP	T ₂	[VP [VP V]
	[α mood]	[ω mood]		[0 mood]	
[β phi]	[β phi]	[0 phi]	[χ phi]	[0 phi]	
	[γ tns]	[0 tns]		[ψ tns]	

Stage two:

[TP DP	T ₁	[VP V [CP C	[TP DP	T ₂	[VP [VP V]
	[α mood]	[ω mood]		[0 mood]	
[β phi]	[β phi]	[χ phi]	[χ phi]	[0 phi]	
	[γ tns]	[ψ tns]		[ψ tns]	

Stage three

[TP DP	T ₁	[VP V [CP C	[TP DP	T ₂	[VP [VP V]
	[α mood]	[ω mood]		[ω mood] ¹³	

¹³ In Leung (2011), the value of the mood feature on T₂ in Stage 3 is 0. I assume that this is a typo. This assumption is confirmed by the fact that on the next page (Leung 2011: 138), the author claims that the complete set of valued formal features on C is transferred to T in Stage 3.

[β phi]	[β phi]	[χ phi]	[χ phi]	[χ phi]
	[γ tns]	[ψ tns]		[ψ tns]

In (51), Leung (2011: 137-138) claims that the valued mood and ϕ -features of the matrix T are inaccessible for further computation, as indicated by the strikethrough notation. He claims that the embedded C has an interpretable mood feature, but uninterpretable ϕ and tense features in Stage one. He also claims that in Stage two, the uninterpretable ϕ feature on the embedded C is valued via agreement with the interpretable ϕ feature of the embedded DP, the uninterpretable tense feature of the embedded C is valued via agreement with the interpretable tense feature of T₂. In Stage 3, Leung claims that the complete valued features of mood and phi are transferred to T through the mechanism of feature inheritance (as in Chomsky 2000).

To show the close relationship between mood on C and accusative vs. nominative subjects, Leung (2011: 141) provides the schematic structures in (52) and (53):

(52)	[TP DP	T ₁	[VP V [_{CP} <i>inna</i>	[TP DP	T ₂	[VP [VP V]...
		[+ indic]	[+ indic]	[+ acc]	[+ indic]	
	[β phi]	[β phi]	[χ phi]	[χ phi]	[χ phi]	
		[γ tns]	[ψ tns]		[ψ tns]	

(53)	[TP DP	T ₁	[VP V [_{CP} <i>an</i>	[TP DP	T ₂	[VP [VP V]...
		[+ subj]	[+ subj]	[+ nom]	[+ subj]	
	[β phi]	[β phi]	[χ phi]	[χ phi]	[χ phi]	
		[γ tns]	[ψ tns]		[ψ tns]	

The example in (52) represents embedded sentences that are introduced by the indicative complementizer *ʔinna*. According to Leung, the indicative complementizer *ʔinna* has an interpretable mood feature with the value [+indic]. This feature c-commands the embedded subject in Spec, TP and assigns to it structural accusative case. The valued mood feature of C is also transferred to the embedded T via feature inheritance. As for (53), Leung claims that the embedded subjunctive complementizer has an interpretable mood feature with the value [+subj], that it assigns the nominative case feature to the embedded subject under c-command. The valued mood feature is also transferred to the embedded T via feature inheritance.

Having discussed Leung's (2011) conjecture, there are a number of problems that face this account.

First, to provide evidence for his account, Leung (2011: 143) offers (74)

- (54) *samiʕ-tu* *ʔanna-hu* *sa-t-usaafir-Ø-u* ***l-bint-u***
 heard-SG that-it.ACC will-3F-travel-SG-INDIC the-girl-NOM
 ḡad-an.
 tomorrow-ACC

'I heard that the girl will travel tomorrow.' (adapted from Leung 2011, ex. 40c: 143)

Leung (2011: 143) claims that (54) provides evidence for his account that C and T have the same set of formal features. He claims that the indicative complementizer *ʔanna* in (54) has a strong and uninterpretable [+D] feature, which attracts the pronominal clitic *-hu* to it for valuation. In

his characterization of the pronominal clitic *-hu*, Leung (2011, fn. 18: 143) cites Ryding (2005) as claiming that “[t]he pronoun clitic *-hu* is argued to function as a generic buffer pronoun that is independent of the subject of the embedded clause[...]. This is analogous to English ‘that’ which incorporates a [+D] feature (i.e. it refers to the embedded clause).” Leung does not clarify how case assignment works in (54). Assuming Leung’s account, we can claim that the indicative complementizer *ʔanna* has an interpretable mood feature with the value [+ indic]. This means that the complementizer assigns the structural accusative to “the generic buffer pronoun that is independent of the subject of the embedded clause.” This account faces the following problem: on the assumption that the indicative complementizer has a [+ indic] feature, and the assumption that T inherits the valued mood feature from C, how do we explain the nominative case on the the subject *l-bint* ‘the girl’ in (54)? In other words, given that C in (54) has a [+ indic] mood feature, this feature is transferred to T. T now has a valued [+ indic] mood feature. T agrees with the subject *l-bint* (or with C); yet, instead of the predicted structural accusative case, we have the unpredicted structural nominative case.

Second, Leung’s (2011) account implies that the subject of root sentences should receive the structural accusative case, contrary to fact. To illustrate, let us consider (55):

- (55) y-aktub-Ø-**u** **zayd-un/*zayd-an** risaalat-an l-ʔaan-a
 3-write-MSG-INDIC Zayd-NOM/*Zayd-ACC letter-ACC the-now-ACC
 ‘Zayd is writing a letter now.’

In (55), T, which hosts the verb, bears the indicative mood marker *-u*. Adopting Leung’s (2011) analysis, this should mean that T inherited its mood feature value [+ indic] from the null

counterpart of the overt indicative complementizer *ʔinna*, which bears the interpretable counterpart of the mood feature. This in turn would predict, on Leung's (2011) account, that the subject *zayd* 'Zayd' should receive the structural accusative case, contrary to fact.

Having discussed the major problems with the Agree-based accounts of case, there are some other problems that can be laid out against more than one of these accounts. First, the view that the tense feature of T is responsible for nominative case on the subject (Raḥḥali 2003) and the view that case is a verbal feature on nouns (Ouhalla 2005) both face problems with case in imperative sentences. Al-Balushi (2011: 46-50) provides convincing evidence that imperative sentences lack a TP specification in SA. Among the arguments that he uses is the fact that imperative verb forms do not realize the [\pm Past] distinction, and this distinction is not observed semantically given that the only temporal interpretation of imperatives is that of future orientation. Assuming that this claim is on the right track, the view that Tense is the locus of structural nominative case is difficult to maintain if imperatives whose null subjects are licensed for case lack a Tense specification. Note that the null subject of imperative sentences has to be marked for nominative case rather than accusative case because in SA the subject, in the absence of an accusative case assigner such as the indicative complementizer *ʔinna* and its variant *ʔanna* or the matrix verbal predicate of an ECM construction, always surfaces with the nominative case. Similarly, the null subject pronoun of imperative sentences would fail to be categorized as a subject in Ouhalla's (2005) account if imperative sentences lack a tense specification, the feature responsible for checking the [PERSON] feature of pronouns in this account.

Second, accounting for case assignment in ECM constructions would be difficult for the view that tense feature is the locus of nominative case in SA (Raḥḥali 2003), the view that case is

a verbal feature (Ouhalla 2005) and the view that Agree in GENDER or ϕ -features (Soltan 2007, 2011) is the locus of case checking in SA. This is because the embedded clause in these sentences is finite both morphologically (having ϕ -features) and semantically (the ability to have distinct tense specification) (more on this in chapter 5). This means that the embedded T should be able to assign it nominative case rather than the obligatory accusative case it surfaces with, contrary to the predictions of Raḥḥali (2003), Ouhalla (2005) and Soltan (2007, 2011). Note that this problem can be overcome if multiple case checking is allowed. However, none of these authors, as far as I can tell, allows multiple case checking in their accounts.

Third, structures with event-denoting nominals provide evidence against all Agree-based account of case. In these structures, the lexical root starts the derivation as a verb before being nominalized later in the derivation. These structures project a vP, witnesses the fact that they can bind an anaphor, as in (56b), as well as the fact that the structures can be modified by agentive adverbials, as in (56a-b). However, instead of the predicted structural accusative case, the theme object inside the DP receives an obligatory genitive case.

- (56) a. y-uriid-Ø-u [DP ntiqaad-a *PRO* **l-rajul-i**/*l-rajul-a]
 3-want-MSG-INDIC criticizing-ACC the-man-GEN/*the-man-ACC
 bi-qaswat-in/*l-qaasiy-a
 with-bitterness-GEN/the-bitter-ACC
 ‘He wants to criticize the man with violence.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)
- b. y-uriid-Ø-u [DP ntiqaad-a *PRO* **nafs-i-hi**/*nafs-a-hu]
 3-want-MSG-INDIC criticizing-ACC self-his-GEN/*self-his-ACC

bi-qaswat-in/*l-qaasiy-a

with-bitterness-GEN/the-bitter-ACC

‘He wants to criticize himself with violence.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)

If structural accusative case is the result of an Agree relation between the probe v^* and the goal, the object DP *l-rajul* ‘the man’ in (56a), then an Agree-based account of case cannot explain why the theme object surfaces with an obligatory genitive case instead of the predicted structural accusative case. Note especially that the accusative case is realized on the theme object inside the DP when the subject in the structure is a lexical DP *l-rajul* ‘the man’ rather than *PRO*. This is illustrated in (57):

- (57) ʔaqlaqa-nii [_{DP} ntiqaad-u l-rajul-i **l-mašruuʔ-a**]
 annoyed-me criticizing-NOM the-man-GEN the-project-ACC

‘The man criticizing the project annoyed me.’ (Fassi Fehri 1993, ex. 46: 234)

Having discussed the Agree-based accounts of case in SA, I conclude that these accounts face problems and that an alternative account is thus needed.

3.4.2 A mixed approach to case (Fassi Fehri 1993)

Fassi Fehri's (1993) account of case is the only account of case in SA which incorporates a case hierarchy where accusative case is dependent on another higher case (specifically nominative case in the CP domain and genitive case in the DP domain). Fassi Fehri's (1993) account is in some respects similar to the account that will be adopted in this dissertation. Below, I outline the major tenets of this approach to case.

(a) To account for the agreement asymmetry between the VSO order and the SVO order in SA, Fassi Fehri (1993) advances the functional ambiguity hypothesis, according to which all subject agreement affixes in SA are functionally ambiguous in that they can be either be pronouns incorporated into the verb or they can be agreement affixes. To illustrate, let us consider the examples in (58):

- (58) a. jaaʔ-a **l-ʔawlaad-u**
 came-3MSG the-boys-NOM
 'The boys came.'
- b. **l-ʔawlaad-u** jaaʔ-uu
 the-boys-NOM came-3MPL
 'The boys came./The boys, they came.' (adapted from Fassi Fehri 1993, ex. 29:
 27)

According to Fassi Fehri (1993), the verbal affix in (58a) can only be treated as an agreement affix; it cannot be treated as a subject incorporated pronoun; otherwise, the sentence ends up

having two subjects, which is impossible. As for (58b), Fassi Fehri (1993: 28) holds that the sentence has two interpretations, as is indicated by the English translations. In one reading, the DP *ʔal-ʔawlaad* ‘the boys’ is interpreted as a clitic left-dislocated element (i.e. a base-generated topic phrase), and the verbal affix is thus a subject pronoun incorporated into the verb. In another reading, the preverbal DP is interpreted as the real subject of the sentence. In this case, the verbal affix can only be treated as an agreement affix. When the subject is postverbal, as in (58a), Fassi Fehri argues that the nominative case of the subject is assigned by a governing T. In the second reading of (58b), where the preverbal DP is a subject, Fassi Fehri (1993: 33, 45) argues that the case of the preverbal DP is default. For Fassi Fehri (1993), the nominative case of the preverbal DP is default regardless of whether the DP is a subject or a clitic left-dislocated DP.¹⁴

(b) According to Fassi Fehri (1993), the accusative case on the object DP is assigned by V under government. However, there are cases where the accusative case fails to be assigned to the DP object, as can be seen in structures with process (= event-denoting) nominals when they are c-selected by control verbs. This is illustrated by the contrast in (59):

- (59) a. *ʔaqlaqa-nii* [_{DP} *ntiqaad-u* *l-rajul-i* ***l-mašruuʔ-a***]
 annoyed-me criticizing-NOM the-man-GEN the-project-ACC
 ‘The man’s criticizing the project annoyed me.’ (adapted from Fassi Fehri 1993,
 ex. 60a: 239)
- b. *y-uriid-Ø-u* [_{DP} *ntiqaad-a* *PRO l-rajul-i*/**l-rajul-a*]
 3-want-MSG-INDIC criticizing-ACC the-man-GEN/*the-man-ACC

¹⁴ Arsalan Kahnemuyipour asks the following question: what accounts for the difference in agreement between the second reading of (58b) and the VS order in (58a)? According to Fassi Fehri (1993: 34), this is accounted for by his AGR Criterion, which is stated as follows: “Rich AGR is licensed by an argument NP in its Spec, and an argumental NP in Spec AGR is licensed by rich AGR”

bi-qaswat-in

with-bitterness-GEN

‘He wants to criticize the man with violence.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)

Fassi Fehri (1993) shows that process nominals in SA are internally verbal but externally nominal, and that the categorial conversion takes place at some point in the syntactic derivation. Some of the arguments that Fassi Fehri uses to show that process nominals are internally verbal include the fact that they have the same argument structure of verbs, and their thematic objects are assigned the accusative case, as can be seen in (59a). Another argument for the internally categorial status of process nominals is that they can be modified by adverbial phrases, as is shown in (59b). To account for why the thematic object of the control clause fails to be assigned the accusative case in (77b), Fassi Fehri (1993: 242) proposes that *PRO* is caseless, and that objects can only be assigned the accusative case when their subjects are assigned case. This is regulated by his proposed condition on case discharge, which is given in (60):

(60) “Object Case is discharged only if subject Case is discharged” (Fassi Fehri 1993: 243).

(c) The nominative case assigned to subjects of verbless sentences and subjects of sentences of the SVO order in SA is a default case, according to Fassi Fehri (1993). In his account, the default case of the subject of these types of sentences surfaces unless there are external case assigners such as the complementizer *ʔinna/ʔanna* ‘that’, the matrix verb in ECM structures, or D inside DPs. This is illustrated by the contrasting examples in (61) and (62):

- (61) a. **zayd-un** mariiḍ-un
 Zayd-NOM sick-NOM
 ‘Zayd is sick.’
- b. ʔinna **zayd-an/*un** mariiḍ-un
 that.EMPH Zayd-ACC/*NOM sick-NOM
 ‘Zayd is indeed sick.’
- c. ḥasib-tu **zayd-an/*un** mariiḍ-an
 believed-1SG Zayd-ACC/*NOM sick-ACC
 ‘I believed Zayd to be sick.’
- d. ʔaqlaqa-nii [DP kawn-u **zayd-in/*un** mariiḍ-an]
 annoyed-me being-NOM Zayd-GEN/*NOM sick-ACC
 ‘It annoyed me to hear of Zayd being sick.’
- (62) a. **l-ʔawlaad-u** jaaʔ-uu
 the-boys-NOM came-3MPL
 ‘The boys came.’
- b. ʔinna **l-ʔawlaad-a/*-u** jaaʔ-uu
 that.EMPH the-boys-ACC/*NOM came-3MPL
 ‘Indeed, the boys came.’
- c. ḥasib-tu **l-ʔawlaad-a/*-u** jaaʔ-uu
 believed-1SG the-boys-ACC/*NOM came-3MPL
 ‘I believed that the boys came.’

This contrasts with sentences of the VSO order, where only the nominative case is allowed, as can be seen in (63):

- (63) jaaʔ-a **l-ʔawlaad-u/*-a**
 came-3MSG the-boys-NOM/*ACC
 ‘The boys came.’

To account for the obligatory nominative case in the VSO order and the availability of non-nominative case in the nominal sentences and sentences of the SVO order, Fassi Fehri (1993: 50) proposes the nominality parameter in (64):

- (64) I is \pm nominal

Fassi Ferhi (1993: 50) claims that the nominality parameter can be translated as follows: I includes T, which is verbal and AGR, which can or cannot be nominalized, and either one or the other will be favored as the dominant category, which imposes its nature on I. According to this parameter, AGR in the VSO order is strong in that it is verbal and cannot be nominalized. Therefore, the nominative case of the postverbal subject is assigned under government by I, which hosts AGR and T. In other words, I in the VSO order is verbal; therefore, it is a case assigner, which assigns its case to the postverbal subject under government. In contrast to this, AGR in the SVO order is weak; therefore, it can be nominalized by an external case assigner (such as the indicative complementizer *ʔinna* or the ECM predicate or D), which assigns its case

to AGR. In other words, I in the SVO order is nominal; therefore, it can receive case from external case assigners. According to Fassi Fehri (1993: 50). AGR can discharge the case of the external case assigner because it is nominalized in these types of sentences.

Although the account proposed in Fassi Fehri (1993) captures all of the case facts in SA, there are some theoretical problems that can be pointed out. First, this account rests on parameterizing I in one and the same language, namely SA, and while parameterizing I might be justifiable cross-linguistically, it is hard to see how I can be parameterized intralinguistically. If one were to choose between this account, and one that does away with this complication, then the second account would be preferred for simplicity reasons, if for nothing else. To put it differently, in the spirit of the Minimalist Program (Chomsky 1995), any account that requires fewer assumptions should, by hypothesis, be favored over another that requires more assumptions.

Second, Fassi Fehri (1993) claims that the accusative case of the object is only discharged when the case of the subject is discharged. This is regulated by his proposed condition on case discharge, which is repeated in (65) for convenience:

(65) “Object Case is discharged only if subject Case is discharged” (Fassi Fehri 1993: 243).

The question now arises as to what the status of the condition in (65) is? Specifically, can the condition in (65) be derived from any theories of case? Fassi Fehri (1993, fn. 31: 278) claims that the condition in (65) is analogous to the case tier approach of Yip, Maling and Jackendoff (1987). However, in Yip et al.’s (1987) theory, (i) cases in a case tier (NOM, ACC) are mapped

onto grammatical functions (GFs=subject, object) in a separate tier by principles of association, (ii) the notion of domain of case assignment is central, (iii) *PRO* receives case, and (iv) sentences (S), but not *v**Ps, supply a case tier. On the other hand, in Fassi Fehri's (1993) account, (i) condition (65) neither maps cases onto GFs nor refers to domains of case assignment, (ii) *PRO* doesn't receive case, and (iii) the account implies that the case hierarchy applies at VP (*v**P in current theories) as well as S.

Third, in Fassi Fehri's (1993) account, the AGR feature in T is responsible for assigning the structural nominative case to the postverbal subject in the VSO order, and V (*v* in current theory) assigns accusative to the object. However, in the context of process nominals in control structures, the assignment of the accusative case to the object is dependent on the assignment of case to the subject, as is regulated by Fassi Fehri's (1993) condition on case discharge. It is worth pointing out that the account does not offer any explanation as to why the accusative case, which is the result of the syntactic relationship of government between V (= *v*) and the object should in any way be dependent on a hierarchy of cases between the subject and the object, a hierarchy that has nothing to do with the syntactic relation of government. To state the problem differently, the account derives the state of inactivity that V (= *v*) experiences in these structures from a hierarchy of cases rather than from a reassessment of the nature of V(= *v*) itself.

To summarize, Fassi Fehri (1993), makes the following claims:

- (66) a. The postverbal subject receives a structural obligatory nominative case via agreement with AGR in T.
- b. The preverbal subject and the subject of verbless sentences receive an unmarked default nominative case unless there are external case assigners such as the indicative complementizer, the ECM predicate or D.

c. The object receives a structural accusative case from V (v in current theory) as long as the subject receives a case.

d. The first NP complement in DP receives a structural genitive case from D.

While the above claims capture the empirical facts properly, they are not explanatory adequate. I take these arguments as evidence that Fassi Fehri's (1993) account needs to be reframed within an alternative theory of case.

3.5 The proposed account

To address the above problems with the previous analyses of case facts in SA, I adopt a new analysis, which is based on the updated version of the dependent case theory (Baker 2015). This analysis has the merit of incorporating both Agree-based accounts of case and the dependent case theory in one theoretical model. The major claim of this analysis is the hypothesis that Agree-based case is bleeded by dependent case assignment, when the latter is applicable in a language. For the analysis to work, there have to be at least two NPs in the spell out domain of a phase (Baker 2015). Thus, syntactic structural accusative case in this theory is a dependent case, which is assigned when the NP is c-commanded by another NP in either the same phasal domain or in a higher phasal domain depending on whether the lower phase is a soft phase or a hard phase. Broadly speaking, there are two major phases in the updated version of the dependent case theory (Baker 2015). The first such phase is vP. When the head of this phase is merged into the structure, its spell out domain, namely VP is sent to Spell-Out. The second major phase is CP. When the head of this phase C is merged into structure, its spell out domain TP is sent to Spell-Out. According to this theory, if the lower phase is a soft phase, then the NPs

inside this phase are still accessible to the higher phase. If, on the other hand, the lower phase is a hard phase, then the NPs inside this phase are inaccessible to the higher phase. Suppose, for example that vP is a phase, as is standardly taken to be the case in agreement-based theories of case (Chomsky 2000 and subsequent work). Suppose further that there are two NPs inside the VP, which is the spell out domain of this phase. If vP in such a language is a hard phase, then the case of these NPs have to be both calculated inside this domain. In such a language, the higher NP inside the VP domain c-commands the lower NP inside the same domain; therefore, the lower NP receives the dependent accusative case, and the higher NP receives its case through the case-assigning Agree relation with the higher functional head. The other case, which competes with the dependent case would thus be nominative case in a nominative-accusative language. This would be the result of the middle NP Agreeing with T. In an ergative-absolutive case system, the dependent case would be the higher ergative case, and the other case would be the absolutive case, which would be the result of Agreeing with the functional head v.¹⁵ Suppose now that in a nominative-accusative language, vP is a soft phase. Suppose further that there are two NPs inside the phasal domain of v, which is VP. In such a language, there is one of two options. In one option, the language exhibits a “strict cycle” effect such that the dependent case cannot be assigned in the VP domain. This is the case in languages such as Japanese and Korean, as will be shown later in the thesis. In such a language, the lower NP cannot be assigned the dependent case even though it is c-commanded by another NP in the same Spell out domain. In these languages, the assignment of dependent case can only happen at the Spell Out of TP, which is the Spell out domain of the phasal head C. This means that when TP is sent to Spell-Out in

¹⁵ This is the type of languages, where the subject of intransitives and the object of transitives would pattern together. This contrasts with the nominative-accusative case system, where the subject of transitives and the subject of intransitives would pattern together.

these languages, only the higher NP in the matrix clause will get the Agree-based case, but all other NPs in the structure will get the dependent accusative case. The other option that languages of the nominative-accusative type have when vP is a soft phase is when the language does not exhibit a “strict cycle” effect such that the dependent case is assigned to the lower of two NPs in any phasal domain be it VP or TP. This is the case in Amharic, as is argued in Baker (2015), and this is also the case with SA, as will be argued throughout this thesis. A full exposition of the proposed account will be introduced in Chapter 4.

3.6 Summary

This chapter reviews the previous generative accounts of case. The chapter discusses Agree-based accounts of case in SA, and Fassi Fehri’s mixed account (1993), where a mixed approach is developed. The chapter argues that all of the above accounts of case are problematic either theoretically or empirically. The chapter sketches out an alternative account, namely the dependent case theory of Baker (2015).

Chapter Four

Alternate accounts to case with a focus on Baker's dependent case and relevant theoretical assumptions

4.1 Introduction

In this chapter, alternative generative of accounts of case to the Chomskian accounts reviewed previously are introduced. The case tier theory of Yip, Maling and Jackendoff (1987) and the original version of the dependent case (Marantz 1991) are discussed together with the problems that they face. This is then followed by the updated version of the dependent case theory, as developed in Baker (2015).

4.2 Alternative accounts of case: The Case Tier theory

Yip, Maling and Jackendoff (1987) propose a theory of case assignment in syntax which is analogous to the autosegmental theory in phonology and morphology. They further propose that NPs form an NP tier and cases form a distinct case tier, and each case is associated with an NP via association lines. They propose that the unmarked association is from left (L) to right (R). This is the case of nominative-accusative languages. They argue that some languages are marked in that the association takes place from R to L. These are the ergative-absolutive languages. In this theory, crossing association lines is not allowed. To illustrate how this theory works, let us consider the following simple transitive sentence from English:

- (1) John hit Mary (the NP tier)
 | |
 NOM ACC (the case tier) (adapted from Yip et. al. 1987, ex. 1: 219)

In (1), the NPs form an NP tier and the cases form a case tier, and the cases are mapped onto the NPs in a L-to-R association. An example of a simple intransitive sentence is given in (2):

- (2) John paused.
 |
 NOM ACC (adapted from Yip et. al. 1987, ex. 2: 219)

The NP *John* in (2) is associated with the nominative case, and the accusative case remains unassociated, as there is no NP to associate with. As a result, the accusative case is not realized.

Yip et. al. (1987: 221) argue that in double object constructions, some languages have a rule of spreading case across two sister complements. This is the case, they argue, in Swedish, as is illustrated by (3):

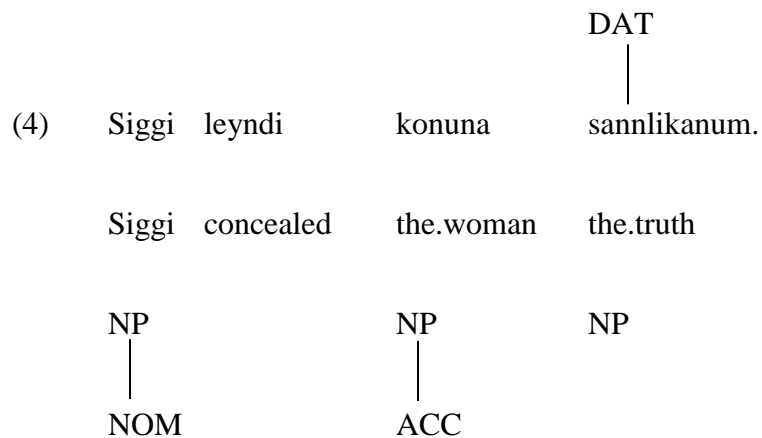
- (3) Kungen gav honom(*hon) henne(*hon) (till maka).
 the.king gave him(*he) her(*she) (as wife)
- NP NP NP
 | | /
 NOM ACC

‘The king gave her to him as a wife.’ (adapted from Yip et. al. 1987, ex.3: 221)

The example in (3) shows, the authors argue, that Swedish has a spreading rule, which spreads the accusative case on the goal object to its sister complement theme object. The authors point

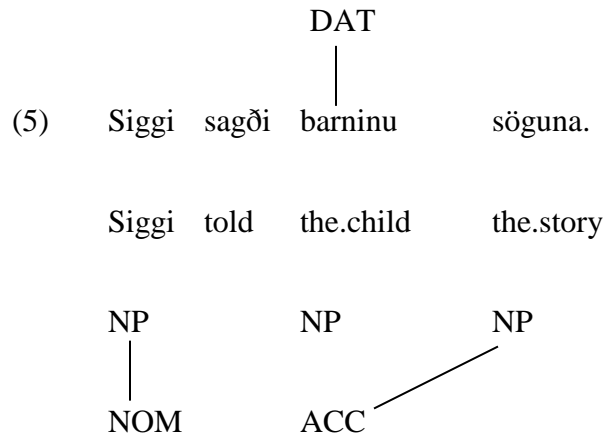
out that the case on the second object cannot be a default case, as nominative but not accusative is the default case in Swedish.

In structures with lexical case, the authors argue that this case is a special case lexically assigned by some verbs to one of their arguments. This is illustrated with the following example from Icelandic:



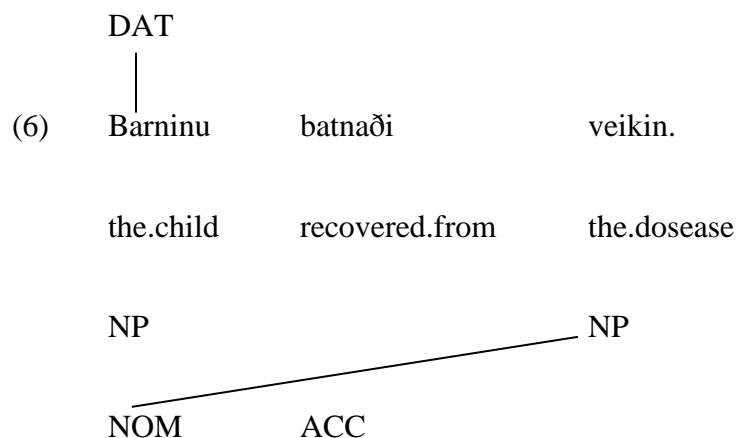
'Siggi concealed the truth from the woman.' (adapted from Yip et. al. 1987, ex. 8a: 223)

In (4), the theme object receives a lexical dative case from the verb, which is annotated as a case above the NP rather than below it. The syntactic accusative case is associated with *konuna* ‘the woman’, and the nominative case is associated with *Siggi*. Let us consider the following example, where the goal object receives a lexical dative case from the verb:



‘Siggi told the child the story.’ (adapted from Yip et. al. 1987, ex. 8b: 223)

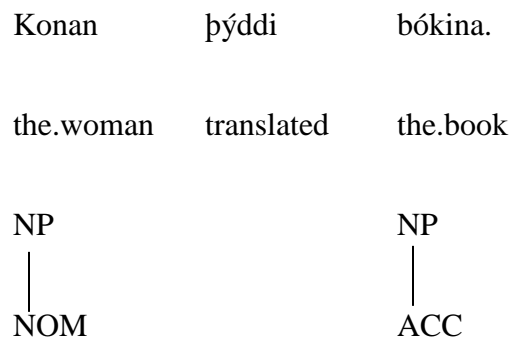
In (5), the syntactic nominative case is associated with the subject, and the syntactic accusative case is associated with the theme object. As for the goal object, it receives a lexical case from the verb. Similar to objects, the authors argue that subjects in Icelandic may also receive lexical case, as is illustrated by (6):



In (6), the subject is assigned a lexical dative case by the verb, and the syntactic nominative case is assigned to the object. As for the syntactic accusative case, it remains unassociated, and is therefore, not realized.

Yip et. al. (1987) also propose that not only sentences provide a case tier but NPs do too. In their discussion of Icelandic, they propose that it has one case to be associated with a bare NP modifier, namely the syntactic genitive case. This case is assigned to the first bare NP complement; all other bare NP complements inside the NP domain must therefore get their case from prepositions; otherwise, the structure is ill-formed. The authors argue that the genitive case inside the NP is assigned regardless of what thematic roles the genitive NP gets. The following are some illustrative examples adapted from Yip et. al. (1987, ex. 15: 234):

(7) a. Active sentence:



Case tier in S(entence)

- b. NP with prenominal genitive:

Jóns þýðing á bókinni

J. translation of the.book

NP PP
|
GEN

Case tier in NP

- c. NP with postnominal genitive 'subject':

þýðing Jóns á bókinni

translation J. of the.book

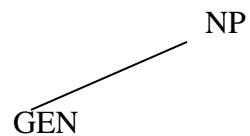
NP PP
/ GEN

Case tier in NP:

- d. NP with postnominal genitive ‘object’:

þýðing bókarinnar

translation the.book



Case tier in NP

- e. Ill-formed sequences of two bare NPs:

* Jóns(GEN) þýðing bókarinnar(GEN)

* þýðing Jóns(GEN) bókarinnar(GEN)

* þýðing Jóns(GEN) bókina(ACC)

Discussing the data in (7), the authors show the following: in (7a), there is an active sentence with two NPs in the NP tier and two syntactic cases in the case tier, and each case is associated with one NP in a one-to-one L-to-R association. This is an example of case assignment in the S domain. All other examples in (7) are examples of case assignment in the NP domain. In (7b), the head of the NP is the deverbal noun of the transitive verb for *translate*, namely *þýðing* ‘translation’. Here, the genitive case assigned in the NP domain goes to the first NP complement of the head, namely the prenominal possessor *Jóns* ‘John’. In (7c), the genitive case is assigned to the first NP complement, namely the subject *Jóns* ‘John’. The other NP complement receives

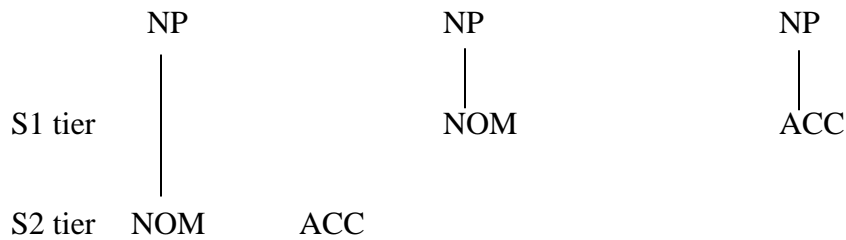
its case from the preposition. In (7d), the genitive case is assigned to the first NP complement, namely the object *bókarinnar* ‘the book’. In (7e), all the examples are ill-formed because they involve assigning case to the second NP complement without a preposition.

To handle sentences with *PRO* subjects, Yip et. al. (1987: 239) propose that case assignment applies strictly to items in a domain, where the domain is either an S or an NP. They offer the following definition of domain:

- (8) a. “A node Y is IN THE CASE DOMAIN of a node X iff Y is dominated by X, and X supplies a case tier C.
- b. A node Y is IN THE CASE DOMAIN of a node X iff Y is in the case domain of X, and there is no node Z such that X dominate Z and Y is in the case domain of Z.”

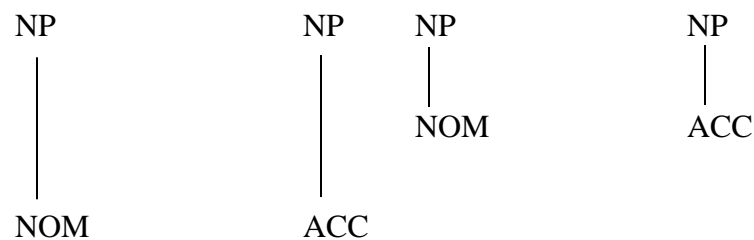
Given the definition of domain in (8), a syntactic case in a matrix clause (S2) cannot be associated with an NP in the embedded clause (S1), as case assignment is strictly domain-specific. Similarly, a syntactic case in S2 cannot be associated with any NP arguments inside an NP, as NPs are themselves case domains. Having identified case domains, the authors offer their proposal for how case assignment works in sentences with *PRO* subjects. This is illustrated in (9) adapted from Yip et. al. (1987, ex. 21: 239):

(9) a. [S2 Bill tried [S1 *PRO* to help me]].



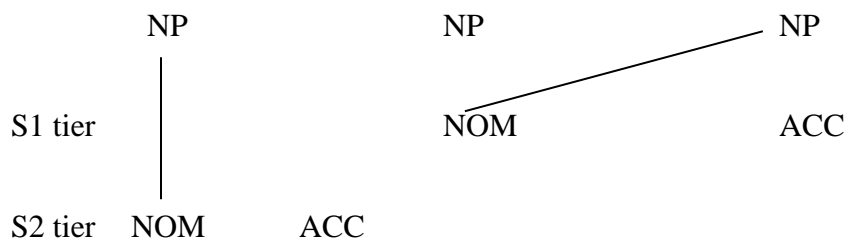
According to the authors, the sentence in (9) can be analyzed as follows: In the S1 tier, there are two NPs, *PRO* and the object NP, and two syntactic cases. Each syntactic case is assigned to each NP in the NP tier in a one-to-one L-to-R association. In the S2 tier, there is one NP in the NP tier but two syntactic cases in the case tier. The first syntactic case NOM is associated with the only NP in the NP tier. As for the second syntactic ACC case, it remains unassociated, as there is no other NP in the S tier to associate with. Crucially for the authors, the syntactic accusative case in the S2 tier does not associate with any NP in the S1 tier, as case assignment is strictly domain-specific. The same reasoning, the authors argue, applies to sentences where *PRO* is controlled by the object of the matrix clause, as in (9b) adapted from Yip et. al. (1987, ex. 21: 239):

(9) b. Bill forced him [*PRO* to help me]].



