CASE IN STANDARD ARABIC: THE UNTRAVELED PATHS

by

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This thesis proposes a novel theory to account for the structural Case facts in Standard Arabic (SA). It argues that structural Nom and Acc Cases are licensed by Verbal Case (VC). Thus it argues against the proposal that structural Case in SA is licensed as a reflex of ϕ-agreement (Schütze 1997 and Chomsky 2001 crosslinguistically, and Soltan 2007 for SA), and also against the view that structural Case is a $[u\text{T}]$ feature on the DP (Pesetsky & Torrego 2001, 2004). After arguing against these two approaches, it is shown that verbless sentences, where the verb is not licensed (by VC), do not witness the licensing of structural Case. Thus verbless sentences provide a context where verbs are not licensed, similar to the embedded subject position of control verbs like 'try' (where lexical DPs are not licensed). Investigation of the SA verbal system reveals that SA verbs are licensed through Case checking/assignment by verbal particles. Thus, like DPs, verbs receive a form of Case, which I call VC, represented as unvalued [VC] features on I^0 and $v*^0$. Since the VC-assigning particles are Comp elements, I propose that [VC] is valued on I^0 and $v*^0$ by a valued [VC] feature on Fin^0 (via Agree), which enables I^0 and $v*^0$ to value the [Case] features on the subject and object as Nom and Acc, respectively. Thus the DP is licensed by the same feature that licenses the verb, which is VC. Given the observation that [T], [ϕ], and [Mood] do not license Case in SA, I argue for two types of finiteness, Infl-finiteness, related to [T], [Mood], and [ϕ], and Comp-finiteness, related to [VC]. To account for the Case facts in various SA sentence types, I propose that Fin^0 has a [VC] feature iff it selects an XP that has (at least) one I-finiteness feature ([T], [Mood], [ϕ]) and a categorial [V] feature.

Acknowledgments

Before I started my Ph.D., I thought that the acknowledgments section would be the easiest to write. After finishing my dissertation, I have discovered that this section is the most difficult one to write, perhaps because it is now time to give credit to the people who taught me linguistics, inspired me, nurtured my powers of observation and reasoning, and tolerated my false starts and lack of knowledge and answers. Many of the ideas in this dissertation would not have seen light were it not for my desire to earn the respect of my committee members after having received so much support and encouragement from them. Regardless of whether or not they totally endorse my proposals, their feedback has always had a great impact on my intellect and therefore on my reasoning. From Diane Massam, Elizabeth Cowper, and Alana Johns, as well as from a 1997-1998 undergraduate assignment on the role of intuition in scientific research, I learnt that "[i]n the absence of compelling evidence to the contrary" (Chomsky 2001:2), one can argue for what one believes, hence the arguably controversial claims in this dissertation. Interaction with the members of my committee transformed me from a student to a researcher. In the following lines, I will try to give credit to the people who were behind this achievement, warning from the outset that words will not depict the reality of their influence on my academic life.

I would like to start by expressing my most sincere gratitude to my advisor, Diane Massam, who tolerantly and patiently supervised the development of every idea in this dissertation. Interaction with Diane was the most intellectually stimulating aspect of my living experience. Meetings with her were productive, even hours after the meeting. Some of the ideas were born during the discussion, others on my way to the meetings, and others on my way home, and yet others when I recalled her words and comments on my work. It was a pleasure to work with someone as supportive and genuinely interested in Case theory as Diane. Discussion with Diane gave me confidence and made me feel that I can contribute to syntactic theory in my own way. On so many occasions when I had no clue on where to head with my proposal, Diane provided direction and advice on how to proceed. Whatever insight this thesis might provide must be attributed to Diane's high standards, ever-lasting support, and 30 years long experience with Case theory. I owe much of this achievement to her direction.

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his input and interest in my work. I should perhaps not spend much time praising Howard and expressing my admiration of his work since this will definitely not make him shine any brighter; if anything, it will just reveal the fact that I am a big fan of him. I have been telling friends and family that my external examiner is the world's second biggest syntactician, especially when it comes to Case theory.

In addition to my committee members, I had the honor of working long-distance with some brilliant linguists during the last twenty months. The first one for me to contact was Usama Soltan. The topic of this thesis started as a response to Soltan's (2007) thesis, and later turned into a full endorsement of his thesis and a response to the 'Case' aspect of it, namely his claim that Case in Standard Arabic is licensed by ϕ-agreement. I think it is fair to say that the main idea in this thesis was inspired by Soltan's thesis. I am very grateful to him for his prompt replies to my questions about his work and issues related to it, as well as to other questions about Standard Arabic morphosyntax. His replies were much clearer then textbooks could be and more instructive than interactive classes could be. It is difficult to state how nice, helpful, and patient Usama has been since my first days with this topic.

The second for me to contact was Gary Miller. In some long and instructive emails, Gary explained to me many of the issues and problems surrounding the different proposals about Case. He pointed out the crosslinguistic challenges each one of these proposals has to deal with, and introduced me to the position that Case is licensed by mood. His thought-provoking discussion, which reveals profound knowledge, convinced me that none of the available proposals is trouble-free, which led me to the new discovery and the controversial claims in this thesis. My only regret is that I did not get to work with Gary as a student at the University of Florida, where I did my M.A.

I am also indebted to Tom Roeper and Ian Roberts for providing me with details and insights related to their work on proposals similar to mine. Through some prompt and instructive replies to my emails, both scholars showed genuine interest in my inquiries.

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Dedication:

الى معلمي و ملهمي و شفيعي

محمد صلى الله عليه و سلم

Committee:

Professor Diane Massam, Chair

Professor Elizabeth Cowper

Professor Alana Johns

Professor Elan Dresher

Distinguished University Professor Howard Lasnik, External Examiner

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List of Abbreviations

Acc	accusative
Agr^0	agreement head
[Agr]	agreement features
Aff	affirmative
Asp^0	aspect head
[Asp]	aspect feature
C^0	Comp head
Comp	complementizer
d	dual
def	definite
ec	empty category
Ener	energetic
f	feminine
Fut	future
Gen	genitive
GF	grammatical function
Impf	imperfective
Impr	imperative
Inst	Instrumental
Ind	indicative
Interro	interrogative
Juss	jussive
m	masculine

m-case	morphological case
m-vc	morphological verbal case suffix
mod	modal
$Mood^0$	mood head
[Mood]	mood feature
Neg	negative
Nom	nominative
Oath	oath
p	plural
Pst	past
Prs	present
s	singular
SC	small clause
Sub	subjunctive
T^0	tense head
[T]	tense feature
TAGs	traditional Arabic grammarians
Top	topic
$v*^0$	light verb
VC	verbal case
1	first person
2	second person
3	third person

1. Theoretical Background

1.0. Introduction and Outline of the Thesis[1]

This thesis explores the formal features and mechanisms responsible for licensing structural Nominative (Nom) and Accusative (Acc) Cases in Standard Arabic (SA). Contrary to proposals eliminating abstract Case (Marantz 1991, McFadden 2004, among others), I claim that Case is active in the verbal system as well as in the nominal system. Also, contrary to current views on the features licensing structural Case, I argue that Case in SA is not licensed by ϕ-agreement (Schütze 1997, Chomsky 2001, Soltan 2007), nor by tense (Pesetsky & Torrego 2001, 2004). Instead, I claim that structural Case in SA is licensed by the same feature that licenses verbs, which are shown to be licensed through Case checking/assignment (which is also realized morphologically). This Case, which I call Verbal Case (VC), is checked on/assigned to verbs by (the structural position occupied by) certain verbal particles, which are (almost) always Comp elements. Case facts from SA verbless sentences indicate that structural Case does *not* exist in the absence of VC, that is, when the verb is not licensed.[2] My view of Case theory comprises the two main approaches in the generative literature, having a morphosyntactic aspect and a semantic requirement. The first refers to abstract syntactic licensing, which usually has a phonetic reflex (assuming Vergnaud's 1977 insight as well as Chomsky's 1980, 1981 Case Filter) and the second refers to the Visibility Condition which requires Case to render arguments visible at Logical Form (LF) for θ-role assignment (assuming proposals in Aoun 1979, and Chomsky 1981, 1986b). The data examined in this thesis will show that whenever an XP (DP, CP, PP) is an argument (hence requires visibility at LF for θ-role assignment), it will always be licensed through Case checking by a functional head (with the relevant feature) in the A-domain.

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[1] I will be using the terms 'Case checking' and 'Case assignment' interchangeably until section 4.2, where I argue that the two terms designate two different operations, where 'Case checking' is the focus of this thesis. I will also be using the terms NP and DP interchangeably.

[2] The syntactic proposal laid out in this thesis is devised for SA, and is, in fact, likely to be extended to other languages; see chapter 6 for an attempt to extend it to some English facts.

The fact that lexical DPs are not licensed in certain positions (e.g. the embedded subject position of some control constructions in English, and the subject position of participial sentences in SA) led to the claim that they are *not* assigned Case in those positions. Thus in licensed positions DPs receive (morphologically realized) Case, which led to the proposal that Case is represented as an unvalued [Case] feature on D^0. Likewise, the fact that verbs are not licensed in a certain position (verbless sentences in SA), I claim, must indicate that they are *not* assigned Case in this position. Thus in licensed positions (verbal and copular sentences in SA), verbs receive (morphologically realized) Case, which, I propose, must be represented as an unvalued [VC] feature on I^0 and $v*^0$. Since the VC-assigning particles are Comp elements, I claim that Fin^0 (the locus of finiteness in the C^0 domain (Rizzi 1997)) has a valued [VC] feature. Therefore, structural Case is licensed on arguments in the Infl domain when Fin^0 values [VC] on I^0 and $v*^0$ (via Agree), which then value [Case] on the subject and object, respectively. Thus [VC] checking results in [Case] checking.

Given standard proposals in the literature (e.g. Rizzi 1997) that [T], [Mood], and [φ] represent finiteness, as well as the observation that none of these three features licenses structural Case in SA, there must be a different type of finiteness that is responsible for licensing structural Case. Therefore, I claim that there are two types of finiteness, Infl Finiteness (I-finiteness) and Comp Finiteness (C-finiteness). While I-finiteness is related to [T], [Mood], and [φ], which are usually contributed by the verb in the Infl domain, C-finiteness makes reference to [VC], which is the feature that licenses structural Case in the clause.

Moreover, since structural Case is licensed by a valued [VC] feature on Fin^0, and given the observation that verbless sentences do *not* witness the licensing of structural Case, thus indicating a Fin^0 with *no* [VC] feature, it should be made clear when Fin^0 must and must not have a [VC] feature. To regulate this situation, I will appeal to the conception of categorial selection in Chomsky (1995) and Hallman (2004). Basically, I propose that Fin^0 must have a [VC] feature iff it selects an XP that has (at least) one I-finiteness feature and a categorial [V] feature. Thus Fin^0 has two versions, with and without a [VC] feature. The two versions could be considered two different categories, which means that they should select different complement categories. This condition accounts for all the structural Case facts in SA.

Chapter 1 presents an overview of the history of Case theory in the last three decades. It also discusses the adopted framework, the Minimalist Program (MP), with respect to its design as well as its Merge and Agree operations.

Chapter 2 starts by reviewing some literature on the feature(s) licensing structural Case, both crosslinguistically and in SA. It then presents a number of arguments that structural Case in SA is not licensed by agreement or tense. These arguments come from basic SA agreement facts, Qur'aan data, imperatives, and verbal morphology.

Chapter 3 presents an overview of the SA verbal system (verbs and verbal particles), with the goal of showing that verbs in SA (with all the moods and functions that they convey) can all be subsumed under three verbal case forms: indicative, subjunctive, and jussive, thus arguing against associating the verbal inflectional suffixes with mood (contra Wright 1967).[3] It also lists the various verbal case assigning particles, showing that the subjunctive verbal case form conveys subjunctive and optative moods, as well as other functions, and that the jussive verbal case form conveys imperative and conditional moods, as well as other functions. It then discusses some attempts in Generative linguistics to posit verbal Case as well as introducing the concept of verbal case in traditional Arabic grammar. This chapter also presents the proposed conception of VC as the abstract feature that licenses verbs. Next, it introduces the SA verbless sentences, with the goal of showing that though they encode [T], [ϕ], and [Mood], they do not witness structural Case due to the fact that the verb is not licensed, thus establishing the link between VC and Case.