Note that it is crucial for the authors to claim that *PRO* receives case. On the assumption that *PRO* does not get case, their theory would make the wrong predictions, as is illustrated by the example in (10) adapted from Yip et. al. (1987, ex. 20: 238):

(10) [S2 Bill tried [S1 *PRO* to help I/me]].



‘*Bill tried to help I.’

In (10), *PRO* of S1 does not receive a syntactic case; therefore, the syntactic case NOM is associated with the object, and the syntactic case ACC of S1 remains unassociated; the result is ungrammatical. Therefore, *PRO* must receive a syntactic case for the theory to make the right predictions.

To account for case assignment in raising-to-object constructions or what is known in the GB literature as exceptional case marking (ECM) structures, Yip et. al. consider two possibilities. According to the first possibility, the embedded subject of *believe*-type predicates raises to the matrix object position. In this scenario, the authors offer the following analysis:

- (11) a. Bill believes [she/her to like me]
 NOM ACC NOM ACC
- b. Bill believes her_i [t_i to like me]
 ⊥
 NOM ACC
 |
 NOM ACC (Yip et.al. 1987, ex. 22: 241)

‘John believes her to like me.’

In (11), Yip et.al. (1987: 241) argue that the subject of the embedded clause is associated with the nominative case in the complement cycle (i.e. the embedded clause). Upon raising to the matrix object position, the subject of the embedded clause is now in the case domain of the matrix cycle (i.e. the matrix clause) where the previously assigned nominative case is now overlaid with the accusative case which is associated with the object in the matrix cycle.

The second possibility that the authors consider is one where the subject of the embedded clause does not raise to the matrix clause. They offer the following example from Icelandic as in illustration:

- (12) Jón telur [hana hata mig]
- John believes her to.hate me
 ⊥
 NOM ACC
 |
 NOM ACC

‘John believes her to hate me.’

In (12), Yip et.al. (1987: 241-242) assume that the subject of the embedded clause does not raise to the matrix object position. In this scenario, the embedded subject is associated with the nominative case in the complement cycle. Due to the mechanism of S'-deletion, the subject of the complement cycle is now in the case domain of the matrix cycle. The nominative case of the embedded cycle is now overlaid with the accusative case of the matrix cycle.

To summarize, the Case Tier theory posits the hypothesis that the syntactic cases, NOM and ACC, which are often called structural cases, are assigned neither to certain syntactic configurations, nor to certain grammatical functions. Instead, they are assigned along a hierarchy of grammatical functions, where NOM is higher on the hierarchy than ACC (Maling 2009: 87). The theory makes the following predictions:

(13) “a. NOM is assigned before ACC.

b. Only one XP can get assigned NOM; any remaining NPs get ACC via case-spreading.

c. Which XP gets NOM reflects the hierarchy of G[rammatical]F[unction]s, where SUBJ[ect] > OBJ[ect]...” (Maling 2009: 82).

4.2.1 Problems with the Case Tier theory

As discussed in the previous section, there are two case domains in the Case Tier theory, S and NP. Given this theoretical assumption, there are structures in SA that pose a problem for the Case Tier theory. One such structure includes sentences with process nominals, as can be seen by the example in (14):

- In (14), the lexical root starts the derivation as a verb and is then nominalized later on in the derivation. According to the Case Tier theory, this would mean that there are two NPs in the NP tier and two cases in the S case tier. This in turn means that the underlying structure of the sentence in (14) can be represented as in (15):

- In (15), there are two NPs in the NP tier and two syntactic cases in the case tier, and each case is associated with each NP one-to-one in a L-to-R fashion. Assuming that the object pronominal DP *(n)ii* ‘me’ is cliticized onto the verb, and that the verb then raises from *v* to *T*, as is standardly assumed for SA, would account for the surface structure shown in (14) above. So far, the Case

Tier theory can account for the case facts of SA. The problem starts when we want to explain the accusative case marking on the thematic object *l-mašruuʔ* ‘the project’ inside the first NP. From the perspective of the Case Tier theory, the NP is also a case domain. The only case available inside the NP domain in this theory is the genitive case. Suppose that the genitive case is indeed available and that it is associated with the first bare NP complement of the nominalized V, as is shown in (16):

- (16) [DP ntikaad-u l-rajul-i **l-mašruuʔ-a** bi-šiddat-in]
 criticizing-NOM the-man-GEN the-project-ACC by-bitterness-GEN
 NP NP
 |
 GEN

If we now assume that the language-specific case spreading rule, proposed for some languages in Yip et. al. (1987) is operative in SA, we end up making the wrong predictions, as is shown in (17):

- (17) *[DP ntikaad-u l-rajul-i **l-mašruuʔ-i** bi-šiddat-in]
 criticizing-NOM the-man-GEN the-project-GEN by-bitterness-GEN
 NP NP
 | /
 GEN
- ‘the man’s criticizing the project bitterly’

The DP in (17) is ungrammatical because the NP *l-mašruuʔ* ‘the project’ obligatorily surfaces with the accusative case rather than the genitive case. One might want to argue that the syntactic genitive case is associated in (17) with the first bare NP complement *l-rajul* ‘the man’, and that the second NP *l-mašruuʔ* ‘the project’ receives its accusative case as a default/unmarked case. However, this argument is untenable; given that the default/unmarked case in SA is standardly taken to be the nominative case. Also, if accusative case were the default case inside the NP domain, one would expect the phrase in (18) to be grammatical, contrary to the facts:

- (18) *_{[DP} *ṣūurat-u* *zayd-in* *qays-an*]
 picture-NOM Zayd-GEN Qays-ACC
 Intended meaning, ‘Zayd’s picture of Qays.’

The only way for (18) to be grammatical is when the second NP inside the DP domain is assigned the genitive case via the prepositional strategy, as in (19):

- (19) *_{[DP} *ṣūurat-u* *zayd-in* *li-qays-in*]
 picture-NOM Zayd-GEN of-Qays-GEN
 ‘Zayd’s picture of Qays.’

Notice further that the Case Tier theory cannot explain why the theme object inside the nominalized DP of (14) may surface with the accusative case simply because there is only a vP inside the DP domain, and vPs do not supply a case tier in Yip et. al.’s (1987) theory. Thus, the Case Tier theory can not account for the accusative case of the theme object inside the DP, when the head of this DP is a nominalized verb.

Let us now consider a similar problem for the Case Tier theory. This has to do with control predicates that take as their complements a nominalized verb, as in (20):

- (20) y-uriid-Ø-u *pro*_i [_{DP} ntiqaad-a *PRO*_i **l-rajul-i**/*l-rajul-a]
 3-want-MSG-INDIC criticizing-ACC the-man-GEN/the-man-ACC
 bi-šiddat-in
 by-bitterness-GEN
 ‘He wants to bitterly criticize the man.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)

The example in (20) is problematic for the Case Tier theory in the following manner: In this theory, *PRO* must receive a syntactic case. Suppose that *PRO* in (20) does receive the only syntactic case available inside the NP domain, namely the genitive case, as proposed in the Case Tier theory. If this is the case, then case assignment inside the DP in (20) would be as shown in (21):

- (21) [_{DP} ntiqaad-a *PRO*_i **l-rajul-i**/*l-rajul-a]
 criticizing-ACC the-man-GEN/the-man-ACC
 NP NP
 |
 GEN

In (21), we have two bare NP complements inside the DP domain, but one syntactic case. The problem that (21) poses for the Case Tier theory can be stated as follows: if the only syntactic

case inside the DP domain is associated with the first NP complement, namely *PRO*, how does the second NP *l-rajul* ‘the man’ inside the DP domain receive its genitive case, especially given our previous conclusion that case spreading is not operative in SA?

Given the above problems with the Case Tier theory, I conclude that this theory does not make the right predictions for SA.

4.3 The proposed account of case for SA

In this thesis, I develop an account of case in SA based on the dependent case approach as developed in Baker (2015). Baker’s (2015) theory of case assignment is a development of Marantz’ (1991) original theory of dependent case. I begin by introducing the original version of dependent case theory as first proposed in Marantz (1991). I point out some of the problems that face this version of the theory. I follow that by introducing Baker’s (2015) developed version of the dependent case theory, the version that forms the theoretical framework of the proposed account of case in SA. Following that, I lay out the technical details and theoretical assumptions that form the basis of the analysis to be developed in chapter 5. I conclude this chapter with a summary.

4.3.1 The original version of dependent case (Marantz 1991)

In response to abstract case theory as developed in Chomsky (1980 and subsequent work), Marantz (1991) claims that NP licensing is distinct from the morphological assignment of case on NPs. In this work, Marantz uses the examples in (22) from Icelandic to show that NPs

can get morphological case without being licensed by abstract case. Recall that this distinction is the same distinction discussed earlier between syntactic structural cases and syntactic but non-structural cases.

- (22) a. *María* *óskaði* (*ólafi*) *alls* *goðs*.
 Mary-NOM wished Olaf-DAT everything-GEN good-GEN
- b. *þess* *vas* *óskað*.
 this-GEN was wished
- c. *Henni* *vas* *óskað* *þess*.
 her-DAT was wished this-GEN (Marantz 1991, ex. 15: 18)

Marantz (1991) reasons as follows: in (22a) both objects receive a quirky morphological case (i.e. a case lexically specified by certain verbs), which is not the expected structural accusative case for objects; yet, the NPs are not licensed as objects because they get these cases. This is because these cases are not structural cases (i.e. cases determined by the structural relationship holding between a V or v and the object in the complement position of the verb). When the verb is passivized, as in (22b), the object has to raise to the subject position, but its case does not change. On the face of it, this means that the object is not licensed for structural case in the object position. Moreover, (22c) makes it clear that the movement of the object in (22b) is driven by the need to check the Extended Projection Principle (EPP) feature rather than to get licensed by case. (22c) shows that when the subject position is occupied by a dative NP, the genitive object is now licensed as an object even though it is not licensed by structural accusative case. If one wants to claim that the genitive object in (22b) has to move because it lacks structural case

as the object of a passive verb, then one has to explain how the object in (22c) is licensed in the base position of a passive sentence even though it does not receive the structural accusative case.

Marantz (1991) also gives the Icelandic example in (23) to show that NPs can be licensed as objects without having structural case:

- (23) Ég tel **henna** hafa alltaf þótt **ólafur** leiðinlegur.
I believe her-DAT to-have always thought Olaf-NOM boring-NOM
'I believe her to have always thought of Olaf as boring.'
(Marantz 1991, ex. 16: 19)

For the example in (23), Marantz (1991) provides the following account: the embedded sentence in (23) has a non-structural dative subject and a structural nominative object in the complement clause of *believe*. T cannot possibly license the object with structural nominative case, as the complement clause is non-finite lacking the feature [Tense]. The object is however licensed in the object position even though it does not have a structural accusative case.

As an alternative to abstract structural case theory, Marantz (1991: 20-21) offers the principle in (24):

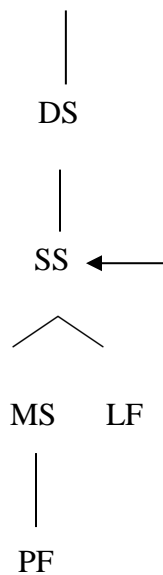
- (24) "Nominal arguments are licensed by (extended) projection, not by Case or by morphological properties."

Marantz (1991) acknowledges the fact that the principle in (24) does not cover the distribution of *PRO*. He also notes that the principle in (24) does not apply to the distribution of *pro*, given that the latter is licensed by the morphological properties of agreement systems. To account for the distribution of *PRO*, Marantz (1991) offers the residue of case theory in (25):

(25) “RES(Case Theory): an NP is PRO iff not governed at S-structure by a lexical item or [+tense] INFL[ection]”.

Marantz (1991: 19) assumes a model of grammar without case theory. The model is represented in (26):

(26) Projection



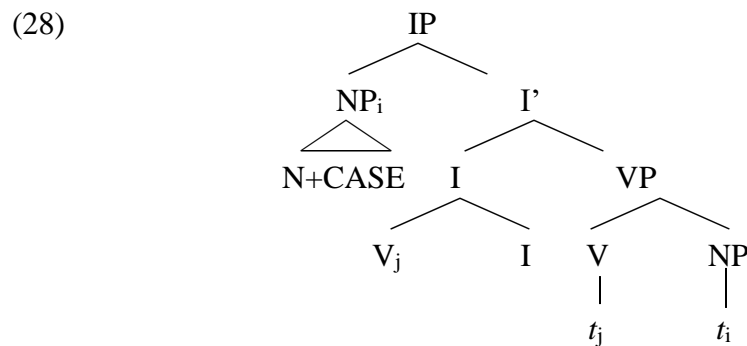
MS = “Morphological Structure”

Given this model of the grammar, Marantz (1991: 23-25) explains how case is realized in the following manner: case realization takes place in the MS component, which maps SS (i.e. Surface Structure) to PF (i.e. Phonological/Phonetic Form). At MS, the case affix in languages that have morphological cases, is attached to the noun affix. Which case feature the case affix requires (e.g. nominative, accusative, genitive, dative, etc.) depends on the syntactic properties of the element, which governs the maximal projection of the noun to which the case affix

attaches.¹⁶ The relevant objects at MS are not NPs per se but rather chains, in particular A-chains (argument chains), which include the traces of NP-movement. Marantz (1991: 23) states that “the case features on the case affix may depend on what governs any link in the chain of the NP headed by the N+Case.” This is covered by the principle in (27):

(27) “CASE features are assigned/realized based on what governs the chain of the NP headed by N+Case” (Marantz 1991: 23).

To illustrate how case is assigned, Marantz (1991: 23) offers the representation in (28), where the subject and object NPs are links in the same chain:



Marantz then explains how the case of the case affix is determined in the following manner: there are three case candidates for the NP in the structure of (28), and these are lexical (e.g. dative), nominative or accusative. If the verb requires lexical dative on the object NP, then that NP will preserve this case no matter where it ends up at SS, MS or PF. The case preservation is explained in this theory by the fact that the object NP and the subject NP are both members of the same chain in (28). The case affix may receive accusative feature in the object position. This is explained in this theory on the grounds that the NP is governed by the trace of V in (28). The

¹⁶ Crucially, note that the case feature that the case affix acquires depends, in the theory of Marantz (1991), on the syntactic properties of the element that governs the maximal projection of the noun to which the affix is attached. This casts doubt on the assumption that case assignment is a PF phenomenon, as argued in Marantz (1991). I thank Gabriela Alboiu for pointing out this to me.

NP in the subject position may receive nominative case. This is explained by the fact that this position is governed by the complex head V+I in (28). Case realization obeys a disjunctive hierarchy typical of morphological Spell-Out. In this hierarchy, the more specific case feature wins out over the less specific case feature. The hierarchy is disjunctive in that going down the list, as soon as the case affix finds a case feature it qualifies for, it picks up that feature and leaves the hierarchy. Marantz (1991: 24) offers the disjunctive hierarchy in (29):

- (29) case realization disjunctive hierarchy:
- lexically governed case
 - “dependent” case (accusative and ergative)
 - unmarked case (environment-sensitive)
 - default case

Marantz (1991: 24) explains the disjunctive hierarchy as follows:

“Lexically determined case takes precedence over everything else, explaining the preservation of quirky case when an NP moves from a position governed by a quirky case verb to a position of NOM or ECM_{ACC} case realization; [...] Unmarked case may be sensitive to the syntactic environment; for example, in a language GEN may be the unmarked case for NPs inside NPs (or DPs) while NOM may be the unmarked case inside IPs. Finally, there is a general default case in the language when no other case realization principle is applicable.”

According to this hierarchy, if a verb requires a lexical dative case on the object NP, then this is the case the NP will have at any position, as lexical case ranks higher than any other case feature in the hierarchy. If lexical case is unavailable, the object NP will receive a dependent case if

certain syntactic conditions are met, as will be explained below. If dependent case is inapplicable, an NP will receive an unmarked case. For example, a language may have the genitive case as the unmarked case in the NP domain, but nominative case as the unmarked case in the TP domain. If no other case realization principles are applicable, a default case is supplied. Notice that the difference between unmarked case and default case in Marantz' (1991) theory seems to be that the former is domain-sensitive whereas the latter is domain-insensitive.

Marantz (1991: 25) spells out what dependent case is in the following manner: accusative is a dependent case assigned downward to an NP when the subject NP, which is governed by V+I has certain syntactic properties. Ergative case is a dependent case assigned upward to a subject NP when V+I governs downward another NP with certain syntactic properties. These certain syntactic properties are listed in (30):

- (30) Dependent case is assigned by V+I to a position governed by V+I when a distinct position governed by V+I is:
- c. not "marked" (not part of a chain governed by a lexical case determiner)
 - d. distinct from the chain being assigned dependent case

Dependent case assigned up to subject: ergative

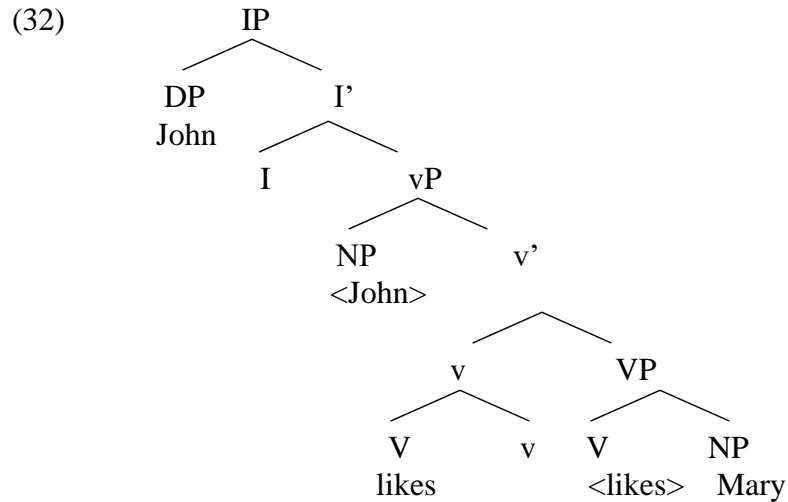
Dependent case assigned down to object: accusative

The syntactic properties listed in (30) explain why the subject NP in the representation in (28) above can never be assigned the accusative case. The idea is that the subject and the object NPs in the representation are both members of the same chain governed by V+I. In other words, there are no distinct positions governed by V+I. To illustrate how the subject and the object receive

their cases in Marantz' (1991) theory, we can consider the following example of a transitive sentence:

(31) John likes Mary.

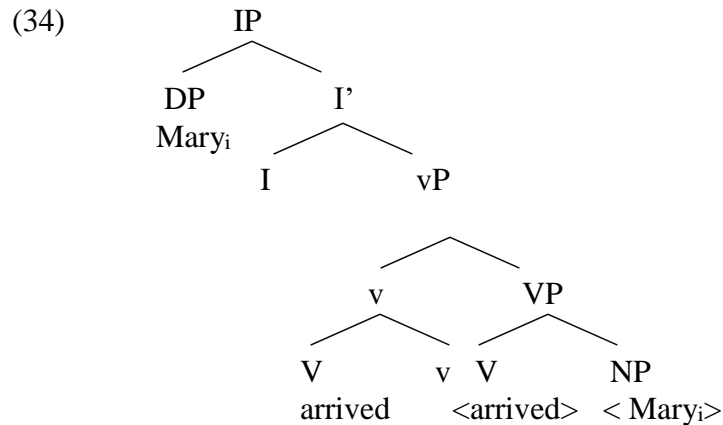
Updating Marantz' (1991) theory, the sentence in (31) presumably has the following syntactic representation:



In (32), the NP *John* in Spec, TP is governed by the the functional head I. The subject is not marked for lexical case, as there is no lexical case assigner. The subject and the object are not members of the same chain. Therefore, the object qualifies for the dependent accusative case. As for the subject, it receives unmarked nominative case in the IP domain. Let us now discuss how an intransitive sentence can be accounted for in Marantz' (1991) theory by considering the following example:

(33) Mary arrived.

Presumably, the sentence in (33) has the following representation:



In (34), the NP *Mary* is not lexically marked, as there is no lexical case assigner. The subject does not qualify for the dependent accusative case because the subject is a member of the A-chain <Mary, Mary> whose head is in the subject position in Spec, TP and whose tail is in the object position in VP. Therefore, the subject receives the unmarked nominative case in the TP domain.

As is pointed out by a number of authors (e.g. Legate 2008, Marantz' 1991) PF version of dependent case assignment faces problems in light of the fact that some syntactic phenomena (e.g. A-bar movement) occur after dependent case assignment. For example, if an object receives dependent case in its base-position, and then moves to the Spec, TopP position or Spec, FocP position for topicalization or focalization purposes, then Marantz' (1991) theory faces the following problem: On the assumption that case assignment takes place at PF after syntax, and the fact that A-bar movement takes place in syntax before PF, the object will be higher than the subject at PF. This would then change the case assignment pattern such that the object receives the unmarked nominative case and the subject receives the dependent accusative case, contrary the observational fact that objects retain their accusative case after movement to the A-bar

position. Baker's (2015) updated version tries to salvage the dependent case assignment by updating it and moving it back to syntax. The next section discusses this updated approach.

4.3.1.1 Problems with the original version of the dependent case theory

As has been discussed in the previous section, the gist of Marantz' (1991) account is that abstract licensing of arguments in certain syntactic configurations is distinct from case realization. For Marantz, the licensing of arguments in certain syntactic configurations (e.g. Spec, TP for the subject or the complement of V for the object) takes place in syntax proper. As for case realization, Marantz argues that it is strictly postsyntactic; it takes place in the Morphological Structure of the grammar, the point in the derivation where the surface structure maps phonological/phonetic structure.

The view that case realization is postsyntactic is also defended in Bobaljik (2008). As is argued in Baker (2015), case assignment cannot be a purely PF phenomenon. One piece of evidence against this view comes from the fact that the dependent case assigned to NPs in their base-position is retained after movement of these NPs to the left periphery. On the standard assumption that movement to the left-periphery takes place in the syntax proper, this runs counter to the Marantzian (1991) claim that case assignment is a PF phenomenon. To illustrate this point, let us consider the example in (35):

- (35) katab-a zayd-un **risaalat-an.**
 wrote-3MSG Zayd-NOM letter-ACC
 'Zayd wrote a letter.'

Here the NP *risaalat* ‘a letter’ receives the dependent accusative case at the Spell Out of TP. According to the Marantzian (1991) theory, the prediction would be that the calculation of case assignment would change when the object NP *risaalat* ‘a letter’ raises to the left periphery for the purpose of focalization, for instance.¹⁷ More specifically, the prediction would be that the subject NP *zayd* ‘Zayd’ would receive the dependent accusative case, and the object NP *risaalat* ‘a letter’ would receive the unmarked nominative case (or through the case-assigning Agree given the theoretical framework we will adopt in this thesis), when the object NP *risaalat* ‘a letter’ is raised to the left periphery. This prediction is based on the standard assumption that movement to the left periphery is a syntactic rather than a PF phenomenon. However, such a prediction is not borne out, as shown by the contrasting pair in (36):

- (36) a. ***RISAALAT-UN_i** katab-a **zayd-an** e_i .
 letter-NOM wrote-3MSG Zayd-ACC
 Intended meaning ‘It was a letter that Zayd wrote.’
- b. **RISAALAT-AN_i** katab-a **zayd-un** e_i .
 letter-ACC wrote-3MSG Zayd-NOM
 ‘It was a letter that Zayd wrote.’

On the assumption that case assignment is a purely PF phenomenon, the object NP *risaalat* ‘a letter’ c-commands the subject NP *zayd* ‘Zayd’ at PF, as shown in the ungrammatical example (36a). Therefore, it follows, according to Marantz (1991), that the subject NP *zayd* ‘Zayd’ in

¹⁷ Note that this prediction does not run counter to Marantz’ (1991) claim that case is assigned to chains because Marantz’ (1991) claim only includes A-chains and does not extend to A’-chains.

(36a) should be assigned the dependent accusative case, and the object NP *risaalat* ‘a letter’ should receive the unmarked nominative case, contrary to fact. The grammatical example in (36b) shows that the dependent case assigned to the object in its base-position is retained when the object moves to the left periphery. This casts doubts on Marantz (1991) proposal that case assignment is a purely PF phenomenon.

I therefore conclude that the original version of the dependent case theory of Marantz (1991) cannot be on the right track.

4.3.2 The updated version of dependent case (Baker 2015)

Baker (2015: 48) updates Marantz’s (1991) dependent case theory by proposing the rule of dependent case assignment in (37):

(37) “If there are two distinct NPs in the same spell-out domain such that NP1 c-commands NP2, then value the case feature of NP2 as accusative unless NP1 has already been marked for case”.

Given that c-command relationship is essential in the updated version of dependent case, Baker (2015: 49) offers the definition of c-command in (38):

(38) “X c-commands Y if X does not contain Y and the first node that properly contains X contains Y.”.

To flesh out the mechanics of dependent case, Baker (2014a: 355, 2015: 233) makes the assumptions in (39):

- (39)
- a. C and v are phase heads.
 - b. Their complements (IP, VP) are Spell-Out domains.

c. Spell-Out involves mapping relevant c-command relations onto linear order statements, *case assignments*, and so on.

d. CP is always a “hard phase”: its complement is invisible for later operations.

e. vP may be a “hard phase” or a “soft phase.” If it is soft, the contents of its complement do remain visible in the next stage of derivation, *but only new c-command relationships are considered at later Spell-Outs*.

Baker (2015: 234) explains the assumptions in (39) as follows: (39a, b, d) are standard assumptions in phase theory (Chomsky 2000 and subsequent work). The difference between (39d) and (39e) captures the fact that some languages have differential case marking while others do not. Baker (2015: 146) proposes to consider vP as either a soft phase or a hard phase. Baker (2015, ex. 59: 149) explains the distinction between the two phases, as shown in (40):

(40) “a. If v is a hard phase head, then the contents of its VP complement are invisible for the subsequent syntactic derivation after spelling out.

b. If v is a soft phase head, then the contents of its VP complement undergo spell out (e.g. they may get their case features fixed) but they remain active in the derivation.”

To illustrate the concept of vP being a hard phase, we can consider the examples in (41) from Sakha:

- (41) a. Masha salamaat-y sie-te.
Masha porridge-ACC eat-PAST-3sS
‘Masha ate the porridge.’
- b. Masha salamaat sie-te.
Masha porridge eat-PAST-3sS
‘Masha ate porridge.’ (Baker 2015, ex. 22: 125).

Baker (2015: 125) explains the difference between the examples in (41) in the following manner: the object in (41a) receives a specific or definite interpretation, and is assigned the dependent accusative case. In contrast, the object in (41b) receives an indefinite or non-specific interpretation, and is assigned an unmarked nominative case. If we assume that *v* is a hard phase head, we can account for the differential object marking in the language. We can assume that when the object is specific or definite, it shifts out of VP into vP. When the complement of *v*, namely VP is sent to Spell-Out, there are no NPs available; therefore no dependent case is applicable. Given that the object is now in the Spec of vP, it is now part of the domain of the higher phasal head, namely C. Thus, when the complement of C is sent to Spell-Out, the object is subject to the dependent case, and it receives the dependent accusative case. In contrast, the object in (41b) does not receive a specific or definite interpretation. Therefore, we can assume that the object in this structure remains in situ next to the verb. When the complement of the phasal head *v* is sent to Spell-Out, the object is not subject to dependent case because it is the only NP in this domain. Therefore, the object receives an unmarked bare nominative case. To further strengthen the argument that this analysis is correct, Baker shows that the neutral word

order for specific or definite objects is before VP adverbs, whereas the indefinite or non-specific objects must be after the VP adverbs. This is shown in (42):

- (42) a. Masha salamaat-y turgennik sie-te.
Masha porridge-ACC quickly eat-PAST.3sS
‘Masha ate the porridge quickly.’
- b. Masha turgennik salamaat sie-te.
Masha quickly porridge eat-PAST.3sS
‘Masha ate porridge quickly.’ (Baker 2015, ex. 23: 126).

Baker shows that the same facts are found in ergative languages. He illustrates with data from Eastern Ostyak, a Finno-Ugric language spoken in Siberia. When the object in this language is indefinite, it does not shift out of VP, and thus the subject is not marked ergative, as in (43a). In contrast, when the object is definite, it shifts over a PP, and the subject is marked ergative, as in (43b):

- (43) a. Mä t’ əkəjəylämnä ula mənəäləm.
we.DU.NOM younger.sister.COM berry pick.PAST.1pS
‘I went to pick berry with my younger sister.’
- b. Mə-ŋən ləyə əllə juγ kanŋa aməyaloy.
we-ERG them large tree beside put.PAST.3pO/1pS
We put them (pots of berries) beside a big tree.’ (Baker 2015, ex. 26: 128).

In addition to languages where the unmarked case for an NP at the spell-out of VP and TP is the same, as is the case in Sakha, Baker shows that the unmarked case needs not be the same in these two spell-out domains. Baker illustrates this with the examples in (44) from Finnish, where the unmarked case at the spell-out of VP is partitive case, whereas the unmarked case at the spell-out of TP is nominative:

- (44) a. Tuo-n karhu-n/karhu-t.
 bring-1sS bear-ACC/bear-PL.ACC
 ‘I’ll bring the (a) bear/the bears.’
- b. Tuo-n karhu-j-a.
 bring-1sS bear-PL-PART
 ‘I’ll bring (some) bears.’ (Baker 2015, ex. 45: 141).

According to Baker, the examples in (44) can be accounted for as follows: in (44a), the object refers to a fixed quantity; therefore, the object shifts out of VP. At the Spell-Out of VP, the object is not inside VP; therefore, the object does not receive the unmarked case. Instead, the object, being out of VP is inside the Spell-Out of C, namely TP; therefore, the object is subject to dependent case, and receives the structural dependent accusative case. In (40b), the object does not refer to a fixed quantity; therefore, it remains in situ at the Spell-Out of VP. This way, the object receives the unmarked case in the VP domain, namely the partitive case.

Baker (2015: 141) shows that accusative is clearly a dependent case in Finnish in that it only shows up when a certain kind of subject is available. Thus, Baker (2015: 141) notes that when the subject is the featureless subject of an imperative, as in (45), the definite object shows

up with nominative rather than accusative case. Baker accounts for this on the grounds that the object being of a fixed quantity shifts out of VP; therefore, at the spell-out of VP, the object is not available. At the Spell Out of TP, the definite object is inside the domain of TP, but given that subject is featureless, the object is not subject to the dependent case, and instead, it receives the unmarked case. However, given that the object is inside the TP domain, it does not receive the unmarked case for the VP domain, namely the partitive case. Instead, the object receives the unmarked case in the TP domain, namely the nominative case.

- (45) Tuo karhu! (*karhu-n)
bring.IMPER bear.NOM bear-ACC

‘Bring the (a) bear!’ (Kiparsky 2001, as cited in Baker 2015, ex. 46: 141).

Baker shows that partitive is not a dependent case. Thus, when a bare-plural object with an indefinite interpretation is found in imperative sentences, it remains partitive. This is shown in (46):

- (46) Tuo karhu-j-a!
bring.IMPER bear-PL-PART

‘Bring bears!’ (Kiparsky 2001, as cited in Baker 2015, ex. 47: 141).

Baker accounts for the example in (46) as follows: the object is indefinite; therefore, it does not shift out of VP, and remains inside VP. Given that VP is a hard phase in Finnish, the object is the only available NP at the Spell-Out of VP, and it receives the unmarked case in the VP domain, namely the partitive case.

In contrast to languages where the VP is clearly a hard phasal domain, and v a hard phase head such as Sakha, Eastern Ostyak, and Finnish (also known as differential object/subject marking languages), Baker (2015) shows that there are other accusative and ergative languages, where the VP is clearly a soft phase, and v a soft phase head. As an example of an accusative language, where VP is a soft phasal domain, Baker illustrates with Cuzco Quechua. In this language, Baker (2015) shows that the indefinite objects, which do not shift out of VP, still receive the dependent accusative case. This is shown in (47):

- (47) Juan wawakuna-man miski-*(ta) qunpuni.
 Juan children-DAT candy-ACC give.HAB.3sS
 ‘Juan gives candy to the children.’ (Baker 2015, ex. 54: 146).

According to Baker (2015: 149), examples such as (47) receive an explanation if we assume that the VP domain is a soft phasal domain, and the contents of VP remain visible to the CP spell out domain. In other words, the indefinite object in (47) remains inside VP. At the Spell Out of VP, the case of the object is considered, but is not valued yet. Instead, the object receives its case value at the spell-out domain of CP. In this domain, both the object and the subject are considered for case purposes; therefore, the object is subject to the dependent case, and it receives the structural dependent accusative case. Thus, Cuzco Quechua contrasts with Finnish or Sakha, where the object receives the dependent accusative case if and only if the object is definite, and where the definite object shifts out of VP.

Baker shows that the same pattern is observed in ergative languages. He illustrates with the example in (48) from Lezgian:

- (48) Gada.di wiči-n žibin.da-j c'akul aqud-na.
 boy.ERG self-GEN pocket-INEL feather take.out-AOR

‘The boy took a feather out of his pocket.’ (Haspelmath 1993, as cited in Baker 2015, ex. 55: 146).

Baker shows that the subject in Lezgian, as in (48), uniformly receives ergative case regardless of the position or the specificity of the object. Thus, in (48), the object is indefinite; therefore, it does not shift out of VP; yet, the subject still receives the dependent ergative case. Thus, Lezgian contrasts with Eastern Ostyak, where the subject receives a dependent ergative case if and only if the object is definite.

In addition to languages having special structural cases inside the TP cycle (special structural dependent accusative in the accusative languages and special structural dependent ergative in ergative languages), which is the most common type of languages, Baker shows that there is analogue to that in that there are languages, where the higher of the two NPs inside the VP cycle receives a special structural dependent case, namely dative. In other words, dative case is the VP-internal analogue of ergative case inside the TP cycle. Baker (2015: 131-134) shows that this is the case in Sakha. Baker illustrates with an example of ditransitive verbs in Sakha (49), where the goal argument, which is generally higher than the theme argument inside the VP domain, receives dative case.

- (49) Min [_{VP} Masha-qa kniige-ni bier-di-m] (*with Masha-ny)
 I Masha-DAT book-ACC give-PAST-1sS Masha-ACC

‘I gave Masha the book.’ (Baker 2015, ex. 30: 132)

In order to confirm the claim that dative in Sakha is structural rather than lexical inherent case, Baker provides the example in (50b), where the dative is clearly assigned to an NP if the root verb of a morphological causative is transitive. Baker (2015) shows that the higher NP in the VP domain has the agent thematic role rather than the goal role, which is normally associated with lexical inherent dative case cross-linguistically.

- (50) a. Sardanna [_{VP} Aisen-y yta(a)-t-ta (*Aise-ŋa)].
 Sardanna Aisen-ACC cry-CAUS-PAST.3sS Aisen-DAT
 ‘Sardaana made Aisen cry.’
- b. Misha [_{VP} Masha-qa miin-i sie-t-te].
 Misha Masha-DAT soup-ACC eat-CAUS-PAST.3sS
 ‘Misha made Masha eat the soup.’ (Baker, ex. 31b: 132)

Baker further shows that the dative case on the higher NP of the VP cycle cannot be thematically related, as is shown by the fact that the same NP receives accusative case rather than dative case if the root verb of the morphological causative is intransitive, as shown in (50a). Baker (2015: 131), therefore, claims that Sakha has a rule, which can be stated as in (51):

- (51) “If XP c-commands ZP in VP, then assign Case U (dative) to XP” (Baker 2015, ex. 29a: 131).

Just as dative case is the VP-internal analogue of ergative case inside the TP, Baker (2015: 137-138) shows that there are languages, where the lower NP inside the VP cycle receives a special structural dependent case, namely structural oblique. In other words, this is the VP-

internal analogue of accusative case inside the TP cycle. Baker argues that Chamorro is a language, which shows structural oblique case on the lower of two NPs inside the VP cycle. To substantiate his claim, Baker (2015: 137-138) provides three arguments: First, oblique is used to mark the theme but not the goal argument of dyadic verbs, as shown by the example in (52):

- (52) Ha-na'i si nana-ña **ni** **buteya-n** **ketchup**
 3s-give PN.UNM mother-3.POSS OBL bottle-LK soy sauce
 'He gave his mother the bottle of soy sauce.' (Baker 2015, ex. 39: 137)

Second, oblique is used in morphological causatives when the base verb is transitive, as shown in (53b), but not when it is intransitive, as shown in (53a). In this case, oblique marks the theme argument, not the causee argument.

- (53) a. Hu na'-poddung i bola
 1s CAUS-fall the ball
 'I dropped the ball.'
- b. Ha na'-taitai hām i ma'estru **ni** **esti** **na** **lebbu**
 3s CAUS-read us the teacher OBL this LK book
 'The teacher made us read this book.' (Baker 2015, ex. 40: 138)

Third, oblique is used to mark the theme argument of dyadic verbs that have experiencer subjects. This is shown by the example in (54):

- (54) Maleffa yu' **ni** **lebblok-ku**
 forget 1s OBL book-1sPOSS
 'I forgot my books.' (Baker 2015, ex. 41: 138)

Baker, therefore, claims that Chamorro has a rule, which can be stated as in (55):

- (55) "If XP is c-commanded by ZP in VP, then assign Case V (oblique) to XP" (Baker 2015, ex. 29: 131).

Another pattern of case assignment that Baker describes is one, where the language has a single rule, which assigns a particular dependent case to the higher of two NPs in the same spell-out domain regardless of whether the spell-out domain is TP or VP. Baker claims that this is the case in Ika, where the suffix *se?* is used to mark the agent of a transitive verb (56a) and the goal of a ditransitive verb (56b):

- (56) a. Tigri-se? tšina kΛ-ga-na
 Jaguar-ERG pig PERI-eat-DIST
 'A jaguar ate his pig.'
- b. Abran-di Juan-se? kafé a?be u-ž-in
 Arban-TOP Juan-LOC(=ERG) coffee deliver AUX-MED-WIT
 'Arban delivered coffee to Juan.'
- c. Juan-di Abram-se? kafé k-i-san u-ž-in
 Juan-TOP Abram-LOC(=ERG) coffee PERI-?-buy AUX-MED-WIT
 'Juan bought coffee from Abram.' (Baker, ex. 36: 136)

Baker (2015: 136) claims that the example in (56c) shows clearly that the higher argument receives a structural dative(ergative) rather than lexical inherent dative given that the higher argument in (56c) has the thematic role SOURCE. According to Baker (2015: 136); therefore, Ika has a single rule of case assignment, which can be stated as in (57):

(57) “If NP1 c-commands NP2, and both are in the same spell-out domain (VP or TP), assign NP1 case X.” (Baker 2015, ex. 35: 136)

According to Baker (2015: 136) X is covered in Ika by ergative and structural dative case. Similar to the syncretism between ergative and dative case on the higher of two NPs in the same spell-out domain (VP or TP), Baker (2015: 139) claims that there are also languages, where there is a syncretism between structural accusative and structural oblique case on the lower of two NPs in the same spell-out domain (VP or TP). Baker claims that this is the case in Amharic, where the dependent accusative case is marked on the two internal arguments of ditransitive verbs as well as on the causee and the lower object of a morphological causative. This is shown by the examples in (58):

- (58) a. Ləmma Almaz-in Tarik-u-n nəggər-at
 Lemma Almaz.F-ACC story-DEF-ACC tell-(3mS)-3fO
 ‘Lemma told Almaz the story.’
- b. Ləmma Aster-in gənzəb-u-n sərrək’-at
 Lemma Aster.F-ACC money-DEF-ACC rob-(3mS)-3fO
 ‘Lemma robbed Aster of the money.’

- c. Ləmma Aster-in səa-u-n as-k'orrət-at
 Lemma Aster.F-ACC meat-DEF-ACC CAUS-cut-(3mS)-3fO
 'Lemma made Aster cut the meat.' (Baker 2015, ex. 43: 139)

Baker (2015: 139) claims that the same case should also be found on the theme/stimulus argument of an experiencer or possessive verb, but he acknowledges that this would be indistinguishable from an ordinary transitive constructions, as the pattern would be NOM-ACC-verb. Baker (2015: 139), therefore, claims that languages such as Amharic have a single rule, which can be stated as in (59):

(59) “If NP1 is c-commanded by NP2, and both are in the same domain (TP or VP), assign NP1 case Y” (Baker 2015, ex. 42: 139)

For languages such as Amharic, Y would cover both structural dependent cases, the accusative and oblique case, which are syncretized as accusative.

Returning to the assumptions made in Baker (2015) in (39) above, (39c) includes the novelty that when c-command pairs are considered for the purposes of determining linear order, case assignment is also determined. Thus, both linear order and case assignment happen at Spell-Out, the point in the derivation when syntax interfaces with PF. (39e) also includes another novelty, namely the idea that NPs in the VP domain are still accessible for case assignment in the CP cycle, but only if they are part of new c-command pairs at the larger spell-out domain TP.

Having discussed Baker's (2015) updated version of the Marantzian dependent case theory of (1991), it is important to note that the major distinction between this theory of case and the Agree-based theory of case (Chomsky 2000, 2001) lies in the fact that in Baker (2015), case

is a relationship between two NPs in a local domain (VP of the phasal head v or TP of the phasal head C). In other words, the structural dependent accusative/ergative case is only assigned in the presence of another NP in the same local domain (VP or TP). Otherwise, dependent case is not assigned, and the only NP in the structure receives an unmarked case (e.g. nominative if the spell-out domain is TP, genitive inside the NP domain, or partitive in the VP domain). This approach to case contrasts with an Agree-based approach to case (Chomsky 2000, 2001), where case is the result of an Agree relation between an NP and a functional head (e.g. structural NOM is the result of an Agree relation between a finite T and an NP subject in the c-command domain of T , and structural ACC is the result of an Agree relation between the strong phasal head v^* and an object NP in the c-command domain of v^*).

To summarize, in the updated version of the dependent case theory, Baker (2015) proposes the following rules of dependent case assignment:

- (60) a. If XP is c-commanded by ZP in TP, the spell-out domain of CP, assign XP the dependent accusative case (vP is a hard phase = differential object/subject marking languages)

(the unmarked case in the VP and TP domains is the nominative case = Sakha)

(the unmarked case in the VP domain is partitive; the unmarked case in the TP domain is nominative = Finish)

- (61) a. If XP is c-commanded by ZP in TP, the spell-out domain of CP, assign ZP the dependent ergative case (vP is a soft phase, the subject receives the unmarked nominative case in TP, Eastern Ostyak)
- b. If XP is c-commanded by ZP in TP, the spell-out domain of CP, assign XP the dependent accusative case (vP is a soft phase, and the language exhibits a “strict cycle” effect such that the dependent accusative case is assigned only at the TP cycle, Cuzco Quechua, Korean, Japanese)
- c. If XP is c-commanded by ZP in TP, the spell out domain of CP, assign ZP the dependent ergative case (vP is a soft phase, and the language exhibits a “strict cycle” effect such that the dependent ergative case is assigned only at the TP cycle, Lezgian)
- (62) a. If XP c-commands ZP in VP, the spell out domain of vP, assign the dependent (dative) case to XP (Sakha)
- b. If XP is c-commanded by ZP in VP, the spell out domain of vP, assign the dependent (oblique) case to XP (Chamorro)
- (63) a. If XP c-commands ZP in the same spell out domain (VP or TP), assign XP the dependent (ergative) case to XP (Ika)
- b. If XP is c-commanded by ZP in the same spell out domain (VP or TP), assign XP the dependent (accusative/oblique) case (Amharic).

In this thesis, the updated version of the dependent case, as developed in Baker (2015) will be adopted as the theoretical framework.¹⁸

4.3.3 Theoretical assumptions

In what follows, I lay out the theoretical assumptions that form the basis for the analysis to be developed of the case assignment facts of SA in chapter 5.

(a) Following Baker (2014a: 355, 2015: 233), I adopt the theoretical assumptions in (64):

- (64) a. C and v are phase heads.
- b. Their complements (IP, VP) are Spell-Out domains.
- c. Spell-Out involves mapping relevant c-command relations onto linear order statements, *case assignments*, and so on.
- d. CP is always a “hard phase”: its complement is invisible for later operations.
- e. vP may be a “hard phase” or a “soft phase.” If it is soft, the contents of its complement do remain visible in the next stage of derivation, *but only new c-command relationships are considered at later Spell-Outs*.
- f. Following Baker (2015: 294-295) I will assume the following hierarchy of case assignment in SA:

¹⁸ The dependent case of Baker (2015) has recently been criticized by Omer Preminger and Ted Levin (2015) on the grounds that two modalities of case assignment, the dependent case and the Agree-based case are undermotivated. They argue that the Agree-based case assignment can be dispensed with when accounting for case assignment in languages such as Sakha. At this point, I am unable to evaluate this critique. I thank Arsalan Kahnemuyipour for directing my attention to this work.

(65) lexical case < dependent case < Agree-based case < unmarked/default case

Lexical case = I will argue that this case is assigned by two lexical items in SA.

The first lexical case assigner in SA is the indicative complementizer *ʔinna* and its variant *ʔanna*. I claim that the second lexical case assigner in SA is the copular verb *k-w-n* ‘to be’.

Dependent case = This is the case that is assigned to a lower NP when it is c-commanded in a new c-command relationship by a higher NP in the same spell out domain, VP or TP.

Agree-based case = This case is assigned as the result of an Agree relation (in tense, mood, aspect) between a functional head T and the subject in SA. This case is phase-bound in the sense that it must be assigned inside the CP phase, and cannot be determined by higher phases. I claim that *v* does not engage in an Agree relation with the object in SA. Accusative case in this thesis is always the result of the dependent case.

Unmarked/default case = This is the case that is assigned when neither of the higher-ranked case mechanisms applies. I claim that it is nominative in the CP domain, but accusative in the PP domain.

Semantic/adverbial case = This case is not included in the hierarchy above.

However, I claim in this thesis that this case is needed to mark adverbial NPs as having the adverbial function.

Given the hierarchy in (61), it will be shown that the unmarked/default case in the CP domain is nominative case, but the unmarked case in the PP domain is the accusative case. The claim that the accusative case is the unmarked case inside the PP domain is also taken from Baker (2015: 296), who claims that “[s]ome languages might have a special unmarked case triggered by P heads (oblique in the Hindi sense), which may or may not be the same as nominative-absolutive and/or genitive.” I therefore claim that the unmarked case in the PP domain is not the same as the unmarked case in the CP domain. Thus, the unmarked case in the PP domain of SA is accusative case, whereas the unmarked case of the CP domain is the nominative case.

- g. Following Soltan (2007) and Al-Balushi (2011, 2012), I will assume that SA includes lexical case in addition to structural case. I will assume that the indicative C head *?inna/?anna* assigns a purely idiosyncratic lexical accusative case to its linearly adjacent NP. Following Fassi Fehri (1993: 88) and Al-Balushi (2011), I will also assume that the copular verb in SA assigns a purely idiosyncratic lexical accusative case to its NP/AP complement.
- h. Following Rizzi (1997), I will assume the split CP analysis of the left-periphery, where the CP domain splits into a number of projections, which are shown by the hierarchy given in (66):

(66) ForceP > TopP > FocP > TopP > FinP

The hierarchy in (66) shows that a focus phrase (FocP) can be sandwiched by two topic phrases (TopP). In the case of SA, I follow (Shlonsky 2000) and Aoun et. al. (2010), where the claim is made that clitic left-dislocated elements are always base-generated, and they occupy the higher TopP position (or they are adjoined to projections in the left periphery of the clause, as I will argue in this thesis). I will also assume with Shlonsky (2000) that the reason why SA does not exhibit a lower TopP projection is because the FocP has an adjacency requirement for the verb given that focus phrases in SA induce subject-verb inversion.

(b) Based on Baker (2015), I will argue that the case assignment facts of SA will be shown to be determined by one of the rules proposed in Baker, a rule offered in Baker to account for case assignment in languages such as Amharic. The rule is stated here as (67):

(67) If XP is c-commanded by ZP in the same spell out domain (VP or TP), assign XP the dependent accusative case

(c) I will claim that vP in SA is a soft phase in the sense of Baker (2015).

(d) One of the major claims of this thesis is that even in those structures where the dependent case fails to apply, v does not engage in an Agree relation with the object, and does not assign the structural accusative case as a result. This, I argue, follows naturally from the hypothesis that v is a soft phase in SA. Thus, Fassi Fehri's (1993) condition on case discharge, where the accusative case is assigned only when the subject receives case is now interpreted as a reflex of v being inactive rather than as a reflex of the subject not receiving case in certain structures.

(e) Following Fassi Fehri (1993), I claim that T can host features of tense, mood or aspect.

Therefore, I claim that any of these features in T can establish an Agree relation with the subject and assign the subject the structural nominative case as a result.

(f) I will claim that DP and PP in SA are hard phases in the sense of Baker (2015).

(g) Following Baker (2015), multiple case assignment is allowed across the Spell Out of the phasal head v^* , as this is the only soft phasal head in SA.¹⁹ I claim that multiple case assignment does not apply across the phasal heads C, D, or P, as these are claimed in this thesis to be hard phases in SA where case decisions are made exclusively from within.

(h) I will claim that the null subject *pro* does compete for case, whereas the null subject *PRO* does not.

In addition to the above theoretical assumptions, I will take two further theoretical positions, one regarding the status of the preverbal DPs in the SVO order, and another regarding the nature of the default/unmarked case in SA. These two theoretical positions will be discussed later in this chapter. Before that, the rules of dependent case assignment have to be spelled out. This is addressed in the next subsection.

4.3.4 The rules of dependent case assignment

Following Baker (2015: 174-175), I make the following two theoretical assumptions about the rules of dependent case assignment:

(a) If X has a referential index and X is c-commanded by Y such that Y has a distinct index in the same spell out domain, assign X *accusative*.

¹⁹ Earlier in this thesis, I argued against some of the Agree-based accounts of case (e.g. Raḥḥali 2003, Soltan 2007, 2011) on the grounds that their accounts face problems with ECM constructions. As far as I am concerned, there is evidence that multiple case checking should be allowed (cf. Bejar and Massam 1999, and more recently Alboiu and Hill 2016).

What (a) means is that for the dependent case to apply, the following two conditions must be met: both the case competitor (i.e. the higher NP in the spell out domain) and the case undergoer (i.e. the lower NP in the same spell out domain) have to have (a) referential indices, and (b) the referential index of the case competitor has to be distinct from the referential index of the case undergoer (cf. Marantz's (1991) claim that the NPs engaged in dependent case assignment must be distinct). In the theory of lexical categories laid out in Baker (2003: 104), only nouns and their projections have a referential index, which is conceived of as having an ordered pair of integers in the syntactic representation of nouns such that nouns have syntactic representations of the form $X_{[j,k]}$.²⁰ The first integer introduces a new referent to the syntactic representation, and the second integer must be shared with something else in the structure, and the two integers are equal by virtue of the fact that they are in the same index. The syntactic representation $X_{[j,k]}$ is read as j is the same X as k . Having two integers in the syntactic representation of nouns is, according to Baker (2003: 101-109), dictated by the fact that nouns, but not verbs or adjectives, have a criterion of identity. In other words, only nouns can fill the blank in the frame "X is the same ____ as Y", as can be verified by the contrasts between (68) and (69):

- (68) a. That is the same man as you saw yesterday.
 b. Those are the same women as we saw last night.
 c. That is the same water as was in the cup this morning.
 d. The French want to have the same liberty as the Americans have. (Baker 2003, ex. 14: 101)
- (69) a. #That is the same long as this.

²⁰ It is true that in Baker's (2003) theory of lexical categories only nouns and their projections have a referential index. I take this to mean that null categories such as *pro* and *PRO* also have a referential index, since these are NPs as well.

- b. #She is the same intelligent as he is.
- c. #I saw Julia the same sing as Mary did.
- d. #I watched Nicholas the same perform a stunt as Kate performed. (Baker 2003, ex. 15: 101)

Baker (2003: 101-102) points out that the reason why the examples in (69) are ill-formed cannot be attributed solely to syntactic reasons on the grounds that only nouns can follow determiners such as *the* and adjectives such as *same*. Rather, the examples are ill-formed because they are both ungrammatical syntactically and uninterpretable semantically. Thus, they are different from ungrammatical examples such as Chomsky's (1957, as cited in Baker 2003: 102) example given in (70):

(70) The child seems sleeping.

As pointed out in Baker (2003: 102), the example in (70) is ill-formed for purely syntactic reasons even though it is semantically interpretable.

One of the axioms that Baker (2003: 104) adopts for common nouns is the mathematical property of transitivity, which is given in (71):

(71) $N\{i, k\}$ and $N\{k, n\} \rightarrow N\{i, n\}$ (transitivity: if *i* is the same N as *k* and *k* is the same N as *n*, then *i* is the same N as *n*) (Baker 2003, ex. 18d: 104).

Given the property of transitivity offered in (71), Baker offers the following example to illustrate his system:

(72) I bought a pot_[i,k] and a basket_[l,m]. The pot_[n,i] is heavy (Baker 2003, ex. 19c: 105)

In (72), the second token of *pot* has the index $[n, i]$. There is a new integer in the index, namely n , and n is equal to the second integer i because they are in the same index. Since n is equal to i in the index of the second token of *pot* and since i of the index of the first token of *pot* is equal to k of the first token of *pot*, it follows by transitivity that k of the first token of *pot* is equal to n of the second token of *pot*.

Thus, to engage in dependent case calculation, the two NPs involved in a spell out domain must have distinct referential indices.

4.3.5 The preverbal position is a subject position

The first thing to notice about SA is the fact that the VSO order is the unmarked order of the language. However, the SVO order is also used. This can be illustrated with the examples in (73):

- (73) a. katab-at l-banaat-u risaalat-an
 wrote-3FSG the-girls-NOM letter-ACC
 ‘The girls wrote a letter.’ (VSO)
- b. l-banaat-u katab-na risaalat-an
 the-girls-NOM wrote-3FPL letter-ACC
 ‘The girls wrote a letter/(The girls, they wrote a letter.)’ (SVO)

As can be seen in (73a), the postverbal DP is unambiguously a subject. The status of the preverbal DP has been a subject of ongoing debate between those who consider them to be subjects (see Benmamoun 1999, 2000), and others who consider them to be topics (see for

example Soltan 2007, Al-Balushi 2011). Fassi Fehri (1993) argues that the status of the preverbal DP is ambiguous, as it can have a subject reading or a topical reading, as is shown in the English translation in (73b). Following Benmamoun (1999, 2000, Mohammed 1990, 2000), I will take the position that the preverbal DP is indeed a subject. There are a number of arguments in support of this position. First, if we assume that the preverbal DP is a topic rather than a true subject, then we have to explain why the the verb bears rich agreement (i.e. agreement in number and gender) in this position only but not in the postverbal position. Fassi Fehri (1993) accounts for the agreement asymmetry in the two orders by arguing that rich agreement can be an incorporated pronoun linked anaphorically to the preverbal DP, when the latter is interpreted as a topic. However, as noted in Aoun et. al. (2010: 79), the incorporation account is problematic given that the ϕ -features are realized as both prefixes as well as suffixes in the imperfective/present form of the verb. A proponent of the incorporation analysis would have to assume that the pronoun has somehow split such that part of it appears on the prefix and part of it appears as a suffix. Clearly, any analysis along these lines is problematic, given that pronouns are always realized as one phonological unit. Soltan (2011) also argues that the preverbal DP is a topic rather than a true subject. To account for the agreement asymmetry, Soltan (2011) argues that the verb in the SV order agrees with a postverbal null subject, *pro* and rich agreement on the verb is therefore necessary in order to identify the null subject. This position is also problematic for a number of reasons. First, Fassi Fehri (1993) shows that agreement with pronouns is not different from agreement with lexical DPs, as the agreement asymmetry obtains regardless of whether the verb agrees with a pronoun or a lexical DP. This is illustrated by the contrast in (74) and (75) (the examples are taken from Fassi Fehri 1993):

- (74) a. l-nisaaʔ-u nabiil-aat-un/* nabiil-at-un.
 the-women-NOM noble-**FPL**-nom/*noble-FSG-NOM
 ‘The women are noble.’
- b. ʔa-nabiil-at-un l-nisaaʔ-u?
 Q-noble-**FSG**-NOM the-women-NOM
 ‘Are the women noble?’
- (75) a. ʔantunna nabiil-aat-un.
 you.**FPL**.NOM noble-**FPL**-NOM
 ‘You (fpl) are noble.’
- b. ʔa-nabiil-at-un ʔantunna?
 Q-noble-**FSG**-NOM you.**FPL**.NOM
 ‘Are you (fpl)noble?’

The examples in (74) show that there is a plural agreement in the DP + adjective order, but plural agreement is lacking in the adjective + DP order. This is the case when the DP is a lexical DP. The examples in (75) show that the same agreement asymmetry is observed when the DP is a pronominal DP. Based on examples like these, Fassi Fehri (1990) concludes that there is no distinction between agreeing with lexical DPs and agreeing with pronominal DPs since in both cases, the same asymmetry is observed. Other examples to show the same asymmetry are (76) and (77) (the examples in (76b) and 77b) are from Al-Astrabaaḍi 13th c./1996: 127):

- (76) a. humaa qaaʔim-aan/*qaaʔim-un.
 they.**MDU.NOM** standing.up-**MDU.NOM**/*standing.up-**MSG.NOM**
 ‘The two of them are standing up.’
- b. ʔa-qaaʔim-un humaa
 Q-standing.up-**MSG.NOM** they.**MDU**
 ‘Are they standing up?’
- (77) a. ʔantumaa qaaʔim-aan/*qaaʔim-un.
 you.**MDU.NOM** standing.up-**MDU.NOM**/standing.up-**MSG.NOM**
 ‘You two are standing up.’
- b. maa qaaʔim-un ʔantumaa.
 NEG standing.up-**MSG-NOM** you.**MDU**
 ‘You two are not standing up.’

In addition to the fact the agreement asymmetry is the same regardless of whether the subject is a pronoun or a lexical DP, the complex tense constructions provide another context, where the preverbal DP can only be interpreted as a subject. This is illustrated in (78a):

- (78) a. kaan-at l-banaat-u y-aktub-na-Ø risaalat-an.
 was-3FSG the-girls-NOM 3-write-PL.F-INDIC letter-ACC
 ‘The girls were writing a letter.’

In (78), the DP *l-banaat* ‘the girls’ is preverbal, as it triggers rich agreement on the lexical verb. Here, no argument can be made that the preverbal DP is a topic, since the sentence does not have the illicit interpretation ‘as for the the girls were, they were writing a letter’. The only reading the preverbal DP has is that of the subject. Furthermore, on the assumption that the DP *l-banaat* ‘the girls’ is a topic, the subject must be a null *pro* following the lexical verb, as shown in (78b):

- (78) b. *kaan-at* *l-banaat-u* *y-aktub-na-Ø* *pro* *risaalat-an.*
 was-3FSG the-girls-NOM 3-write-**PL.F**-INDIC letter-ACC
 ‘The girls were writing a letter.’

Following Soltan (2007, 2011), one would have to assume that the auxiliary verb *k-w-n* ‘be’ and the lexical verb both establish an Agree relation with the null subject *pro*. The DP *l-banaat* ‘the girls’ should not act as an intervener, as it is in a left-peripheral A-bar position. The auxiliary verb would have to Agree in GENDER with the null subject, and the lexical verb would have to establish an Agree relation with the postverbal subject in GENDER, EPP and ϕ . The problem that this analysis creates is the following: the auxiliary verb shows agreement of the VS order on Soltan’s (2007, 2011) account despite the fact that it is in an Agree relation with a null subject *pro*, an Agree relation which should exhibit full agreement, contrary to Soltan’s (2007, 2011) predictions. Notice that (78b) contrasts with (78c) which is in line with Soltan’s (2007, 2011) predictions, as both the auxiliary verb and the lexical verb show full agreement when they Agree with the null subject *pro*.

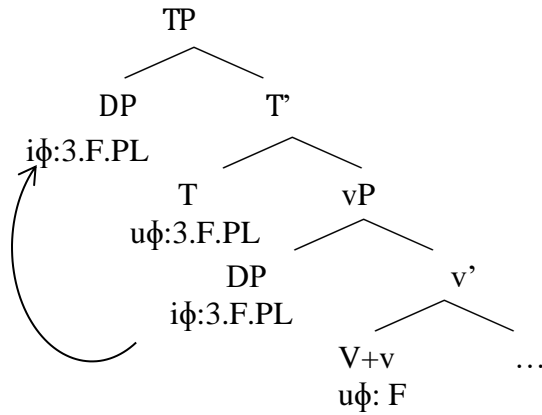
- (78) c. *l-banaat-u* *kunna* *y-aktub-na-Ø* *pro* *risaalat-an.*
 the-girls-NOM were.3FPL 3-write-**PL.F**-INDIC letter-ACC
 ‘The girls were writing a letter.’

To account for the agreement asymmetry, I follow Wurmbrand and Haddad (2016: 23-24), who claim that *v* is specified for a gender feature only, whereas *T* is fully specified for the features of person, number and gender.²¹ Wurmbrand and Haddad (2016) argue that there are two ways of satisfying the EPP feature of *T*. This can be achieved directly by raising the subject from Spec, *vP* to Spec, *TP*, or indirectly by raising *v* to *T*. They argue that *v* has a gender feature only, which is valued against that of the subject, when the latter is merged in Spec, *vP*. In the SVO order, *T* (with the features of person, number and gender) agrees with the subject, and the subject is raised to Spec, *TP*. The result of this movement is that *T* values its person, number and gender features. They further argue that another way of satisfying the EPP feature of *T* is by raising *v* to *T*. The functional head *v* is specified for a gender feature only, which is valued against that of the subject in Spec, *vP*. When *v* raises to *T* to satisfy the latter's EPP feature, *v* agrees with *T* and values the latter's gender feature. As for the person and number features of *T*, they receive a default value [3 SG]. Wurmbrand and Haddad's (2016) model for agreement in the SVO order and the VSO order can be schematized, as in (79) and (80) (from Wurmbrand and Haddad 2016: 23-24):

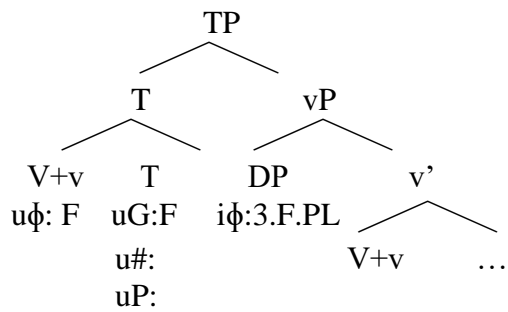
(79) Agreement in the SVO order when the preverbal DP is specified as [3.PL.F]²²

²¹ Note that the claim that *T* is fully specified in the syntax for the features of person, number and gender does not mean that all these features should be realized morphophonologically. As I argued in Ahmed (2015), the morphophonological realization of *T* in the SVO order includes only number and gender, but not person. In other words, only a subset of the full ϕ -set of *T* is realized morphophonologically in the SVO order of SA.

²² Although the structure in (78) does not show it, the assumption is that *v-V* always moves to *T* in SA.



(80) Agreement in the VSO order when the postverbal DP is specified as [3.PL.F]



That the lexical verb in SA raises to T is confirmed by the fact that the verb may precede vP adverbs, as shown in (81) and (82):

- (81) a. ʔakal-a Zayd-un kaṭiir-an l-tuffaḥ-a
 ate-3MSG Zayd-NOM abundantly-ACC the-apples-ACC
 ‘Zayd ate apples abundantly.’ (Raḥḥali and Souâli 1997, ex. 8a: 321)
- b. t-aṭbux-Ø-u Hind-un daaʔim-an l-samak-a
 F-cook-SG-INDIC hind-NOM always-ACC the-fish-ACC
 ‘Hind always cooks fish.’ (Raḥḥali and Souâli 1997, ex. 8b: 321)

- (82) a. Zayd-un ?akal-a kaṭiir-an l-tuffaḥ-a
 Zayd-NOM ate-3MSG abundantly-ACC the-apples-ACC
 ‘Zayd ate apples abundantly.’
- b. *kaṭiir-an Zayd-un ?akal-a l-tuffaḥ-a
 abundantly-ACC Zayd-NOM ate-3MSG the-apples-ACC
 ‘Zayd ate the apples abundantly.’²³

To summarize, the position taken in this thesis is that the subject may appear either preverbally to satisfy the EPP feature of T directly or postverbally, in which case the EPP feature of T is satisfied by raising *v* to T.

4.3.6 Nominative is the unmarked/default case in SA

In this thesis, I will follow the modern generative literature on SA, where the claim is that nominative case is the default case in SA. This is the claim made in Fassi Fehri (1993), Ouhalla (1994), Mohammed (1990, 2000), Raḥḥali (2003), Soltan (2007) and Al-Balushi (2011). One piece of evidence that this is true is that nominative case can surface on the clitic left-dislocated NP, as in (83):

- (83) l-ḍuyuuf -u_i, ?istaqbal-tu-hum_i
 the-guests-NOM received-1SG-them
 ‘The guests, I received them.’ (Moutaoukil 1987, ex. 109a: 88)

²³ According to Raḥḥali and Souâli (1997, fn. 12: 321), the adverb *kaṭiir-an* ‘abundantly’ is a restrictiver modifier of the verb; therefore it can only be conceived as a vP adverb and not as a TP adverb.

4.4 Summary

In this chapter, alternative generative accounts of case to the Chomskian accounts are discussed. One such account is that of Yip et al. (1987). Another account is that of the original version of the dependent case theory, as developed in Marantz (1991). The chapter discusses the problems that both of these accounts face. The chapter introduces the theoretical framework of this thesis, namely the updated version of dependent case theory, as developed in Baker (2015). Crucially, vP in SA is claimed to be incapable of assigning the accusative case to the object NP, as it is a soft phase in the sense of Baker (2015). In addition, the preverbal NP is considered to be a subject, and the nominative case is assumed to be the unmarked/default case in SA.

Another crucial claim of this chapter is that dependent case applies only when the NPs competing for case have distinct referential indices.

Chapter Five

Case assignment of core arguments in Standard Arabic

5.1 Introduction

In this chapter, I develop a dependent case analysis (Baker 2015) of the case assignment facts in Standard Arabic (SA). This chapter will focus on the case assignment facts of the core arguments (i.e. the subject and the object).

5.2 vP is a soft phase in SA

One of the major theoretical arguments of this thesis is that the lower phase vP is a soft phase in SA in the sense of Baker (2015). It is worth recalling that a soft phase in Baker's (2015) theory is a phase whose NPs are still accessible to a higher phase even though case assignment may be determined in this phase. This is in contrast to a hard phase, whose complement NPs are inaccessible to a higher phase. There are four pieces of evidence to support the claim that vP is a soft phase in SA. The first piece of evidence is theory-internal. In double object constructions, the middle argument, (be it goal or source) still receives the dependent accusative case rather than the structural nominative case assigned via Agree with T, as is shown in (1):

- (1) wahab-at Hind-un **Zayd-an** tawb-an
 gave-3FSG Hind-NOM Zayd-ACC dress-ACC
 'Hind gave Zayd a dress.'

This indicates that the middle argument, which is in Spec, VP is still accessible to the higher phase, CP at the point in the derivation when case assignment is calculated. The subject is

assumed to be in Spec, vP and the theme object is assumed to be in the complement of VP (more on this later in this chapter).

The second piece of evidence comes from passive sentences of double object constructions. Here, the theme argument still receives an accusative case despite the standard assumption in Agree-based accounts of case that passive verbs lose their ability to assign structural accusative case to the object. This is shown in (2):

- (2) wuhib-a Zayd-un **tawb-an**
 given.PASS-3MSG Zayd-NOM dress-ACC
 ‘Zayd was given a dress.’

From the perspective of dependent case theory, this is also an indication that the vP in SA is a soft phase rather than a hard phase. If we assume that vP is a soft phase, the facts follow straightforwardly; the middle argument c-commands the theme argument in vP, and the theme argument receives the dependent accusative case at the Spell Out of vP. However, if we assume that vP is a hard phase, the facts do not follow; as the c-command relationship between the middle argument and the theme argument is old information at the TP cycle; therefore, the prediction is that no dependent case on the theme argument is possible, contrary to fact.

The third clue that vP is a soft phase in SA comes from the feature specification of the phasal heads v and C. As argued in Wurmbrand and Haddad (2016), v is impoverished in SA in that it is specified only for a gender feature. This is in contrast to T, which, according to Wurmbrand and Haddad, is fully specified for the person, number and gender features. Assuming that v is

deficient in its ϕ -specification would then explain why vP is a soft phase in SA. This is illustrated by the agreement asymmetry shown in (3):

- (3) a. katab-at l-banaat-u risaalat-an
 wrote-3FSG the-girls.3FPL-NOM letter-ACC
 ‘The girls wrote a letter.’ (VS order)
- b. l-banaat-u katab-na risaalat-an
 the-girls.3FPL-NOM wrote-3FPL letter-ACC
 ‘The girls wrote a letter.’ (SV order)

Assuming that this analysis is on the right track, this explains why vP but not CP is a soft phase in SA. In other words, vP is a soft phase because the lower phasal head v is impoverished; the higher phase CP is a hard phase because the functional head T, which inherits its features from C (see Chomsky 2000, 2001), is not impoverished, as it is specified for the features of person, number and gender.

The fourth piece of evidence, which indicates that v is a soft phase in SA comes from a reassessment of the nature of v itself. In the context of process nominals in control structures, v in SA is inactive (probably due to its impoverished ϕ -feature specification à la Wumbrand and Haddad 2016) in that even in those cases where the dependent case fails to apply, v does not establish an Agree relation with the object, and therefore, does not assign the structural accusative case to it. This is illustrated in (4):

- (4) y-uriid-Ø-u [DP ʔintiqaad-a [vP *PRO*
 3-want-MSG-INDIC criticizing-ACC
 l-mašruuʕ-i/*l-mašruuʕ-a bi- taʕammud-in]
 the-project-GEN/*the-project-ACC with-intention-GEN
 ‘He wants to intentionally criticize the project.’

In chapter 7, I show that the structural accusative case on the object is the result of the object receiving the dependent accusative case rather than the result of the object agreeing with v.

5.3 Case assignment in simple transitive sentences

The example in (5) is a simple transitive sentence:

- (5) [CP C [TP katab-a [vP **zayd-un**_[NP1] [VP <kataba> **risaalat-an**_[NP2]]]]]
 wrote-3MSG Zayd-NOM letter-ACC
 ‘Zayd wrote a letter.’

The derivation of the simple transitive sentence (5) proceeds along the lines of the theoretical framework adopted in this thesis. This is shown in (6):

- (6) a. [vP V NP2]
 b. [vP NP1 v [vP V NP2]], v a phase head
 Spell out v’s complement: NP2
 → Case NP2 = NA (= not applicable)

c. [_{CP} C [_{TP} T [_{VP} NP1 v [_{VP} V NP2]]]], C a phase head

Spell-out C's complement: NP1 c-c's NP2 \rightarrow (NP1 < NP2)

→ Case NP2 = ACC

→ Case NP1 = structural NOM via Agree with T

(c-c = c-command; \rightarrow = if x then y; $x < y$ = x linearly precedes y)

In (6), NP2 is merged into the structure as the complement of the lexical head V, and VP is projected. The light verb *v* is then merged into the structure with the external argument NP1 merged in the specifier position of vP. Given that vP is a phase, its domain VP is spelled out. The only argument in this domain is NP2; therefore, the dependent case does not apply. The functional head T is now merged into the structure and the verb raises to it. The phasal head C is now merged, and its TP domain is spelled out at this point. In this domain, NP1 now c-commands NP2; therefore, NP1 linearly precedes NP2 in accordance with Kayne's (1994) Linear Correspondence Axiom. NP2 receives the dependent accusative case given that NP2 is part of a soft phase whose contents are visible to C. As for NP1, it receives the structural nominative case via Agree with T.

5.4 Case assignment in simple intransitive sentences

The example in (7) is a simple intransitive sentence, where the verb is unergative with one NP, which is the external argument of the verb, and there are no internal arguments.

(7) [CP C [TP sakat-at [VP **zaynab-u**_[NPI] [VP...<V>]]]].
stopped.talking-3FSG Zaynab-NOM

‘Zaynab stopped talking.’

The derivation of (7) unfolds as in (8):

(8) a. [_{VP} V]

b. [_{VP} NP1 v [_{VP} V]], v a phase head

Spell out v’s complement: NA

c. [_{CP} C [_{TP} T [_{VP} NP1 v [_{VP} V]], C a phase head

Spell out C’s complement: NP1 = structural NOM via Agree with T

In (8), the external argument is located in Spec, vP on standard accounts, and it is the only NP in the sentence; therefore, the subject NP is not assigned the dependent case, and it is instead assigned the structural NOM case via Agree with T. Crucially, note that even though dependent case is ranked higher in the adopted theoretical model than Agree-based case, the former can only apply when there are at least two NPs competing for case in the same phasal domain; dependent case does not apply when there is only one NP at the Spell-Out of a phase.