Chapter 4 presents a formalization of the proposed conception of VC as the feature that licenses structural Case in SA. This chapter proposes two VC-related operations; 'VC checking' and 'VC

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[3] The terms 'indicative', 'subjunctive', and 'jussive', as used in this thesis, do not map to the three relevant moods, but can be thought of as equivalent to 'Form I', 'Form II', and 'Form III', where the relevant criterion is their inflection. As we will see later, the modality-related terminology was introduced by European scholars, and I decided to follow them just to avoid having to coin new labels.

assignment'. The former refers to valuing [VC] on I^0 and $v*^0$ by Fin^0, and the latter to assigning the verb some verbal case specification relevant for the morphological component by the VC-assigning particle occupying Fin^0. It also makes the distinction between Infl-finiteness (I-finiteness), which refers to [T], [φ], and [Mood], and Comp-finiteness (C-finiteness), which makes reference to [VC]. It then presents the syntactic proposal, with its assumptions and claims, followed by some sample derivations. The data examined in this chapter make a clear distinction between 'Case checking' and 'case assignment', reserving the former for the licensing of arguments in the Infl domain by functional heads, while reserving the latter to describe instances of lexical case assignment by particles and verbs to non-arguments (topics and predicates). After providing some rationale for those assumptions and claims, the chapter reviews some literature where (some of) those claims have been made. It closes with a critique of the notion of 'feature inheritance', in favor of a system exclusively based on 'Agree'.

Chapter 5 applies the proposed theory of Case checking and assignment to various SA clauses, comprising complement clauses (control, ECM, and raising), positive and negative imperatives, passives, unaccusatives and unergatives, as well as participial sentences. It closes with a proposal on the structure and Case requirements of *pro*.

Chapter 6 starts by restating the conclusions and findings from the previous chapters. It then attempts to extend the theory of Case proposed for SA to some English constructions, making use of proposals from Fabb (1984) and Ross (1970).

After presenting syntactic arguments for the proposed relation between VC and structural Case, **the appendix** provides a morphological argument. Basically, by proposing a novel analysis of the SA imperfective paradigm, I show that the Nom morphological case (m-case) suffixes and indicative morphological verbal case (m-vc) suffixes are identical, and that the Acc m-case suffixes and subjunctive m-vc suffixes are identical, at some stage in the derivation of the verb forms. After that stage, the verbal forms undergo two word-formation operations, feature movement and feature deletion, which result in the verbs realizing their surface forms. The discussion in the appendix is restricted to highlighting the morphological similarity between the

two sets of suffixes, without making claims on what it results from. Illustrating the similarity between the Acc m-case suffixes and the subjunctive m-vc suffixes could have consequences for an account of the Acc m-case syncretism. This refers to the Acc m-case suffixes of non-singular nouns which are phonologically identical to the Genitive (Gen) m-case suffixes of non-singular nouns. The parallelism of the Acc m-case suffixes with the subjunctive m-vc suffixes shows that the subjunctive non-singular verbal forms have null m-vc suffixes, that is, ones similar to the jussive m-vc suffixes for non-singular verbs. The imperfective paradigm analysis accounts for the loss of gender distinction in the 2nd person dual paradigm. One goal of the material presented in the appendix is to show that the two sets of suffixes (m-case and m-vc) can, in fact, be regarded as the same element, which further supports the syntactic claim that Case is licensed by VC. If this sketchy account (or even a development thereof) is on the right track, it could indicate that m-case and abstract Case are related in the sense that the former realizes the latter in the morphological component (an idea suggested in Chomsky 1980, 2001, and in Legate 2008, among others), thus contra Zaenen et al. (1985), Marantz (1991), and McFadden (2004) who propose that m-case should be separated from abstract Case.

Since this thesis investigates Case in SA, the data cited will be from SA; there might be some data from other modern varieties of Arabic, but this will only be for providing extra support for already established generalizations. The source of the data is my own intuitions (being a native speaker of the language) as well as the text of the Holy Qur'aan. Although some scholars maintain that the Holy Qur'aan was written in Classical Arabic (CA) (e.g. Holes 2004:4-5), rather than SA, I believe that the two varieties differ only with regard to vocabulary and wording techniques; that is, CA uses some words and word orders that SA does not use. Crucially, with regard to the data cited and discussed in this thesis (morphosyntax and Case), the two varieties do not differ at all.[4] Some of the crucial data cited and discussed in this thesis come from various sources (books, theses, articles) in the literature, especially the ones on 3rd person imperatives,

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[4] In fact, Holes (2004:5) himself states that "Modern Standard Arabic (MSA), or Modern Literary Arabic (MLA) [which are other labels for SA], is the modern descendant of Classical Arabic, unchanged in the essentials of its syntax but very much changed, and still changing, in its vocabulary and phraseology". As far as phraseology is concerned, I think that it has to do with observations like the relative rarity of VOS sentences in SA, as compared to CA/Qur'aan Arabic, where VOS sentences are very common.

PP-passives, and some embedded clauses (Soltan 2007), and on verbless sentences (Fassi Fehri 1993, and Benmamoun 2000, 2008), as well as others. I also use the internet as a source of data and information, especially with regard to verbal particles and some archaic constructions.

Throughout the thesis, when appropriate, I make reference to insights and contributions made in the medieval literature on Arabic grammar, especially contributions and arguments made by the Basran and Kufan grammarians. Basran and Kufan grammarians belong to the two language/grammar schools of ancient Iraq, practiced in the cities of Basrah and Kufah, respectively. The issues on which they disagreed as well as their arguments for their positions are documented in Ibn Al-Anbari (1961). Two of the main insights that issues and proposals in this thesis are based on come from the Basran grammarians, whose main figures are Siibawayhi and his mentor (as well as that of many Basran grammarians), Al-Xalil bin Ahmad. The first insight is that preverbal DPs are topics, not subjects, and the second is that the subject in the SVO structure is the argumental pronominal agreement on the verb. The first insight is picked up on in Soltan (2007) and the second is similar to Platzack's (2003) proposal that agreement in SA is pronominal. See Owens (1988), Versteegh (1997), Wright (1967), and Holes (2004) for an overview of this literature.

1.1. Case in Syntactic Theory[5]

This section presents an overview of the history of Case Theory in generative linguistics. It reviews the different proposals and developments that the theory witnessed in the last three decades, and closes with a note on the relevance of this thesis to Case Theory.

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[5] The discussion in this section is partly based on Bobaljik & Wurmbrand (2007) and Lasnik (2008). I would like to refer the reader to these two articles and works cited therein for an overview of the theoretical and empirical issues related to Case theory and the developments it witnessed over the last three decades. This brief introduction is by no means complete. Also, it is worth mentioning that the various GB- and MP-related notions discussed in this section have received more than one definition over the last three decades (given new empirical discoveries); I will not get into these details.

1.1.1. Case in Government and Binding

Work on Case in the generative framework began more than three decades ago with the goal of accounting for the distribution of NPs (especially in embedded clauses) as well as NP movement. One of the early attempts to devise a condition on NP distribution was Chomsky & Lasnik's (1977:459-460) filter in (1).

1. * [α NP to VP], unless α is adjacent to and in the domain of Verb or *for* ([-N])

Being little more than a description of the infinitival clause facts that it was designed to account for, the filter in (1) soon went out of fashion, marking the beginning of the quest for an alternative (to be developed in Chomsky 1980).

Chomsky's (1980, 1981) theory of Case assignment was based on a crucial contribution made by Jean-Roger Vergnaud. To illustrate, Vergnaud's (1977, 1982) original insight was that Case is an abstract element that all NPs, in all languages, require, or rather have, since his insight was that NPs are 'born' with Case, and undergo a 'checking' operation whereby the Case checking category determines the appropriateness of the NP's Case for the position it is in. Thus the observation that only lexical NPs, which can realize Case morphologically, can appear in the scope of Case assigners (licensed positions) led Chomsky (1980:25, 1981:49) to propose the Case Filter, in (2).

2. *NP if NP has phonetic content and has no Case

In other words, a phonetically overt NP must have Case, even if it has no morphological case (m-case); in fact, Chomsky (1981) assumed that Case is a property of A-chains, rather than of individual members. Vergnaud's insight (which asserted that, crosslinguistically, lexical NPs have Case, despite morphological deficiency) is also valuable for its implications for Universal Grammar (UG); now one filter or condition can apply to NP licensing (and movement) in all languages.

Alongside this morphosyntactic approach to Case, there emerged a semantic one based on a contribution made by Joseph Aoun. To illustrate, Aoun's (1979) insight was that (argumental) NPs require abstract Case so that they can be visible for θ-role assignment at LF, the so-called 'Visibility Condition'. Aoun's insight (adopted and developed in Chomsky 1981, 1986b) proved empirically viable since not only argumental NPs, but also argumental CPs, which require Case for LF visibility, occurred in licensed positions similar to those occupied by NPs. I will assume that both requirements, syntactic and semantic, are relevant to a theory of structural Case in SA (but see Lasnik 2008 for a discussion of the relevant issues).

Despite the theoretical advancement embodied in the Case Filter, the need arose as to how it should be implemented (crosslinguistically). In other words, linguists needed to make sure that a given NP in a given language has received Case (preferably in a uniform manner), thus passing the requirement of the Case Filter. Thus linguists started investigating the structural configurations in which NPs must and must not receive Case. To achieve this goal, a number of notions were posited, among which government (and proper government), c-command (and m-command), minimality, and adjacency, with the Extended Projection Principle (EPP) being another NP movement trigger (making the Case Filter, at times, look redundant).

As the name of the theory suggests, the notion of 'government' was key to accounting for Case assignment (as well as for other aspects of natural language syntax, like binding). Chomsky (1980:25) defines 'government' as in (3).

3. 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.

Given the definition of c-command (based on branching nodes), the concept of government accounted for Acc Case assignment by verbs and prepositions to their (object) complements. To subsume the assignment of Nom Case under the notion of government, the definition of c-command was adapted so as to make reference to maximal projections, rather than branching

nodes, what came to be known as 'm-command'. Case assignment under government also made reference to the notion of minimality to prevent possible double Case assignment (resulting from c-command by more than one head/governor). Despite the appeal of the notion of government as applied to Case assignment, it was obvious that Nom Case was assigned in a configuration different from that in which Acc Case was assigned. Linguists came to recognize that while Acc is assigned in a head-complement relation, Nom is assigned in a Spec-head relation, a situation that led to a search for symmetry (and simplicity).

Besides the Case theory outlined in Chomsky (1981, 1982, and 1986b), other proposals emerged to account for data in less studied languages, among which Levin & Massam (1985) where it was suggested that Case assigners/governors enter the derivation with a Case Assigner feature [+CA], and Massam (1985) where it was proposed that C^0 has a [+CA] feature, which allows it to assign Case to the NP in the Spec, IP position of an ECM complement clause.[6] Moreover, Raposo's (1987) analysis of the Portuguese inflected infinitival non-tensed clauses, where the embedded subject is assigned Nom Case, suggested some dissociation between Nom Case and tense, as well as agreement, since Raposo proposed that the embedded I^0 must be specified for 'Case' in order for the subject to receive Nom Case; in other words, for Raposo, the Case assigning head must have a Case assigning property (regardless of tense and agreement). Raposo's suggestion is similar to Levin & Massam's (1985) and Massam's (1985) in that Case assigning heads must have a [Case] feature. Furthermore, Bittner & Hale (1996) proposed a Case theory where Case "represents the maximal extension of the nominal projection" (p. 4), hence Case is a syntactic head, K^0; thus Case Phrase (KP) selects DP. Case assignment results from a relation they call 'Case Binding', which states that "[a] head will Case-bind an argument, and thereby assign it some marked structural Case [accusative, ergative, oblique, but crucially not nominative], only if it governs a Case competitor for that argument" (p. 13), where a Case competitor is a K-less nominal, that is, a nominal in the Nom Case, which for them represents the absence of Case.[7]

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[6] In chapter 4, I will discuss in detail the similarities and differences between my proposal and the ones outlined in Levin & Massam (1985) and Massam (1985).