Another example of a simple intransitive sentence is the type of sentence known as the unaccusative sentence. An example of unaccusative sentences is given in (9):

(9) [_{CP} C [_{TP} waṣal-a [_{VP} V [_{VP} <V> **l-musaafir-uun**<sub>[NP1]]]]].
arrived-3MSG</sub>

‘The passengers arrived.’²⁴

The derivation of (9) is as shown in (10):

(10) a. [_{VP} V NP1]

b. [_{VP} v [_{VP} V NP1]], v a phase head

Spell out v’s complement: NP1

Case NP1 → not applicable (= NA)

c. [_{CP} C [_{TP} T [_{VP} v [_{VP} V NP1]]]], C a phase head

Spell out C’s complement: NP1 = structural NOM via Agree with T

In (10), the internal argument is base-generated in the complement of VP and it does not raise to Spec, vP, as the latter is not projected in these structures on standard accounts. There is only one NP at the Spell-Out of TP; therefore, the dependent accusative case cannot be assigned and the NP is assigned the structural NOM case via Agree with T. Note that the theme object does not agree with v, for the latter is, I claim, incapable of establishing an Agree relation with the object and assigning structural accusative to it. This is in addition to the fact that unaccusative verbs are, on standard accounts, incapable of assigning case to their objects.

²⁴ I assume that unaccusatives project a vP but they do not project an external argument.

5.5 Case assignment in sentences with double object constructions

The example in (11) is a double object construction (or ditransitive), where the verb has two internal arguments and one external argument.

- (11) [CP C [TP ʔaʕt-at [VP **zaynab-u**_[NP1] [VP **zayd-an**_[NP2] <V> **risaalat-an**_[NP3]]]]].
 gave-3FSG Zaynab.F-NOM Zayd-ACC letter-ACC
 ‘Zaynab gave Zayd a letter.’

It is worthwhile to note at this point that the higher object (i.e. the goal argument) and the lower object (i.e. the theme argument) in (11) receive the structural dependent case. That this is the case is confirmed by the fact that both objects alternate their accusative case with nominative case in passives, as is shown in (12):

- (12) a. ʔuʕtiy-at **risaalat-un**_[NP1] **li-zayd-in**_[NP2].²⁵
 gave.PASS-3FSG letter.F-NOM to-Zayd-GEN
 ‘A letter was given to Zayd.’
- b. ʔuʕtiy-a **zayd-un**_[NP1] **risaalat-an**_[NP2].
 gave.PASS-3MSG Zayd-NOM letter-ACC
 ‘Zayd was given a letter.’

²⁵ The reason why the agent is demoted to an adjunct position has to do with the fact in SA, there is a hierarchy of thematic roles such that the theme cannot be projected higher than the goal in the presence of the latter (cf. Fassi Fehri 1999 on this issue).

That the middle argument in double object constructions receives a structural accusative case is also confirmed by the fact that this argument receives this case regardless of its thematic role in the sentence, as can be shown by the following examples:

- (13) a. manah-at Zaynab-u **Zayd-an** jaaʔizat-an
 gave-3FSG Zaynab.F-NOM Zayd.M-ACC prize-ACC
 ‘Zaynb gave Zayd a prize.’
- b. salab-at Zaynab-u **Zayd-an** maal-a-hu
 deprived-3FSG Zaynab.F-NOM Zayd-ACC money-ACC-his
 ‘Zaynab deprived Zayd of his money.’

As can be observed, the middle argument in (13) receives the same case even though it has distinct thematic roles in the sentence. Thus, it is a goal in (13a), and a source in (13b). This strongly indicates that the middle argument receives a structural accusative case rather than an inherent case in the sense of Woolford (2006).

Following the standard assumption in the generative literature (see Baker 2015, Woolford 2006), the goal argument *zayd* ‘Zayd’ in (11) is projected either in the Spec, VP position or in the Spec, v_GP between VP and the higher vP that projects an external argument. For the purposes of this dissertation, I assume that the goal argument is projected in the Spec, VP position.

The derivation of the active double object construction in (11) proceeds as in (14):

- (14) a. [_{VP} NP2 V NP3]
 b. [_{VP} NP1 v [_{VP} NP2 V NP3]], v a phase head

Spell out v's complement: NP2 c-c's NP3 \rightarrow (NP2 < NP3)

\rightarrow Case NP2 = 0

\rightarrow Case NP3 = ACC

c. [CP C [TP T [vP NP1 v [vP NP2 V NP3]]]], C a phase head

Spell-out C's complement: NP1 c-c's NP2 \rightarrow (NP1 < NP2)

\rightarrow Case NP2 = ACC

NP1 c-c's NP3 \rightarrow (NP1 < NP3)

\rightarrow Case NP3 = ACC (redundantly)

\rightarrow Case NP1 = structural NOM via Agree with T

In (14), there are two NPs in the spell-out domain of the lower phase vP. In the VP spell-out domain, NP2 c-commands NP3; therefore, NP2 linearly precedes NP3. As a result of the c-command relationship, NP3 is assigned the dependent accusative case inside the VP domain. As for NP2, it does not get a case value yet. Given that the lower phase is a soft phase and it is part of another phase, NP2 does not get a case value yet. T is merged into the structure, the verb raises to it. C is merged into the structure, and the domain TP is spelled-out. In this domain, NP1 c-commands NP2, which does not have a case value yet. The result is that NP1 linearly precedes NP2. As a result of this relationship, NP2 is assigned the dependent accusative case. In this domain, NP1 also c-commands NP3. The result is that NP1 linearly precedes NP3, and NP3 is redundantly assigned the dependent accusative case. Note that NP3 receives the dependent case twice, the first time at the Spell-Out of vP, and the second time at the Spell-Out of CP. Assuming that NP3 receives the dependent case at the Spell-Out of CP is in accordance with Baker's (2015) theory of case given that the c-command relationship between NP1 and NP3 is a new one rather

than an old one; therefore, case assignment is available. As for the linear relationship between NP2 and NP3, it has already been considered in the lower phase vP such that NP2 linearly precedes NP3. The subject NP1 ends up with the structural nominative case via Agree with T. It is important to recall here that the case assignment in active double object constructions provides a strong argument for the claim made in this thesis that vP is a soft phase in SA. The goal argument NP2 and the theme argument NP3 are still accessible in the TP cycle given that vP is a soft phase. Therefore, the c-command relationship in the TP cycle between NP1 and NP2 and that between NP1 and NP3 are both new c-command relationships; as a result, the dependent case applies for the first time to the goal argument and applies for the second time to the theme argument.

When the theme argument of (11) is passivized, we get (15):

- (15) a. *ʔuʕṭiy-at* **risaalat-un**_[NP1] **li-zayd-in**_[NP2].
 gave.PASS-3FSG letter.F-NOM to-Zayd-GEN
 ‘A letter was given to Zayd.’
- b.*? *ʔuʕṭiy-at* **risaalat-un** **zayd-an**.
 gave.PASS-3FSG letter-NOM Zayd-ACC
 Intended meaning ‘A letter was given [to] Zayd.’

The example in (15b) is accepted by some traditional Arab grammarians, but rejected as ungrammatical by others (see Hasan 1962, fn. 1: 112). Among modern linguists, Fassi Fehri (1999: 51) treats it as ungrammatical and Moutaoukil (1987: 23) considers it to be highly marginal. For Moutaoukil (1987: 23), sentences such as (15b) become more acceptable only if the theme argument *risaalat* ‘a letter’ is referential (i.e. definite or specific indefinite). The

reason why (15b) might be judged as grammatical can be explained as follows: on the assumption that the goal argument (PP or NP) is merged in Spec, VP and the theme argument in the complement of VP, both are in the same Minimal domain of the head V; therefore, both are equidistant from the target position, Spec, vP (or any other position for that matter). According to Hornstein et al. (2005: 19) whose definition is based on Chomsky (1993), Minimal Domain is defined as in (16):

(16) “The Domain of α , or $\text{MinD}(\alpha)$, is the set of categories immediately contained or immediately dominated by projections of the head α , excluding projections of α .”

They define Containment and Domination as in (17):

- (17) a. “Containment: A category α contains β iff some segment of α dominates β .”
 b. “Domination: A category α dominates β iff every segment of α dominates β .”

As for equidistance, Hornstein et al (2005: 163) define it as in (18):

(18) “Equidistance (final version): If two positions α and β are in the same MinD , they are equidistant from any other position.”

In (11), both internal arguments are equidistant from the position Spec, vP. In its original position, the $\text{MinD}(V)$ comprises the set [goal, theme]. The goal is in $\text{MinD}(V)$ because a projection of the head V, namely VP immediately contains and immediately dominates the goal argument in Spec, VP. The theme argument is in $\text{MinD}(V)$ because the projection V' immediately contains and immediately dominates the theme argument in the complement of V. Given the standard assumption that the lexical verb in SA moves to adjoin to v and then to T,

MinD(V) now includes Spec, TP as well as vP. It follows, therefore, that the Spec, vP position is equidistant from both the goal argument and the theme argument and either one of the internal arguments can therefore move to Spec, vP without violating Minimality.

Having established that both internal arguments are equidistant from the Spec, vP position, let us consider for the purpose of illustration, the derivation of (15a).

I assume that (15a) has the structural representation in (19):

- (19) [CP C [TP ʔuʕtiy-at [vP [VP **risaalat-un**_[NP1] <V>] [PP li-**zayd-in**_[NP2]]]]].
 gave.PASS-3FSG letter.F-NOM to-Zayd-GEN
 ‘A letter was given to Zayd.’

The derivation of (15a) proceeds as in (20):

- (20) a. [vP v [vP NP1 V][PP P + NP2]]], v a phase head
 Spell out v’s complement: NP1
 → Case NP1 = 0
- b. [CP C [TP T [vP v [vP NP1 V]]]], C a phase head
 Spell-out C’s complement: No new c-command relationships are considered for
 case assignment
 → Case NP1 = structural NOM via Agree with T

When the vP is projected in (15), its domain VP is spelled-out. In this domain, only NP1 is available, as NP2, the subject of VP, is demoted to an adjunct PP position, where case is

assigned by the preposition. The reason why NP2 is demoted to an adjunct position has to do with the fact that there is a hierarchy of thematic roles such that the theme cannot be projected higher than the goal in the presence of the latter. In other words, when the goal is higher than the theme in the structure, the goal is an argument, and therefore it is not preceded by a preposition. Conversely, when the theme is projected higher in the structure, the goal has to be demoted to an adjunct position, which is embedded in a PP (cf. Fassi Fehri 1999 on the hierarchy of thematic roles in SA).²⁶ NP1 is not considered for case in this domain, as it is not engaged in a c-command relation with any other NP for the purpose of case assignment. On standard accounts, NP1 does not raise to Spec, vP in passive sentences, as Spec, vP is not projected in these structures, on standard accounts. The functional head T is merged into the structure and the verb raises to it. C is merged into the structure, and its domain TP is spelled-out. NP1 is assigned the structural nominative case via Agree with T. Note that v does not Agree with the internal argument, as the verb is passive, which is incapable of assigning an accusative case to its object on standard accounts. In passive sentences, I assume that the lexical head V is always c-selected by the functional head v although v in this type of sentences does not have an external argument.

When the goal argument in (11) is passivized, we get the sentence in (21):

- (21) [CP C [TP ʔuʕtiy-a [vP [VP **zayd-un**_[NP1] <V> **risaalat-an**_[NP2]]]]].
gave.PASS-3MSG Zayd-NOM letter-ACC

‘Zayd was given a letter.’

²⁶ Later in this chapter, I claim that PP is a strong phase in SA, and that the genitive case assigned by the preposition is structural rather than inherent or lexical.

The derivation of (21) proceeds as in (22):

(22) a. [_{VP} V NP2]

b. [_{VP} v [_{VP} NP1 V NP2]], v a phase head

Spell out v's complement: NP1 c-c' NP2 → (NP1 < NP2)

→ Case NP1 = 0

→ Case NP2 = ACC

c. [_{CP} C [_{TP} T [_{VP} v [_{VP} NP1 V NP2]]]], C a phase head

Spell-out C's complement: → No new c-command relations are considered for case assignment

→ Case NP1 = structural NOM via Agree with T

At the merger of vP in (22), its domain VP is spelled-out. On standard accounts, the goal argument is base-generated in Spec, VP, and the theme argument is base-generated in the complement of VP. In the VP cycle, NP1 c-commands NP2. As a result, NP1 linearly precedes NP2, and NP2 is assigned the structural dependent accusative case inside the VP cycle. At the merger of CP, its domain TP is spelled-out. In this domain, there are no new c-command relationships. NP1 receives the structural nominative case via Agree with T. The derivation in (22) shows clearly that SA is similar to Amharic in that the dependent accusative case is assigned on the VP cycle. This contrasts with languages such as Korean, where the dependent case is assigned only on the TP cycle and cannot be assigned based on c-command relationships that hold only in the VP domain (see Baker 2015: 236-237). In other words, SA and Amharic do not show a “strict cycle” effect, where the VP cycle inhibits the assignment of dependent case in this cycle. Had SA been a language with a “strict cycle” effect, the prediction would be that the

dependent case is assigned only at the TP cycle. This means that in the context of double object structures in the passive form, the prediction would be that both internal arguments would receive the structural nominative case via Agree with T. This is because the c-command relationship between the goal argument and the theme argument would be old c-command relationships at the TP cycle, and old information is not considered in case assignment, according to the adopted model. This would prevent the application of the dependent case. In the absence of the dependent case, Agree would take over. However, v is not a case assigner, as I claim in this thesis, being a defective probe in the sense of Chomsky (2000, 2001). In this scenario, the prediction would be for T to agree with both internal arguments and assign the structural nominative case to both via multiple Agree. However, this prediction is not borne out by the facts, which suggests that SA is unlike Korean in that it does not show a “strict cycle” effect.

5.6 Case assignment in sentences introduced by the indicative (emphatic or neutral)

Complementizer

The example in (23) is a complex sentence, where the embedded clause is introduced by the indicative emphatic complementizer *ʔinna* ‘that’.

- (23) qaal-at zaynab-u ʔinna **zayd-an**_[NP1]
 said-3FSG Zaynab-NOM that.EMPH Zayd.M-ACC
 katab-a **risaalat-an**_[NP2].
 wrote-3MSG letter-ACC
 ‘Zaynab said that indeed Zayd wrote a letter.’

Before attempting to show the derivation for (23), we need to address the status of the accusative case assigned by the complementizer *ʔinna* ‘that’. Specifically, is this a structural case or lexical/inherent case?

Fassi Fehri (1993: 32-33, 2012) suggests that the complementizer assigns a structural accusative to the NP in its TP complement. This claim is supported by the fact that the complementizer seems to be able to assign this case both when the NP is linearly adjacent to it (24a) and when it is not (24b):

- (24) a. *ʔinna* **rajul-an** *fii* *l-daar-i*
 that.EMPH man-ACC in the-house-GEN
 ‘Indeed, a man is in the house.’ (adapted from Fassi Fehri 1993, ex. 95a: 46)
- b. *ʔinna* *fii* *l-daar-i* **rajul-an**
 that.EMPH in the-house-GEN man-ACC
 ‘There is indeed a man in the house.’ (adapted from Fassi Fehri 1993, ex. 95b: 46)

The subject in (24a) is base-generated in Spec, PP before it raises to Spec, TP. To account for how *rajul* ‘a man’ receives its case in (24b), Fassi Fehri claims that the NP is extraposed from the specifier position of the PP *fii l-daar* ‘in the house’ to the Spec,TP position, where it can receive its accusative case from the complementizer.

Similar to Fassi Fehri (1993), Aoun et. al. (2010, fn. 8: 17) claim that the accusative case assigned by the complementizer is structural rather than inherent. For them, the complementizer

cannot be assigning an inherent case to the NP in its TP complement because the NP does not receive any thematic role from the complementizer.

In contrast to Fassi Fehri (1993, 2012) and Aoun et. al. (2010), Shlonsky (2000: 332-333), Soltan (2007) and Al-Balushi (2011, 2012) claim that the accusative case assigned by the complementizer is not syntactic structural. Shlonsky (2000: 232-233), for example, takes the post-complementizer DP “to be endowed with a morphological feature, [+F], a nominal feature, which happens to have the same phonetic realization as accusative Case.” He continues to add that “[t]his feature is *not* a structural Case feature [emphasis in the original]”. In fact, the accusative case assigned by the indicative complementizer (*ʔinna* or *ʔanna*) cannot be structural. If it were, the derivation of sentences such as (25), where the accusative case is not assigned after the complementizer, should crash, contrary to the facts:

- (25) a. *ʔinna* *fii* *l-ʕiraaq-i* *ḥaṣal-a* *l-ʔittifaaq-u*
 that.EMPH in the-Iraq-GEN happened-3MSG the-agreement-NOM
 ‘It is in Iraq that the agreement took place.’

To account for sentences such as (25), Shlonsky (2000, fn. 9: 333) assumes that “under certain circumstances and perhaps only marginally, locative PPs can qualify as [+F] bearers ([+F] remaining phonetically unexpressed) and can thus satisfy *ʔanna*.” To account for why the postverbal subject *l-ʔittifaaq* ‘the agreement’ receives nominative case rather than the purely idiosyncratic lexical accusative case assigned by the complementizer *ʔinna*, I claim that this is due to the fact that the postverbal subject is an internal argument of the verb, which is located in the complement of VP. In order for the purely idiosyncratic lexical accusative case assigned by

the complementizer to be assigned to the subject *l-ʔittifaaq* ‘the agreement’, the latter needs to be linearly adjacent to the former (i.e. in the CP domain or in Spec, TP). However, this is not the case; therefore the lexical case assigned by the complementizer ends up not being assigned, and the Agree-based case mechanism applies such that the postverbal subject receives its nominative case via Agree with T. Note especially that the locative PP in (25) is not a subject that qualifies for structural case; rather, it is a focalized PP. The facts are the same regardless of word order, as can be seen in (25b) below:²⁷

- (25) b. ʔinna l-ʔittifaaq-a ɥaʃal-a fii l-ʕiraaq-i
 that.EMPH the-agreement-ACC happened-3MSG in the-Iraq-GEN
 ‘Indeed the agreement took place in Iraq.’

In (25b), the the subject satisfies the (+F) feature of the the complementizer *ʔinna*. Note, however, that Shlonsky (2000) claims that the case assigned by the complementizer is not even a case feature. I suggest that this claim is unwarranted, as it makes the following wrong prediction: if the (+F) feature of the complementizer can be satisfied by the PP, then the prediction is that in those sentences where the subject DP follows the PP, the subject should surface with the nominative case rather than the accusative case, contrary to the facts, as is illustrated by the following example:

- (26) ʔinna fii l-ʕiraaq-i rajul-an/*rajul-un
 that.EMPH in the-Iraq-GEN man-ACC/*man-NOM
 y-afʕal-Ø-u haaðaa
 3-do-MSG-INDIC this

²⁷ On the assumption that the locative PP is focalized in (25a), it is not possible to test what happens when the postverbal subject is placed before the verb following the focalized locative PP, since focalization in SA induces subject-verb inversion (cf. Shlonsky 2000).

‘It is in Iraq that someone does this.’

The fact that the (+F) feature in (26) cannot be satisfied by the PP but only by the subject indicates that the (+F) feature of the complementizer is a case feature, contrary to Shlonsky (2000). In (26), I assume that the purely idiosyncratic lexical accusative case is assigned by the complementizer to the preverbal subject because the latter is linearly adjacent to the complementizer being either in the Spec, TP position or even in the C domain.

I suggest that the accusative case assigned by the complementizer is a purely idiosyncratic lexical case feature rather than a structural case feature. One piece of evidence to support this claim is that the same case obligatorily surfaces even on clitic left-dislocated NPs (see also Shlonsky 2000: 233 for a similar claim), as is shown in (27):

- (27) ʔinna **l-ʔawlaad-a** qaabal-a-hum Zayd-un.
 that.EMPH the-boys-ACC met-3MSG-them.PL.F.ACC Zayd-NOM
 ‘As for the the boys, they were indeed met by Zayd.’

Fassi Fehri (1986) and Aoun et.al. (2010) show clearly that resumptive pronouns such as *hum* ‘them.F.PL.ACC’ in (27) void islands; therefore, clitic left-dislocated NPs such as *l-banaat* ‘the boys’ must be base-generated in a left peripheral position. If this is the case, then the complementizer must be assigning a lexical accusative case to the clitic dislocated left-peripheral NP.

Having established that the complementizer *ʔinna* (and its variant *ʔanna*) assigns a purely idiosyncratic lexical accusative case to the NP in its complement, we can proceed to show how the sentence in (23) is derived. I assume that (23) has the structural representation in (28):

- (28) qaal-at zaynab-u [CP ?inna [TP **zayd-an**_[NP1]
said-3FSG Zaynab-NOM that.EMPH Zayd.M-ACC
katab-a [_{VP} <NP1> v [_{VP} <V> **risaalat-an**_[NP2]]]].
wrote-3MSG letter-ACC
‘Zaynab said that indeed Zayd wrote a letter.’

The derivation of (28) is as shown in (29):

- (29) a. [_{VP} V NP2]
b. [_{VP} NP1 v [_{VP} <V> NP2]], v a phase head
Spell out v’s complement: NP2
→ Case NP2 = NA
c. [CP C [TP NP1 T [_{VP} <NP1> v [_{VP} V NP2]]]], C a phase head
Spell-out C’s complement: NP1 c-c’s NP2 → (NP1 < NP2)
→ Case NP2 = ACC
→ Case NP1 = purely idiosyncratic ACC assigned by C

At the merger of v of the embedded clause in (29), its domain VP is spelled-out. Given that there is only one NP, namely NP2 in this spell-out domain, no c-command relationship is considered, and hence no case assignment is considered. At the merger of the embedded C, its domain TP is spelled-out. In this domain, NP1 in Spec, TP is in a new c-command relationship with NP2. As a result of this relationship, NP2 is assigned the dependent accusative case. As for the embedded agent argument *zayd* ‘Zayd’, it is assigned the purely idiosyncratic lexical case assigned by C.

5.7 Case assignment in sentences with backgrounding encliticized topics

The example in (30) is a complex sentence, where the embedded clause is introduced by the indicative complementizer and an embedded pronoun is encliticized onto the complementizer.

- [illegible]

I follow Fassi Fehri (2012: 279) who claims that the clitic pronoun *-hu* ‘it’ in (30) is a backgrounding topic. If this analysis is correct, then clearly the complementizer *ʔinna* ‘that’ to which the clitic pronoun is encliticized must be base-generated higher than a topic phrase, presumably in the head of the highest functional projection ForceP of the cartographic structure of Rizzi (1997). This claim is supported by the fact that nothing can precede the emphatic complementizer, and the fact that the complementizer also clause-types the sentence as an assertion.

The derivation for (30) is as shown in (31):

- (31) a. [_{VP} V NP2]
b. [_{VP} v [_{VP} V NP2]], v a phase head
Spell out v's complement: NP2

→ Case NP2 = NA

c. [CP C NP1 [TP T [vP v [VP V NP2]]]], C a phase head

Spell-out C's complement: NP2

→ Case NP2 = structural NOM via Agree with T

→ Case NP1 = purely idiosyncratic ACC assigned by C

In (31), the NP of the embedded clause, NP2 cannot receive the dependent accusative case. On the standard assumption that NP2 starts the derivation in the object position of the embedded clause, being the argument of an unaccusative predicate, the embedded NP cannot be assigned a dependent case given that it is the only NP in the VP and TP domains. The internal argument does not raise to Spec, vP on standard accounts. Therefore, the embedded subject receives the structural nominative case via Agree with T. Notice that the embedded subject cannot agree with the embedded v, given that v in SA is incapable of establishing an Agree relation with its object. The backgrounding topic, *-hu* 'it' is base-generated in the Spec, TopP position in the embedded clause, and it is encliticized onto the indicative complementizer, which assigns a purely idiosyncratic lexical accusative case to it. In the matrix clause, the dependent case is unavailable, as there is one NP available, namely the null subject *pro*, which gets the structural nominative case via Agree with T.

5.8 Case assignment in sentences with existential constructions

The example in (32) is an existential sentence:

- (32) **kaan-a** **hunaaka**_[NP1] **rajul-un**_[NP2] **fii** **l-daar-i**_[NP3]
 was-3MSG there man-NOM in the-house-GEN
 ‘There was a man in the house.’

Fassi Fehri (1993: 156-159) claims that structures with auxiliary verbs in SA are naturally analyzed as bi-inflectional in the sense that they have two Ts rather than one. Among the pieces of evidence that he brings to support this hypothesis is the fact that in these structures, both the auxiliary verb and the lexical verb are inflected for their ϕ -features, as well as the fact that negative markers can negate either the auxiliary verb or the lexical verb, as shown in (33):

- (33) a. **qad** **t-akuun-Ø-u** **l-banaat-u** **?akal-na**
 may F-be-3SG-INDIC the-girls-NOM eaten-3FPL
 ‘The girls may have eaten.’ (adapted from Fassi Fehri 1993, ex. 37: 157)
- b. **kaan-at** **l-bint-u** **lam** **t-a?kul-Ø-Ø**
 was-3FSG the-girl-NOM NEG.PAST F-eat-3SG-JUSS
 ‘The girl had not eaten.’ (adapted from Fassi Fehri 1993, ex. 38: 157)
- c. **kaan-a** **l-junuud-u** **laa** **y-a?kul-uu-na**
 was-3MSG the-soldiers-NOM NEG 3-eat-MPL-INDIC
 ‘The soldiers were not eating.’ (adapted from Fassi Fehri 1993, ex. 39: 157)
- d. **lam** **y-akun-Ø-Ø** **l-rajul-u** **(qad)** **ḥaḍar-a**
 NEG.PAST 3-be-MSG-JUSS the-man-NOM already came-3MSG
 ‘The man had not already come.’ (adapted from Fassi Fehri 1993, ex. 40: 157)

While it is true that the structure in (33) shows neither of the properties associated with complex tense structures (i.e. both the auxiliary verb and the lexical verb are inflected for their ϕ -features, as well as the fact that negative markers can negate either the auxiliary verb or the lexical verb), I still claim that it has two instances of T rather than one. There are three reasons for this claim.

First, the structure projects an existential NP, namely *hunaaka* ‘there’. On standard accounts, the expletive *there* must be base-generated in Spec, TP given that it lacks a thematic role, being meaningless. It follows, therefore, that the existential NP must be in Spec, TP in (32). Second, the existential NP is obligatory; and is therefore needed for structural reasons. The sentence in (32) has one reading in which the NP *rajul* ‘a man’ is non-specific indefinite, and the sentence is ungrammatical without the existential, as is shown in (34):

- (34) *kaan-a **rajul-un**_[NP2] fii **l-daar-i**_[NP3]
 was-3MSG man-NOM in the-house-GEN

Intended to mean, ‘There was a man in the house.’ (on the reading where *rajul* ‘a man’ is non-specific indefinite)

The fact that (34) is ungrammatical suggests that the existential NP must be base-generated in a functional head higher than vP. I take that head to be T following standard accounts of the expletive in other languages. Third, no plausible argument can be made that the copular verb in (32) is in a position higher than T, as the sentence lacks neither a topic nor a focus reading, and the copular verb is not stressed. It is worth noting that it is not possible to claim that the

expletive in (32) is base-generated in Spec, vP, where it does not receive a theta role.²⁸ If it did, then the DP *rajul* ‘a man’ must be generated in the complement of VP, a position, in which it would qualify for the purely idiosyncratic lexical accusative case assigned by the copular verb. The prediction would then be that the DP *rajul* ‘a man’ would surface with the purely idiosyncratic lexical accusative assigned by the copular verb, contrary to fact.

Fassi Fehri (2012, fn. 24: 280-281) claims that the locative *hunaaka* ‘there’ is not an expletive but a true locative adjunct. However, there are some good reasons to believe that there are contexts in which *hunaaka* ‘there’ can be used as a true expletive and not as a pure locative adjunct, contra Fassi Fehri (2012). First, unlike true locative adjuncts, the locative expletive cannot be questioned, as the ungrammaticality of (35) shows.

(35) a.: kaan-a hunaaka l-kaṭiir-u min l-rijaal-i.
 was-3MSG there the-many-NOM of the-men
 ‘There were many men.’

b. A: ʔayna kaan-a l-kaṭiir-u min l-rijaal-i
 where was-3MSG the-many-NOM of the-men-GEN
 ‘Where were many of the men?’²⁹

B: *hunaaka
 there

²⁸ This possibility was suggested to me by Gabriela Alboiu.

²⁹ Notice that the locative *hunaaka* ‘there’ cannot co-occur with the question word *ʔayna* ‘where’, as shown by the ungrammatical example in (i):

(i) *ʔayna kaan-a hunaaka l-kaṭiir-u min l-rijaal-i?
 Where was-3MSG there the-many-NOM of the-men-GEN
 ‘*Where were there many of the men.’

The example in (i) is as ungrammatical as the English counterpart with the expletive *there* is, as shown by the ungrammatical English translation.

‘There.’

The example in (35b) contrasts with the example in (35c), where the locative *hunaaka* is a true locative adjunct, hence it can be questioned:

- (35) c. A: Zayd-un y-aqif-Ø-u hunaaka
Zayd-NOM 3-stand-MSG-INDIC there
'Zayd is stnding there.'
- B: ?ayna y-aqif-Ø-u Zayd-un?
Where 3-stand-MSG-INDIC Zayd-NOM
'Where is Zayd standing?'

A: Hunaaka

there

Second, unlike true locative adjuncts, *hunaaka* ‘there’ cannot be focused, as shown by the ungrammaticality in (36a), and the expletive *hunaaka* can also co-occur with the locative adjunct *hunaaka*, as shown by the grammatical example in (36c):

- | | | | | | |
|------|----|--------------------------------|----------|-----|---------------|
| (36) | a. | *HUNAACA | rajul-un | fii | l-daar-i |
| | | there | man-NOM | in | the-house-GEN |
| | | ‘THERE is a man in the house.’ | | | |
| | b. | *kaan-a | rajul-un | fii | l-daar-i |
| | | was-3MSG | man-NOM | in | the-house-GEN |

Intended to mean ‘There is a man in the house.’ (on the reading where where *rajul* ‘a man’ is non-specific indefinite)

- c. hunaaka rajul-un hunaaka
 there man-NOM there
 ‘There is a man (over) there.’³⁰

Third, in declarative sentences, the locative *hunaaka* ‘there’, unlike true locative adjuncts, cannot be omitted, as illustrated in (36b). The proposal that the locative pronoun *hunaaka* and its variant *hunaalika* have an existential use in SA is also made in Ryding (2005: 321).

Given the above arguments, I take sentences such as (32) to be projecting two instances of T, where the lower T has the existential NP in its specifier position, and the higher T hosts the copular verb. I therefore assume that (32) has the structural representation in (37):

- (37) [TP *kaan-a* [TP **hunaaka**_[NP1] [vP **rajul-un**_[NP2] [vP [PP *fii* **l-daar-i**_[NP3]]]]]]
 was-3MSG there man-NOM in the-house-GEN
 ‘There was a man in the house.’

The derivation of (37) unfolds as in (38):

- (38) a. [vP NP2 v [PP P + NP3]], v a phase head
 Spell out v’s complement: <P + NP3>
 → Case NP3 = GEN assigned by P
 b. [CP C [TP [TP NP1 [vP NP2 v]]]], C a phasal head
 Spell out C’s complement: NP1 c-c’s NP2 → (NP1 < NP2)

³⁰ I thank Youssef Haddad for drawing my attention to examples such as (36c).

→ Case NP2 = structural NOM via Agree with T

→ Case NP1 = No case is assigned, as NP1 has a referential index which is not distinct from its associate³¹

In (38), *v* is merged into the structure, and its complement VP is sent to Spell-Out. In this domain, there is only one NP, namely NP3, which is assigned the genitive case by the preposition. At the merger of C, its complement TP is sent to Spell-Out. In this domain, NP1 c-commands NP2. As a result of this relationship, NP1 linearly precedes NP2. However, NP1 is an expletive, which is not a case competitor, as it has a referential index which is not distinct from its associate *rajul* ‘man’. The proposal that the expletive has a referential index which is not distinct from that of the associate can be explained as follows using the adopted theoretical model. Suppose that the expletive *hunaaka* ‘there’ has the referential index [k, i] and its associate *rajul* ‘man’ has the referential index [n, i]. The integers k and i of the expletive are equal because they are in the same index. Similarly, the integers n and i of the associate are equal because they are in the same index. By transitivity, the integer n of the associate is equal to the integer k of the expletive. It follows therefore that the referential index of the expletive and that of the associate are not distinct, and the dependent case does not apply to the associate. Given this state of affairs, NP2 is assigned the structural nominative case via Agree with T. NP1, being an expletive that does not trigger the assignment of dependent case, does not receive any case. One piece of evidence that NP1 does not receive any case comes from the fact that when NP1 is embedded in a clause, which is introduced by the indicative complementizer, which assigns a purely

³¹ Chomsky (2000: 122-126) argues that the expletive *there* has an uninterpretable ϕ -feature, which renders the case feature for the expletive unnecessary.

idiosyncratic lexical accusative case, NP1 does not receive the lexical accusative case. Instead, it is NP2 that receives the accusative case assigned by the complementizer, as is shown in (39):

- (39) ʔinna **hunnaka**_[NP1] **rajul-an**_[NP2]/*rajul-un fii l-daar-i.
 that.EMPH there man-ACC/man-NOM in the-house-GEN
 ‘Indeed, there is a man in the house.’

In (39), it is the NP2 *rajul* ‘a man’ rather than the NP1 *hunnaka* ‘there’, which bears the purely idiosyncratic lexical accusative case assigned by the complementizer.

5.9 Case assignment in sentences with *believe*-type predicates

The example in (40) is a sentence where the embedded clause is the complement of *believe*-type predicates (i.e. exceptional case marking).

- (40) ḥasib-tu **zayd-ank**_[NP1] y-uriid-Ø-u
 believed-1SG Zayd.ACC 3-want-MSG-INDIC
 l-safar-a_[NP2].
 the-traveling-ACC
 ‘I believed that Zayd wanted to travel.’

In the literature on *believe*-type predicates, these verbs are argued to c-select a TP rather than a CP (see Johnson, 1991, Koizumi 1993, 1995, Runner 1995, 1998, Lasnik 1999, 2001,

Chomsky 2000). Thus, while CPs can be pseudo-clefted, TPs cannot. This explains the contrast found with examples such as (41) (the examples are from Adger 2003: 313)

- (41) a. What Medeea arranged was [_{CP} for her children to be poisoned].
- b. What Medeea attempted was [_{CP} to poison her children].
- c. *What Medeea believed was [_{TP} Jason to be a murderer]

The examples in (41) show that only CPs but not TPs can be pseudo-clefted. The prediction then is that the clausal complements of *believe*-type predicates in SA should not be allowed to be pseudo-clefted if they were TPs. This is borne out, as can be shown by the contrast between CPs introduced by overt complementizers and sentences with *believe*-type predicates in (42) and (43) respectively:

- (42) a. nasiy-a zayd-un_i [_{CP} ?an e_i y-aqfil-a
 forgot-3MSG Zayd-NOM that.SUBJ 3-lock-3MSG.SUBJ
 l-?abwaab-a].
 the-doors-ACC
 ‘Zayd forgot to lock the doors.’
- b. llaðii nasiy-a-hu zayd-un_i huwa
 that forgot-3MSG-it Zayd-NOM be.3MSG
 [_{CP} ?an e_i y-aqfil-a l-?abwaab-a].

‘What Zayd forgot was to lock the doors.’

- The examples in (42) and (43) might suggest that the embedded clausal complements of *believe*-type predicates are actually TPs, not CPs. However, Fassi Fehri (2012) shows that these embedded clauses can still support an independent temporal modifier, as is shown in (44):

- ³² Pseudo-clefted sentences in SA are discussed in Moutaoukil (1985: 27-30).

tomorrow-ACC

‘Yesterday, I believed that the man would write the letter tomorrow.’ (adapted from Fassi Fehri 2012, ex. 58: 249)

Following Fassi Fehri (2012: 249), I therefore assume that the *believe*-type constructions start the derivation with two CPs, one of which is later truncated.³³

Having established that the embedded clause of the *believe*-predicate in (40) is a CP, which is truncated at TP, we now need to consider the position of the embedded subject of the complement clause of the *believe*-type predicates. Specifically, does the subject of the embedded clause remain in the Spec, TP of the embedded clause or does it raise to the object position of the matrix clause? Fassi Fehri (2012: 249) claims that the subject of the embedded clause raises to the object position of the matrix clause. In contrast to this position, Soltan (2007: 155-157) and Al-Balushi (2011: 219-222) both claim that the subject of the embedded clause is in a left-peripheral position of the embedded clause and does not raise to the matrix clause. For Soltan (2007), the embedded subject is located in the Spec, TP of the embedded clause, which is a left-peripheral position for him; For Al-Balushi (2011), the embedded subject is in the Spec, TopP position of the embedded clause. The claim that the embedded subject in these constructions is in a left-peripheral position seems, for both of these authors, to be dictated by their other claim that there is no A-to-A movement in SA. As far as case assignment is concerned, Soltan (2007) claims that the embedded subject, which is in a left-peripheral position, can still receive a structural accusative case via an Agree relation with the matrix functional head v^* . For

³³ Alternatively, it could be the case that the lower CP of an ECM construction is defective in some way. I do not adopt this option in this thesis.

(45) ḥasib-tu-**hu** daxal-a l-qaaṣat-a

 believed-1SG-him entered-3MSG the-hall-ACC

 ‘I believed he entered the hall.’ (adapted from Fassi Fehri 2012, ex. 57: 249)

(46) a. danan-tu **Zayd-an** ʔax-aa-ka
 believed-1SG Zayd-ACC brother-ACC-your

 ‘I believed Zayd to be your brother.’ (Al-Waraaq 10th c./1999: 285)

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(47) a. ḥasib-a Zayd-un **Khaled-an** šaaʕir-an
 believed-3MSG Zayd-NOM Khaled-ACC poet-ACC

b.	ḥusib-a	Khaled-un	šaaʕir-an
	believed.PASS-3MSG	Khaled-NOM	poet-ACC

(48)	a.	dann-a	Khaled-un	Hind-an	musaafir-at-an
		believed-3MSG	Khaled-NOM	Hind-ACC	traveling-3FSG-ACC

b.	dunn-at	Hind-un	musaafir-at-an
	believed.PASS-3FSG	Hind-NOM	traveling-3FSG-ACC

Third, Fassi Fehri (1986: 232) shows that the topic hypothesis of the embedded subject of ECM constructions cannot be correct once we consider the example in (49):

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‘Who do you believe Zayd hit?’ (Fassi Fehri 1986, ex. 136: 232)

On standard assumptions, movement across a topicalized element is barred. However, the example in (49) shows that movement of the *wh*-word across the embedded preverbal NP does not induce ungrammaticality, which suggests that the embedded NP is a subject rather than a topicalized NP.

Having established that the embedded subject of the complement of *believe*-type predicates raises to the object position of the matrix clause in SA, we can now proceed to show how the sentence in (40) is derived. I assume that (40) has the structural representation in (50):

(50) [CP [TP *pro*_[NP1] ḥasib-tu <*pro*_[NP1]> **zayd-an**_[NP2]
believed-1SG Zayd.ACC
[TP <NP2> y-uriid-Ø-u [v_P <NP2> [v_P <V> **l-safar-a**_[NP3]]]]]].
3-want-MSG-INDIC the-traveling-ACC
‘I believed that Zayd wanted to travel.’

The derivation of (50) is as in (51):

(51) a. [_{VP} V NP3]
 b. [_{VP} NP2 v [_{VP} V NP3]], embedded v a phase head
 Spell out embedded v's complement: NP3
 → Case NP3 = NA

c. $[_{VP} V [_{TP} NP2 T [_{VP} <NP2> v [_{VP} V NP3]]]$

d. $[_{VP} NP1 v [_{VP} V NP2 [_{TP} <NP2> T [_{VP} <NP2> v [_{VP} V NP3]]]]]$, matrix v a phase head

Spell out matrix v' complement: $NP2 \text{ c-c's } NP3 \rightarrow (NP2 < NP3)$

\rightarrow Case $NP2 = 0$

\rightarrow Case $NP3 = ACC$

e. $[_{CP} C [_{TP} NP1 T [_{VP} <NP1> v [_{VP} V NP2 [_{TP} <NP2> T [_{VP} <NP2> v [_{VP} V NP3]]]]]]]$,

matrix C a phase head

Spell out C's complement: $NP1 \text{ c-c's } NP2 \rightarrow (NP1 < NP2)$

$NP1 \text{ c-c's } NP3 \rightarrow (NP1 < NP3)$

\rightarrow Case $NP2 = ACC$

\rightarrow Case $NP3 = ACC$ (redundantly)

\rightarrow Case $NP1 =$ structural NOM via Agree with T

In (51), the embedded v is merged into the structure, and the complement domain VP is spelled-out. In this domain, there is only one NP, namely NP3. No c-command relationships are considered, hence no case assignment is considered either. The embedded TP is now the complement of the matrix V, as the CP projection is deleted. At the merger of the matrix v, the complement matrix VP, which includes in it the embedded TP is now sent to Spell-Out. In this domain, NP2 c-commands NP3. Therefore, NP2 linearly precedes NP3; the dependent case of NP3 is also considered, and NP3 is assigned the dependent accusative case. At the merger of the matrix C, the complement TP is sent to Spell-Out. In this domain, NP1 c-commands NP2, and at the same time NP1 also c-commands NP3 in this domain, given that the embedded vP is a soft phase in SA and the fact that both of these c-command relations are new rather than old. The result of the new c-command relationships is that NP2 is assigned the dependent accusative case,

and NP3 is redundantly assigned the dependent accusative case, whereas the matrix NP1 is assigned the structural nominative case via Agree with T. Note that case assignment in these structures in the theory of dependent case (Marantz 1991, Baker 2015) differs from how case in these structures is assigned in theories that depend on a case hierarchy such as that of Yip, Maling and Jackendoff (1987). Thus, unlike in Yip et al. (1987), where the assignment of accusative case to the embedded object depends crucially on the embedded subject being assigned nominative case in the complement cycle, no such assumptions are required in the dependent case theory. To illustrate this point, let us consider the following example of an ECM construction:

(52) John_[NOM] believed [_{TP} him_[ACC] to be stalking her_[ACC]].

Recall that in Yip et. al.'s (1987) theory of case tiers, there is a dependency in case assignment such that the accusative case can only be assigned if nominative case is assigned first. For this account to work, Yip et. al (1987) assume that the embedded subject *Him* in (52) receives a nominative case in the embedded cycle (i.e the embedded clause). It is this case that allows the accusative case to be associated with the embedded object *her*. To account for why the embedded subject of an ECM construction surfaces with an accusative case, Yip et al. (1987) claim that the embedded clause is defective in some way (specifically S'-deletion) such that the embedded domain can still be accessed by the matrix cycle (i.e the matrix clause). In this cycle, the accusative case in the matrix cycle is associated with the embedded subject, and the nominative case of the embedded subject is therefore overlaid by the accusative case of the matrix cycle.

In contrast to the Case Tier theory, the adopted theoretical framework does not need to make extra theoretical claims for the account to work.

5.10 Case assignment in sentences with control structures

The issue of control sentences in SA is much more complicated than the way it is presented here, and semantics seems to be involved; therefore the discussion here is not exhaustive.³⁴ Let us consider the example in (53), which is an instance of obligatory control in SA; in particular, obligatory subject control.³⁵

- (53) **ħaawal-a** **l-luṣuuṣ-u_i** **ʔan**
 tried-3MSG the-thieves-NOM that.SUBJ
 y-ahrab-uu-Ø *e_i/*j*.
 3-escape-MPL-SUBJ
 ‘The thieves tried to escape.’³⁶

The question that needs to be answered first is whether the null category of the embedded clause is the null category *PRO*, the null category *pro*, or a lower copy of the matrix subject NP. This question is important because the verb in SA control constructions is unlike its equivalent in English control constructions, where the verb is non-finite. As is clear from the example in (53),

³⁴ For example with verbs such as *qarrara* ‘to decide’ control is not obligatory, as shown by the following examples (the examples are from Youssef Haddad):

- (i) **qarrar-a** **[ʔan** **t-usaafir-Ø-a** **bnat-a-hu]**
 decided-3MSG that.SUBJ F-travel-SG-SUBJ daughter-ACC-his
 ‘He decided that his daughter should travel.’
 (ii) ***staṭaaṣ-a** **[ʔan** **t-usaafir-Ø-a** **bnat-a-hu]**
 managed-3MSG that.SUBJ F-travel-SG-SUBJ daughter-ACC-his

³⁵ Recall that in these structures, the subject NP of the embedded clause is coindexed with an argument of the matrix clause.

³⁶ The SV order of (53) is possible in which case the subject surfaces with nominative case as well, as shown in (i):

- (i) **l-luṣuuṣ-u** **ħaawal-uu** **ʔan** **y-ahrab-uu-Ø**
 the-thieves-NOM tried-3MPL that.SUBJ 3-escape-MPL-SUBJ
 ‘The thieves tried to escape.’

the embedded verb bears ϕ -features [3MPL] as well as mood features [subjunctive]. However, Landau (2004) shows that control is independent of finiteness. Thus, Landau (2004) argues that the Balkan languages (Greek, Romanian, Bulgarian, Albanian) show instances of what Landau calls ‘finite control’ in the sense that an NP of the matrix clause controls into a finite clause. To illustrate, let us consider the examples in (54) from Landau (2004, ex. 16: 826-827):

- (54) a. I Maria₁ prospathise *PRO*_{1/*2} na divasi
the Mary tried.3s ec PRT read.3s.Sub
‘Mary tried to read’ (Greek)
- b. L₁-am indemnat ca de miine
him-I.have urged that from tomorrow
*PRO*_{1/*2} sa mearga la scoala cu bicicleta
ec PRT go.3s.Sub to school with the.bike
‘I urged him to ride his bike to school from tomorrow on’ (Romanian)
- c. Ivan₁ usnja *PRO*_{1/*2} da ostane pri nego
Ivan managed.3s ec PRT stay.3s.Sub with him
‘Ivan managed to stay with him’ (Bulgarian)
- d. I kerkova *PRO*_{1/*2} te recitoje nje poezi
him asked.1s ec PRT recite.3s.Sub a poem
‘I asked him to recite a poem’ (Albanian)

The examples in (54) show clearly that the null subject *PRO* is controlled by an NP in the matrix clause even though the verb of the embedded clause is finite bearing ϕ -features [3 SG] and mood features [subjunctive]. In other words, finite control in (54) parallels finite control in SA, where the embedded verb is also marked for ϕ -features and mood [subjunctive] features.

This parallelism might at first sight suggest that SA control structures are indeed equivalent to their Balkan counterparts. However, a closer look seems to indicate that the null category in these structures is actually the null pronoun *pro* rather than the null pronoun *PRO*. More specifically, there are other interpretative diagnostics, which show that in SA, the embedded subjunctive clauses of control verbs include the null category *pro*. For example, Landau (2004: 823) states that only *PRO* supports a sloppy reading under ellipsis. This is not borne out in SA, as is illustrated by the example of subject control in (55):

- (55) a. waʕad-a zayd-un_i saalim-an_j
 promised-3MSG Zayd.M-NOM Saalim.M-ACC
 [CP ʔan y-uhaðib-Ø-a e_i/*_j nafs-a-hu_i/*_j]
 that.SUBJ 3-behave-MSG-SUBJ self-ACC-his
 ‘Zayd promised Saalim that he (Zayd) behave himself.’
 wa kaðaalika faʕal-a qays-un.
 and so did-3MSG Qays.M-NOM
 ‘...and so did Qays.’
 Sloppy reading or strict reading ‘Qays also promised Saalim that he (Qays/Zayd)
 behave himself’

The subjunctive complementizer in examples such as (55) is obligatory. This example shows clearly that the null category can have either a sloppy reading or a strict reading under ellipsis. This indicates that the null category in these constructions must be *pro* and not *PRO*. The same interpretation is obtained in cases of object obligatory control, where the subjunctive complementizer is also obligatory, as can be verified by the example in (56):

- (56) a. ṭalab-a zayd-un_j min qays-in_i [CP ʔan
 asked-3MSG Zayd-NOM from Qays-GEN that.SUBJ

 y-usaaʕid-Ø-a-hu_j/_i *e_i/_j*]
 3-help-MSG-SUBJ-him
 ‘Zayd asked Qays to help him.’

 wa kaḏaalika faʕal-at zaynab-u
 and so did-3FSG Zaynab-NOM
 ‘...and so did Zaynab.’

 Sloppy reading or strict reading ‘Zaynab also asked Qays to help her/Zayd)’

Having said that, there are clear cases where the subject of the embedded clause is obligatorily controlled by the subject of the matrix clause. This is illustrated in (57) through (60):

- (57) ḥaawal-a **l-luṣuuṣ-u_i** ʔan
 tried-3MSG the-thieves-NOM that.SUBJ

 e_i/_j y-ahrab-uu-Ø <*e_i/_j*>.

3-escape-MPL-SUBJ

‘The thieves tried to escape.’

- (58) nasiy-a zayd-un_i ?an y-aqfil-Ø-a e_i/*_j

forgot-3MSG Zayd-NOM that.SUBJ 3-lock-MSG-SUBJ

l-?abwaab-a

the-doors-ACC

‘Zayd forgot to lock the door.’

- (59) ?istaṭaaṣ-at l-ṭaalibat-u ?an t-ajtaaz-Ø-a

managed-3FSG the-student.F-NOM that.SUBJ F-pass-SG-SUBJ

e_i/*_j l-?ixtibaar-a

managed-3FSG

‘The female student managed to pass the test.’

- (60) ?amar-a zayd-un l-?awlaad-a_i ?an

ordered-3MSG Zayd-NOM the-boys-ACC that.SUBJ

e_i/*_j y-aktub-uu-Ø <e_i/*_j> maqaalat-an

3-write-MPL-SUBJ essay-ACC

‘Zayd ordered the boys to write an essay.’

The subject of the embedded clauses in (57) through (60) cannot be controlled by anything other than the subject or object of the matrix clause. However, given the interpretive diagnostics offered in Landau (2004: 823), I claim that the embedded subject in the examples in (57) through (60) is also *pro* rather than *PRO*. The third logical possibility that needs to be considered is

whether the embedded subject of control sentences is actually a lower copy of the matrix subject, as proposed in Hornstein (1999 and subsequent work). This claim, however, necessitates that the subjunctive complementizer of the control structures of SA cannot be a phasal head, since case assignment in the adopted model is determined in the CP domain, if C is phasal. To test whether the subjunctive complementizer *ʔan* is a phasal head or not, we use the following test: if the CP headed by the subjunctive complementizer can be clefted or moved, it is phasal; if not, then it is non-phasal.³⁷ Using this diagnostic, we have to conclude that the subjunctive complementizer is a phasal head, as verified by the following examples

- (61) tamanny-tu [ʔan y-usaafir-Ø-a zayd-un]
wished-1SG that.SUBJ 3-travel-MSG-SUBJ Zayd-NOM
‘I wished that Zayd would travel.’
- (62) a. ʔinna ʔaktar-a maa tamanny-tu huwa [ʔan
 that.EMPH most-ACC what wished-1SG be.3MSG that.SUBJ
 y-usaafir-Ø-a zayd-un]
 3-travel-MSG-SUBJ Zayd-NOM
 ‘Indeed, what I wished most was for Zayd to travel,’³⁸
- b. [ʔan y-usaafir-Ø-a zayd-un] huwa
 that.SUBJ 3-travel-MSG-SUBJ Zayd-NOM be.3MSG

³⁷ I thank Gabriela Alboiu for suggesting this test to me.

³⁸ Using the same diagnostic, one can also show that the indicative complementizer *ʔanna* is also phasal, as can be verified by the fact that the whole CP introduced by it can be pseudoclefted:

- (i) saʔal-tu zayd-an
 asked-1SG Zayd-ACC
 ‘I asked Zayd.’
- (ii) ʔinna aqsaa maa faʕal-tu huwa [CP ʔanna-nii saʔal-tu zayd-an]
 that.EMPH most.ACC what did-1SG be.3MSG that-me asked-1SG Zayd-ACC
 ‘Indeed, what I mostly did was ask Zayd.’

ʔaktar-u maa tamanny-tu
 most-NOM what wished-1SG

‘For Zayd to travel is something that I mostly wished.’

The example in (61) is the unmarked example. The example in (62a) shows that bracketed CP introduced by the subjunctive complementizer can be pseudoclefted, and the example in (62b) shows that the CP can be moved to the beginning of the sentence. I take this as evidence that the subjunctive complementizer *ʔan* is a phasal head. Given that the subjunctive complementizer *ʔan* is a phasal head, I conclude that the subject of the embedded clauses in the control sentences of SA cannot be a lower copy of the matrix subject, and must therefore be the null subject *pro*.

Aside from the structures discussed above where the subject of the embedded clause is *pro*, Fassi Fehri (1993: 242) claims that SA exhibits cases of control in structures where the complement of control verbs includes a process (or event-denoting) nominal, as in (63) and (64):

(63) y-uriid-Ø-u ntikaad-a l-rajul-i
 3-want-MSG-INDIC criticizing-ACC the-man-GEN
 ‘He wants to criticize the man.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)

(64) y-uriid-Ø-u ntikaad-a nafs-i-hi
 3-want-MSG-INDIC criticizing-ACC self-GEN-his
 ‘He wants to criticize himself.’ (adapted from Fassi Fehri 1993, ex. 65a: 242)

Having established that the embedded subject of control structures is a lower copy of the matrix subject, we can now consider how the derivation of both the embedded CP and the matrix CP in (53) above proceeds. I assume that (53) has the structural representation shown in (65):

- The derivation of (65) proceeds as in (66):

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e. [CP₁ C [TP NP₁ T [vP₁ <NP₁> v[vP₁ V]]], matrix C a phase head

Spell out matrix C's complement: NP₁

→ Case NP₁ = structural NOM via Agree with matrix T

In (66), the embedded clause has only one lexical NP, namely the lower copy of the subject ; *luṣuuṣ* 'the thieves', therefore, the dependent case does not apply, and the NP is not assigned the structural dependent case. The embedded subject raises to the matrix clause; where it does not receive the dependent case, as it is the only NP in this clause. The subject ends up receiving the structural nominative case via Agree with the matrix T.

5.11 Case assignment in sentences with adjectival/nominal predicates

Let us consider (67), which is an example of verbless sentences with an adjectival/nominal predicate:

(67) **zayd-un**_[NP1] **saʕiid-un/muhandis-un**_[NP2].

Zayd-NOM happy-NOM/engineer-NOM

'Zayd [is] happy/Zayd [is] an engineer.'

The question arises as to whether adjectival/nominal predicates in SA should receive a structural dependent case. Baker (2015: 221-222), based on robust cross-linguistic evidence, argues that predicate nominals neither undergo nor trigger the structural dependent case. I follow Baker on this. Baker (2015, fn. 29: 222) acknowledges that the only empirical exception he finds is Classical Arabic, where the predicate nominal does receive the accusative case but only when

there is a copular verb in the sentence. To account for this fact, Baker claims that Classical Arabic should be analyzed as a language with no dependent case on predicate nominals, and that the accusative case assigned to the predicate nominal when there is a copular verb in the sentence is explained if we consider that “the overt copula (or some functional head associated with it) assigns accusative case to an NP in its c-command domain under Agree.”

In the generative literature on SA, there are a number of accounts for the case patterns of adjectival/nominal predicates. Benmamoun (2000: 43) claims that the copular verb assigns the accusative case to its adjectival/nominal predicate, but does not spell out whether this case is structural or lexical/inherent. Fassi Fehri (1993: 88) seems to leave it open as to whether this case is structural or lexical. Fassi Fehri (1993: 88) discusses sentences such as (68):

- (68) lays-at Hind-un mariiḍat-an
 NEG-3SG Hind-NOM sick-ACC
 ‘Hind is not sick.’ (Fassi Fehri 1993, ex. 5: 88)

The negative particle in (68) has been argued by traditional Arabic grammarians and by Ouhalla (1994) to be a complex of the archaic copular *be* and the negative particle. Therefore, this negative particle patterns with copular verbs in that it assigns the accusative case to the adjectival predicate in (68). In his treatment of this case, Fassi Fehri (1993) seems to be ambivalent. Thus, he writes that “*laysa* assigns a (morphological) accusative case to the adjective. He goes on to say that “[t]his case is presumably assigned (under adjacency) by the negative”. On the other hand, Ouhalla (2005: 681) holds the view that this case is structural rather than lexical. In his treatment of sentences similar to (68) above, he argues that the adjectival/nominal predicate receives structural case, “the result of matching [CASE] with the aspectual feature of the

[copular] verb”. Baker (2015: 222) claims that the copular verb in SA assigns structural case to the predicate via Agree. Al-Balushi (2011), on the other hand, argues that the accusative case assigned by the copular verb is lexical rather than structural. There are reasons to believe that the accusative case assigned by the copular verb in SA is a syntactic but purely idiosyncratic lexical case rather than structural case.³⁹ The first piece of evidence comes from the fact that adjectival/nominal predicates, on standard accounts, are not arguments; therefore, they do not receive a form of structural case. The second piece of evidence that the accusative case assigned to adjectival/nominal predicate is a purely idiosyncratic lexical case assigned in the presence of the copular verb is the fact that in the absence of the copular verb, the adjectival/nominal predicate receives nominative case rather than accusative case, as is illustrated in (69):

- (69) zayd-un mariid-un/muhandis-un/*mariid-an/*muhandis-an
 Zayd-NOM sick-NOM/engineer-NOM/*sick-ACC/*engineer-ACC
 ‘Zayd [is] sick/an engineer.’ (predicational sentence)

The third piece of evidence in support of the claim that the copular verb assigns a purely idiosyncratic lexical case comes from the fact that in equative sentences, where the pronominal copula rather than the copular verb is obligatory, no accusative case is assigned to the second argument in the sentence, as is illustrated in (70):

- (70) zayd-un *(huwa) zaynab-u/*zaynab-a
 Zayd.M-NOM be. 3MSG Zaynab.F-NOM/*zaynab.F-ACC

³⁹ Recall that non-structural cases are assigned in the syntax but they are not assigned based on a structural relation between a functional head and an NP. In Woolford’s (2006) terms, these are either internal arguments that receive purely idiosyncratic case from certain Vs or prepositions, or else they are external arguments that receive their case based on their particular thematic role. It is this reasoning that justifies the term “syntactic but not structural.”

At this point, the following question might be raised. Since the second NP *zaynab* ‘Zaynab’ in the equative sentence of (70) is an argument rather than a predicate, why can’t it receive the dependent case? The answer to this question can be found in Baker (2015: 174) who states that “a noun is by definition a lexical category that bears a referential index.” Baker then adds that “it becomes easy and natural to say that two nominals that interact case-theoretically must not only have indices, but must have distinct indices.” To account for why the second argument in an equative sentence does not receive the dependent case, we can follow Baker (2015: 175) who makes the following theoretical claims:

- a. Then if X c-commands Y, assign X ergative.
- b. Then if X is c-commanded by Y, assign X accusative.

With these theoretical assumptions in mind, we can account for (70) as follows: Baker (2015: 225) proposes that predicate nominals are embedded in a projection which he calls EP (i.e. equative phrase). Suppose that this is correct. Suppose further that the pronominal copula in SA is a lexicalization of T, specifically the ϕ -features of T. If this is correct, then the sentence in (70) has the following syntactic representation:

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In (72), the predicate nominal *zaynab* ‘Zaynab’ has a referential index [i], and it is properly contained within EP and PredP both of which also bear the referential index [i]; therefore, the dependent case does not apply by (71) even though the predicate nominal is c-commanded by the subject *zayd* ‘Zayd’ which has a distinct referential index [k].

Having established that the accusative case assigned by the copular verb in SA is lexical rather than structural, we can proceed to account for the case patterns with adjectival/nominal predicates. Given that the dependent case does not apply in these structures and the fact that they are not arguments that should agree with T for case-assigning purposes, the prediction is that these predicates would receive a form of unmarked case, namely nominative in the CP domain. It turns out that this mechanism does indeed account for the case patterns of adjectival/nominal predicates in SA. To illustrate, let us consider first, case assignment in nominal sentences (sentences lacking a lexical verb) together with their structural representation:

- (73) a. Zayd-un safiid-un/*safiid-an.
 Zayd-NOM happy-**NOM**/*happy-ACC
 ‘Zayd is happy.’
- b. [CP [TP Zayd T [PredP <Zayd> Pred happy]

In (73), there is only one argument in the structure, namely *zayd* ‘Zayd’; therefore, the predicate nominal receives the unmarked nominative case.

When there is an overt copular verb in the structure, this verb assigns a purely idiosyncratic lexical accusative to the predicate, as is shown by the example in (74a) and its structural representation in (74b):

- (74) a. kaan-a Zayd-un safiid-an/*safiid-un
 was-3MSG Zayd-NOM happy-ACC/*happy-NOM
 ‘Zayd was happy.’

- b. [CP [TP kaana T [TP Zayd-un <kaana> [vP <Zayd> <kaana> v safiid-an]

In (74), the representation includes two instances of T, as it has a copular verb, and this kind of structures has been argued in this thesis to have two projections of TP. Note especially that the sentence does not include an expletive. This has to do with the fact that unlike with indefinite subjects with the copular verb, where an expletive is obligatory, no expletive is needed when the subject is definite, as is the case with (74). SA is a language, where non-specific indefinite subjects are not allowed to occupy the Spec, TP position (see Fassi Fehri 1993: 28 on this). When the sentence includes the indicative complementizer, the subject receives a purely idiosyncratic lexical case from C, and the predicate realizes the unmarked nominative case in the CP domain, as is shown by the example in (75):

- (75) ?inna Zayd-an safiid-un/*safiid-an
 that.EMPH Zayd-ACC happy-NOM/*happy-ACC
 ‘Indeed, Zayd is happy.’

When there is an indicative complementizer as well as a copular verb, the subject receives an idiosyncratic lexical case from the complementizer and the adjectival predicate receives an idiosyncratic lexical case from the copular verb, as in (76):

- (76) ʔinna Zayd-an kaan-a saʕiid-an/*saʕiid-un
 that.EMPH Zayd-ACC was-3MSG happy-ACC/*happy-NOM
 ‘Indeed, Zayd was happy.’

When the nominal sentence is embedded in an ECM construction, the adjectival/nominal predicates obligatorily surface with an accusative case. To account for this case pattern, I claim that the adjectival/nominal predicate is assigned a purely idiosyncratic lexical accusative case by the covert analogue of the copular verb. This is illustrated by (77a) and its structural representation in (77b):

- (77) a. ḥasib-tu Zayd-an saʕiid-an/*saʕiid-un
 believed-1SG Zayd-ACC happy-ACC/*happy-NOM
 ‘I believed Zayd to be happy.’
 b. ḥasib-tu Zayd-an muhandis-an/*muhandis-un
 believed-1SG Zayd-ACC engineer-ACC/*engineer-NOM
 ‘I believed Zayd to be an engineer.’
 c. ...[_{VP} V Zayd-ACC] [_{TP} <Zayd> <kaana> [_{TP} <Zayd> <kaana> [_{VP} <kaana>
 saʕiid-an / muhandis-an-ACC]]]

The question that might now be raised is the following: why should the copular verb be covert only in embedded contexts?⁴⁰ To answer this question, I tentatively assume that this is so because the overt copular verb encodes tense, and in the context of the ECM constructions, the tense of the embedded clause can but need not be encoded by the matrix predicate; therefore, the use of of the overt copular verb to encode tense in the embedded clause becomes redundant.⁴¹

To summarize, the adjectival and nominal predicates do not undergo the dependent case assignment. Instead, they surface with the unmarked nominative case unless there is an overt or covert copular verb, which assigns a purely idiosyncratic lexical accusative to the predicate.

5.12 Case assignment in passive sentences

Compare the pair in (78):

- (78) a. katab-a zayd-un **risaalat-an**
- wrote-3MSG Zayd-NOM letter-ACC

⁴⁰ I thank Arsalan Kahnemuyipour for raising this question. I realize that redundancy does not entail impossibility, and the sentence with an overt copula is highly improbable if not ungrammatical in SA. The only instance of the copular verb preceding a *belief*-type predicate that I managed to find is the following verse from (Ibn ʿaqqil 13th c./1980, Vol. 2, ex.123: 35):

(i) ʔin t-azʕum-ii-ni kun-tu ʔajhal-Ø-u...

 if F-believed-FSG-me was-1SG lack.knowledge-MSG-INDIC

 ‘If you believed that I lacked knowledge...’

⁴¹ Ouhalla (1994) attempts to account for the accusative case on the adjectival/nominal predicate in the context of ECM constructions by claiming that the embedded clause forms a small clause, which raises to the matrix clause, and the whole clause receives an accusative case from the matrix predicate. This analysis begs the question of why should small clauses, which are predicates, need case. Fassi Fehri (1993, fn. 24: 92) accounts for the accusative case on the adjectival predicate in the context of ECM constructions by using the notion of spreading, i.e. the accusative case assigned to the subject of the embedded clause spreads to the adjectival predicate (cf. Yip et. al. 1987). Al-Balushi (2016: 26) claims that the embedded adjectival/nominal predicate in an ECM construction is assigned lexical accusative case by the matrix ECM predicate.

‘Zayd wrote a letter.’

b. kutib-at **risaalat-un**/*risaalat-an

wrote.PASS-3FSG letter-**NOM**/letter-ACC

‘A letter was written.’

Suppose that the structure of (78b) is as shown in (79):

(79) [CP [TP kutib-at T [_{VP} v [_{VP} <V> **risaalat-un**]]]]

The example in (78a) is in the active form, and the theme object receives a structural dependent accusative case. When the theme object is passivized, as in (78b), it surfaces as the subject of the sentence with nominative case. The facts of (78b) can be accounted for using the dependent case theory of Baker (2015) as follows: at the insertion of the soft phasal head v, its complement VP is sent to Spell-Out. In this domain, there is only one NP, namely the theme object; therefore, no case assignment is calculated. At the insertion of the strong phasal head C, its complement TP is sent to Spell Out. In this domain, there is only NP, namely the theme object; therefore, the dependent case does not apply, and the theme object surfaces with the structural nominative case via Agree with T. Note crucially that at the Spell Out of vP, no case applies if there is only one NP in the spell out domain. At the Spell out of CP, case has to apply even there is only one NP in the spell out domain. This is accounted for on the grounds in the adopted theoretical model

on the grounds that vP is a soft phase; therefore, there is still a chance for the case to compete for other NPs for case; at the CP level, however, case has to apply even if there is one NP, as this is a hard phase, and all case decisions have to be made in this phase.

5.13 Case assignment in imperative sentences

The example in (80) is a sentence in the imperative form in SA:

- (80) ktub-Ø-Ø **risaalat-an**/*risaalat-un.
 write.IMP-MSG-JUSS letter-ACC/letter-NOM
 ‘Write a letter!’

In (80), the theme object obligatorily surfaces with the accusative case. Following Benmamoun (2000) and Al-Balushi (2011), I assume that imperative sentences in SA do not have a Tense specification. Suppose that the structural representation of (80) is as shown in (81):

- (81) [CP [TP *pro* ktub [vP <*pro*> v [vP <V> **risaalat-an**]]]

Following Benmamoun (2000), I assume that T in imperative sentences does not have a Tense specification, but is rather specified for an [IMP(erative)] feature. The fact that the theme object in (80) obligatorily surfaces with the accusative case indicates that the null subject *pro* of

‘Zayd is reading the book now.’

‘Zayd will be reading the book sometime in the future’

‘*Zayd was reading the book in the past.’

Fassi Fehri (1993:181-184) provides a number of arguments to show that participles in SA do not bear a Tense specification. In terms of their aspectual properties, Fassi Fehri (1993: 178-181) shows that participles are similar to adjectives in some respects, but similar to verbs in other respects. Thus, similar to adjectives, participles encode states. However, the states that participles encode are not the same as those that adjectives encode. Specifically, adjectives encode non-contingent states, whereas participles encode contingent states. Thus, adjectives such as *ġariiġ* ‘drowned’ is not the same as the active participle *ġaariġ* ‘drowning’. The adjective *ġariiġ* ‘drowned’ describes someone who is in the state of drowning, and there is no attention paid to how the event is unfolding in time. In contrast to this, the participle *ġaariġ* ‘drowning’ means that someone is drowning now but may not be after a while, or that someone has entered the state of drowning (i.e. inceptive aspect). Similarly, participles can even be derived from purely stative lexical roots, such as *faahim* ‘understanding’ from *fahima* ‘to understand’, *ṣaalim* ‘knowing’ from *ṣalima* ‘to know’. However, even here, the participles *faahim* ‘understanding’ and *ṣaalim* ‘knowing’ encode a transitional or temporary state of understanding or knowing rather than a permanent state. In addition to their ability to express states, participles also show other properties that are characteristic of adjectives. For example, they bear case, as shown in (85b) above. They also agree in gender and number with the subjects. This is illustrated by the comparison shown between (86) and (87):

- (86) a. l-ʔawlaad-u **muhaððab-uun.**
the-boys-M.PL.NOM well-mannered-MPL.NOM
‘The boys are well-mannered.’
- b. l-banaat-u **muhaððab-aat-un.**
the-girls.FPL.NOM well-mannered-FPL.NOM
‘The girls are well-mannered.’
- (87) a. l-ʔawlaad-u **ʕaarif-uun** l-jawaab-a.
the-boys.MPL.NOM knowing.PTPL-MPL.NOM the-answer-ACC
‘The boys are now in the stage of knowing the answer.’
- b. l-banaat-u **ʕaarif-aat-un** l-jawaab-a.
the-girls.FPL.NOM knowing.PTPL-FPL.NOM the-answer-ACC
‘The girls are now in the stage of knowing the answer.’

Moreover, Fassi Fehri (1993: 187) shows that similar to adjectives, participles occur in positions that are occupied by adjectives. This is shown by the comparison in (88):

- (88) a. daxal-a zayd-un l-bayt-a **ḥaziin-an**
entered-3MSG Zayd-NOM the-house-ACC sad-ACC
‘Zayd was sad when he entered the house.’
- b. daxal-a zayd-un l-bayt-a **raakib-an**
entered-3MSG Zayd-NOM the-house-ACC riding.PTPL-ACC
ḥiṣaan-an
horse-ACC

‘Zayd entered the house riding a horse.’

- c. daxal-a zayd-un l-bayt-a **mumtaṭṭiy-an**
 entered-3MSG Zayd-NOM the-house-ACC mounting.PTPL-ACC
 ḥiṣaan-an
 horse-ACC

‘Zayd entered the house mounting a horse.’ (Fassi Fehri 1993, ex. 132: 187)

The example in (88a) shows that an adjective modifies the subject of the sentence. The examples in (88b-c) show that this position can also be occupied by the active and passive participles respectively.

On the other hand, participles show other properties which are similar to those of verbs. Thus, similar to fully inflected verbs, participles have an argument structure, which parallels that of their corresponding verbs, and their complements are marked with the accusative case. This is shown by the comparison in (89) and (90):

- (89) a. **ʕaraf-a** zayd-un l-jawaab-a
 knew-3MSG Zayd-NOM the-answer-ACC
 ‘Zayd knew the answer.’

- b. zayd-un **ʕaarif-un** l-jawaab-a.
 Zayd-NOM knowing.PTPL-NOM the-answer-ACC
 ‘Zayd is now in the state of knowing the answer.’

- (90) a. **salab-a** zayd-un l-rajul-a maal-a-hu
 deprived-3MSG Zayd-NOM the-man-ACC money-ACC-his
 ‘Zayd deprived the man of his money.’
- b. zayd-un **saalib-un** l-rajul-a maal-a-hu
 Zayd-NOM depriving.PTPL-NOM the-man-ACC money-ACC-his
 ‘Zayd is now in the state of depriving the man of his money.’

The example in (89b) shows that a participle may have a theme object as its complement in the same way that a monotransitive verb can in (89a). Similarly, the theme object of the participle in (89b) is also marked in the accusative case in the same way that the theme object of the verb in (89a) is. The example in (90b) shows that a participle may have two objects as complements in the same way that its corresponding verb can in (90a). Also, the objects of the participle are both marked in the accusative case in the same way that the objects of a ditransitive verb are.