[7] A full response to the works cited in this chapter is beyond the scope of this thesis. However, given the SA data to be discussed in this thesis, I am not sure how Bittner & Hale's (1996) assumption that Nom-marked DPs are Case-

As far as the link between abstract Case and morphological case is concerned, Chomsky (1980) assumed that elements that can realize m-case (thus satisfying the Case Filter) can be licensed in positions where Case is assigned (and so only PRO is allowed where Case is not licensed in English). Despite this elegance, Case theory (with all its sophistication) had to handle some challenges. For example, Case facts from Icelandic (Zaenen et al. 1985), which show that the language allows non-Nom subjects, suggested that there is dissociation between abstract Case and m-case, arguing for the abandonment of the former. Another set of data problematic for Chomsky's (1980, 1981) Case theory was the fact that languages like Latin and Greek allow Acc-marked subjects in non-finite, non-ECM clauses (as noted in Chomsky 1981:140). Moreover, Icelandic Case data also suggested that PRO subjects of infinitival clauses receive Case, as detected on agreeing modifiers and predicates (Sigurdsson 1991, 2008). This was followed by Marantz's (1991) extreme position that abstract Case be eliminated from syntactic theory. This position was reiterated in McFadden (2004) who also argues that morphological case is independent of the principles of DP licensing (or abstract Case).[8] In addition, Case facts from languages with ergative Case systems were not readily accounted for; ergative Case received some treatment in Marantz (1981), Levin & Massam (1985), Massam (1985), Johns (1992), and Bobaljik (1993), among others, but still needs more investigation. Despite these and many other challenges, some posed against the PF relevance of Case (Case Filter) and some against its LF relevance (Visibility Condition), Case continued to be a central issue in syntactic theory.

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less (or not Case-marked) can differentiate between subjects (which surface with only structural Nom Case, in Spec, v*P) as compared to topics/left-dislocated elements (which could surface with default Nom case or lexical Acc case in Spec, TopP), since the former obtains under c-command whereas the latter takes place either at PF (default Nom) or in syntax (lexical Acc).

[8] Regardless of whether or not McFadden's approach is on the right track given the data he surveyed, I believe that it cannot be extended to the SA facts. To illustrate, much of his evidence against the connection between structural abstract Case and m-case comes from the mismatch between Case and m-case in languages like Icelandic (quirky Case). As far as SA is concerned, no such mismatches are observed, except in P-passives, which I discuss and account for in chapter 5. In P-passives, the passive subject surfaces with Oblique, not Nom Case, as a result of its being inside a PP. In regular passives, the passive subject surfaces with Nom Case. McFadden's other argument is related to default case contexts where we see m-case, but no structural DP licensing (or Case assignment due to the absence of Case licensers). In chapter 4, I argue that such DPs are licensed by a feature called [Topic], which is in complementary distribution with [Case], the latter being a property of arguments, while the former of non-arguments.

As far as the focus of this thesis is concerned (which is the feature(s) responsible for licensing structural Case), most of the GB research in the 1980s was not very concerned about features. To illustrate, Acc Case was assumed to be assigned under government by V^0 without reference to the featural structure of the Case assigning lexical head (V^0). Nom Case assignment was assumed to take place by I^0 as a result of agreement in terms of ϕ-features between the subject and the verb; that is, the subject, in Spec, IP, and finite I^0 have to agree in terms of [Person], [Number], and [Gender], an insight that Chomsky attributes to George & Kornfilt (1981), who, based on Turkish data, argued that the licensing of Nom Case is dependent on the presence of verbal agreement morphology. Though linguists often referred to finite I^0, the nature of 'finiteness' as a concept and a property of Nom Case assigning heads remained a puzzle.

Despite the fact that Case theory (with much more apparatus than described here) accounted for a lot of data crosslinguistically, a number of questions were left unanswered, listed in Bobaljik & Wurmbrand (2007:5-6), and reproduced in (4-7).

4. Why is Acc assigned in a head-complement configuration (c-command), while Nom is assigned in a Spec-head configuration (m-command)?

5. Why is Acc assigned by a lexical head, V^0, while Nom is assigned by a functional head, I^0?

6. Why is adjacency crucial for the assignment of Acc Case in English, but not for the assignment of Nom Case?

7. Why is finiteness crucial for the assignment of Nom Case, but not for the assignment of Acc Case?

These questions (and others related to other modules of linguistic theory) required answers, which led to further crosslinguistic investigations. In a momentous publication, Pollock (1989) proposed to split the traditional I^0 node into T^0 and Agr^0 heads (so-called Split-Infl-Hypothesis) to account for verb movement, word order, and verbal inflectional differences between English and French (a publication that inspired a great interest in parameterization in natural language, as in Ouhalla 1994 for SA). One virtue of Pollock's proposal to split the I^0 node (into T^0 and Agr^0) was Chomsky's (1991) proposal to split the Agr^0 node into $Agrs^0$ and $Agro^0$. This proposal was a natural response to the finding that there are languages (like Basque, Burushaski, and Mohawk) where verbs carry object agreement in addition to subject agreement morphology. This development, coupled with Chomsky's proposal that agreement and Case are manifestations of the Spec-head relation between the NP and the relevant Agr head, removed the rationale for the questions in (4-5). To illustrate, while Nom Case is now licensed by $Agrs^0$ when the subject is in Spec, AgrsP as a result of subject-verb agreement, Acc Case is assigned to the object when it is in Spec, AgroP, that is, in a Spec-head configuration with $Agro^0$, as a result of object-verb agreement. The importance of this work was in unifying the Case assignment configurations into only Spec-head, thus eliminating head-complement relations (as well as government) from Case assignment relations. Also, Chomsky's (1991) proposal unified the nature of the Case assigning heads, with both Nom and Acc being assigned/checked by functional heads, $Agrs^0$ and $Agro^0$, respectively (which is the issue of question (5)).[9]

Despite this progress in uncovering the nature of the Language Faculty, the quest for minimizing the theoretical machinery implemented in empirical investigation as well as in theoretical explanation did not stop. This quest led from GB to the Minimalist Program (MP). Though

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[9] With regard to the third question raised in the previous section, Culicover (1997:41-43) provides four reasons for eliminating adjacency from Case assignment configurations. First, adjacency complicates Case assignment. Second, it predicts that the second object in double object constructions should not receive Case. Third, it accounts for only Acc Case assignment. Fourth, as shown in Kayne (1984), there are independent restrictions on the distribution of adverbs that are not related to Case, as in '*John was yesterday angry'. As for the fourth question, the quest is still on for what constitutes finiteness (see Nikolaeva 2007a for a recent overview). This thesis makes (and supports) the claim that a verbal sentence has two types of finiteness, one related to the Infl domain, like tense, mood, and agreement (which do not license structural Case, as also argued in Raposo 1987), and the other is related to the clause's ability to license structural Case, which refers to VC in the Comp domain. This claim will be presented and defended in chapters 3 and 4.

keeping to the spirit of the Principles and Parameters framework (which is investigating the nature of UG), MP advanced linguistic inquiry in terms of, as suggested by the label, minimizing the theoretical primitives and so computational load proposed in GB. The next section will review MP only with respect to Case assignment/checking issues.

1.1.2. Case in the Minimalist Program

The Minimalist Program (MP) was a desirable development in syntactic theory given the fact that some theoretical primitives (in GB) seemed to be largely needless (like government, head-complement relations, Deep Structure (DS), Surface Structure SS)). Though foreseen in GB works like Larson (1988), Lebeaux (1988), Uriagereka (1988), Pollock (1989) and Chomsky (1991), Chomsky (1993) is considered the official inauguration of the Minimalist Program. This is where he proposed to eliminate the Case-relevant SS (as well as DS) from the design of UG.[10] This proposal had implications for the GB Case Theory since Case is assigned at SS. Case is not assigned at DS because passives and raising constructions will then be hard to account for; it is not assigned at the Logical Form (LF) since then it will not be realized at PF; it is not assigned at the Phonetic Form (PF) since it must be visible at LF for θ-role assignment. Thus SS seems to be the right place for Case assignment, unless, argues Chomsky, we devise a new conception of how DPs are licensed. He thus proposes that 'Case assignment' be replaced with 'Case Checking' (much in the spirit of Vergnaud's original insight). According to the former, a DP has no Case feature upon lexical insertion but it is assigned one by the Case assigner (which has a Case feature). By contrast, the latter assumes that (upon lexical insertion) both the DP and the Case assigner have a Case feature each; now the DP obtains licensing by matching its Case feature with that of the Case assigner, where the latter checks the former, resulting in licensing Case (and hence the DP). Adopting Case checking (as opposed to Case assignment), argues Chomsky, results in rendering the Case-related arguments for SS baseless, which constituted a major step towards simplicity (both conceptually and computationally).

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[10] But this was also the time when he gave more emphasis to the covert derivational cycle. In other words, licensing of features could be overt or covert, depending on feature strength. To illustrate, strong features were licensed overtly (pre-Spell-Out), whereas weak ones were licensed covertly (post-Spell-Out), by Procrastinate.

Case theory, in both GB and MP, made reference to the distribution of PRO (a hybrid + anaphor, + pronominal element). The PRO Theorem (Chomsky 1981) stated that PRO must not be governed (given the assumption that nonfinite I^0 is not a governor), and hence not Case-marked. However, this made the wrong prediction with regard to the Visibility Condition, which required that argument chains (regardless of phonetic content) be Case-marked. Thus Chomsky & Lasnik (1993) proposed that PRO is assigned Case (on a par with lexical DPs), which they termed 'Null Case', lexically specified as only licensed by nonfinite I^0; Chomsky & Lasnik state that PRO may also receive other Case values. Being assigned in a Spec-head configuration, the Null Case approach to PRO provides further support for eliminating the notion of government from UG. This approach was embraced and elaborated on in Martin (1996, 2001), but was challenged in Baltin & Barrett (2002) and Cecchetto & Oniga (2004), among others. The extreme position with regard to PRO was Hornstein's (1999, and subsequent work) which proposed that PRO be eliminated from UG in favor of analyzing control as movement, on a par with raising (but this discussion is not relevant here).

Chomsky (1993:7) proposed that T^0 raises to $Agrs^0$ and V^0 to $Agro^0$; the resulting complexes, $[_{Agr} T+Agrs]$ and $[_{Agr} V+Agro]$, check agreement and license Case, Nom and Acc, respectively. He states that "agreement is determined by the φ-features of the Agr head of the Agr complex, and Case by an element that adjoin to Agr (T or V)" (p. 8). However, Chomsky (1995:335) suggested that the functional head that licenses structural Case is the same one that checks verbal agreement. Thus he dispensed with his (1991) independent agreement projections (AgrsP and AgroP).[11] In his early Minimalist writings, Chomsky (1995:368) proposed that T^0 and V^0 (the Case assigners) have intrinsic uninterpretable Case features; in other words, "T and V have intrinsic – interpretable features that must be checked: for T, [(assign) Case] (nominative or null); and for V, its φ-features and [(assign) accusative Case]". Adopting Larson's (1988) verbal shells (proposed for double-object constructions), as well as findings and proposals in Hale & Keyser (1993), Chomsky (1995) proposed that the upper verbal shell is a (functional) light verb

[11] Agrs and Agro were eliminated because they proved superfluous. First, Agrs was dispensed with because T^0 can check both subject agreement as well as Nom Case. Also, not only can v^{*0} do the jobs of Agro (checking object agreement as well as Acc Case), but also it is semantically motivated since it introduces the external argument. See Hornstein et al. (2005:162-169) for a discussion of the motivation behind eliminating the AgrP projections.

v^0 (projected by a phonetically null light v, rather than by a (minimalistically problematic) feature-empty head, V^0, as initially proposed by Larson 1988, or a semantically-vacuous Agro^0 head, as proposed in Chomsky 1991) which is responsible for licensing the θ-role of the external argument as well as assigning Acc Case to the object, thus, again, both Cases are assigned by functional heads, under agreement. This was followed by Schütze's (1997) seminal work where he investigated Case checking in a number of languages and concluded that "structural case marking is a reflex of the same syntactic feature-checking relation as agreement" (p. 2). Thus he argues that the Case assigning heads have no intrinsic [Case] features; rather the match relation will take place between the DP's φ-features and the φ-features of the Case checking head, with the valuation of those on the head results in licensing/valuing [Case] on the DP. Along the same lines, Chomsky (2001:6) argues that "[s]tructural case is not a feature of the probes (T, *v*), but it is assigned a value under agreement […] Case itself is not matched, but deletes under matching of φ-features". This position marked the elimination of independent [Case] features from the functional heads that license Case, thus reducing Case assignment to being a reflex of agreement. Also, this proposal, through positing Agree as a long distance (agreement and Case) feature valuation relation, marked the end of the Spec-head relation as a prerequisite for structural Case checking. Agree will be discussed in section 1.2.3.