Moreover, as pointed out in Fassi Fehri (1993: 186-187), participles have the same selectional properties that their corresponding verbs have. This is illustrated by the comparison in (91):

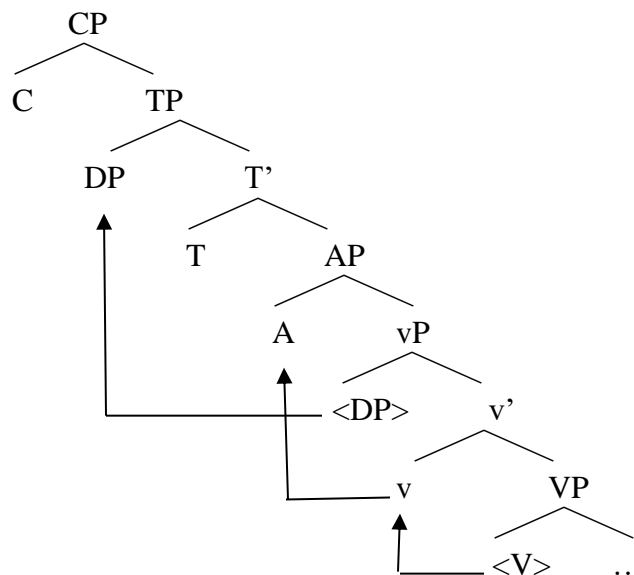
- (91) a. zayd-un **y-uʕraf-Ø-u** [PP bi-nazaahat-i-hi]
 Zayd-NOM 3-know.PASS-MSG-INDIC for-honesty-GEN-his
 ‘Zayd is known for his honesty.’
- b. zayd-un **maʕruuf-un** [PP bi-nazaahat-i-hi]
 Zayd-NOM known.PTPL-NOM for-honesty-GEN-his
 ‘Zayd is known for his honesty.’

The examples in (91) show that the participle in (91b) c-selects the same PP complement that its corresponding verb does in (91a).

Similar to Fassi Fehri (1993), Al-Balushi (2011: 262-267), also argues that participle sentences lack a tense specification, and the proposal is made that such sentences project an AspP instead of TP.

Given the above hybrid categorial properties of participles, Fassi Fehri (1993: 187-190) proposes that participles are internally verbal but externally adjectival. He further proposes that the categorial conversion takes place in syntax. I adopt this proposal, together with the claim that T in these structures encodes aspect but not tense. I therefore propose the structure in (92) for participles:

(92):



The structure in (92) shows that the participle starts the derivation as a verb, before it is converted to an adjective later on in the derivation. The participle head-moves from V to v and then to A. The subject DP of the participle moves from its base-generation position in Spec, vP before moving moving to Spec, TP. Based on Fassi Fehri (1993) T may bear mood, aspect or tense features. Thus, T in the structure in (92) has aspect features but no tense features. What the

Having established the temporal, aspectual and categorial properties of participles, let us consider how sentences with participles can be accounted for in the dependent case theory of Baker (2015). Let us consider first the example in (93):

- The sentence in (93) therefore has the derivation in (94):

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In (94), vP is projected, and its complement VP is sent to Spell-Out. In this spelled out domain, there is only one NP, namely NP2, which is not considered for case assignment, as it is the only NP in this domain. At the spell out of C, its complement TP is sent to Spell-Out. In this spelled out domain, NP1 c-commands NP2. As a result of this relationship, NP1 linearly precedes NP2, and NP2 is assigned the structural dependent accusative case. NP1 receives the structural nominative case via Agree with T. Given that the participle is externally an adjectival predicate, it follows that the participle receives the unmarked nominative case in the CP domain. The fact that the participle receives the unmarked case even though it is externally an adjectival predicate can be attributed to a PF requirement of SA, which requires that adjectival predicates bear a morphological form of case.

Let us consider next how the sentence with auxiliaries such as (95) can be accounted for in this theory.

- (95) [CP C [TP kaan-at [TP **l-ʔamʔaar-u**_[NP1] <~~kaan-at~~> ʔamsi
was-3FSG the-rains-NOM yesterday
[AP **gaasil-at-an-A** [vP <NP1> v [vP V **l-ʔašjaar-a**_[NP2]]]]]].
cleaning.PTPL-FSG-ACC the-trees-ACC

‘The rains were washing the trees yesterday.’ (Hasan 1963: 248)

Here, I assume that T has a tense specification given that the copular verb bears tense information. I also assume that there are two instances of T given the presence of the copular verb. The derivation of the sentence in (95) proceeds as in (96):

(96) a. $[_{VP} <NP1> v [_{VP} V NP2]]$, v a phase head

Spell out v's complement: NP2

→ Case NP2 = NA

b. $[_{CP} C [_{TP} kaanat T [_{TP} NP1 <kaanat> T [_{AP} V-V-A [_{VP} <NP1> v [_{VP} V NP2]]]]]]]$, C a phase head

Spell out c's complement: NP1 c-c's NP2

→ (NP1 < NP2)

→ Case NP2 = ACC

→ Case participial = a purely idiosyncratic lexical ACC assigned by the copular verb

→ Case NP1 = structural NOM via Agree with T.

In (96), vP is projected and its complement VP is sent to Spell-Out. In this domain, there is only one NP, namely NP2, which is not considered for case assignment, as it is the only NP in this domain. At the Spell Out of the phasal head C, its complement TP is sent to Spell-Out. In this domain, NP1 c-commands NP2. As a result of this relationship, NP1 linearly precedes NP2 and NP2 is assigned the structural dependent case. The participial is assigned the purely idiosyncratic lexical accusative case assigned by the copular verb. As for NP1, it receives the structural nominative case via Agree with T.

5.15 Case assignment in the PP domain

In SA, NPs embedded in the prepositional phrases (PPs) receive structural genitive case assigned by the preposition (more on this below). This is illustrated in (97):

- (97) a. saafar-at zaynab-u **ʔilaa** l-ʕiraaq-i
travelled-3FSG Zaynab-NOM to the-Iraq-**GEN**
‘Zaynab travelled to Iraq.’
- b. qadim-at zaynab-u **min** l-mağrib-i
came-3FSG Zaynab-NOM from the-Morocco-**GEN**
‘Zaynab came from Morocco.’
- c. ʕaad-at zaynab-u **li-l-laʕib-i**
returned-3FS Zaynab-NOM to-the-playing-**GEN**
‘Zaynab returned to playing.’
- d. takallam-at zaynab-u **ʕan** l-faqr-i
spoke-3FSG Zaynab-NOM about the-poverty-**GEN**
‘Zaynab spoke about poverty.’
- e. saqaṭ-at zaynab-u **ʕalaa** l-ʔarḍ-i
fell-3FSG Zaynab-NOM on the-floor-**GEN**
‘Zaynab fell on the floor.’
- f. ʔintaḍar-at zaynab-u **ʕinda** l-baab-i
waited-3FSG Zaynab-NOM at the-door-**GEN**
‘Zaynab waited at the door.’
- g. ḥallaq-at l-ṭaaʔirat-u **fawqa** l-saḥaab-i
flew-3FSG the-plane-NOM over the-clouds-**GEN**
‘The plane flew over the clouds.’
- h. takallam-at zaynab-u **maʕa** l-muʕallim-i
spoke-3FSG Zaynab-NOM with the-teacher-**GEN**

‘Zaynab spoke with the teacher.’

- i. ʔiltaq-at zaynab-u **bi-zayd-in**
 met-3FSG Zaynab-NOM with-Zayd-**GEN**

‘Zaynab met with Zayd.’

- j. jalas-at zaynab-u **bayna** l-muʕallimat-**i** wa
 sat-3FSG Zaynab.F-NOM between the-teacher.F-**GEN** and
 l-ṭaalibat-**i**
 the-student.F-**GEN**

‘Zaynab sat between the teacher and the student.’

There is, however, a class of nouns known in the literature on SA as diptotes, which can only surface with a morphologically accusative case following a preposition. Diptotes are a class of nouns whose declension is characterized by the two properties shown in (98):

- (98) a. They are declined with the accusative case when they are indefinite and when they function as the complement of a preposition.
 b. They lack the indefinite marker *-n* when they are used as indefinite.⁴²

There are a number of factors which determine when a noun is a diptote. The following are some of these factors. According to Ibn Al-Saraaj (10th c./1996: 80-92), a noun is considered to be a diptote whenever two of any of the following factors are available, or whenever one factor is repeated more than once with one noun.

⁴² The status of the final *-n*, called the *tanwiin* or *nunation* in traditional grammars is not resolved. Kouloughli (2007) defends the thesis that it is an indefinite marker. Fassi Fehri (2012, fn 2: 294), however, argues that “it is the head of Poss(essive) phrase, which marks the absence of the possessor constituent, or absence of individuation.” For the purpose of this study, I treat it as an indefinite morpheme.

- (99)
- a. The noun is of the template *ʔaʕʕal*, as in the proper name *ʔaḥmad*.
 - b. The noun is feminine either morphologically, as in the proper name *ḥamdat* or it is made up of more than three radicals (i.e. consonants), the second of which is not followed by a vowel and it is inherently feminine, as in the proper names *Zaynab* or *Suʕaad*.
 - c. The noun ends in *-an*, as in the proper name *ʕutmaan*.
 - d. The noun is definite.
 - e. The noun is derived from another noun resulting in a change in meaning.
 - f. The noun is plural, which is derived from another plural noun, such that no other plural can be derived from the newly derived plural.
 - g. The noun is a foreign proper name.
 - h. The noun is a compound noun formed out of two simple nouns.

To illustrate, the proper name *ʔaḥmad* qualifies as a diptote because it is of the templatic form *ʔaʕʕal* and it is definite. Similarly, the proper name *ḥamdat* is a diptote because it is morphologically feminine bearing the feminine suffix *-at* and it is definite. The proper name *ʕutmaan* is a diptote because it ends in *-an* and it is definite. The noun *maṭnaa* ‘two two in a row’ is a diptote because it is derived from the noun *ʔiṭnayn* ‘two’ thus changing its templatic form, and the derived noun *maṭnaa* also changes the meaning *ʔiṭnayn* ‘two’ into ‘two two in a row’. Thus, with *maṭnaa* ‘two two in a row’, the same factor, change, is repeated twice. The noun *ʔakluban* ‘dogs’ is the plural form of *kalb* ‘dog’, and the noun *ʔakaalib* is a diptote because it is the plural form of *ʔakluban*, the latter itself is the plural form of *kalb* ‘dog’. Here also, the same factor, pluralization, is repeated twice. The fact that no other plural can be formed out of *ʔakaalib* makes it qualify to be a diptote. The nouns *ʔibraahiim* ‘Ibrahim’, *ʔiṣḥaaq* ‘Isac’, *yaʕquub*

‘Jacob’ are diptotes because they are foreign names and they are definite. The proper nouns *ḥaḍramawta* and *baʕlabakka* are diptotes because both are compounds, one is derived from *ḥaḍram* ‘Hadoram’ and *mawta* ‘land’, and the other is derived from *baʕl* ‘owner’ and *baq* ‘Biqaaʕ’ meaning ‘plain’ respectively.⁴³

The examples in (100) contain an example of a diptote, namely *Zaynab* ‘Zaynab’:

- (100) a. jaaʔ-at zaynab-**u-Ø**
 came-3FSG Zaynab-**NOM-INDEF**
 ‘Zaynab came.’
- b. raʔay-tu zaynab-**a-Ø**
 saw-1SG Zaynab-**ACC-INDEF**
 ‘I saw Zaynab.’
- c. marar-tu bi-zaynab-**a-Ø**
 passed-1SG by-Zaynab-**ACC-INDEF**
 ‘I passed by Zaynab.’

The examples in (100) show that the proper noun *Zaynab* ‘Zaynab’, a member of the minority class of nouns known as diptotes in SA, declines in the following manner: the proper noun is assigned morphological nominative case when it functions as the subject of the sentence, as in (100a); it is assigned a morphological accusative case when it functions as the object of the sentence (100b) as well as when it functions as the object of a preposition, as in (100c). In

⁴³ There is no agreement on the original meaning of *ḥaḍramawta*. The meaning I ascribe to it here is based on just one of the possible original meanings ascribed to it.

addition to the case endings, the diptote *Zaynab* ‘Zaynab’ lacks the indefinite marker *-n*, which is normally attached to proper nouns in SA (for a discussion of diptotes in SA, see Al-Hawary 2011: 343-348).

Diptotes are to be distinguished from another declensional class of nouns, which make up the majority of nouns in SA, namely triptotes. Triptotes have distinct case markings in the nominative, accusative and genitive, and they bear the indefinite marker *-n* when used as indefinite. The examples in (101) contrast with the diptotes shown in (100):

- (101) a. jaaʔ-a zayd-**u-n**
 came-3MSG Zayd-**NOM-INDEF**
 ‘Zayd came.’
- b. raʔay-tu zayd-**a-n**
 saw-1SG Zayd-**ACC-INDEF**
 ‘I saw Zayd.’
- c. marar-tu bi-zayd-**i-n**
 passed-1SG by-Zayd-**GEN-INDEF**
 ‘I passed by Zayd.’

The examples in (101) show that the proper noun, *zayd* ‘Zayd’, a member of the majority declensional class known as triptotes in SA declines in the following manner: it is assigned a morphological nominative case when it functions as the subject of the sentence, as in (101a); it is assigned a morphological accusative case when it has the function of the object, as in (101b), and

it is assigned a morphological genitive case when it functions as the object of a preposition, as in (101c).

Having described the declensional properties of triptotes and diptotes in SA, I now address the question of case marking on the complements of prepositions. Specifically, is the genitive case assigned by prepositions to their complements a structural or a lexical/inherent case? I claim that the genitive case assigned by the prepositions in SA is a structural case. This claim is supported by two arguments against the view that this case is lexical/inherent. The first argument against the view that the genitive case assigned by prepositions is an inherent case is that objects of prepositions all receive a genitive case regardless of their thematic role in the sentence. This is shown by the examples (97) above and further in (102):

- (102) a. saafar-at zaynab-u ʔilaa **l-siraaq-i**
 travelled-3FSG Zaynab-NOM to the-Iraq-**GEN**
 ‘Zaynab travelled to Iraq.’
- b. qadim-at zaynab-u min **l-mağrib-i**
 came-3FSG Zaynab-NOM from the-Morocco-**GEN**
 ‘Zaynab came from Morocco.’
- c. ʔaʕt-at zaynab-u l-kitaab-a li-zayd-in
 gave-3FSG Zaynab-NOM the-book-ACC to-Zayd-**GEN**
 ‘Zaynab gave the book to Zayd.’
- d. zaynab-u fii **l-mağrib-i**
 Zaynab-NOM in the-morocco-**GEN**
 ‘Zaynab [is] in Morocco.’

The examples in (102) clearly show that the genitive case assigned by the prepositions to their complements is not thematically linked. Thus, the NP *l-firaaq* ‘Iraq’ in (102a) receives the genitive case from the preposition *ʔilaa* ‘from’, and the NP has the thematic role GOAL. Similarly, the NP *l-maġrib* ‘Morocco’ in (102b) receives the genitive case from the preposition *min* ‘from’, and the NP has the thematic role SOURCE. In (102c), the NP *Zayd* ‘Zayd’ receives the genitive case from the preposition *li* ‘to’, and the NP has the thematic role BENEFICIARY. In (102d), the NP *zaynab* ‘Zaynab’ receives the genitive case from the preposition *fii* ‘in’, and the NP has the thematic role LOCATION.

A second argument in support of the claim that prepositions in SA assign structural genitive case to their complements rather than a purely idiosyncratic lexical case in the sense of Woolford (2006) is that the assignment of genitive case is a property that applies to all prepositions in SA, not just to particular ones, as shown by the examples in (97) and (102) above, the only apparent exception noted is the case of the minority class of declensional nouns known as diptotes, as discussed. To account for the morphological accusative case marking on diptotes following a preposition, I follow Embick and Noyer’s (2005) analysis of diptotes in SA. In their Distributed Morphological (DM) analysis of diptotes in SA, Embick and Noyer (2005: 17-20) assume that the case features for SA are those in (103):

(103) Case features for SA

	NOM	ACC	GEN
Oblique	-	-	+
Superior	+	-	-

Given the case features in (103), Embick and Noyer assume that the Vocabulary Items in (104) are in a competition to realize the case morphemes of SA:

(104) $-u \leftrightarrow [+superior]$

$-i \leftrightarrow [+oblique]$

$-a \leftrightarrow \text{elsewhere}$

For the indefinite morpheme, Embick and Noyer assume that the Vocabulary Items in (104) compete for insertion, as in (105):

(105) $-n \leftrightarrow [-definite]$

$-\emptyset \leftrightarrow \text{elsewhere}$

To account for the indefinite and case declensional patterns of diptotes in SA shown in (100) above, namely the syncretism of genitive and accusative into the accusative form $-a$, and the lack of the indefinite marker $-n$, Embick and Noyer claim that the Impoverishment rules in (106), which precede the process of Vocabulary Insertion in the Morphophonological Structure of DM, are responsible for the surface realization of these morphemes on diptotes in SA:

(106) SA diptote Impoverishment

a. $[+oblique] \rightarrow \emptyset / [\text{diptote}] + ___ + [-\text{definite}]$

b. $[-\text{definite}] \rightarrow \emptyset / [\text{diptote}] + \text{case/number} + ___$

According to Embick and Noyer, the Impoverishment rule in (106a) prevents the insertion of the genitive morpheme *-i* on diptotes in SA, and the Impoverishment rule in (106b) prevents the insertion of the indefinite morpheme on dipototes in SA.

Given Embick and Noyer's (2005) analysis of the case and indefinite patterns of the declensional class of diptotes in SA, it follows that prepositions always assign a structural genitive case to their complements in the syntax. In the case of the accusative case on diptotes following a preposition, this is due to an Impoverishment rule in the Morphophonological component, which maps the syntactic component to the PF interface level. I take the fact that accusative case rather than nominative case is assigned to diptotes in the PP domain as an indication that accusative case is the unmarked case in this domain in SA. The proposal that accusative case is the unmarked case in the PP domain is supported by Baker's (2015: 296) conjecture that

“[s]ome languages might have a special unmarked case triggered by P heads (oblique in the Hindi sense), which may or may not be the same as nominative-absolutive and/or genitive.”

One piece of evidence that the case assigned by prepositions to diptotes is syntactically genitive but morphophonologically accusative can be gleaned from the agreement that takes place between NPs and their modifying adjectives, which is morphologically overt in SA. It is a fact of SA that adjectives agree with their head nouns in number, gender and case. The example in (107) clearly shows that when an NP with a modifying adjective and a head noun, which is a diptote, is assigned a structural genitive case by the preposition, the modifying adjective, which is not a

diptote in this case, surfaces with a genitive case and an indefinite morpheme even though the head noun bears a morphological accusative case with no indefinite morphemes.⁴⁴

- (107) marar-tu bi-talaamiið -a judud-i-n
 passed-1SG by-students-ACC new-GEN-INDEF
 ‘I passed by new students.’

The example in (107) shows unambiguously that the object of the preposition bears a structural genitive case but a morphological accusative case, given that adjectives lack inherent ϕ -features and simply copy the ϕ -features of their head nouns.

The question that remains to be answered is why the NP inside the PP domain is immune to the assignment of structural dependent accusative case. I claim that this is due to the fact that PPs in SA are hard phases in the sense of Baker (2015 and references therein) (on the view that PPs can be phases in some languages, see Baker 2015: 81). One piece of evidence that PPs in SA are hard phases comes from extraction structures. In SA, the NP complements cannot be extracted out of the PP domain. In cases of extraction, the extracted element has to pied-pipe the PP as a whole in order for the sentence to be grammatical. This is shown in (108):

- (108) a. saafar-at zaynab-u ?ilaa l-siraaq-i
 travelled-3FSG Zaynab-NOM to the-Iraq-GEN
 ‘Zaynab travelled to Iraq.’

⁴⁴ There are other adjectives, which are also diptotes. An example is the plural feminine adjective *?uxar* ‘other’ (Al-Hawary 2011: 347).

- b. **ʔilaa l-ʕiraaq-i** saafar-at zaynab-u ___
 to the-Iraq-GEN travelled-3FSG Zaynab-NOM
 ‘It was to Iraq that Zaynab travelled.’
- c. ***l-ʕiraaq-i/u/a** saafar-at zaynab-u ʔilaa ___
 the-Iraq-GEN/NOM/ACC travelled-3FSG Zaynab-NOM to
 Intended meaning ‘It was to Iraq that Zaynab travelled.’

The examples in (108) show that only when the whole PP is fronted is the sentence grammatical, as is shown in (108b). When the NP inside the PP is extracted out of the PP, the sentence is ungrammatical, as is shown in (108c). This, in addition to the fact that the NPs inside the PP domain are not subject to the structural dependent case, might be taken as evidence that PPs in SA are hard phases in the sense of Baker (2015).

5.16 Summary

In this chapter, I have shown that the case assignment facts of the core arguments in SA can be properly accounted for using the dependent case theory of Baker (2015). The crucial claim has been that *v* in SA is a soft phase in the sense of Baker (2015). The phasal head *v* has been shown to be incapable of assigning a structural accusative case to the object. This has been attributed to *v*’s being impoverished having only a gender feature. The structural accusative case on the object has been argued to be the result of the dependent case assignment. The chapter has also shown that the subject (i.e. the highest argument in Spec, *v*P or Spec, TP) receives its structural nominative case via Agree with T. This mechanism of case assignment has been argued to be available when it is not blocked by dependent case assignment. This chapter has also shown that purely idiosyncratic lexical case does apply in SA, and that there are two lexical

case assigners. The first lexical case assigner in SA is the indicative complementizer. The second lexical case assigner is the copular verb. These lexical case assigners have been shown to assign a purely idiosyncratic lexical accusative case to NPs in their complements. The chapter has moreover shown that NPs inside the PP domain receive a form of structural genitive case assigned by P. Crucially, the chapter also shows that for NPs to compete for the dependent case, they have to have distinct referential indices.

Based on the results of the analysis conducted, I have shown that the following properties are characteristic of SA:

- (a) The CP and PP are hard phases, but the vP is a soft phase.
- (b) The null category *pro* is a case competitor in SA in that it triggers the assignment of structural dependent accusative case on the object DP in the sentence.
- (c) NOM can be the result of an Agree relation with T, or it can be the result of the assignment of unmarked/default case in the CP domain; GEN is a structural case assigned by D to its complement in the DP domain, and ACC is the unmarked case in the PP domain.

The goal of this chapter has been to show that in order for the structural dependent case to apply in a spell out domain, the NPs involved must have distinct referential index. Thus, a *there*-type expletive is not capable of triggering the structural dependent case on an NP because its referential index is not distinct from that of its associate. Similarly, the lower argument in an equative sentence does not get the dependent case. Thus, although it has a referential index, it is not the only maximal projection bearing that index.

Chapter Six

Case assignment of non-arguments in SA

6.1 Introduction

In this chapter, I will discuss the case assignment of adverbial NPs and NPs in the left periphery of the clause. I will claim that all non-arguments receive a form of non-structural non-syntactic case referred to as semantic case (see Maling 2009, Schütze 2001, Fassi Fehri 1986), which is homophonous to the structural accusative case.⁴⁵

6.2 The case assignment of adverbial NPs

Let us consider the examples of adverbial NPs in (1):

- (1) a. katab-a zayd-un risaalat-an **ṣabaah-an.**

 wrote-3MSG Zayd-NOM letter-ACC morning-ACC

 ‘Zayd wrote a letter in the morning.’

⁴⁵ Other cases of case syncretism in SA include those cases where the class of nouns known in traditional Arabic grammar as sound feminine plural nouns (i.e. nouns that pluralize thorough suffixation rather than through a change of the root/stem) realize their syntactic structural or syntactic non-structural (i.e. purely idiosyncratic lexical) accusative case as morphologically genitive, as can be seen by the following examples:

- (i) qaabal-a zayd-un l-ṭaalibaat-i/*l- ṭaalibaat-a
 met-3MSG Zayd-NOM the-students.F-GEN/*the-students-ACC
 ‘Zayd met the students.’ (syntactic structural ACC on the theme object but morphologically GEN)
- (ii) ʔinna l-ṭaalibaat-i/*l-ṭaalibaat-a fii l-ṣaff-i
 that.EMPH the-students.F-GEN/*the-students.F-ACC in the-class-GEN
 ‘Indeed, the students are in the class.’ (syntactic purely idiosyncratic lexical ACC on the theme object but morphologically GEN)

- b. waḍaṣ-a zayd-un l-ṣalaamat-a **yamiin-a** **l-ṭariiḡ-i**
- placed-3MSG Zayd-NOM the-sign-ACC right-**ACC** the-road-GEN
- ‘Zayd placed the sign on the right side of the road.’
- c. zayd-un y-uṭaaliṣ-u l-ṣuḥuf-a **kaṭiir-an.**
- Zayd-NOM 3-read-M.SG.INDIC the-newspaper-ACC often-**ACC**
- ‘Zayd often reads the newspapers.’

In (1a-c), the adverbial NPs receive a morphological accusative case. There are two questions that need to be answered. First, are these NPs true arguments of the verb, or are they adverbial NPs? The second question is whether the accusative case borne by these adverbial NPs is a structural dependent case, Agree-based case, a semantic/adverbial case or a default case.

There are arguments against the claim that adverbials in SA are actually true arguments of the verb. For instance, unlike true objects, adverbial NPs cannot be passivized, as is shown by the contrasting pairs in (2):

- (2) a. kutib-at risaalat-un **ṣabaah-an.**
- wrote.PASS-3FSG letter.F-NOM morning-**ACC**
- ‘A letter was written in the morning.’
- b. *kutib-a **ṣabaah-un** risaalat-an.
- wrote.PASS-3MSG morning.M-**NOM** letter-ACC

- c. wuḍiṣ-at l-ṣalaamat-u **yamiin-a** **l-ṭariiḡ-i**
- placed.PASS-3FSG the-sign.F-NOM right-ACC the-road-GEN
- ‘The sign was placed on the right side of the road.’
- d. * wuḍiṣ-a **yamiin-u** **l-ṭariiḡ-i** l-ṣalaamat-a
- placed.PASS-3MSG right.M-NOM the-road-GEN the-sign-ACC
- e. t-uṭaaliṣ-u l-ṣuḥuf-u **kaṭiir-an.**
- 3FSG-read.PASS-INDIC the-newspapers.F-NOM often-ACC
- ‘Newspapers are often read.’
- f. *y-uṭaaliṣ-u **kaṭiir-un** l-ṣuḥuf-a
- 3MSG-read.PASS-INDIC often.M-NOM the-newspapers-ACC

Having established that adverbial NPs are not true arguments of the verb, it is crucial to point out that place and time NPs as well as amount NPs can still be passivized on the condition that they lose their adverbial function, and assume instead the function of subjects or the function of objects of prepositions. This can be illustrated by the contrasts in (3) through (6):

- (3) a. ṣaam-at zaynab-u **yawm-a** l-jumuʿat-i
- fasted-3FSG Zaynab-NOM day-ACC the-Friday-GEN
- ‘Zaynab fasted on Friday.’

b. *šiim-a* **yawm-u** **l-jumuʕat-i.**

fasted.PASS-3MSG day.M-**NOM** the-Friday-GEN

‘?*Friday was fasted on.’ (adapted from Al-Ašram 2003: 347)

(4) a. *waqaf-at* *zaynab-u* **?amaam-a** **l-nahr-i**

stood.3FSG Zaynab-NOM front-**ACC** the-river-GEN

‘Zaynab stood in front of the river.’

b. *wuqif-a* **?amaam-u** **l-nahr-i.**

stood.PASS-3MSG front.M-**NOM** the-river-GEN

‘?*The front of the river was stood at.’ (adapted from Al-Ašram 2003: 348)⁴⁶

(5) a. *katab-at* *zaynab-u* **l-kaṭiir-a** *ʕan* *l-faqr-i*

wrote-3FSG Zaynab-NOM the-lot-**ACC** about the-poverty-GEN

‘Zaynab wrote a lot about poverty.’

b. *kutib-a* **l-kaṭiir-u** *ʕan* *l-faqr-i*

wrote.PASS-3MSG the-lot.M-**NOM** about the-poverty-GEN

‘A lot was written about poverty.’

⁴⁶ This example might sound degraded to many Modern speakers of SA. However, Al-Ašram 2003: 348) takes these examples from traditional Arab grammarians who were native speakers of SA.

- (6) a. raʔay-tu-haa fii yawm-i l-jumuʕat-i
 saw-1SG-her.ACC on day-GEN the-Friday-GEN
 ‘I saw her on Friday.’
- b. zayd-un y-uṭaaliʕ-u l-ṣuḥuf-a fii
 Zayd-NOM 3-read-M.SG.INDIC the-newspaper-ACC on
 kaṭiir-in mina l-ʔaḥyaan-i.
 lot-GEN of the-times-GEN
 ‘Zayd often reads newspapers.’

I take the fact that the NPs in (3) through (6) can be passivized and bear nominative case, and their ability to function as objects of prepositions and bear genitive case as evidence that these NPs are no longer adverbial NPs, but assume other grammatical functions. This is also the position taken by traditional Arab grammarians (see, for example Al-Warraq 10th c./1999: 281). In other words, these NPs take whatever structural cases regular NPs take when they function as subjects of passives or objects of prepositions.

Baker (2015: 215-2016) argues, based on cross-linguistic evidence, that adverbial NPs can still receive the structural dependent case in some languages such as Cuzco Quechua, Finnish and Korean. Baker (2015: 217) shows that in Finnish, certain adverbs receive structural case because they show case alternation. For example, the duration adverb is accusative in (7a)

but bare-nominative in (7b), an impersonal passive where the covert agent is not a case competitor:

- (7) a. Opiskel-i-n vuode-n
study-PAST-1sS year-ACC
'I studied (for) a year.' (Baker 2015, ex. 63a: 217)
- b. Opiskel-tiin vuosi
study-PAST.PASS year.NOM
'People/we studied (for) a year.' (Baker 2015, ex. 63b: 217)

To see whether this is actually the case in SA, we can employ the same diagnostics used in Baker (2015: 216-217).

For example, adverbials bear the accusative case in active sentences in SA, as can be illustrated in (8):

- (8) daras-tu şabaah-an/*şabaah-un.
studied-1SG morning-ACC/*morning-NOM
'I studied in the morning.'

If the accusative case borne by the adverbials is structural, then the prediction would be that in the context of impersonal passives, the adverbial NP would show case alteration by bearing the nominative case. This prediction is not borne out by the facts, as is shown in (9):

- | | | | | |
|-----|---|-----------|----------|--------------|
| (9) | y-uxtaşam-u | [PP ʔılaa | zayd-in] | şabaah-an/ |
| | 3MSG-arbitrate.PASS-INDIC | to | Zayd-GEN | morning-ACC/ |
| | *şabaah-un. | | | |
| | morning-NOM | | | |
| | ‘Zayd is referred to for arbitration in the morning.’ | | | |

In (9), the NP *zayd* ‘Zayd’ is part of a PP, and the the adverbial NP obligatorily surfaces with the accusative case. The fact the advberial in (9) does not show case alteration in active and passive sentences suggests strongly that the accusative case borne by the adverbial is not syntactic structural. It is also crucial to point out the accusative case borne by averbials cannot be some kind of case concord. This is because the accusative case realized on the adverbial in (9) without there being another accusative-marked NP in the sentence.

The other question that needs to be answered is the following: why can't we assume that adverbial NPs receive an unmarked/default case? This possibility is also ruled out given that the unmarked/default case in SA is the nominative case rather than the accusative case in the CP domain.

Another question that might be raised is why we cannot assume that the accusative case borne by adverbial NPs is a form of lexical/inherent case. This possibility is also ruled out when we consider the fact that in the sense of Woolford (2006), lexical case is only assigned to internal arguments, whereas inherent case is only assigned to external arguments. Since the adverbial NPs in SA are neither internal nor external arguments, it follows that the accusative case borne by these NPs is neither lexical nor inherent. Furthermore, assuming that adverbial NPs receive a form of purely idiosyncratic lexical case entails that there be lexical case assigners, something, which is not available in the case at hand. The argument that adverbial NPs receive a form of inherent case is also ruled out, as these NPs are not arguments of the verb to begin with.

We are thus left with one possibility to consider, which is that the accusative case borne by adverbial NPs in SA is a form of semantic/adverbial case. One piece of evidence that the accusative case borne by adverbial NPs in SA are probably a form of semantic/adverbial case comes from Schütze (2001: 209) who states that “[...] in rich case-marking languages, specifically bare DPs can serve various adverbial functions, with their particular meaning dependent on the choice of case (e.g. dative of duration, ablative of instrument)[...]” Given that the case system of SA is not as rich as that of other languages, with only three morphological cases, it should not be surprising that adverbial NPs bear one of these cases, namely the accusative form in order to mark them as having adverbial functions. Other linguists (see Fassi Fehri 1986: 186) also claim that adverbial NPs in SA bear a form of semantic case rather than structural case.

6.3 Accusative case assignment of some other case-marked NPs

In this section, I discuss the case facts of some accusative-marked NPs in SA such as the absolute objects (= cognate objects), the circumstances, objects of reason/purpose, and objects of accompaniment (comitative objects). I show that these NPs function as adverbial NPs rather than true objects. I also show that the accusative case borne by these NPs is a form of semantic case rather than structural dependent case.

SA has a number of accusative-bearing NPs, some of which are treated as objects in traditional Arabic grammar. These NPs are cognate objects, objects of reason, and comitative objects.

The examples below are respectively called the absolute objects (10), the objects of purpose (11), and the comitative objects (12) in traditional Arabic grammar:

- (10) dammar-a l-zilzaal-u l-qaryat-a **tadmiir-an.**
destroyed-3MSG the-earthquake-NOM the-village-ACC destruction-ACC
'The earthquake literally destroyed the village.'
- (11) ?alqaa zayd-un qaṣiīdat-an **takriim-an** **li-l-ṣaalim-i**
recited.3MSG Zayd-NOM poem-ACC honor-ACC for-the-scientist-GEN
'Zayd recited a poem to honor the scientist.'
- (12) sir-tu wa **l-niil-a.**
walked-1SG and the-Nile-ACC
'I walked along the Nile.'

However, there are reasons to believe that these NPs are not true objects. Instead, I argue that they are adverbial NPs. Semantically, traditional Arab grammarians (see Ibn ʿaqqil (13th c./1980: 169, 186) hold the view that absolute objects encode the meaning of corroboration, and that objects of purpose, encode the meaning of reason or purpose. This indicates that their function in the sentence is one of modification. Syntactically, there are other reasons to believe that these objects are adverbial NPs rather than true objects. First, unlike true objects, which can be passivized, these objects cannot, as can be seen by the contrasting pairs in (13) through (15):

- (13) a. dammar-a l-zilzaal-u **l-qaryat-a** tadmiir-an.
 destroyed-3MSG the- earthquake -NOM the-village-ACC destruction-ACC
 ‘The earthquake literally destroyed the village.’
- b. dummir-at **l-qaryat-u** tadmiir-an.
 destroyed.PASS-3FSG the-village.F-NOM destruction-ACC
 ‘The village was literally destroyed.’
- c. *dummir-a **tadmiir-un** l-qaryat-a.⁴⁷
 destroyed.PASS-3MSG destruction.M-NOM the-village-ACC
- (14) a. ʔalqaa zayd-un **qaʕiidat-an** takriim-an li-l-ʕaalim-i
 recited.3MSG Zayd-NOM poem-ACC honor-ACC for-the-scientist-GEN
 ‘Zayd recited a poem to honor the scientist.’
- b. ʔulqiy-at **qaʕiidat-un** takriim-an li-l-ʕaalim-i
 recited.PASS-3FSG poem.F-NOM honor-ACC for-the-scientist-GEN
 ‘A poem was recited in honor of the scientist.’
- c. *ʔulqiy-a **takriim-un** **li-l-ʕaalim-i**

⁴⁷ On the ungrammaticality of such examples of absolute objects in passives, see (Hasan 1962: 115).

recited.PASS-3MSG honor.M-NOM for-the-scientist-GEN

qašiīdat-an⁴⁸

poem-ACC

- (15) a. sir-tu wa **l-niil-a.**
 walked-1SG and the-Nile-ACC
 ‘I walked along the Nile.’

- b. *siir-a ` wa **l-niil-u.**
 walked.PASS-3MSG and the-Nile-NOM

Second, unlike true objects, which are obligatory, these objects are optional, as can be seen by the contrasting examples in (16) through (18):

- (16) a. dammar-a l-zilzaal-u l-qaryat-a **tadmiir-an.**
 destroyed-3MSG the-volcano-NOM the-village-ACC destruction-ACC
 ‘The earthquake literally destroyed the village.’

- b. dammar-a l-zilzaal-u l-qaryat-a.
 destroyed-3MSG the-volcano-NOM the-village-ACC
 ‘The earthquake destroyed the village.’

- c. * dammar-a l-zilzaal-u tadmiir-an.
 destroyed-3MSG the-earthquake-NOM destruction-ACC

⁴⁸ On the impossibility of passivizing the objects of reason/purpose and comitative objects, see Hasan (1962: 122).

- (17) a. ʔalqaa zayd-un qaṣiīdat-an **takriim-an** **li-l-ṣaalim-i**
 recited.3MSG Zayd-NOM poem-ACC honor-ACC for-the-scientist-GEN
 ‘Zayd recited a poem to honor the scientist.’
- b. ʔalqaa zayd-un qaṣiīdat-an
 recited.3MSG Zayd-NOM poem-ACC
 ‘Zayd recited a poem.’
- c. *ʔalqaa zayd-un takriim-an li-l-ṣaalim-i
 recited.3MSG Zayd-NOM honor-ACC for-the-scientist-GEN
- (18) a. sir-tu wa **l-niil-a.**
 walked-1SG and the-Nile-ACC
 ‘I walked along the Nile.’
- b. sir-tu
 walked-1SG
 ‘I walked.’

Having established that absolute objects are not true objects but are rather adverbial NPs, it is worth pointing out that there are other cases, where absolute objects do behave like true objects. This is exclusively the case with absolute objects that are quantified, as can be seen in (19):

- (19) saar-a zayd-un **sayr-an** **ḥaṭiit-an.**
 walked-3MSG Zayd-NOM walking-ACC swift-ACC
 ‘Zayd walked a swift walk.’

- (21) a.
- | | | | |
|--|-----------------------------|-----------------------------|----------------|
| | ʔih̥tufiy-a | [_{PP} bi-zayd-in] | ʔih̥tifaaʔ-an/ |
| | welcomed.PASS-3MSG | for-Zayd-EGN | welcoming-ACC |
| | *ʔih̥tifaaʔ-un | | |
| | welcoming-NOM | | |
| | ‘Zayd was warmly welcomed.’ | | |
- b.
- | | | | |
|--|--|-----------------------------|----------------|
| | ʔih̥tufiy-a | [_{PP} bi-zayd-in] | takriim-an/ |
| | welcomed.PASS-3MSG | for-Zayd-GEN | rewarding-ACC/ |
| | *takriim-un | li-juhuud-i-hi | |
| | rewarding-NOM | for-efforts-GEN-his | |
| | ‘Zayd was celebrated for his efforts.’ | | |
- c.
- | | | | |
|--|--|-----------------------------|--------------------------------|
| | siir-a | [_{PP} bi-zayd-in] | wa l-niil-a/*l-niil-u |
| | walked.PASS-3MSG | with-Zayd-GEN | and the-Nile-ACC/*the-Nile-NOM |
| | ‘Zayd was walked with along the Nile.’ | | |

structural, together with the claim that these NPs have an adverbial function, it follows that these NPs bear a form of semantic/adverbial case rather than structural case. Here also, the possibility that the accusative case borne by these NPs is default/unmarked is ruled out, as it is the nominative case rather than the accusative case that is the default case in the CP domain of SA.

To summarize, I have shown that SA has a number of accusative-bearing NPs, some of which are treated as objects in traditional Arabic grammar. Using a number of diagnostics, I have demonstrated that these NPs are not actually objects, but are better treated as adverbial NPs. I have also shown that the accusative case borne by these NPs is a form of semantic/adverbial case rather than structural dependent accusative case or default case.

6.4 Case assignment of NPs in the left periphery of the clause

In this section, I discuss the case facts of NPs in the left periphery of the clause, i.e. the CP domain. The example in (22) is an illustrative example.

- (22) l-kitaab-u, qara?-tu-hu
 the-book-NOM read-1SG-it
 ‘The book, I read it.’

First, we need to address the status of resumptive pronouns in SA. I consider resumptive pronouns in SA to be full pronominal arguments which are encliticized to lexical or functional heads in the structure. This claim is supported by Fassi Fehri’s (1986) observation and Aoun et.

al.’s (2010) observation that resumptive pronouns void islands in SA, as can be shown by the following examples:

- (23) **l-mariid-u,** qaabal-tu [NP l-rajul-a ll-aðii zaar-a-*(hu)]
the-sick.person-NOM met-1SG the-man-ACC who visited-3MSG-him
‘The sick person, I met the man who visited him.’
- (24) **l-mariid-u,** xaraj-tu [CP qabl-a ?an ?-azauur-Ø-a-*(hu)]
the-sick.person-NOM left-1SG before that.SUBJ 1SG-visit-3MSG-SUBJ-him
‘The sick person, I left before I visited him.’
- (25) **l-mariid-u,** samiʕ-tu ?anna zayd-an y-aʕlam-Ø-u
the-sick.person-NOM heard-1SG that Zayd-NOM 3-know-MSG-INDIC
[CP man zar-a-*(hu)]
 who visited-3MSG-him
‘The sick person, I heard that Zayd knows who visited him.’

The examples in (23-25) show clearly that the complex NP island (23), the adjunct CP island (24), and the *wh*-island (25) can all be voided using the resumptive pronoun. I take this as evidence that the resumptive pronouns are true arguments of the verb and that the NP *?al-mariid* ‘the sick.person’ is base-generated in the left-periphery rather than moved from within the clause.

Let us consider next the contrasting pair in (26a-b) below, which show that the sentence is rendered ill-formed if the focalized NP *Hind* ‘Hind’ is followed by the SV order . However, the sentence is well-formed when the focalized NP is followed by VS order.

(26) a. *HIND-AN Zayd-un raʔaa-haa

Hind-ACC Zayd-NOM saw-her

‘It was Hind that Zayd saw.’

b. HIND-AN raʔaa-haa Zayd-un

Hind-ACC saw-her Zayd-NOM

‘It was Hind that Zayd saw.’

To account for these sentences, I follow Shlonsky’s (2000: 330) claim that focalization in SA induces subject-verb inversion. Thus, the sentence in (26a) is ill-formed because the focalized NP *Hind* ‘Hind’ is followed by the subject *Zayd* ‘Zayd’ rather than by the verb. This is in contrast with the grammatical example in (26b), where the focalized NP *Hind* ‘Hind’ is followed by the verb.

In the cartographic theory of Rizzi (1997), it is argued that question words universally occupy the Spec, FocP position and that question particles universally occupy the head position of FocP. In addition, Chomsky (1986), Marantz (1991) and Baker (2015) argue that case is assigned to chains. Assuming that these two claims are correct, we can now address the following questions: what makes the left peripheral DP in (27-31) ungrammatical when the left peripheral DP is marked with the accusative or nominative cases and the sentence has a gap? (b) why are the sentences in (27-31) grammatical when the left-peripheral DP surfaces with the nominative case and the sentence has the resumptive strategy?

- (27) a. hal ḍarab-ta Zayd-an
- Q hit-2MSG Zayd-ACC
- ‘Did you hit Zayd?’
- b. *Zayd-an hal ḍarab-ta _____
- Zayd-ACC Q hit-2MSG
- (Fassi Fehri 1986, ex. 73: 121)
- c. *Zayd-un hal ḍarab-ta _____
- Zayd-NOM Q hit-2MSG
- d. Zayd-un hal ḍarab-ta-hu
- Zayd-NOM Q hit-2MSG-him
- ‘Zayd, did you hit him?’
- (28) a. ?a-ḍarab-ta Zayd-an
- Q-hit-2MSG Zayd-ACC
- ‘Did you hit Zayd?’
- b. *Zayd-an ?a- ḍarab-ta _____
- Zayd-ACC Q-hit-2MSG

c. *Zayd-un ʔa- ɖarab-ta _____

Zayd-NOM Q-hit-2MSG

d. Zayd-un ʔa- ɖarab-ta-hu

Zayd-NOM Q-hit-MSG-him

‘Zayd, did you hit him?’

(29) a. man daʕaa ɭlaah-a

who prayed.3MSG God

‘Who prayed God?’

b. *ɭlaah-a man daʕaa _____

God-ACC who prayed.3MSG

(Fassi Fehri 1986, ex. 72: 121)

c. *ɭlaah-u man daʕaa _____

God-NOM who prayed.3MSG

d. ɭlaah-u man daʕaa-hu

God-NOM who prayed-him

‘God, who prayed him?’

(30) a. kam ḍarab-ta Zayd-an
 how.much hit-2MSG Zayd-ACC

‘How much did you hit Zayd?’

b. *Zayd-an kam ḍarab-ta _____

Zayd-ACC how.much hit-2MSG

(Fassi Fehri 1986, ex. 54: 116)

c. *Zayd-un kam ḍarab-ta _____

Zayd-ACC how.much hit-2MSG

d. Zayd-un kam ḍarab-ta-hu

Zayd-NOM how.much hit-2MSG-him

‘Zayd, how much did you hit him?’

(31) a. hallaa ʔakram-ta Zayd-an

PRT.why.not were.generous.with-2MSG Zayd-ACC

‘Why were you not generous with Zayd?’

b. *Zayd-an hallaa ʔakram-ta _____

Zayd-ACC PRT.why.not were.generous.with-2MSG

(Fassi Fehri 1986, ex. 52:116)

c. *Zayd-un hallaa ʔakram-ta _____

Zayd-NOM PRT.why.not were.generous.with-2MSG

d. Zayd-un hallaa ʔakram-ta-hu

Zayd-NOM PRT.why.not were.generous.with-2MSG-him

‘Zayd, why were you not generous with him?’

Let us assume (following Chomsky 1977, Fassi Fehri 1986, Aoun et. al. 2010) that the presence of gaps indicates movement, and the presence of resumptive pronouns indicates the absence of movement, given that resumptive pronouns void islands. The examples in (27-31) all show the following pattern: when the left-peripheral accusative-marked NP *Zayd* ‘Zayd’ is focalized or topicalized leaving a gap as the result of movement, as in (27b-31b), the sentence is ungrammatical; when the left-peripheral nominative-marked NP *Zayd* ‘Zayd’ is focalized or topicalized as the result of movement, as in (27c-31c), the result is ungrammatical; when the left-peripheral nominative-marked NP *Zayd* ‘Zayd’ is base-generated in the left-periphery as in (27d-31d) and the resumptive strategy is used, the result is grammatical. These examples can all be accounted for if we assume the cartographic approach of Rizzi (1997). To account for the ungrammatical examples in (27b-31b), we can proceed along the following manner: suppose that the question words and particles *ʔa-*, *hal*, *man*, *kam*, *hallaa* all project a FocP. Suppose further that a gap indicates movement, and the resumptive pronoun indicates lack of movement, given that resumptive pronouns void islands in SA. If this is the case, then the examples in (27b-31b) are all barred because the NP *Zayd* ‘Zayd’ is raised from its base position in the complement of

VP, where it receives a dependent accusative case to the Spec, FocP position or the Spec, TopP position in the sentence. This movement induces ungrammaticality for one of two reasons: (a) the DP *Zayd* ‘Zayd’ is raised to the Spec, FocP position, and the ungrammaticality is due to the fact that it is impossible to have two projections of FocP in the architecture of the sentence, à la Rizzi (1997). In other words, the underlying representation of the sentences in (27b-31b) can be represented as is shown in (32):

(32) *_{[FocP Zayd-an} [_{FocP} *ʔa, hal, man, hallaa, kam...* <~~Zayd-an~~>]

(b) the DP *Zayd* ‘Zayd’ is raised to the Spec, TopP position, and the ungrammaticality is due to the fact that the DP *Zayd* ‘Zayd’ moved across the question words, which occupy the FocP projection, and movement across elements in the C domain is banned on standard accounts. In other words, the underlying derivation of the sentences in (27b-31b) can be represented as follows:

(33) *_{[TopP Zayd-an} [_{FocP} *ʔa, hal, man, hallaa, kam...* <~~Zayd-an~~>]

To account for why the examples in (27c-31c) are ungrammatical, we can proceed along the following manner: these examples are all ungrammatical due to one of two reasons (a) the pronounced copy of the NP *Zayd* ‘Zayd’ is raised to the Spec, FocP position; therefore, this structure incurs two violations, namely the structure projects two instances of FocP projections, thus violating the universal ban on having two FocP projections in the structure, and the fact that the two links in the chain <Zayd, Zayd> end up receiving two distinct cases, thus violating the

condition that stipulates that cases are assigned to chains (cf. Chomsky 1986, Marantz 1991, Baker 2015) (b) the pronounced copy of the NP *Zayd* ‘Zayd’ is raised to the Spec, TopP position; therefore, the structure incurs two violations. The first violation has to do with the fact that the two links in the chain $\langle \textit{Zayd}, \textit{Zayd} \rangle$ end up receiving two distinct cases, accusative case in the base position and nominative case in the landing position, thus violating the condition stipulated in Chomsky (1986), Marantz (1991) and Baker (2015) that case is assigned to chains. The second violation has to do with the fact the DP *Zayd* ‘Zayd’ moved across an element in the C domain, a movement, which is banned on standard accounts. The underlying representation of (27c-31c) can therefore be represented as in (34):

(34) *_{[TopP Zayd-un_[NOM]} _{[FocP *ʔa, hal, man, hallaa, kam...* ~~$\langle \textit{Zayd-an}_{[ACC]} \rangle$~~]}

To account for the grammatical examples in (27d-31d), we can assume that the lack of a gap in the structure and the presence of a resumptive pronoun indicate lack of movement. Thus, the NP *Zayd* ‘Zayd’ in these sentences must be one of two things: (a) a higher topic phrase base-generated in its surface position, and it therefore surfaces with the unmarked/default case in the CP domain, namely the nominative case. Therefore, nothing is violated, and the sentences are grammatical. The underlying representation of (27d-31d) can therefore be shown as in (35):

(35) _{[TopP Zayd-un_[NOM]} _[FocP *ʔa, hal, man, hallaa, kam...*]

Alternatively, the NP *Zayd* ‘Zayd’ is adjoined to FocP, and it receives the unmarked/default nominative case in SA. The underlying structure of the sentences in (27d-31d) must, according to this option be represented as follows:

- (36) [FocP *Zayd-un*_[NOM] [FocP *ʔa, hal, man, hallaa, kam...*]

If the above analysis is correct and if question particles occupy the head Foc of the FocP projections, the question now arises as to how to account for the following sentence:

- (37) *ʔa-Zayd-an ɖarab-ta* _____

Q-Zayd-ACC hit-2MSG

‘Was it Zayd that you hit?’

In (37), there is a gap, which indicates that the NP *Zayd* ‘Zayd’ is moved from its base position as the object of the verb to the CP domain for focalization purposes. If focalization can be encoded by question particles and if the NP *Zayd* ‘Zayd’ is also focalized (or topicalized), as seems to be the case, the question is how to account for the surface order of the question particle and the focalized NP. This sentence is accounted for once we consider the fact that it is a yes/no question, and in the cartographic system of Rizzi (1997), question particles of the yes/no type occupy the highest position in the clause, namely ForceP. Therefore, I suggest that the bound

question particle is located in the highest position of the clause, and the DP *Zayd* ‘Zayd’ is the only element that moves to Spec, FocP (or Spec, TopP).⁴⁹

Now we can consider the sentences in (38-41) and ask the following questions: what makes the left peripheral DP in (38-41) ungrammatical when the left peripheral DP is marked with the accusative or nominative cases and the sentence has a gap? (b) why are the sentences in (38-41) grammatical when the left-peripheral DP surfaces with the nominative case and the sentence has the resumptive strategy?

(38) ?in laqii-ta Zayd-an fa-ʔkrim-Ø-hu

if met-2MSG Zayd-ACC CONJ-be.generous.with-MSG-him

‘If you meet Zayd, be generous with him.’

b. *Zayd-an ?in laqii-ta _____

Zayd-ACC if met-2MSG

fa-ʔakrim-hu

CONJ-be.generous.with-him

(Fassi Fehri 1986, ex. 51: 116)

c. *Zayd-un ?in laqii-ta _____ fa-ʔakrim-Ø-hu

Zayd-NOM if met-2MSG CONJ-be.generous.with-MSG-him

⁴⁹ I thank Gabriela Alboiu for suggesting this analysis to me.

- d. Zayd-un ?in laqii-ta-hu fa-?akrim-Ø-hu
- Zayd-NOM if met-2MSG-him CONJ-be.generous.with-MSG-him
- ‘Zayd, if you meet him, be generous with him.’

- (39) a. law qaabal-at Hind-un Zayd-an la-?akram-at-hu
- if met-3FSG Hind-NOM Zayd-ACC CONJ-was.generous-3FSG-him
- ‘Had Hind met Zayd, she would have been generous with him.’

- b. *Zayd-an law qaabal-at Hind-un _____,
- Zayd-ACC if 2-meet-MSG-JUSS
- la-?akramat-hu
- CONJ-was.generous.with-him

- c. *Zayd-un law qaabal-at Hind-un _____,
- Zayd-NOM if met-3FSG Hind-NOM
- la-?akramat-hu
- CONJ-was.generous.with-him

- d. Zayd-un law qaabal-at-hu Hind-un,
- Zayd-NOM if met-3FSG-him Hind-NOM
- la-?akram-at-hu

CONJ-was..generous.with-him

‘Zayd, had Hind met him, she would have been generous with him.’

- (40) a. la-ʔanaa ʔ-uḥibb-u Zayd-an
 PRT.verily-I 1SG-love-INDIC Zayd-ACC

‘Verily, I love Zayd.’

- b. *Zayd-an la-ʔanaa ʔ-uḥibb-u _____
 Zayd-ACC PRT-I 1SG-love-INDIC

(Fassi Fehri 1986, ex. 53: 116)

- c. *Zayd-un la-ʔanaa ʔ-uḥibb-u _____
 Zayd-NOM PRT-I 1SG-love-INDIC

- d. Zayd-un la-ʔanaa ʔ-uḥibb-u-hu
 Zayd-NOM PRT-I 1SG-love-INDIC-him

‘Zayd, I verily love him.’

- (41) a. ʔinn-ii ɖarab-tu Zayd-an
 that.EMPH hit-1SG Zayd-ACC

‘Indeed, I hit Zayd.’

- b. *Zayd-an ?inn-ii ḍarab-tu _____
 Zayd-ACC that.EMPH-me hit-1SG
 (Fassi Fehri 1986, ex. 74: 121)
- c. *Zayd-un ?inn-ii ḍarab-tu _____
 Zayd-NOM that.EMPH-me hit-1SG
- d. Zayd-un ?inn-ii ḍarab-tu-hu
 Zayd-NOM that.EMPH-me hit-1SG-him
 ‘Zayd, I hit him.’

To account for the ungrammatical examples in (38b-41b), I argue that the particles *law* and *?in* of conditions, *la* of initiation and swearing/promising, and *?inna* of assertion and corroboration are all base-generated in the highest position of the architecture of the CP domain, namely the head Force. This claim is supported by the fact that nothing in SA (aside from adjuncts) can ever precede these particles. This is in addition to the fact these particles clause-type the sentence. Thus, *law* and *?in* clause-type the sentence as a condition, *la-* clause-types the sentence as a promise, and *?inna* clause-types the sentence as an assertion. If this claim is on the right track, then the facts follow straightforwardly. The examples in (38b-41b) are all ungrammatical because the NP *Zayd* ‘Zayd’ is raised to a position higher than ForceP, thus violating the universal architecture of the clause. The underlying representation of (38b-41b) can therefore be shown as in (42):

(42) *_[FocP/TopP Zayd-an] _[ForceP *law*, *?in*, *la*, *?inna*...<Zayd-an>]

Notice crucially that the NP *Zayd* ‘Zayd’ cannot be argued to be adjoined to ForceP, as there is a gap in these sentences, which indicates movement from within the TP domain to the CP domain. A similar explanation can account for the ungrammatical sentences in (38c-41c) in addition to the fact that the sentences incur another violation, namely the two links in the chain receive distinct cases. As for the examples in (38d-41d), they are grammatical because no violations are incurred. The NP *Zayd* ‘Zayd’ is base-generated as an adjunct, which adjoins to ForceP, and it receives the unmarked/default nominative case in the CP domain. The underlying representation of (38d-41d) can be shown as in (43):

(43) _[ForceP Zayd-un] _[ForceP *law*, *?in*, *la*, *?inna*...]

The claim that *law*, *?in*, *la*, and *?inna* occupy the highest projection in the structure of the clause, namely ForceP makes the following prediction: the accusative-marked NP *Zayd-an* in (43) should be fine below these heads, on the assumption that Zaydan can be occupying the Spec, TopP position or Spec, FocP position.⁵⁰ In principle, the prediction should be borne out. However, there are other interfering factors that make it difficult to test this prediction at least with some of these heads. For example, *law* and *?in* of conditions seem to force the VSO order

⁵⁰ I thank Arsalan Kahnemuyipour for raising this issue.

suggesting that they induce subject-verb inversion, as can be seen by the following contrasts in grammaticality:

- (44) a. law jaaʔ-at Hind-un la-ʔakram-tu-haa
 if came-3FSG Hind-NOM CONJ-was.generous.with-1SG-her
 ‘Had Hind come, I would have been generous with her.’
- b. *law Hind-un jaaʔ-at la-ʔakram-tu-haa
 if Hind-NOM came-3FSG CONJ-was.generous.with-1SG-her
- (45) a. ʔin jaaʔ-at Hind-un fa-ʔakrim-Ø-haa
 if came-3FSG Hind-NOM CONJ-be.generous.with-MSG-her
- b. *ʔin Hind-un jaaʔ-at fa-ʔakrim-Ø-haa
 if Hind-NOM came-3FSG CONJ-be.generous.with-MSG-her

However, with the heads *la* and *ʔinna*, placing the NP Zayd ‘Zayd’ below them is fine, as can be seen by the examples below:

- (46) a.ʔ la-Zayd-an ʔanaa ʔ-uḥibb-u⁵¹
 PRT.verily-Zayd-ACC I 1SG-love-INDIC

⁵¹ This example is grammatical on the reading whereby the DP *ʔannaa* ‘I’ is interpreted as a preverbal subject rather than as a topic. It is ungrammatical on the reading whereby the DP is interpreted as a topic. This explains its marginal acceptability.

‘Verily, Zayd, I love.’

- b. ?inna Zayd-an qaabal-a-hu l-?awlaad-u
 that.EMPH Zayd-ACC met-3MSG-him the-boys-NOM

‘Indeed, Zayd, the children met him.’

Assuming this analysis to be correct, the obligatory case on the left-peripheral NPs follows straightforwardly. Thus, the left-peripheral NP receives its dependent case before it raises to the left-periphery for focalization or topicalization purposes.

To summarize, I have argued in this section that the different patterns of case in the left-periphery can be accounted for using the cartographic approach/mapping of Rizzi (1997) together with the assumption made in Chomsky (1977), Fassi Fehri (1986) and Aoun et. al. (2010) that resumptive pronouns indicate lack of movement, whereas gaps indicate the presence of movement.

6.5 Summary

In this chapter, I have shown that adverbial NPs in SA receive a form of dverbial/semantic case rather than structural dependent case or default case. By considering the case assignment facts of the left-peripheral NPs, I have also shown how case is assigned to chains in that two links in the same chain necessarily bear the same case.

Chapter Seven

Case assignment in the DP domain

7.1 Introduction

This chapter looks at case assignment in the DP domain of SA. In SA, there are two types of DPs, simple DPs and derived DPs. Simple DPs are those DPs, where the lexical root starts the derivation as a noun and ends the derivation as a noun. By contrast, derived DPs are those, where the lexical root is a V, which is then categorially converted into a noun at a later point in the derivation. Following Baker's (2015) conjecture that DPs are universally hard phases, I assume that the DP is a hard phase in SA. This decision is based on the fact that cases assigned outside the DP do not affect the cases of the complements of D in SA. I begin by discussing simple DPs, and then address derived DPs.

7.2 Case assignment in simple DPs

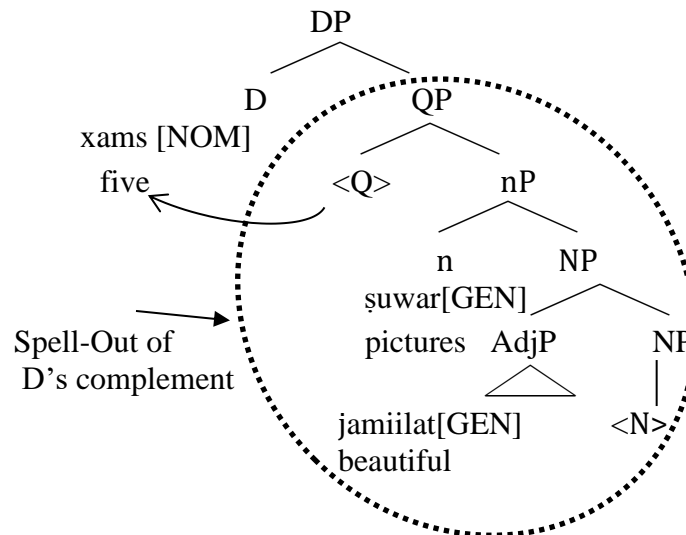
Let us consider the DP in (1) and its structural representation in (2). The internal structure of the DP in SA is adapted from Fassi Fehri (1993).

- (1) xams-u şuwar-i-n jamiil-at-i-n
 five-NOM pictures.F-GEN-INDEF beautiful-F-GEN-INDEF
 ‘five beautiful pictures’

- (2) [DP xams-**u** [QP <~~xams-u~~> [NP şuwar-i-n [NP <~~şuwar-i-n~~> jamiil-at-i-n]]]]
 five-F-NOM pictures.F-GEN-INDEF beautiful-F-GEN-INDEF
 ‘five beautiful pictures’ (in a nominative environment, where the DP occupies the
 Spec, vP or Spec, TP position)

The structure of (1) can be represented in a tree-diagram, as in (3):

(3)



In (3), the lexical head noun *şuwar* ‘pictures’ is merged into the structure, and the AP is left-adjoined to NP.⁵² NP is c-selected by the functional categorizing head n, and N is raised to n. The assumption that NP is always c-selected by a categorizing N head is based on proposals made in Distributed Morphology (see among others, Embick and Noyer 2005). The nP is c-selected by the functional head Q(= quantifier), and QP is now projected. The functional projection QP is c-selected by the functional head D and the DP is now projected. At the merger of D, its QP complement is sent to Spell-Out. When the complement domain of D is spelled-out, the head noun, namely *şuwar* ‘pictures’ is assigned genitive case by D, following Fassi Fehri’s (1993) proposal that D assigns a structural genitive case to the first of its NP complements. The

⁵² Following the category theory of Baker (2003), I assume that nouns cannot license a specifier given that they have a referential index. Therefore, the AP is an adjunct rather than a specifier of N in (1). Assuming that nouns can have a referential index and license a specifier entails a violation of Baker’s (2003) Reference Predication Constraint.

AP, which is adjoined to NP then copies the case features of the head noun and thus is marked for genitive as a result of case concord. As for the quantifier head *xams* ‘five’, which is moved to D, it receives the structural nominative via Agree with T, assuming that the DP is the subject of the sentence in which it is used. Note crucially that only D, which hosts the quantifier, ends up realizing the structural nominative case, whereas all the complements of D do not. This is expected if DP, as is claimed in this thesis, is a hard phase. In other words, the complements of D do not realize the nominative case, simply because these complements are not visible to the domains outside the DP. As for D itself, it is still visible to the higher domains because it is the head of the phase, and it is standardly assumed in Phase Theory (Chomsky 2000, 2001 and onwards) that heads of phases and their specifiers are visible to the immediately higher phasal domains.⁵³

In (1), I have claimed that D in SA assigns the structural genitive case to its complement. But is there any evidence that this is actually the case? Why can’t we, for example, claim that genitive is the unmarked case inside NPs, a possibility, which is suggested in Marantz (1991: 24) as being available in some languages? There is reason to believe that this cannot be true of SA. Instead, the evidence weighs in favor of the proposal first made in Fassi Fehri (1993) that D in SA assigns structural genitive to its complement. Baker (2015: 164) mentions Japanese and Tamil as some of the languages, where the genitive case seems to be the unmarked case inside

⁵³ Note that when the DP lacks the quantifier *xams* ‘five’, it is the head noun, which raises to D that will end up receiving the nominative case assigned via Agree with T, when the former functions as the subject of the sentence, as in (i)

(i) *şuwar-un* *jamiilat-un* *ʔiltuqit-at* *yawm-a* *ʔams-i*
 pictures.F-NOM beautiful-NOM took.PASS-3FSG day-ACC yesterday-GEN
 ‘Beautiful pictures were taken yesterday.’

the NP, as more than one nominal inside the larger nominal can be assigned the genitive case, as can be illustrated by the Tamil example in (4):

- (4) John-ooṭa Mary-ooṭa padam
 John-GEN Mary-GEN picture

‘John’s picture of Mary.’ (Baker 2015, ex. 80c: 164)

In (4), both *John* and *Mary* receive the genitive case, thus indicating that the genitive case is the unmarked case in Tamil. If genitive case were not the unmarked case in Tamil, the prediction in the theoretical framework adopted is to see the theme object *Mary* ‘Mary’ realizing the dependent accusative case, as there are two NPs in the DP domain, and the agent NP *John* ‘John’ c-commands the theme object *Mary* ‘Mary’. However, this prediction is not borne out by the facts. In SA, the equivalent of (4) is ruled out, as shown in (5), thus suggesting that genitive case is not the unmarked case in the DP domain of SA:

- (5) *ṣuurat-u zayd-in hind-in
 picture-NOM Zayd-GEN Hind-GEN

Intended meaning ‘Zayd’s picture of Hind.’

SA behaves like English in that (5) can only be ruled in when the prepositional strategy is used, as shown in (6):⁵⁴

- (6) *ṣūrat-u* *zayd-in* *li-hind-in*
 picture-NOM Zayd-GEN of-Hind-GEN
 ‘Zayd’s picture of Hind.’

The examples in (5) and (6) indicate that the genitive case is not the unmarked case inside the NP. Had it been the unmarked case, (5) should have been grammatical, as nothing, in principle, should prevent the unmarked case from being assigned more than once in the same spell-out domain. As an example of a language, where the genitive case is assigned as a result of agreement with D, Baker mentions Turkish, as shown in (7):

- (7) *Ali-nin* *kalem-i*
 Ali-GEN pencil-3sP
 ‘Ali’s pencil’ (Baker 2015, ex. 81: 165)

⁵⁴ Note that in NPs such as (i), the two NPs *um* ‘mother’ and *Zayd* ‘Zayd’ do get the genitive case:

- (i) *sayyaarat-u* *umm-i* *Zayd-in*
 car-NOM mother-GEN Zayd-GEN
 ‘Zayd’s mother’s car.’

However, this does not provide evidence that GEN is the unmarked case in SA. The NP *ummi Zayd-in* ‘Zayd’s mother’ is a construct state in SA. Therefore, the underlying representation of (i) is as shown in (ii):

- (ii) [_{DP} *sayyaarat-u* [_{POSSP} *umm-i Zayd-in*]]

In (ii), D, to which N raises in a head-to-head movement, assigns the genitive case to the construct state (i.e. the PossP as a whole), which then percolates down to its constituent NPs.

In (7), the possessum agrees with the possessor, as shown by the morphology on the possessum, and the possessor receives the genitive case as a result. Is there any evidence in SA that the possessum agrees with the possessor? As a matter of fact, there is evidence in SA that D agrees with its complement although the evidence is not quite as obvious as it is in Turkish. For example, Fassi Fehri (1993) shows that D in SA inherits definiteness from the possessor, as is shown when the head noun is modified by an adjective or a relative clause. This is illustrated in (8) and (9) respectively:

- (8) a. kitaab-u zayd-in l-tamiin-u/* tamiin-u-n
 book-NOM Zayd-GEN **the**-precious-NOM/*precious-NOM-**INDEF**
 ‘Zayd’s precious book’

- b. kitaab-u-n tamiin-u-n/* l-tamiin-u
 book-NOM-**INDEF** precious-NOM-**INDEF**/***the**-precious-NOM
 ‘a precious book’

- (9) a. kitaab-u zayd-in *(llaḏii) qara?-tu-hu
 book-NOM Zayd-GEN that.**DEF** read-1SG-it
 ‘Zayd’s book, which I read’

- b. kitaab-u-n (*llaḏii) qara?-tu-hu
 book-NOM-**INDEF** that.**DEF** read-1SG-it

‘a book, which I read.’

The example in (8a) shows that a definite DP is grammatical only when the modifying AP is definite. By contrast, the example in (8b) shows that an indefinite DP is grammatical only when the modifying AP is indefinite. Likewise, the example in (9a) shows that the definite DP is ruled in only when the modifying relative clause is headed by the definite complementizer. This contrasts with (9b), where the possessum is indefinite; therefore, no definite complementizer is allowed in the modifying relative clause. These examples show clearly that D in SA, where the possessum moves to, agrees with the possessor in definiteness. Thus, the possessum in SA agrees with the possessor although in a more subtle manner than that shown in Turkish. If this is the case, then SA belongs to those languages, where D assigns the genitive case to its complement, as was first proposed in Fassi Fehri (1993).

Having established that genitive case is a structural case assigned by D in the DP domain, let us consider the DP in (10) and its structural representation in (11):

- (10) kutub-u zayd-i-n l-tamiin-at-**u**
 books.F-NOM Zayd-GEN-INDEF the-precious-F-NOM
 ‘Zayd’s precious books’

- (11) [DP kutub-**u** [PossP zayd-**i**-n [nP kutub-u> [NP kutub-u>
 books.F-NOM Zayd-GEN-INDEF

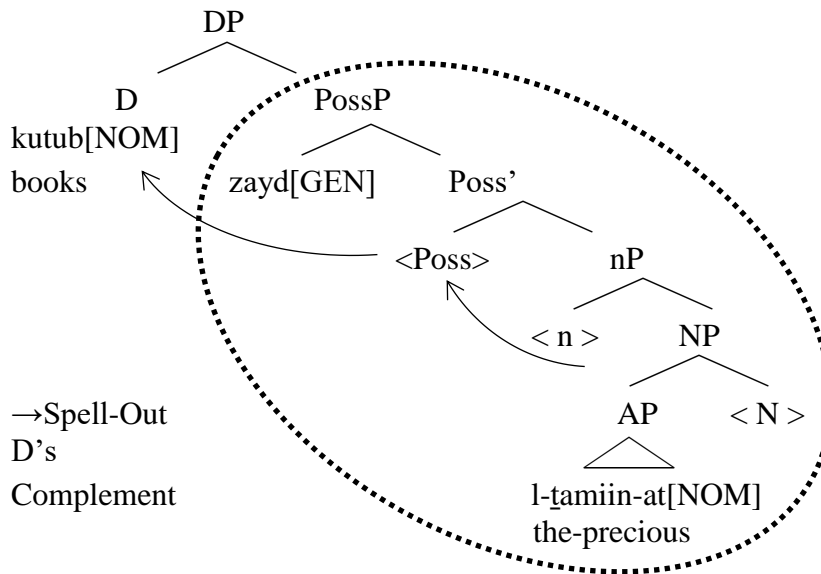
l-tamiin-at-**u**]]]]

the-precious-F-NOM

‘Zayd’s precious books.’