In an attempt to restore the 'traditional' view of Case assignment, Carstens (2001:147) argues that "Agree deletes the goal's Case only if the probe has an intrinsic structural Case value". Further dissociating Case from agreement, Bobaljik (2006:2) argues "that agreement (copying or sharing of φ-features) is a morphological, not a (narrowly) syntactic process", which suggests that φ-features do not license Case. He shows this by first establishing that "the proper place of the rules of m-case assignment is […] the Morphological component, a part of the PF interpretation of syntactic structure" (p. 8), and second by showing that "the controller of agreement is determined by m-case and not GF [grammatical function]. For example, when there are non-nominative subjects, and nominative non-subjects in a structure, it is nominative (unmarked) case, and not subject-hood, that is the correct predictor of agreement" on the verb (p.12). This means, argues Bobaljik, that agreement, too, is a post-syntactic operation. Also, investigating the Person Case Constraint effects (PCC), Bejar & Rezac (2003:50) argue that the

"PCC effects are suspended when structural Case licensing is not through ϕ-agreement", thus suggesting that languages that exhibit no PCC effects (like SA) could license Case without resort to agreement. Moreover, arguing against Chomsky (2001), Tanaka (2005:91) argues that "T with the complete set of ϕ-features is both insufficient and unnecessary for Case assignment to subjects" in English. In a similar vein, Alboiu (2006) argues against the assumption that Case checking is a reflex of agreement. This position is based on facts concerning the "availability of Nominative subjects with phi-deficient T probes [… and the] failure of phi-complete T probes to check Case on their DP goals in the absence of temporal deixis" (p. 13). She instead argues that Case valuation must be viewed as a property of a "C-saturated T domain"; that is, Case checking is a property of phasal heads.

In a rather dramatic development of his Agree-based Case checking mechanism, Chomsky (2005, 2006) proposes that the licensing of Case is a property of phase heads C^0 and $v*^0$. T^0 and V^0, argues Chomsky, inherit the ability to check Case from their respective phase heads, C^0 and $v*^0$, respectively. Feature inheritance assumes that tense and ϕ-features are inherent on C^0 and $v*^0$, but just derivative on T^0 and V^0. One problem with feature inheritance is that it takes us back to the second question raised in the previous section; basically, now Acc is licensed by a lexical head, V^0, after it inherits the necessary properties from $v*^0$.[12] The relevant issue here is that Chomsky (2001, 2005, 2006) and Schütze (1997) assume that structural Case is licensed by agreement; that is, Case is licensed as a reflex of ϕ-feature valuation on the Case assigning head (without the Case assigner having a [Case] feature).

By contrast, another approach emerged where structural Case is assumed to be licensed by tense, that is, as a reflex of valuing a [T] feature on the DP. To illustrate, Pesetsky & Torrego (2001:361) argue that "[n]ominative case is a uT on D". In other words, there is an [iT] feature on T^0 and a [uT] feature on the subject; thus Nom Case is valued under Match between the two [T] features, which eventually results in valuation. In an attempt to unify the

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[12] Feature inheritance as proposed in Chomsky (2005, 2006) will be further discussed and responded to in chapter 4.

nature of structural Case checking, Pesetsky & Torrego (2004:496) propose that "all instances of structural case are actually instances of uT on D", thus "[a]ccusative case (like nominative) is an instance of uT on D" (p. 496). They propose "a *second occurrence of T*", which they call T_o (for the object) to differentiate it from the main T^0 projection of the sentence, which they call T_s (for the subject), thus mimicking the Agro and Agrs projections of Chomsky (1991). As stated in Bobaljik & Wurmbrand (2007:9), Pesetsky & Torrego's (2001, 2004) conception of Case (as a nominal property) "is in fact the NP analogue of tense in the verbal system". While I disagree with Pesetsky & Torrego that tense licenses structural Case (as will be shown in chapter 2), I agree with them that Case, as a nominal property, is the analogue of some verbal property, one that will be investigated in this thesis (chapters 3 and 4).

The development of Case Theory from GB to early Minimalism, to recent Minimalism seems to have (at least) three characteristics with regard to Case, the first being the move from Case assignment to Case checking, and the second being the move from government to Spec-head relations to Agree (reminiscent of c-command). The third is more interesting for the purposes of this thesis. Given the discussion in Hornstein et al. (2005:29), syntacticians during these three stages (of syntactic theory) were uncertain as to where Case comes from; does it come from the head, or the DP, or both?

To illustrate, in GB (Chomsky 1980, 1981, 1986b, 1991), a DP was not assumed to have a Case feature. The Case feature was assumed to be a property of the Case assigner, and so the DP would receive it only through assignment. In early Minimalism (Chomsky 1993, 1995), both the DP and the Case assigner were assumed to have Case features, and matching the two Case features results in checking the Case feature of the DP. In recent Minimalism (Chomsky 2001, 2005, 2006), syntacticians think that the DP has a Case feature but that the Case-checking head has no such Case feature. Thus Case on the DP is not valued under match with a Case feature; rather it is assumed to be valued as a reflex of the operation whereby the DP values the ϕ-features of the relevant head, or alternatively as a reflex of valuing a [uT] feature on the DP. Basically, all three combinations existed in the last thirty years of the history of Case Theory. It

is thus the goal of this thesis to argue for one of these positions, namely the second (early Minimalism) one.

With regard to the issue of finiteness, it was implicitly (and sometimes explicitly) stated that besides agreement (in terms of ϕ-features), the idea that I^0 must be tensed was a crucial issue for Nom Case assignment (but not for Acc Case). This is because Nom Case is not usually licensed in (non-tensed) infinitival (complement) clauses, European Portuguese inflected infinitives being a puzzling case.[13] Thus a major question for Case Theory (in GB as well as in MP) is what element or feature licenses (Nom) Case; that is, what constitutes finiteness; in other words, what is a finite head? Differently put, what is finiteness, and where does it come from, such that it is capable of licensing Nom Case. As noted before, syntacticians usually correlated finiteness (or the licensing of Nom Case) with tense and/or agreement. Aygen (2002:8), by contrast, "explores the phenomenon of *finiteness* as Nominative case [… and] questions the relevance of Tense and Agreement as a Nominative Case licensing feature within the Minimalist framework". Addressing mainly this question, this thesis attempts to explore the feature that constitutes finiteness such that it licenses structural Case in general, and argues that finiteness is Verbal Case. Basically, regardless of labels, Nom, Acc, etc…, I believe that these Case values have something important in common, which is the notion of 'licensing'. In other words, given a visibility as well as a purely syntactic perspective, licensing a DP in the subject position (Nom), should be conceptually similar to licensing a DP in the object position (Acc). This is one reason for my claim that both Case values, Nom and Acc, in SA are tied to Fin^0 (as the locus of Comp finiteness) not necessarily Infl finiteness (tense, mood, and agreement); that is, I associate Comp finiteness with Verbal Case, which is the structural Case licenser in the proposed system (as will be formalized in chapter 4).

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[13] Cowper (2002) coins the term 'pseudofiniteness' to refer to the situation where Nom Case is licensed on the subject by a tenseless or a ϕ-less I^0.

1.2. Adopted Framework: Minimalist Syntax

The system proposed in this thesis assumes the version of the MP laid out in Chomsky (2001). The discussion of the issues/components in the next three sections will focus on the concepts and notions most relevant to the topic of this thesis.

1.2.1. Design

The MP, in its Agree-based approach (Chomsky 2001), assumes a Language Faculty that consists of four components. These are: the lexicon and the computational system, as well as the interface levels, PF, and LF. The lexicon is represented by the (notion of) 'numeration', which refers to "a set of pairs (LI, i), where LI is an item of the lexicon and i is its index, understood to be the number of times that LI is selected" (Chomsky 1995:225). In other words, the derivation of a certain sentence (or structure) does not access the whole lexicon, but rather the numeration, which is constructed out of the lexicon to include all the lexical items needed for building the structure of the relevant utterance. Such lexical items include not only words, but also functional heads (together with their features). The computational system is composed of the two operations, Merge and Agree (to be discussed in the next two sections). As far as the features related to Case licensing are concerned, these operations are assumed to apply only in the narrow syntax, that is, the overt syntactic cycle, a provision made by the elimination of 'Procrastinate' (of Chomsky 1993). PF is composed of a number of morphological and phonological operations. The former, referred to as the 'Morphological component', is syntactic; the latter are not really relevant for the present account. The final stage of narrow syntax is called Spell-Out; this is the point in the derivation where the LF-uninterpretable features are removed from the syntactic object and transferred to the phonological component (Chomsky 2001:5). LF is relevant for modules like the binding theory, quantifier scope, control theory, and θ-theory; the last one operates in conjunction with the Visibility Condition; that is, the assumption that θ-roles are assigned at LF to argumental DPs (and perhaps CPs and PPs). Since this thesis is on Case, only θ-theory as well as the Visibility Condition will be relevant to the discussion throughout. Unlike with GB and early Minimalist syntax (Chomsky 1993, 1995), there is no covert cycle of

syntactic operations; thus LF does not contain structure-building operations nor feature-licensing relations (Chomsky 2001:5). It rather ensures that uninterpretable features are licensed/valued and deleted at Spell-Out.

With respect to Case assignment/checking, there seem to be two lines of thought on the number of Case features a given DP can check (or receive). The first, dubbed Multiple Case Checking (MCC), as argued for in Bejar & Massam (1999), assumes that a given DP can receive more than one Case value. The second, dubbed the Case Freezing Condition (CFC), as argued for in Uriagereka (2008:112), states that "[a]ll other things being equal, Case checking effected on X stops further computational access to X" (for Case checking/assignment purposes). The CFC basically assumes that a DP cannot receive more than one Case value, after which it becomes 'inactive' as far as Case checking is concerned (which is much in agreement with Chomsky 2001). In other words, while MCC assumes that a DP must/could be licensed into every position it occupies in the derivation (hence multiple Case values), the CFC assumes that it just needs to be licensed into the derivation, which takes place only once (regardless of the number of positions it ends up occupying in the derivation). In this regard, I assume the CFC, which seems more plausible given the finding that SA does not exhibit A-movement (Soltan 2007), which indicates that the DP will remain in the scope of one Case assigner, and so will realize only one Case value.

1.2.2. Merge

The operation 'Merge' is the implementation of the notion that (the faculty of) language has a recursive system. Merge "takes two syntactic objects α and β and forms the new object $\Upsilon = \{\alpha, \beta\}$" out of them (Chomsky 2001:3). The motivation for the costless operation 'Merge' comes from the need to build (words,) phrases, and clauses. For simplicity, I will assume that the element which eventually projects the label of the set or combination (Υ) is the head (since heads choose or are specified for specifiers and complements, not vice versa). In this regard, I follow Hornstein et al. (2005:202) who state that "the head projects [because] it's the head that has the

information that it requires a Spec or a complement or is compatible with specific kinds of modifiers – and not the opposite".[14]

Merge has two variants, External Merge (E-Merge) and Internal Merge (I-Merge). While the former refers to picking up an element (X^0 or XP) from the numeration and combining it with another one in the structure, the latter refers to 'Move', that is, displacement. Chomsky (1995) argues that E-Merge is free whereas I-Merge is costly; this is because I-Merge, which amounts to 'Move', is more complicated than E-Merge since it involves Copy as well as Merge (assuming the Copy Theory of Movement, Chomsky 1993). However, Chomsky (2001) suggests that both operations are equally free. However, as Soltan (2007:13-14) points out, the fact that there are languages which exhibit no A-movement, like SA, indicates that I-Merge is perhaps less free than E-Merge. Thus the proposed system witnesses I-Merge only for A-bar movement as well as verb movement. Since this thesis is not on movement in SA, I will not get into the debate of whether verb movement occurs in the narrow syntax or at PF; see Chomsky (2001:37-38), Boeckx & Stjepanović (2001), Parrott (2001), Matushansky (2006), and Soltan (2007:174-177) for an overview of the relevant issues.

So conceived, Merge is subject to four conditions, the Extension Condition, the Inclusiveness Condition, the No-Tampering Condition, and a Locality Condition. The first states that Merge can only target the edge of the syntactic object, which means that structures are built bottom-up, with no possibility of merging in a lower position. The second states that "no new objects are *added* in the course of the computation apart from rearrangement of lexical properties" (Chomsky 1995:228). In other words, it bans the introduction into the derivation of elements or features that are not available in the numeration. The third states that "Merge [of X and Y] cannot break up X or Y, or add new features to them" (Chomsky 2001:6); this means that once

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[14] It is worth emphasizing that this approach is just one of various hypotheses on the issue of labeling, and since none of the proposals in this thesis is contingent on a specific approach to labeling of merged elements, I will not get into the debate; see Chomsky (2000, 2005), Boeckx (2002), Adger (2003:73), Collins (2002), Cecchetto (2006), and Donati (2006) for a discussion of the relevant issues.

merged, a Lexical Item (LI) cannot gain or even lose a feature, for example. The fourth is "defined by least embedding, "closest" under c-command" (Chomsky 2004:109).

1.2.3. Agree

The relation 'Agree' was proposed in Chomsky (2001) as a means for licensing uninterpretable features, such as agreement and Case features.[15] This is because (unlike interpretable features) such features acquire their values in the derivation. Thus the motivation for Agree as a feature checking operation is to license and delete such features in the narrow syntax so as to abide by the principle of Full Interpretation (Chomsky 2004). Agree results in valuing the uninterpretable features for PF reasons, and at the same time deleting these uninterpretable features for LF purposes; thus Agree is necessary for legibility at LF as well as PF.

The operation Agree creates a relation (under non-distinctness) between an uninterpretable feature on some element and the matching interpretable feature on another element. This relation results in matching the two features and valuing the uninterpretable one.[16] The element that has the uninterpretable feature is called 'Probe'; the one with the interpretable variant is called 'Goal'. This operation can either be a head-head relation or a head-DP relation (Chomsky 2001, Baker & Willie 2008, among others).[17] According to Chomsky's conception of Agree, the probe must c-command the goal; that is, the probe searches in its c-command domain for a possible goal. One main reason for this conception of how the probe and the goal must be situated in relation to one another is Chomsky's proposal that structural Case is checked on the DP (subject

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[15] As such, Agree, which assumes a c-command relation, is the successor of the Spec-head configuration which was the standard checking relation from the late 1980s to the late 1990s, itself is the successor of the (early) 1980s government relation (for Acc Case). For a recent defense of the Spec-head relation as an agreement configuration, see Koopman (2006). For a proposal that eliminates the Spec-head relation from the set of syntactic relations available to UG, see Hallman (2002, 2004).

[16] In systems like Schütze (1997) and Chomsky (2001), Case is not valued under match, since they argue that functional heads have no [Case] features. Thus [Case] on nouns is valued as a reflex of match between the ϕ-features on the functional heads and those on the relevant DPs.

[17] Under systems where non-DP arguments receive Case, such as Uriagereka (2006, 2008) among others, Agree could also take place between a head and a CP.

in Spec, v*P, and object in complement to V^0 position) as a reflex of valuing the ϕ-features on the Case checking head, I^0 and $v*^0$, respectively. This state of affairs naturally results in I^0 and $v*^0$ always probing downward (in their c-command domain), looking for a goal to value their ϕ-features, with Case checking obtaining as a by-product. However, with a novel theory of Case checking where I^0 and $v*^0$ have independent [Case] features ([VC] in the proposed system) which are valued on these heads by Fin^0, now the DPs (subject in Spec, v*P, and object in complement to V^0 position), which have unvalued [Case] features, are forced to probe upward to get their [Case] features valued by those on the I^0 and $v*^0$ heads. This approach is especially tenable if we assumed with Bobaljik (2006) that agreement is a morphological, not a syntactic, process. Therefore, the goal may c-commands the probe. This reasoning is in line with Rezac (2004) where it is shown that the search space of the probe can also expand upward; for him, the "search-space is […] the entire syntactic object in which a probe finds itself" (p. 107). Also, Baker (2007:1) states that "[i]n general, a functional head can search upward or downward through the syntactic tree in order to find a DP/NP that it can agree with". This conception of how the probe and goal can be situated in relation to one another indicates that either one could c-command the other. In this thesis, I assume that either element (probe or goal) may c-command the other.

Crucial to Agree, both the probe and the goal must be 'active' in the sense that the relevant feature on both of them is not licensed. Thus if the ϕ-features on I^0 are valued (as a result of an Agree relation with some DP), then I^0 will be 'inactive' for Agree; that is, it will not probe to get its ϕ-features (re)valued. In other words, for a probe to enter an Agree relation with a certain goal, no other potential goal might intervene.

One virtue of the Agree relation is that it accounts for formal feature checking in VSO as well as SVO languages (without having to induce notions like government and m-command) since it allows I^0 to enter an Agree relation with the subject while it is in Spec, v*P. Another virtue is that now feature checking might take place without movement, which accounts for feature checking in a language like SA which does not make use of A-movement.

With regard to feature interpretability and valuation, I follow Pesetsky & Torrego (2007) in assuming that since narrow syntax cannot inspect interpretability, which is an LF property, it can only inspect valuation, and so I will make reference to valuation, but not interpretability. Thus features could be either valued or unvalued. Therefore, I assume that the [VC] features on I^0 and $v*^0$ are unvalued and so can probe, where the goal is the valued [VC] on Fin^0. Similarly, the [Case] features of the subject and object are unvalued and so can probe, where the goals are the now valued [VC] features of I^0 and $v*^0$, respectively. The MP is relevant to every aspect of this thesis, especially its feature licensing operation, Agree, which I propose can even replace Chomsky's recent notion of 'feature inheritance'.

Since Chomsky (2005) uses 'Agree' to refer to agreement in terms of ϕ-features, it should be made clear that the concept of 'Agree' used in this thesis makes no reference to ϕ-features. Thus 'Agree' for me is a relation or link between a probe and a goal which results in valuing virtually any feature on the probe and the goal, not just ϕ-features; these include [T], [Mood], and [VC].

After discussing the various developments that Case theory witnessed as well as the theoretical primitives that this thesis assumes, the next chapter will present a number of arguments against the views that structural Case in SA is licensed as a reflex of valuing ϕ-features on $I^0/v*^0$, or as a reflex of valuing a [uT] feature on D^0. This presentation will pave the way for the introduction of the SA verbal and morphosyntactic properties most relevant to the topic of this thesis in chapter 3, and then the proposed theory of Case in chapter 4.

2. Agreement and Tense do not License Structural Case in SA

This chapter will first present a review of some of the research that attempted to investigate the formal features involved in licensing structural Case, crosslinguistically and in SA. It will then present a number of arguments against the views that structural Case is licensed as a reflex of agreement (Schütze 1997, Chomsky 2001, and Soltan 2007) or by tense (Pesetsky & Torrego 2001, 2004).

2.1. Background

Since this thesis is concerned with the formal feature(s) involved in the licensing of structural Case in SA, it is, I think, a good idea to start by reviewing some of the research aimed at uncovering the formal features involved in the licensing of Case crosslinguistically; this will be followed by a presentation of the previous attempts to account for structural Case checking/assignment in SA.

2.1.1. Background on Case Licensing Crosslinguistically

As we have seen in chapter 1, research on Case in GB did not make much reference to features; Nom is licensed by a combination of agreement and tense, and Acc by V^0 (under government) and later $Agro^0$ (under agreement). Since features are a major contribution of MP, this section will review research conducted in MP. In what follows, I will present some findings on what features license structural Case.

Schütze (1997), in a crosslinguistic survey of Case and agreement facts (that aimed at providing a universal account of structural Case licensing) argued that Case and agreement are two sides of one coin. With Case data from Icelandic, Hindi, Portuguese, Modern Greek, Belfast English, and Standard English, Schütze argues that subject Case is licensed by the same operation that values ϕ-features on the relevant functional head. Also, with data from Italian, Inuit, and Choctaw, he showed that object Case and agreement go hand in hand. Thus Schütze (1997:100) argues that "a

single syntactic relationship, Accord (defined […] as combined phi-feature and case checking) underlies both structural case features on DP and agreement features on V/INFL". With regard to the relationship between tense and agreement (and Case), he states that "[t]here is no simple requirement that agreement be present when tense is present or vice versa" (p. 13).[18]

In addition, Richardson (2007:31-32) states that the licensing of Nom Case in the Slavic languages is linked to the ϕ-features ([Gender], [Number], and [Person]) of I^0. Moreover, on the basis of facts from Lummi (an ergative split person language) and Passamaquoddy (an inverse language), Alexiadou & Anagnostopoulou (2006:41) provide evidence that "Case checking in split and inverse systems is guided by the presence/absence of specific *phi-features*", which, they state, argues for a close connection between Case checking and ϕ-feature valuation.

In response to Schütze's proposal that Case checking/assignment is a reflex of ϕ-agreement, Bejar (2003:178-179) states that the set of languages that Schütze examined to provide evidence for his theory was broad only in the sense of being from different language families, but was narrow given the fact that all the languages he investigated were of the non-Context Sensitive Agreement (CSA) type; CSA makes reference to agreement facts from languages like Nishnaabemwin and Georgian in which the controller of agreement on the verb shifts between the subject and object, thus where the "choice depends crucially on ϕ-properties of other arguments in the agreement domain" (p. 4). If, however, a broader (in terms of CSA/non-CSA) set of languages is considered, "the necessary conclusion seems to be that the relation between Case assignment and Agree [agreement] is not straightforward. The anticipated isomorphy between CSA effects in agreement and Case patterns simply does not arise" (p. 178-179).

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[18] However, I think that if Case and agreement go hand in hand, as Schütze argues, and tense does not have to co-exist with agreement, as he seems to suggest, then this would predict that Case (via agreement) may obtain where tense is not necessary/available.

Moreover, Case findings from other languages point to dissociation between Case and agreement. For example, Carstens (2005:219) argues that "nominative Case-checking is independent of both agreement and EPP in Bantu". Furthermore, Baker (2007:1) argues that in most Niger-Congo languages, agreement between a functional head and a DP/NP does not result in valuing the [Case] feature of the latter. In addition, Niuean has no φ-agreement morphology (Haji-Abdolhosseini et al. 2002) though it has a robust Case system (Seiter 1980). Also, Preminger (2009:22) provides evidence from Hebrew that "a theory claiming that Case is dependent on φ-agreement is untenable". Moreover, Agbayani & Shekar (2007:8) argue that "tense/agreement, though morphologically rich in [Kannada] is syntactically *inert* in that it does not license case". Furthermore, Uchibori (2000:184) argues that in Japanese the "uninterpretable Case feature is checked between T and its subject quite independently of φ-feature checking"; she also assumes that "not only NP/DP but also T has uninterpretable Case feature". These findings thus indicate that Schütze's (1997) (and Chomsky's 2001, and subsequent work) proposal cannot be extended to these languages.

In addition to agreement, Pesetsky & Torrego (2001) propose that Nom Case is an uninterpretable tense feature [uT] on the DP. This [uT] is valued by an [iT] feature on the Case checking head. To make this claim, the authors reanalyzed long puzzling English data, like *that*-trace effect and instances of T-to-C movement in wh-questions. Basically, their point was that a [uT] in a specific domain can be satisfied either by a tense-carrying verb (with [iT]), or by a Nom-marked DP (with [iT], after Nom is checked), and so Nom Case is equal to tense. Though cast in a quest for minimalism, Pesetsky & Torrego's hypothesis is similar to much of the GB approach to Case, like Chomsky (1980), where it was suggested that tense is the defining property of finiteness, which is responsible for Nom Case assignment. In later work, Pesetsky & Torrego extended this proposal to all structural Cases. Along similar lines, Uchibori (2000:184-185) suggests that "Case need not be intrinsically valued for NP/DP and for T, but is determined by T's interpretable *tense* feature"; that is, she seems to propose that the feature relevant for Case checking in Japanese is tense.

Besides agreement and tense, mood (as well as modality) was also proposed to license Case. To illustrate, Aygen (2002), who argues for "the disassociation of Case and Agreement features in case licensing" (p. 9), proposes that "the feature licensing nominative subject case in finite clauses [in] Turkish is a complex feature consisting of mood on Complementizer head and epistemic modality on Finiteness head" (p. 8). This proposal, argues Aygen, can be extended to other Turkic languages, like Tuvan and Kazakh, as well as to languages like English, Catalan, European Portuguese, Japanese, and Italian.