The DP in (10) can be represented as the tree-diagram in (12):

(12)



In (12), the lexical head noun *kutub* ‘books’ is merged into the structure and the AP *l-tamiin-at* ‘the precious’ is left-adjoined to NP. The NP is c-selected by the functional head *n*, and *N* is raised to *n* for categorization. The nP is c-selected by the functional head Poss(essive). The possessor *Zayd* ‘Zayd’ is merged into the structure in the Spec, PossP position. The functional head *D* is merged into the structure, and the complex head *N+n+Poss* is raised to it in order to check the latter’s [uN] feature. *D* is a phasal head. This means that the complement PossP is sent to Spell-Out at the merger of *D* into the structure. In the spell-out domain of *D*, the possessor *Zayd* ‘Zayd’ in the Spec, PossP position is assigned the structural genitive case by *D* in the DP

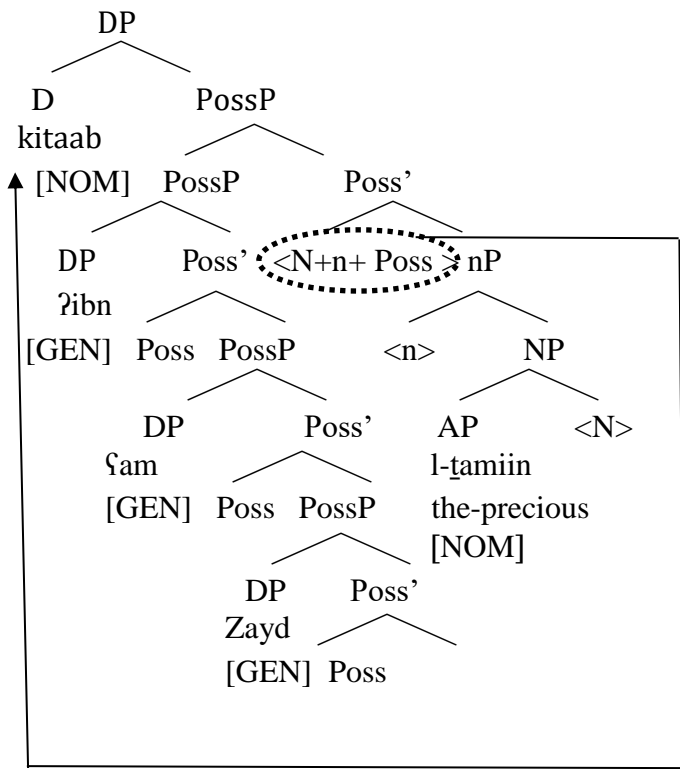
domain. The AP copies the [NOM] feature of the head N given that N is a member of the chain whose head is now in D. The head D, which hosts the head N, is now visible to the higher phasal domains of which DP is the subject. Therefore, D receives the structural nominative case via Agree with T.

Let us consider next the DP in (13) and its structural representation in (14):

- (13) *kitaab-u* *ʔibn-i* *ʕamm-i* *zayd-i-n* *l-ṭamiin-u*
 book.M-NOM son-GEN uncle-GEN Zayd-GEN-INDEF the-precious.M-NOM
 ‘the precious book of the son of the uncle of Zayd/The precious book of Zayd’s cousin.’

- (14) [_{DP} *kitaab-u* [_{POSSP} *ʔibn-i* [_{POSSP} *ʕamm-i* [_{POSSP} *zayd-i-n*
 book-NOM son-GEN uncle-GEN Zayd-GEN-INDEF
 [_{NP} <~~*kitaab-u*~~> [_{NP} <~~*kitaab-u*~~> *l-ṭamiin-u*]]]]
 the-precious-M.NOM
 ‘the precious book of Zayd’s cousin’

The structural representation (13) can be represented as a tree diagram in (15):

$$(15)$$


In (15), the lexical head noun *kitaab* ‘book’ is merged into the structure, and the AP is left-adjoined to NP. The NP is c-selected by the functional categorizing head *n*, and *N* is raised to *n* for categorization. The functional head *Poss* is merged into the structure, and the possessor *ʔibn ʕam Zayd* ‘the son of the uncle of Zayd’ is merged in the Spec, *PossP* position. The complex head *N+n+Poss* is raised to *D* to check the [uN] feature of *D*. At the merger of *D*, its complement *PossP* is sent to Spell-Out. In this spelled-out domain, the DP in *PossP* is assigned the structural genitive case assigned by *D* in the DP domain, which is then percolated down to all the elements inside the *PossP*.⁵⁵ The head *D*, which hosts the head *N*, is now visible to the higher phasal

⁵⁵ That the case feature of the whole nominal is percolated down to all the members of the nominal is confirmed in Baker (2015: 175) who states that “[t]here are, of course, also languages in which every element inside the nominal

domains of which DP is the subject. Therefore, D receives the structural nominative case via Agree with T. The AP later copies the [NOM] case feature of the head noun in D given that N and D are members of the same chain.

7.3 Case assignment in derived nominals

Process (or event) nominals are particularly interesting from the perspective of case theory in that the lexical root starts the derivation as a verb but ends up becoming a noun later in the derivation. This hybrid categorial nature of process nominals has effects on the way NPs inside the larger DP are assigned case. To illustrate, let us consider (16) and (17) from Fassi Fehri (1993):

- (16) ʔaqlaqa-nii [_{DP} ntiqaad-u l-rajul-i **l-mašruuʔ-a**]

 annoyed-me criticizing-NOM the-man-GEN the-project-ACC

‘The man criticizing the project annoyed me.’ (Fassi Fehri 1993, ex. 46: 234)

- (17) ʔaqlaqa-nii [_{DP} ntiqaad-u l-rajul-i **li-l- mašruuʔ-i**]

 annoyed-me criticizing-NOM the-man-GEN of-the-project-GEN

‘The man’s criticizing of the project annoyed me.’ (Fassi Fehri 1993, ex. 47: 234)

(more or less) is marked for case, as in IE languages with case concord; these would be the result of the case feature distributing from the nominal as a whole to all the words inside the nominal, perhaps at PF.”

Fassi Fehri (1993: 234) shows that the process nominals in (16) and (17) are both internally verbal but externally nominal. Thus, process nominals in (16) and (17) take whatever arguments that their inflected verbs take, and they both can be modified by manner adverbs, as in (18):

- (18) a. ʔaqlaqa-nii [_{DP} ntqaad-u l-rajul-i l-mašruuʔ-a
 annoyed-me criticizing-NOM the-man-GEN the-project-ACC

 bi-šiddat-in]⁵⁶

 with-violence-GEN

 ‘The man criticizing the project with violence annoyed me.’
- b. ʔaqlaqa-nii [_{DP} ntqaad-u l-rajul-i li-l- mašruuʔ-i
 annoyed-me criticizing-NOM the-man-GEN of-the-project-GEN

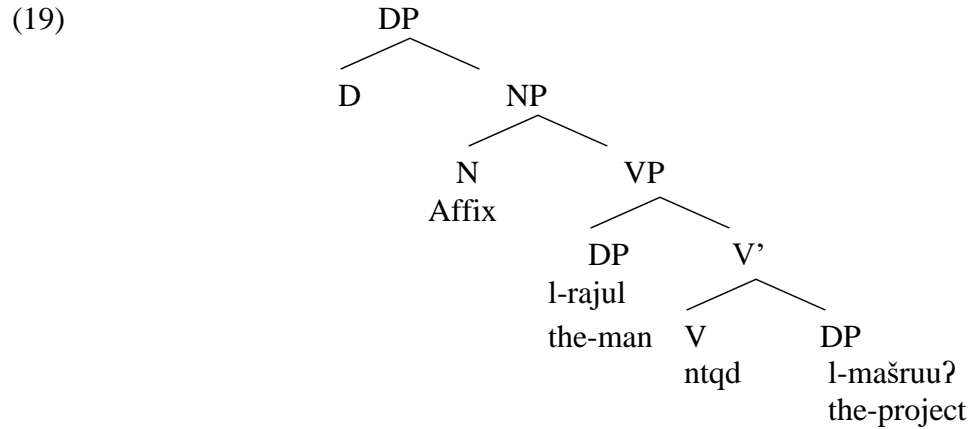
 bi-šiddat-in]

 with-violence-GEN

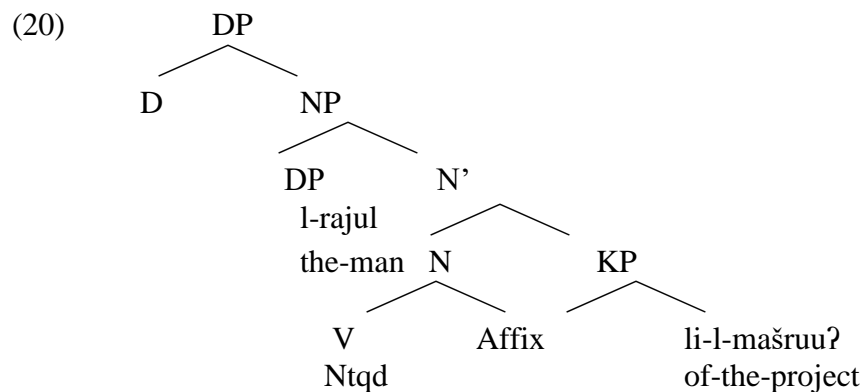
 ‘The man’s criticizing of the project with violence annoyed me.’

⁵⁶ The NP šiddat ‘violence’ in the adverbial PP receives its genitive case from the preposition *bi-* ‘with.’

To derive the different cases assigned to the theme arguments in (16) and (17), Fassi Fehri (1993) argues that the categorial conversion takes place at different stages in the derivation. To derive the case facts of (16), Fassi Fehri (1993: 240) provides the structure in (19):



In (19), the verb is nominalized after VP is projected. This allows the verb to assign the accusative case to the theme object. By contrast, the case facts of (17), can, according to Fassi Fehri (1993: 235), be derived if we assume that the structure is as in (20):



In (20), the abstract nominal affix is adjoined to V early on in the derivation; therefore, the theme argument cannot be assigned the accusative case by the verb, and instead the genitive case is assigned to the theme object via the prepositional strategy.

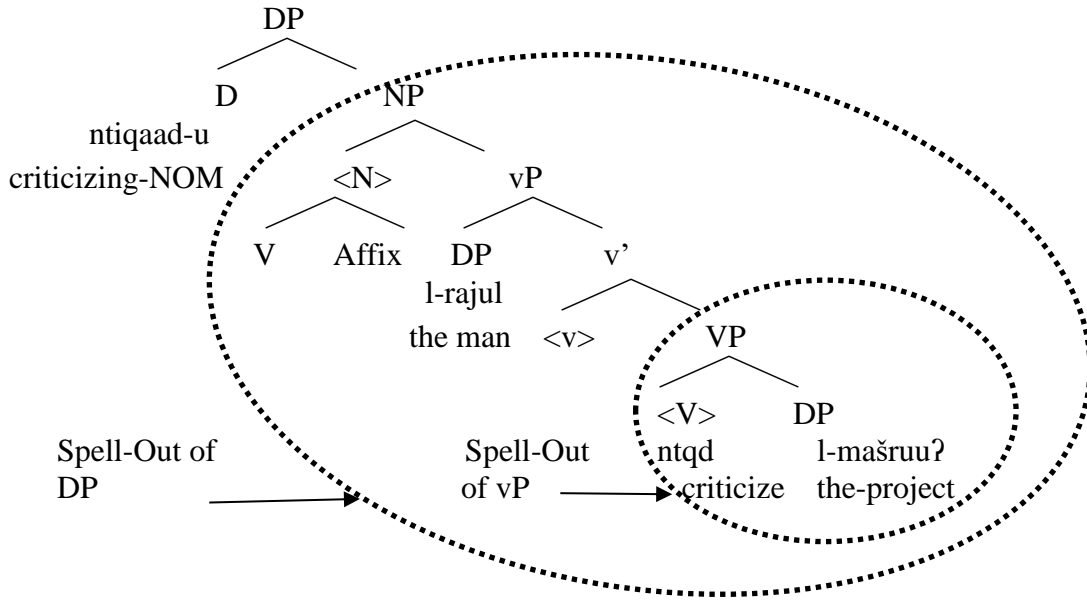
Given that the theory adopted in this dissertation is different from that adopted by Fassi Fehri (1993), how can the case facts of the theme object in (16) and (17) be derived using a dependent case approach? Let us consider (16) repeated here as (21) for convenience:

- (21) ʔaqlaqa-nii [_{DP} ntiqaad-u r-rajul-i l-mašruuʔ-a]
- annoyed-me criticizing-NOM the-man-GEN the-project-ACC

‘The man criticizing the project annoyed me.’ (Fassi Fehri 1993, ex. 46: 234)

Following Fassi Fehri (1993), I assume that (21) has the structure shown in (22):

(22)



In (22), the lexical root starts the derivation as a verb, which moves to *v*, and is then nominalized by adjoining to an abstract nominal affix. *N* is then moved to *D*. At the Spell-Out of the soft phasal head *v*, its complement is sent to Spell-Out. However, no case assignment takes place, as there is only one NP in the domain, namely *l-mašruu?* ‘the project’. At the Spell-Out of the hard phasal head *D*, its complement NP is sent to Spell-Out. In this domain, there are two NPs. The agent argument *l-rajul* ‘the man’ c-commands the theme argument *l-mašruu?* ‘the project’. As a result, the theme argument is assigned the dependent accusative case. As for the agent argument (the possessor), it is assigned the structural genitive case assigned by *D*. The theme argument is accessible at the Spell-Out of *D*, as the former is part of a soft phase *vP*. The DP as a whole will receive the structural nominative case via the case-assigning Agree with *T*. However, the complements of *D* are at this point in the derivation inaccessible to *T*, given that DP is a hard phase. *D*, on the other hand, is accessible to *T*, given that *D* is the head of the phase DP; therefore, it is accessible to *T*, and thus realizes the nominative case assigned to the DP as a whole.

Let us now consider (17) repeated here as (23) for convenience:

- (23) ʔaqlaqa-nii [_{DP} ntikaad-u l-rajul-i **li-l- mašruuʔ-i**]
 annoyed-me criticizing-NOM the-man-GEN of-the-project-GEN

‘The man’s criticizing of the project annoyed me.’ (Fassi Fehri 1993, ex. 47: 234)

To account for the genitive case of the theme argument, I follow Fassi Fehri (1993) by assuming that the theme argument is assigned the genitive case via the prepositional strategy because V (or v in current minimalist theory) adjoins to the nominal affix early on in the derivation. The same analysis adopted for (16) applies here with the exception that the theme argument is assigned the genitive case by the preposition rather than the dependent accusative case.

More complicated and interesting are cases where the complement of an event-denoting nominal receives a genitive case rather than an accusative case, as in (24):

- (24) a. y-uriid-Ø-u ntikaad-a **l-rajul-i**/*l-rajul-a
 3-want-MSG-INDIC criticizing-ACC the-man-GEN/the-man-ACC
 bi- šiddat-in
 with-violence-GEN

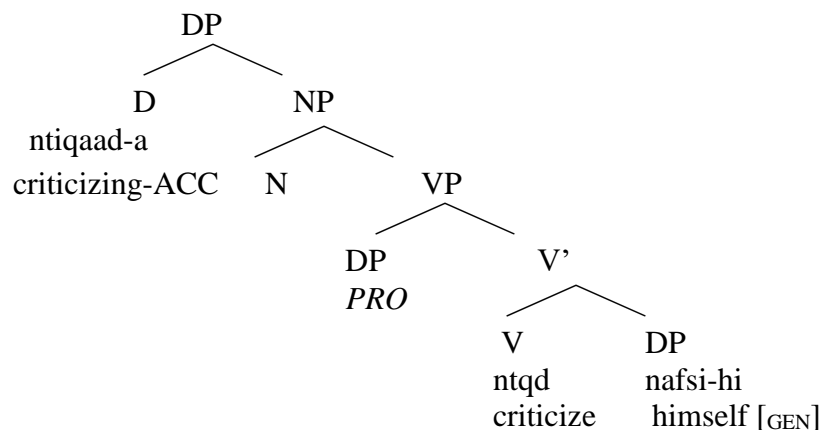
‘He wants to criticize the man with violence.’ (adapted from Fassi Fefri 1993, ex. 65a: 242)

- b. y-uriid-Ø-u ntiquaad-a **nafs-i-hi**/*nafs-a-hu
- 3-want-MSG-INDIC criticizing-ACC self-GEN-his/self-ACC-his
- bi- šiddat-in

‘He wants to criticize himself with violence.’ (adapted from Fassi Fehri 1993, ex. 65b: 242)

To account for the puzzling genitive case on the complement of the event-denoting nominals in (24), Fassi Fehri (1993: 242-243) proposes the following solution: the event-denoting nominal in (24b) has the internal structure in (25):

(25)



In this account, V raises to N before raising further to D. To account for the genitive case on the complement of the event-denoting nominal, Fassi Fehri (1993: 242-243) claims that the genitive

case is checked only at LF, and that the null subject *PRO* inside the structure of the event-denoting nominal is caseless. Fassi Fehri claims that the thematic object (i.e. the reflexive) in (24b) must raise to the Spec, DP position at LF to discharge the genitive case assigned to it by D. To account for why the reflexive in (24b) cannot receive the accusative case, Fassi Fehri (1993: 243) attributes this to the condition on case discharge in (26):

(26) Object case is discharged only if subject case is discharged.⁵⁷

Fassi Fehri claims that the transitive verb *ntqd* ‘to criticize’ in (24b) cannot assign the accusative case to the reflexive pronoun because the subject *PRO* in its Spec does not discharge its case, as the latter is caseless, being *PRO*. This, together with the fact that *PRO* cannot absorb the genitive case assigned by D, explains, according to Fassi Fehri, why the reflexive pronoun cannot receive the accusative case and surfaces instead with the genitive case assigned to it by D.

Let us point out that Fassi Fehri’s (1993) solution to the puzzling genitive case in (26) is not available to us for the following reasons. First, in current case theory, it is no longer possible to claim that the assignment of case takes place at LF. Resort to case assignment at LF has been abandoned ever since the operation Agree was introduced into the Minimalist program, as a syntactic operation. In other words, in current generative accounts of case, case checked at LF has been reformulated as case checked in the syntax via a long-distance Agree. Second, given the theoretical framework adopted in this work, structural case is assigned at Spell-Out, the point where syntax interfaces with PF. Therefore, any resort to case assignment at LF is not possible. This means that a different account is needed to explain the puzzle. I assume along with Fassi

⁵⁷ Fassi Fehri (1993) acknowledges that the condition in (26) is analogous to the case tier approach (Yip et al. 1987), where there is a hierarchy of case assignment such that the accusative case can only be assigned when the nominative case is assigned. Fassi Fehri (1993, fn. 31: 278) claims, analogous to Yip et al. (1987), that case assignment follows a hierarchy in which nominative case is the highest.

Fehri (1993) that the internal structure of the event-denoting nominal of (24b) is that in (25). Specifically, I assume that the internal structure of the event-denoting nominal in (24b) includes the null subject *PRO* in the Spec, vP position. However, I take the morphological fact that the theme object can only receive the genitive case but not the accusative case as an indication that the null subject category *PRO* is not a case competitor in SA.^{58,59} Once this assumption is made, the facts follow straightforwardly. Thus, I argue that the structural representation of (24b) is as in (27):

- (27) [CP [TP y-uriid-Ø-u *pro*_i [DP ntiqaad-a-N-D [NP <V-N>
- 3-want-MSG-INDIC criticizing-ACC
- [_{VP} *PRO*_i <V> **nafs-i-hi** bi-šiddat-in]]]]]]
- self-GEN-his with-violence-GEN

‘He wants to criticize himself with violence.’ (adapted from Fassi Fehri 1993, ex. 65b: 242)

⁵⁸ The claim that *PRO* is not a case competitor in SA might be a language-specific option, as it has been argued that *PRO* receives case in many languages.

⁵⁹ Youssef Haddad raises the following question: could it be that *PRO* is actually a case competitor but that GEN is the dependent case while ACC is the unmarked case inside DP? I believe that this suggestion faces the following problem: It makes the wrong prediction that the dependent case is always GEN inside the DP, as the accusative case obligatorily surfaces on the theme object when the subject (i.e. the possessor/agent) inside process-nominals is a lexical NP rather than *PRO*. Even if we make the suggestion that GEN is a higher dependent case in the DP of SA, we face the following two problems: first, SA would be a language where the dependent case is the lower case inside the CP domain, but it is the higher case inside the DP domain. Second, when the agent/possessor is *PRO*, both the agent/possessor and the theme would surface with GEN and there will be no case competition, contrary to the observational fact that GEN surfaces on the higher of the two NPs and ACC surfaces on the lower of the two NPs in process nominals where the higher NP is a lexical NP rather than *PRO*.

The derivation of (24b) proceeds as in (28):

(28) a. [_{VP} *PRO* v [_{VP} V NP_[reflexive]]], v a phase head

Spell out v's complement: NP_[reflexive]

→ Case NP_[reflexive] → NA

b. [_{DP} N-D [_{NP} <v-N> [_{VP} *PRO* <v> [_{VP} V NP_[reflexive]]]]], D a phase head

Spell out D's complement: *PRO* c-c's NP_[reflexive]

→ (*PRO* < NP_[reflexive])

Case NP_[reflexive] → genitive inside the DP domain assigned by D,

as *PRO* is not a case competitor in SA

The derivation in (28) shows that the theme object, namely the reflexive NP, is not assigned the dependent case at the Spell-Out of the phasal head v, as there is only one NP in this domain.

Therefore, no case calculation is considered. At the merger of the hard phasal head D, its complement is sent to Spell-Out. In this domain, the reflexive NP inside the vP domain is accessible to case calculation, as v is a soft phase. Crucially, the NP reflexive does not receive the dependent accusative case even though it is c-commanded by another NP, namely *PRO* at the Spell-Out of D. This is because *PRO* is not a case competitor in SA. Therefore, the reflexive object is assigned genitive case by D. The reflexive is accessible to D because it is part of a soft phase, namely vP. Thus, unlike *pro*, which has been argued in this dissertation to be a case competitor, *PRO* is not. To explain why certain null categories can in some languages be case competitors but not others, Baker (2015: 201) proposes the hierarchy of case competitors in (29):

Baker (2015: 201) states that “categories to the right on the scale have a subset of nominal features that categories to the left on the scale have. Languages then vary as to which of these features are minimally necessary in order to participate in dependent case assignment.” Baker then continues to state that “some [languages] rule out any covert NPs from being case competitors, *some allow pro to be a case competitor but not PRO*, some allow PRO but not the implicit agent in a passive, and so on[emphasis added].”⁶⁰ I take the facts of genitive case assignment in structures with event-denoting nominals as a confirmation of Baker’s (2015) proposed hierarchy. Specifically, the facts from SA show that *pro* is a case competitor but *PRO* is not. This means that *PRO* in SA must lack some nominal feature, which is minimally required in SA, in order for a category to be a case competitor.

Let us consider again the structures in (24) repeated here as (30):

⁶⁰ The fact that *PRO* is caseless is surprising in the adopted theoretical framework. In the present thesis, to participate in case assignment, the two NPs involved must have distinct referential indices. *PRO* is an NP; therefore, it must have a referential index, following Baker's (2003) theory of lexical categories which we adopt. In structures with event-denoting nominals; the prediction would then be that *PRO* should be a case competitor given that it has a referential index which is distinct from that of the theme object in these structures; yet, it does not. At this point in time I have no explanation as to why this is the case, and the proposal that *PRO* in SA does not participate in dependent case assignment remains a stipulation dictated by Baker's (2015) hierarchy of dependent case triggers which is itself a stipulation.

bi- šiddat-in

with-violence-GEN

‘He wants to criticize the man with violence.’ (adapted from Fassi Fefri 1993, ex. 65a: 242)

- b. y-uriid-Ø-u ntikaad-a **nafs-i-hi**/*nafs-a-hu
3-want-MSG-INDIC criticizing-ACC self-GEN-his/self-ACC-his

bi- šiddat-in

‘He wants to criticize himself with violence.’ (adapted from Fassi Fehri 1993, ex. 65b: 242)

It is crucial at this juncture to point out that the obligatory genitive case of the thematic complement of process nominals offers a testing ground for a comparison between the updated version of dependent case (Baker 2015) on the one hand, and the Case Tier approach of Yip et al. (1987) and the agreement-based approaches to case (Chomsky 2000, 2001) on the other. Specifically, this is a case, where only the updated version of dependent case (Baker 2015) makes the right predictions, and where the Case Tier approach (Yip et. al.) and the agreement-based approach (Chomsky 2000, 2001) make the wrong predictions. Thus, in the approach adopted in this dissertation, the genitive case on the thematic object of the process nominal is predicted on the grounds that *PRO* in SA is not a case competitor in the sense of Baker (2015) together with the assumption that vP is a soft phase in SA, which makes it accessible to the

genitive-assigning head, D via Agree. However, in the Case Tier approach, the genitive case of the thematic object complement of the process nominal can only be explained on the grounds that both *PRO* and the thematic object complement are in the same case domain, namely DP (termed NP in Yip et al. 1987), and the DP in this approach supplies a case tier with one case namely genitive case (see specifically Yip et al. 1987: 233), which is spread from *PRO* to the theme object. Note, however, that this solution faces the problem of undergeneralization, since this approach would predict that the theme argument can never be realized with the accusative case, contrary to the facts, as shown in (21) above, which is repeated as (31) below:

- (31) ʔaqlaqa-nii [_{DP} ntiquad-u r-rajul-i **l-mašruuʔ-a**]

 annoyed-me criticizing-NOM the-man-GEN the-project-ACC

‘The man criticizing the project annoyed me.’ (Fassi Fehri 1993, ex. 46: 234)

Similarly, it is hard to see how an agreement-based account of case can explain the obligatory genitive case on the thematic object complement of the process nominal. This is because the verb in these structures starts the derivation as a transitive verb. This means that an agreement-based account would predict that the thematic object of the process nominal would always receive the structural accusative case via an Agree relation with the functional head *v**, contrary to the facts. If, however, *v* in SA is not capable of establishing an Agree relation with the object and assigning the accusative case to it, as I claim in this thesis, then the facts follow. In the absence of the dependent case mechanism, the Agree-based case assigning mechanism takes over. In the structure of (30), there are two potential case assigners, D, and *v*. However, *v* does not assign case in SA; therefore, D is the only functional head capable of establishing an Agree relation with the theme object and assigning the structural genitive case to it.

- ‘His criticism of Zayd annoyed me.’ (Fassi Fehri 1993, ex. 73: 245)

- Intended to mean ‘Zayd’s criticism of him annoyed me.’ (Fassi Fehri 1993, ex

- ‘Zayd’s criticism of him annoyed me.’

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Let us consider another more interesting example of process nominals that are derived from ditransitive verbs, as in (33):

- 'Zayd's depriving the man of his money' (Fassi Fehri 1993, ex. 78a: 247)

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The example in (33) can be easily accounted for using the dependent case theory as follows: At the insertion of the soft phasal head *v*, its complement VP is sent to Spell-Out. In this domain, there are two NPs available, the source argument and the theme object. As a result, the theme object is assigned the dependent accusative case, and the source argument remains without a case value. At the insertion of the hard phasal head *D*, its complement NP is sent to Spell-Out. In this domain, three NPs are available, the agent NP, the source NP and the theme NP. The agent NP c-commands both the source NP and the theme NP. As a result, the source NP is assigned the dependent accusative case, and the theme NP is redundantly assigned the dependent accusative case. The theme NP is available at the Spell-Out of *D* because it is part of a soft phase *v*P. As for the agent NP, it is assigned the genitive case by *D*. If this DP is in the subject position of the clause, as is hypothesized here, it receives the structural nominative case via Agree with *T*. However, aside from *D*, the complements of *D* are no longer accessible at the point in the derivation when *T* agrees with the DP, given that DP is a hard phase. *D*, on the other hand, is still accessible to *T*, as it is the head of the phase DP. There, the *D* head of DP realizes the structural nominative case assigned via Agree with *T*.

7.6 Summary

Following Baker (2015), I have assumed that the DP is a hard phase in SA. I have demonstrated that the complement of *D* is assigned the structural genitive case by *D*. I have also shown that structures with event-denoting nominals can be properly accounted for using the updated version of dependent case (Baker 2015) as a theoretical framework. I have further shown that structures with event-denoting nominals provide a testing ground for the dependent case theory against the Case Tier approach and the Agree-based approach. Using these

structures, I have provided evidence that only the dependent case theory makes the right predictions for case assignment/values in SA.

Chapter Eight

Conclusions

8.1 Conclusions

In this thesis, I have argued that agreement-based theories of case assignment in SA (e.g. Raḥḥali 2003, Soltan 2007, 2011, Al-Balushi 2011, 2012) face problems. I have also argued that the updated dependent case theory (Baker 2015) can better account for the case facts of SA and that such a theory overcomes the problems that other theories face. The major argument of this thesis is that case-assigning Agree does apply but only in those cases when it is not bled by the dependent case. Adopting the updated dependent case theory of Baker (2015), I have shown that SA exhibits the properties listed in (1):

- (1) a. CPs, PPs and DPs are hard phases, but vPs are soft phases. T assigns the structural nominative case to the subject in the CP domain; P assigns the structural genitive case inside the phasal PP domain, whereas D assigns the structural genitive case inside the phasal DP domain.
- b. SA is governed by one rule of case assignment according to which an NP1, which is c-commanded by NP2 in any phasal domain (VP or TP) is assigned the dependent case Z in its respective domain. Thus, if an NP1 is c-commanded by an NP2 in VP, which is the spell out domain of the phasal head v, NP1 is assigned the dependent accusative case in VP. Similarly, if an NP1 is c-commanded by NP2 in TP, which is the spell out domain of the phasal head C, NP1 is assigned the dependent accusative case in TP. This assumption has been crucial in

analyzing cases of double object constructions as well cases of ECM constructions in SA.

- c. v is a soft head in SA, which is not even capable of establishing an Agree relation with the object in the absence of the dependent case mechanism. This is due to its impoverished feature specification, which includes nothing more than a gender feature. This contrasts with T , which has the full complement of ϕ -features, and is therefore capable of assigning the structural nominative case to the subject.
- d. In order to take part in dependent case, the NPs contained in a spell out domain should have distinct referential indices.
- e. The genitive case assigned to the NPs inside PPs is structural rather than purely lexical or inherent.
- f. NPs in the left periphery of the clause may appear with either a nominative case, or with an accusative case. If the NP in the left periphery appears with the nominative case, this is the unmarked case. If, on the other hand, the NP in the left periphery appears with the accusative case, this case is the dependent case assigned to a lower link in a chain whose head is the NP in the left periphery.
- g. Adverbial NPs in SA receive the semantic/adverbial case.
- h. Adjectival and nominal predicates in SA receive an unmarked nominative case in the CP domain, unless there is a copular (overt or covert) in the structure, in which case these predicates receive a purely idiosyncratic lexical case from the copular verb.

- i. The indicative complementizer and the copular verb in SA assign a purely idiosyncratic lexical accusative case rather than structural accusative case.
- j. The null category *pro* is a case competitor which triggers the dependent accusative case on the lower NP in its spell out domain. This contrasts with the null category *PRO* which is not a case competitor in that it does not trigger the dependent case on the lower NP inside its spell out domain.

At this point, one might raise the following question: If *v* is incapable of establishing Agree and assigning accusative case to the object because *v*'s ϕ -specification is impoverished, being specified only for a gender feature, what enables *v* in Indo-European languages to establish Agree and assign the accusative case to the object, despite the fact that *v* in these languages is also impoverished?⁶³ To answer that, I tentatively suggest that it could be the case that lacking person and number features together, as is the case of *v* in SA might be the reason why *v* in SA is weaker than other Indo-European languages (where *v* might not be specified for a person feature only or a gender feature only).

I conclude therefore that the updated version of the dependent case theory (Baker 2015) makes the right predictions for SA.

Let us now consider the categories that participate in dependent case assignment in SA. Table 1 shows the categories observed in this study and their participation or lack thereof in case assignment:

⁶³ I thank Gabriela Alboiu for raising this question.

Table 1. The categories of case triggers in SA.

Categories	Participation in triggering the dependent case on another NP in the same spell-out domain
Overt referential NPs	YES
Null referential <i>pro</i>	YES
<i>PRO</i>	NO
Overt existential expletives	NO

The important question to answer with reference to Table 1 is what makes some of these categories trigger the dependent case on another NP in the same spell-out domain, and what makes others incapable of acting as triggers for dependent case. In this thesis, I suggest, following Baker (2003, 2015) that it is the distinct referential indices of the NPs contained in a spell out domain that makes some NPs receive the dependent accusative case and others do not. In Baker's (2015: 174) words, "a noun is by definition a lexical category that bears a referential index." Baker then adds that "it becomes easy and natural to say that two nominals that interact case-theoretically must not only have indices, but must have distinct indices." One way of trying to explain the facts of SA summarized in Table 1 might be as follows: overt referential NPs trigger the assignment of dependent case on other NPs in the same spell-out domain because they (a) have referential indices and (b) they bear distinct referential indices from those of the NPs, which bear the dependent case. That is why members of the same chain do not receive distinct cases.

How can we explain the fact that although both *pro* and *PRO* bear referential indices and both bear distinct referential indices from the other NPs in their spell-out domains, only *pros*

trigger the dependent case on another NP in the same spell-out domain? At this point in time, this claim is a stipulation dictated by Baker's (2015) hierarchy of the triggers of dependent case.

The next question is this: why can't existential expletives act as triggers of case assignment in SA? I believe that this can be attributed to the idea that the referential indices borne by expletives are not distinct from those of their associates.

Lastly, one might raise the following question: Why can't the dependent case mechanism apply to adjectival and nominal predicates? In this thesis, I suggest, following Baker (2015), that the referential index borne by predicate nominals is also borne by other projections which contain the predicate nominal, specifically EP and PredP. Therefore, the predicate nominal cannot be assigned the dependent case since it is not a maximal projection with a referential index. As for why adjectival predicates do not receive the dependent case, this is quite predicted in the theoretical framework adopted, as adjectives and verbs do not, according to the theory of lexical categories of Baker (2003) which we adopt, have a referential index.

One final question to be addressed before this thesis is concluded is the following: I have argued, following Baker (2015), that there are two mechanisms of case assignment that can account for the case alteration of what is called structural or abstract cases in the Minimalist literature. These two mechanisms are the dependent case of Baker (2015) and the Agree-based case of Chomsky (2000, 2001). Following Baker (2015), I have also posited a hierarchy of case mechanisms such that dependent case, when it applies, bleeds Agree-based case. The question that might now be asked is the following: are we not losing the explanatory adequacy that Agree-based accounts of case afford us when opting for a dependent case account which is rule-based rather than parameter-based?⁶⁴ In other words, are we not risking the loss of explanatory

⁶⁴ I thank Youssef Haddad, Arsalan Kahnemuyipour, Ruth King and Gabriela Alboiu for raising this question.

adequacy when we opt for the descriptive adequacy that can be achieved by taking into account a dependent case approach to case? I believe that there are two reasons why a dependent case account should be seriously entertained. The first reason is that the Agree-based account of case is now controversial and has been criticized by a number of linguists (see for example, Marantz 1991, McFadden 2004, Diercks 2012). The second reason is that there does not seem to be conclusive evidence that a parameter theory of language variation is in any way superior to a rule-based theory of language variation. As pointed out in Newmeyer (2004: 189), “[...] in all cases, a rule-based account is either more adequate than a parameter-based one or that, when the facts are taken into account, they are empirically indistinguishable.”

To conclude, this thesis advances the following hypothesis: some linguists (see Al-Balushi: 2011, 2012) argue against Chomsky’s (2000, 2001) hypothesis that only a probe with the full complement of ϕ -features can assign case on the grounds that SA is a language, where T is a defective probe (lacking the feature number in the VSO order); yet, it can still assign the structural nominative case to the subject. In contrast to this hypothesis, I argue in this thesis that (a) T is a probe with the full set of ϕ -features; therefore, it can assign the structural nominative case to the subject;

(b) v is a defective probe (following Wumbrand and Haddad 2016); therefore, it cannot assign the structural accusative to the object;

(c) the structural accusative case assigned to the object in SA is not the result of v agreeing with the object, as v is incapable of assigning case to the object; rather, this case is the result of the dependent case mechanism, which bleeds the Agree-assigning case mechanism.

To conclude, the case facts of SA can be best be accounted for using the dependent case theory of Baker (2015). This theory overcomes the problems that other accounts of case face without any loss of descriptive adequacy.

8.2 Future research

One of the issues that I have not addressed in this thesis is the issue of case alternation in vocative constructions in SA. In these constructions, the DP might surface with either the nominative case or the accusative case, as shown below:

- (2) yaa **rajul-an**, t-akallam-Ø-Ø
 O man-**ACC** 2-speak-MSG-JUSS
 ‘O man, speak!’ (Moutaoukil 1986, ex. 21a: 168)
- (3) ʔayyuhaa **l-naaʔim-u**, ʔistayqid-Ø-Ø
 O the-sleeper-**NOM** wake.up-MSG-JUSS
 ‘O the sleeper, wake up!.’ (Moutaoukil 1986, ex. 43c: 175)

. The question that immediately arises is why. I leave this issue for future research.

Another very important question which is not answered here is why *pro* but *PRO* competes for case. I leave this for future research.

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