In addition to agreement, tense, and mood, Richardson (2007:50-51) argues that the licensing of Acc Case in Belarusian, Russian, Ukrainian, Czech, Slovak, Polish, and Bosnian/Croatian/Serbian is linked to the lexical aspect of the verb. Richardson proposes that "object phi-features should be eliminated from the syntax of accusative Case valuing in most of the Slavic languages" (p. 50), thus against proposals by Harves (2002, 2006), Lavine & Freiden (2002) and Richards (2005). She also shows that other Case licensing patterns are linked to grammatical aspect. Aspect was also found to be linked to the licensing of Case in Finnish (Itkonen 1976, Kiparsky 1998, Kratzer 2004), in Classical Greek, Latin, and Hebrew (Arad 1998), in Bengali and Scottish Gaelic (Ramchand 1997), and in Spanish (Torrego 1998). Moreover, Svenonius (2001:1, 2002b) argues that "structural case is the manifestation on the noun phrase of features which are semantically interpretable only on verbal projections […] case is properly seen as reflecting (interpretable) tense and aspect features". Along the same lines, Svenonius (2002a:1) argues that "Icelandic VP-case [is] determined by interpretable features of Inner Aspect or Aktionsart". These positions further support a relation between Acc Case and aspect.

Besides agreement, tense, mood, and aspect, Ritter & Wiltschko (to appear) argue that nominals in two indigenous American languages are licensed by categories like 'location' and 'person'. As a background, Ritter & Wiltschko (2004, 2005) argue that Halkomelem (Salish) and Blackfoot (Algonquian) lack tense as a syntactic category. They argue that event anchoring proceeds spatially via location in Halkomelem, and personally via discourse participants in Blackfoot; thus [Location] and [Person] are the syntactic categories that replace [Tense] in these two languages.

Based on these findings, Ritter & Wiltschko (to appear:1) "conclude that each of these languages appears to use different functional categories (LOCATION and PERSON, respectively), but that these categories can be analyzed as instantiating the same universal category as TENSE, namely INFL". In other words, [Location] and [Person] substantiate INFL in these languages in the same way [Tense] substantiates INFL in English, for example.

As opposed to aspect, location, and person, I think that tense, mood, and agreement are better candidates for taking part in licensing structural Case in SA. As we will see in chapters 4 and 5 of this thesis, these three elements have a role in structural Case licensing in SA, though neither one of them is the element that licenses Case. In other words, each one of these elements is going to be shown to take part in licensing the feature responsible for licensing structural Case (in different clause types).[19]

2.1.2. Background on Case Licensing in Standard Arabic

In Government and Binding (GB) (Chomsky 1981, and subsequent work), Nom Case in SA was assumed to be assigned by tensed I^0 under agreement; Acc Case was assumed to be assigned by V^0 under government. Thus, while agreement was the driving force for Nom Case assignment, tense was also recognized as an important factor. Within GB, Case assignment as driven by agreement was proposed in George & Kornfilt (1981) and Chomsky (1981), among others. Crucial to the conception of Case assignment in GB was also the notion of government. Below, I will review how different authors accounted for Case checking/assignment facts in SA. At the end of this section, I will review the latest analysis of the SA morphosyntax (Soltan 2007), where it is explicitly stated that Case facts can be accounted for in terms of ϕ-agreement, and that the

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[19] Given my claim that none of these formal features (agreement, tense, mood, aspect, person, location) is responsible for structural Case checking/assignment in SA, and that (as will be presented and formalized in chapter 4) Case in SA is licensed by Verbal Case (VC) as a formal feature [VC], the question becomes whether this new theory can be extended to other languages, or whether it is a peculiarity of SA. Since answering this question requires investigating Case (nominal and verbal) facts in many languages, it obviously goes beyond the scope of this thesis. However, in chapter 6, I will make the attempt to extend this theory of Case to English, assuming insights from Ross (1970) and Fabb (1984).

Case assigning heads should *not* have [Case] features. This position is the opposite of what I argue in this thesis.[20]

First, in their discussion of the subject-verb agreement facts in the two word orders of SA, SVO and VSO, as shown in (1-2) respectively, Aoun et al. (1994:204), following Chomsky (1991, 1993) and Sportiche (1990), suggest that structural Nom Case in SA is always assigned when the subject is in a Spec-head relation with I^0.

1. ʔal-ʔawlaad-u   katab-uu-Ø   r-risaala-t-a

   the-boys-Nom   Pst.write.3-m**p**-Ind   the-letter-f-Acc

   'the boys wrote the letter'

2. kataba-Ø   l-ʔawlaad-u   r-risaala-t-a

   Pst.write.3**s**m-Ind   the-boys-Nom   the-letter-f-Acc

   'the boys wrote the letter'

In other words, in both orders, the subject DP is in Spec, IP. To account for the facts that the verb precedes the subject and also does not fully agree with it in the VSO order (in (2)), they argue that the verb moves to a higher-than-I^0 head, which they call F^0; this state of affairs derives the VSO order. The fact that subject-verb agreement is partially lost in the VSO order, argue Aoun et al., is a consequence of the proposed verb movement from I^0 to F^0. Basically, they assume that Case is assigned as a result of agreement between the relevant heads and the DPs in their Spec, positions. In this regard, they state that "Case for a specifier is then similar to agreement for a head" (p. 204).

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[20] A full critique of the proposals reviewed in this section is beyond the scope of this thesis.

Second, Ouhalla (1994:48) claims that "both preverbal and postverbal nominative subjects in Arabic [as shown in (1-2) respectively] are assigned Case by a (language-specific) default mechanism rather than by a Case-governor". The reason for this, argues Ouhalla, is that "neither of the two positions which the subject occupies at S-structure (Spec of TP and Spec of VP) [given his TP-AgrsP-VP system] is Case-governed". The evidence that he provides for this claim comes from two facts. The first is the fact that preverbal DPs (in the SVO order), as in (1), and topics of verbless sentences, as in (3), realize Acc Case rather than Nom when preceded by 'ʔinna', as (4-5) respectively show.

3. ʔal-walad-**u**   mariiD-**un**

   the-boy-**Nom**   sick-**Nom**

   'the boy is sick'

4. ʔinna   l-walad-**a**   kataba-Ø   r-risaala-t-a

   Comp   the-boy-**Acc**   Pst.write.3sm-Ind   the-letter-f-Acc

   'certainly, the boy wrote the letter'

5. ʔinna   l-walad-**a**   mariiD-un

   Comp   the-boy-**Acc**   sick-Nom

   'certainly, the boy is sick'

The second is the fact that the predicate of copular sentences realizes Acc Case in the presence of the copula/Case assigner, as (6) shows, as compared to Nom Case in the absence of the copula, as shown in (3).

6. kaana-Ø   ʔal-walad-u   mariiD-**an**

   Pst.be.3sm-Ind   the-boy-Nom   sick-**Acc**

‘the boy was sick’

Ouhalla also states that although preverbal subjects agree with $Agrs^0$, they do not receive structural Nom from it. However, Ouhalla did not provide evidence for his claim that even post-verbal subjects receive Nom by default. With regard to Acc Case, Ouhalla (1994:52) proposes that "structural accusative is assigned under Spec-head agreement with an Agr_o category situated above VP".

Third, Ouhalla (2005:681) suggests that if [Case] on the DP is matched with a nominal feature, then it is a nominal feature, but if [Case] is matched with a verbal feature, then it is a verbal feature. Given his proposal that the licensing of Case (to nominals) results from the matching of [Case] on the DP with certain verbal features of finite I^0 and the verb, such that Nom Case results from matching [Case] with the [T] of I^0, and Acc results from matching [Case] with the aspectual (transitivity-related) feature of V^0, then Case, suggests Ouhalla, is a verbal feature. To illustrate his proposal (of Case assignment as feature matching) and argue for it, Ouhalla discusses SA verbless and copular sentences, shown in (3) and (6), respectively. The reason why the predicate of verbless sentences appears with Nom case, argues Ouhalla, is that the absence of the copular verb prevents the matching between the [Case] feature of the predicate and the aspectual feature of V^0, a situation that results in matching the [Case] feature of the predicate with the [T] feature of I^0. This reasoning, argues Ouhalla, is supported by the fact that in past (and future) tense counterparts of verbless sentences (so-called copular sentences) the predicate appears with Acc case (resulting from matching the [Case] feature of the predicate with the aspectual feature of V^0). Though it seems attractive, Ouhalla's analysis is challenged by his assumption that "Aspect [on the copular verb] now has properties similar to those associated with the category Tr(ansitivity) in Bowers (2002)" (p. 681), since, for Bowers (2002:183), "Tr may contain a probe with (object) φ-features and assign accusative Case". In other words, Bowers's [Tr] category of V^0 is better linked to the Acc Case assigned to objects, rather than the Acc case that appears on nominal and adjectival predicates. On the other hand, the Small Clause (SC) analysis of verbless and copular sentences (to be developed in section 3.3.4) as well as the theory of Case developed in chapter 4, suggests that the Acc case received by the (nominal/adjectival) predicate is lexical

Acc assigned by the verb (a lexical element), whereas the Acc Case received by the object is structural Acc licensed by $v*^0$. This way, there is a difference between object argumental structural Acc and lexical Acc, since only the former is relevant for LF visibility (given the standard assumption that predicates do not receive θ-roles, which indicates that predicates may not have [Case] features, contra Ouhalla 2005).

Fourth, Benmamoun (1999:110) uses data from SA and Moroccan Arabic (MA) to argue that "Case is checked exclusively in a Spec-head configuration [(Chomsky 1995)] … and that the Case module interfaces with PF [(Vergnaud 1982)]". In other words, his goal is to show that even in a VSO sentence (like (2)) in Arabic the subject checks its Nom Case when it is in a Spec-head configuration with I^0, and crucially overtly; he is thus arguing against the position that in VSO sentences, the subject raises to Spec, IP at LF to get its Nom Case checked. Regardless of the particulars of Benmamoun's analysis, the relevant issue here is that he assumes that Nom Case assignment results from agreement between the Case assigning head and the nominal in its specifier position (p. 117). In a successful attempt to show that verbless sentences (like (3)) in SA have a tense category, Benmamoun (2000:40-41, 2008:106-110) argues that the fact that the topic (or subject for him) of the verbless sentence surfaces with Nom Case suggests that there is tense in verbless sentences (hence a TP). He thus suggests that Nom Case is assigned by the [T] feature, under agreement with the topic/subject. While I agree with him that verbless sentences have a tense category, I disagree that it is the source of the Nom Case on the topic/subject.

Finally, Soltan (2007:16-17) argues that Case is not a probing feature on the Case checking/assigning heads. To illustrate, he proposes that "Case [in SA] is not valued under Match with a Goal. Rather, it is assumed to be a by-product of φ-agreement, i.e., Agree with T results in nominative case assigned to the Goal [subject], whereas Agree with $v*$ results in accusative case assigned to the Goal [object]". He provides three reasons for why Case must *not* be a probing feature. First, he argues that the assumption that Case checking categories have no [Case] feature "prevents probing "upward," which is problematic if allowed, since the Goal would c-command the Probe in that case". Soltan (2007) assumes with Chomsky (2000, 2001) that the probe must c-command the goal. However, given the discussion in section 1.2.3, I will

argue that the probe is the DP and the goal is the head ($I^0/v*^0$) since it is always the DP (subject in Spec, v*P, and object in complement to V^0 position) that seeks to get its [Case] feature valued. Thus I suggest that the goal may c-command the probe.[21] In this regard, I agree with Rezac (2004:3) who proposes that the "search-space [of the probe] can also expand upward"; that is, the search-space should be viewed as dynamic. A similar position is also advocated in Baker (2007). Thus this conception of how the probe and goal can be situated in relation to one another indicates that either one could c-command the other. Second, if Case is a feature on probes, I^0 and $v*^0$, some grammatical structures are predicted to crash since sometimes there is no DP argument to license the Case feature on those probes; instead, one sees a PP or a CP, which both cannot receive Case. Since this issue is more complicated than can be handled here, I will just say that there are many systems where Case assignment to CPs (then called S's) was investigated and allowed in some, like TAG's theory (Siibawayhi 8th century, and subsequent work), Stowell (1981), Safir (1982), Levin & Massam (1985), Massam (1985), Kitagawa (1985), Plann (1986), Raposo (1987), Tsai (1995), Boskovic (1995, 2002), Picallo (2002), Lee (2005), and Uriagereka (2006, 2008). Also, I believe that the fact that PPs and CPs cannot realize Case morphologically should not mean that they cannot be assigned Case, given the assumption that Case is necessary for visibility at LF (Aoun 1979). Thus if argumental DPs can be assigned Case, there should be no reason why argumental PPs and CPs cannot be assigned Case. In chapter 5, I will argue that CPs in SA complement/embedded clauses and PPs in some passive constructions in fact receive structural Case. Third, Soltan states that verbs do not carry Case morphology, but carry φ-features morphology, and so Case is licensed on the DP by the φ-features on $I^0/v*^0$, but not by a primitive [Case] feature on those heads. In the appendix, I will show that this statement is not correct.[22] Thus the three objections of Soltan (2007) are not valid. Another difference between the proposed analysis and Soltan's with respect to Case checking/assignment is that while he

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[21] Perhaps a better approach to probing is one where the probes are the unvalued features, rather than the categories (X^0 or XP); I will leave this here.

[22] With a novel account of the SA imperfective paradigm, I will show that the indicative morphological verbal case (m-vc) suffixes are identical to the Nom morphological case (m-case) suffixes, and that the subjunctive m-vc suffixes are identical to the Acc m-case suffixes, but only when the former are marked overtly. When the subjunctive m-vc suffixes are marked with null suffixes, the Acc m-case suffixes are identical to the Genitive (Gen) m-case morphology. This approach might prove fruitful for explaining the Acc m-case syncretism in SA.

assumes that I^0 is the locus of Nom Case assignment (p. 73), I argue that C^0/Fin^0 is the locus of structural Case checking/assignment.[23]

To sum up, almost all the previous accounts of Case checking/assignment in SA assumed that structural Case is licensed in a Spec-head configuration, and that it is licensed as a result of agreement between the Case assigning head and the DP in its Spec, position; pre-minimalist accounts assumed that Acc is assigned to the object by the verb under government. As for the first issue, it is noteworthy that Soltan (2007:36-45) presented good arguments against the GB/early MP predominant view that Case in SA must be licensed in a Spec-head configuration; I agree with him. In addition, in a rather theoretical discussion of the relation between selection and feature checking, Hallman (2002:1) proposes that selection is the only licensing procedure that UG needs, and that feature checking is just an instance of selection. This, argues Hallman, "effectively eliminates the spec-head relation from the repertoire of syntactic relations" (p. 1). As for the second issue, the next section will present arguments against the view that Case in SA is licensed as a result of subject-verb agreement, or in more minimalist terms, as a reflex of ϕ-feature valuation on I^0 and v^{*0}. It also argues against tense being the feature that licenses Case.

2.2. Structural Case Licensing in the Absence of Agreement and Tense

2.2.1. Case Licensing in the Absence of Agreement

This section capitalizes on Chomsky's (2001) claims that a ϕ-incomplete I^0 counts as a ϕ-defective probe, and that a ϕ-defective probe cannot license Case to the goal (p. 7). He writes, "α [probe] must have a complete set of ϕ-features (it must be ϕ-*complete*) to delete uninterpretable features of the paired matching element β [goal]" (p. 6). Chomsky's claim that a ϕ-defective probe cannot value [Case] on the goal is based on facts from English raising and ECM

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[23] We will see in chapter 4 that Chomsky (2005, 2006) proposes that the locus of Nom Case assignment is C^0; a similar account is proposed in Tanaka (2005). Also, Aygen (2002) argues that Nom Case is licensed by a complex feature consisting of two features: one on C^0 and the other on Fin^0, thus both in Comp.

constructions where the infinitival (embedded) I^0 cannot value [Case] on the subject, since it only has a [Person] feature, thus counting as a φ-defective probe. He also discusses "participle-object constructions, which may manifest partial φ-feature agreement but without Case assignment to the object, the participle being defective" (p. 7).[24] What is relevant here is Chomsky's claim that the valuation of [Case] is *not* possible in the presence of a φ-defective probe. In the next three sections, I will show that [Case] in SA is valued on the subject and object despite the fact that the relevant probes are φ-defective, thus suggesting dissociation between [Case] and [φ]. In other words, I will use verbal morphology to show that when a SA sentence has a lexical DP subject, for example, which refers to the VSO order, I^0 is always φ-defective (since it is always φ-incomplete).

Given the fact that many languages have impoverished or partial verbal φ-morphology, thus suggesting φ-incomplete/-defective $I^0/v*^0$, Chomsky's claim that a φ-incomplete X^0 cannot value [Case] seems (extreme and) controversial since it suggests dissociation between [φ] and [Case]. However, Chomsky's proposal, which attributes some syntactic inertness to φ-incomplete probes, is consistent with Platzack's (2003) observation (itself based on his proposal that agreement in SA is pronominal) that a φ-incomplete [Agr] category on I^0 does *not* constitute a pronoun, since its φ-specification is not rich enough to license a pronoun (as will be discussed in section 2.2.1.3). In addition, though I think that it is not unreasonable to assume that the probes of a language with *no* φ-morphology could be φ-complete (since agreement inflection is absent elsewhere in the language), I believe that it is implausible to assume that the probes of a language with partial or full φ-morphology are φ-complete when they are not (as revealed by verbal inflectional morphology) simply because they are φ-complete some where else in the language. In other words, if a certain φ-feature, say [Number], is instantiated in the verbal morphology of some language, then its absence in some verbal forms must indicate φ-incompleteness, thus φ-defectivity. The discussion in the next section will clarify this criterion.

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[24] In chapter 5, we will see that SA participles are different from their English counterparts in that they can value Case on the object, thus having different characteristics from the English ones.

2.2.1.1. Subject/Object-Verb Agreement Facts

This section uses some basic SA agreement facts to argue against the claim that Case is licensed by agreement (Schütze 1997, Chomsky 2001, among others). The assumption that Nom Case in SA is licensed as a reflex of ϕ-feature valuation on I^0 (Soltan 2007) is immediately challenged by one basic fact. To illustrate, the verb does not fully agree with the subject, as shown by (7-8).

7. qaraʔa-Ø   l-mudarris-uun   l-kitaab-a

   Pst.read.3**s**m-Ind   the-teacher.m-**p**.Nom   the-book-Acc

   'the teachers read the book'

8. qaraʔa-t-Ø   l-mudarris-aa-t-u   l-kitaab-a

   Pst.read.3**s**-f-Ind   the-teacher.**p**-f.Nom   the-book-Acc

   'the female teachers read the book'

The sentences (7-8) show that although the verb may agree with the subject in terms of [Person] and [Gender], it does *not* agree with it in [Number], thus I^0 is ϕ-defective. In fact, the verb in SA is *not* allowed to fully agree with the subject, as (9-10) show. This basic fact provides the strongest argument against associating Case with agreement, since if this approach (of Case licensing) were on the right track, sentences like (9-10) would have been the best to support it.

9. *qaraʔa-uu-Ø   l-mudarris-uun   l-kitaab-a

    Pst.read.3-m**p**-Ind   the-teacher.m-**p**.Nom   the-book-Acc

10. *qaraʔa-na-Ø   l-mudarris-aa-t-u   l-kitaab-a

    Pst.read.3-**p**f-Ind   the-teacher.**p**-f-Nom   the-book-Acc

Moreover, the agreement account of Case licensing is also refuted by the fact that the verb does not carry object-agreement morphology in SA, as (11-12) show; thus $v*^0$ is also ϕ-defective. The verbs and the objects in (11-12) carry the opposite gender marking.[25]

11. qaraʔa-Ø   l-mudarris-uun   r-risaal-at-a

     Pst.read.3s**m**-Ind   the-teacher.m-p.Nom   the-letter-**f**-Acc

     'the teachers read the letter'

12. qaraʔa-t-Ø   l-mudarris-aa-tn   l-kitaab-a

     Pst.read.3s**f**-Ind   the-teacher-p-f-Nom   the-book.**m**-Acc

     'the female teachers read the book'

In fact, the verb is *not* allowed to agree with the object, neither fully, as (13) shows, nor partially, as (14) shows.

13. *katab-**na**-Ø   r-rajul-u   r-rasaaʔil-a

     Pst.write.3-**pf**-Ind   the-man-Nom   the-letter.**pf**-Acc

14. *katab-**uu**-Ø   r-rajul-u   r-rasaaʔil-a

     Pst.write.3m-**p**-Ind   the-man-Nom   the-letter.**pf**-Acc

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[25] It is noteworthy that Chomsky's (1991) proposal for English (where he assumed that object agreement is present but phonetically null) cannot be extended to SA because there are contexts in SA where the verb can carry object agreement, as in (i).

     i. ʔishtaray-tu-Ø   S-SaHiifa-t-a   wa   qaraʔ-tu-Ø-**haa**

       Pst.buy-1s-Ind   the-newspaper-f-Acc   and   Pst.read-1s-Ind-it.f

       'I bought the newspaper and read it'

Thus the verb can only agree with the subject, and only in terms of [Person] and [Gender], but not [Number]. The facts illustrated by the data (7-14) refute the assumption that Case is licensed as a reflex of ϕ-feature valuation on I^0 and $v*^0$, since I^0 and $v*^0$ are both ϕ-defective in SA, and thus should not to be able to value [Case], assuming Chomsky (2001). In other words, if agreement were what licenses Case in SA, nothing should prevent verbs from carrying full subject as well as object agreement morphology, especially in a language known for its rich morphology. The fact that this is possible is shown by SVO sentences in SA, like (15), where the verb carries full agreement with the preverbal agentive DP. The difference between this preverbal DP and the post-verbal one in (7-8) is that the preverbal DP is a topic, not a subject, (Soltan 2007); more on this is in section 3.3.1.

15. ʔal-banaat-u   katab-**na**-Ø   *pro*   r-risaala-t-a

    the-girls-Nom   Pst.write.**3-pf**-Ind   ec   the-letter-f-Acc

    'the girls wrote the letter'

This state of affairs thus points to dissociating the licensing of Case from agreement, contra Schütze (1997), Chomsky (2001), and Soltan (2007).[26]

2.2.1.2. SA I^0 can be more ϕ-defective

After using some basic SA facts to argue against associating Case with agreement (in the previous section), this section uses some novel data to provide another argument that Nom Case in SA is not licensed as a reflex of ϕ-feature valuation on I^0 (Soltan 2007). Given Chomsky's (2001) account of English raising and ECM constructions where he assumes that infinitival I^0 is ϕ-defective since it only has a [Person] feature (but no [Gender] nor [Number]), and so cannot license Nom Case, we understand that having only [Person] makes

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[26] The logic assumed in this section suggests that ϕ-agreement also does not license Case is English, since I^0 and $v*^0$ are almost always ϕ-defective (since English verbs sometimes carry subject agreement and never carry object agreement). While this is in fact what I think, I will not make the claim here (since it requires more evidence).

I[0] φ-defective, and so unable to license [Case] on the DP goal. Given this reasoning, one would not expect to see Nom-marked subjects in the SA data (16-18). However, these data show that Nom Case is licensed even when the concerned probe is φ-defective, having only a [Person] feature, thus suggesting that φ-features do not license Nom Case.

To illustrate, taking verbal morphology to indicate the featural structure of I[0], the SA data in (16-18), from the Holy Qur'aan, show that the verb agrees with the subject only in [Person], yet the post-verbal subject DP surfaces with structural Nom Case.[27]

    16. "la-ya-quula-nna   THahaba   s-sayyiʔaat-**u**   ʕan-ni"   p.222

        Oath-3-say.sm.Juss-Ener   Pst.go.**3**   the-misery.**pf-Nom**   away-me

        "he would definitely say: the misery has gone away from me"

The past tense verb 'THahaba', meaning 'went', does not agree with the plural feminine DP subject since it appears with 3rd person agreement only. Thus the Nom case on the subject cannot be a reflex of φ-feature valuation. The same pattern of defective agreement is shown by the data in (17-18).

    17. "jaaʔa-kum   bayyina-t-**un**   min   rabb-i-kum"   p. 149

        Pst.come.**3**-you   proof-**f-Nom**   from   God-Gen-you

---

[27] It is noteworthy that the sentences in this section are grammatical with the verb showing gender agreement as well. The data (i-ii), from the Holy Qur'aan, are very similar except for the gender agreement on the verb.

    i. "wa   min-hum   man   Haqqa-**t**   ʕalay-hi   D-Dalaala-**t-u**"

       and   of-them   who   Pst.apply-**3f**   on-him   the-misguidance-**f**-Nom

       'and of them those who sought misguidance and deserved it'   p. 271

    ii. "fariiq-an   Haqqa   ʕalay-him   D-Dalaala-**t-u**"

       party-Acc   Pst.apply.**3**   on-them   the-misguidance-**f**-Nom

       'a party (of them) sought misguidance, and got it'   p. 153

'a proof has come to you from your Lord'

18. "ʔiThaa jaaʔa-kum l-muʔminaat-**u** muhaajiraat-in" p. 550

if Pst.come.**3**-you the-believer.**pf-Nom** migrating.**pf**-Gen

'if the female believers came to you migrating …'

The verbs in (17-18) realize only 3rd person marking/morphology, and thus have a [Person] feature. Despite this defective agreement, the plural feminine DP subjects appear with structural Nom Case. It is noteworthy that the Nom Case realized by the subjects in (16-18) is not the default case specification in SA since, by being in the scope of the verb/I^0, the subject does not qualify for default Nom case.

It is clear from these data that, since the verb does not carry [Gender] and [Number] agreement morphology, the I^0 head has only a [Person] feature, which makes it count as a φ-defective head, a state of affairs that indicates that it cannot be the source of the Nom Case on the subject. Therefore, I take this as evidence that Case licensing cannot be a reflex of φ-feature checking, and that the previous analyses of Case facts in SA are based on sheer stipulation.

2.2.1.3. More on φ-defectivity in SA

This section presents another argument that I^0 is φ-defective in the VSO order, that is, when the clause has a subject that requires structural Nom Case, thus arguing against the involvement of φ-feature valuation in the licensing of (Nom) Case in SA. This argument is based on Platzack's (2003) analysis of agreement as a θ-role bearer (affix or clitic). Platzack (2003) argues that agreement in SA, Italian, Catalan, and Spanish is pronominal, whereas it is anaphoric in German, French, and Icelandic; this distinction, based on Borer (1989), makes reference to different Binding Conditions, B and A, respectively.

As a matter of fact, Platzack's assumption that AGR is pronominal in SA is consistent with the Basran grammarians' view which maintained that AGR is an affixed (or encliticized) pronoun. This view makes reference to the Basran grammarian's incorporation analysis of pronominal agreement affixes according to which "a (phonetically realized) bound pronoun is generated in an argument position at D-structure, and later incorporated into a governor at S-structure" (Fassi Fehri 1993:96). Thus I will refer to the view that the encliticized agreement affix is a pronominal argument of the verb as the Basran/Platzack approach.

Platzack's proposal is also relevant to this thesis in terms of the positions (domain-wise) it assigns to preverbal and post-verbal (agentive) DPs, which reveals the ϕ-defectivity of I^0 in SA. To illustrate, Platzack argues that the preverbal DP (or for him, subject) in SA, for example, must be in an A-bar position. This is because if it were in an A-position, it will A-bind the pronoun (or AGR in I^0, which is ϕ-complete in the SVO order), resulting in a Principle B violation.[28]

The case of post-verbal DP subjects is a bit more complicated, however. To illustrate, there are some languages (of the agreement-as-pronominal type) where verbs realize the same agreement morphology whether the subject is preverbal or post-verbal, like Catalan, and others, like SA, where the verb realizes different agreement morphology depending on the position of the agentive DP. For the former, Platzack suggests that the post-verbal DP is in a post-verbal A-bar position (possibly a tucked-in Spec, v*P), since if it were in an A-position, the subject would be A-bound by full AGR in I^0, resulting in a Condition C violation.

As for the SA-type languages, he suggests that the post-verbal subject is in a post-verbal A-bar position. Platzack, however, provides an alternative analysis for the SA-type languages. Basically, he proposes that "the absence of number agreement [as in VSO structures in SA, illustrated by (19-20)] might prevent the agreement affix [on I^0] from binding the DP; hence

[28] Though with different goals and assumptions, Platzack's finding about preverbal DPs in SA being in an A-bar position is consistent with the Basran/Soltan approach (to be introduced in section 3.3.1).

even if the DP remains in an A-position, it may stay behind the verb" (p. 345), that is, in post-verbal position without inducing a Condition C violation.

19. kataba-Ø   l-walad-u   r-risaalat-a

    Pst.write.3**s**m-Ind   the-boy-Nom   the-letter-Acc

    'the boy wrote the letter'

20. kataba-Ø   l-ʔawlaad-u   r-risaalat-a

    Pst.write.3**s**m-Ind   the-boy**s**-Nom   the-letter-Acc

    'the boys wrote the letter'

As far as Platzack's analysis (of treating AGR in SA as pronominal) is on the right track, I would like to suggest that his alternative solution is very likely to be on the right track. In other words, the fact that SA verbs carry [Person] and [Gender], but not [Number] agreement with their subjects (in the VSO order) might be the reason why the subject, in a post-verbal A-position (as will be shown in section 3.3.1), is *not* A-bound by AGR (which, I assume, is in the A-domain), since AGR (or [φ]) is incomplete in the VSO order, and so Condition C is not violated.

This way, a φ-incomplete AGR on I^0 does *not* count as a pronoun (since it cannot A-bind an R-expression), which is supported by the fact that it does *not* license a pronoun, shown by the ungrammaticality of (21-22). Basically, (21-22) are ungrammatical because subject pronouns and lexical subjects are in complementary distribution (in the same clause), and since there is a lexical subject in the VSO order, *pro* is not licensed, regardless of whether it is affixed to the verb, (21), or free, (22).

21. *katab-na-Ø   l-banaat-u   r-risaala-t-a

    Pst.write.**3-pf**-Ind   the-girls-Nom   the-letter-f-Acc

22. *kataba-t-Ø   l-banaat-u   hunna   r-risaala-t-a

Pst.write.3s-f-Ind   the-girls-Nom   they-f   the-letter-f-Acc

This approach to the nature of ϕ-features on I^0 in SA receives support from Chomsky (2001) where it is claimed that a ϕ-incomplete I^0 is a ϕ-defective one that cannot value Case on the subject. Thus it could be argued that ϕ-incompleteness renders a category (I^0 or $v*^0$) inert as far as formal relations and syntactic operations are concerned. This means that the post-verbal DP is in an A-position, and also that I^0 is ϕ-defective in the VSO order, thus it is not responsible for the Nom Case on the subject, contra Schütze (1997), Chomsky (2001), and Soltan (2007).

2.2.2. Case Licensing in the Absence of Tense

2.2.2.1. Facts from Imperatives

This section uses data from SA imperatives to argue that structural Case can be licensed in the absence of tense, thus arguing against Pesetsky & Torrego (2001, 2004). I will argue that SA imperative clauses are tenseless, and that the imperative subject gets its [Case] feature valued via Agree with (the [VC] feature of) a $Mood^0$ head; the object gets its [Case] feature checked by (the [VC] feature of) $v*^0$. Thus imperative clauses have a MoodP, rather than a TP.

The first argument that SA imperative clauses are tenseless is based on the fact that the imperative verb has no tense morphology. The positive imperative verb form is derived from the jussive form (Wright 1967:61), which encodes no tense morphology, by replacing the person prefix with the imperative (Impr) morpheme 'ʔV-', as the rule in (23) shows.[29]

     23. Jussive: ta-ktub-Ø

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[29] The derivational rule is presented in descriptive terms, with no claims for the relevant theoretical issues. It is noteworthy that Benmamoun (1995:157) argues that "the indicative is the underlying form for the derivation of the imperative form". I disagree with him since deriving the imperative from the jussive form saves the computational system the implementation of the rule that truncates the indicative marker, 'ta-ktub-**u**'. Wright (1967:61) also assumes that the imperative form is derived from the jussive.

2-write-Juss

Deletion of the 2nd person prefix: ktub-Ø

Prefixation of the Impr morpheme: ʔV-ktub-Ø [30]

Impr.2-write-Juss

Second, the negative imperative verb form is identical to the jussive form; the [Impr] feature is encoded on the negative particle, called prohibitive 'laa'. As table 1 shows, the verb forms realize no tense morphology.

Table 1

Jussive	Positive Imperative	Negative Imperative
ta-ktub-Ø	ʔu-ktub-Ø	laa ta-ktub-Ø
2-write-Juss	Impr.2-write-Juss	Neg.Impr 2-write-Juss

The second argument is based on the observation that SA imperative verbs lack tense semantically. First, assuming with Wright (1967) that the imperative verb form is derived from the jussive verb form, and given the claim that the jussive form is tenseless, as supported by (24-27), it becomes clear that the imperative form is also tenseless.

24. lam   ya-njaH-Ø   l-walad-u

    Neg.**Pst**   Impf-pass.3sm-**Juss**   the-boy-Nom

    'the boy did not pass'

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[30] This V (vowel) can be either /u/ or /i/, depending on the vowel in the verb root, as follows:

  i. it is /u/ if the vowel in the verb root is /u/, like 'ʔ**u**-kt**u**b', 'write!'.

  ii. it is /i/ elsewhere, like 'ʔ**i**-Hm**i**l', 'carry!', and 'ʔ**i**-dfaʕ', 'pay!'.

This analysis makes reference to the fact that SA has only three vowels, /a/, /u/, and /i/ (plus their long forms, /aa/, /uu/, and /ii/, respectively).

25. ʔin   tu-THaakir-Ø   ta-njaH-Ø

     if   2-study.sm-**Juss**   2-pass.sm-**Juss**

     'if you study, you pass'

26. mahmaa   ta-zraʕ-Ø   ta-HSud-Ø

     whatever   2-plant.sm-**Juss**   2-harvest.sm-**Juss**

     'whatever you plant, you harvest'

27. mataa   tu-THaakir-Ø   ta-njaH-Ø

     when   2-study.sm-**Juss**   2-pass.sm-**Juss**

     'when you study, you pass'

In other words, by occurring in past tense negative sentences, where tense is encoded on the negative particle, as well as in conditional sentences which are not anchored to a specific time frame, the jussive form proves to be devoid of tense. Second, SA imperative verbs lack tense semantics because they do not display the basic tense distinctions (past vs. non-past), as do their tensed counterparts, a finding of Zhang's (1990) survey of 46 languages from 13 language families. This thus shows that the temporal interpretation (or tense) that imperative clauses convey is not encoded in the verb (hence the lack of a T^0 in the clause), but rather a contribution of the clausal mood that the verb takes part in. Support for the assumption that SA imperative clauses lack tense (and so a TP) comes from the fact that the only temporal interpretation they convey is 'future orientation', a property that is readily supplied by the illocutionary force of the imperative and encoded in the mood of the clause, which is 'the command', since commands are not issued for the past.[31] In other words, the future orientation of imperatives is a logical

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[31] In this thesis, I assume that if the Infl domain of a clause has a [T] feature, then this feature instantiates a T^0, which projects a TP, as in SA main clauses. However, if the Infl domain has a [Mood] feature, then a $Mood^0$ is

interpretation provided by the function of the command, rather than by any tense specification inherent in the imperative verb (or clause).

Thus I will assume that the relevant illocutionary force is provided by the special imperative morpheme on the verb, or on the negative particle in negative imperatives, which provides the [Impr] feature. This view of the temporal specification of imperatives (in SA) as 'future orientation' encoded in the imperative mood is supported by the finding that some languages use a future suffix or a future particle for the imperative verb (Zhang 1990). Moreover, several authors proposed that futurity (which for our purposes is the temporal orientation of imperatives) does not belong to tense, but rather to modality. For example, Cowper (2005) suggests that 'future' is not a tense, but rather a 'mood'. Also, Cowper & Hall (2007:2) argue that "[f]uture time reference is not part of the tense feature system, but is instead a kind of epistemic modality […] which is part of the mood feature hierarchy" that they propose. Similar proposals have been made for English (Hall 2001), St'át'imcets (Lillooet Salish) (Matthewson 2005), Greek (Kyriakaki 2006), and Inuktitut (Hayashi 2007). With regard to the relation between futurity and modality in SA, Fassi Fehri (1993:82-83) suggests that modality is instantiated by particles like 'qad' and 'sawfa', the latter being the future particle in SA. These findings thus lend support to my assumption that the 'future orientation' specification of imperatives (in SA) is closely related to mood, rather than to tense. Differently put, imperative clauses are expected to instantiate a $Mood^0$ category rather than a T^0 one.

Since a comprehensive analysis of the morphology, syntax, and semantics of SA imperatives is beyond the scope of this thesis, I will just agree with the majority of authors who argue that imperative clauses are crosslinguistically tenseless. For example, Huntley (1980) argues that imperatives are unanchored propositions. Zanuttini (1991) argues "that true imperatives are incompatible with preverbal negation in Italian and Catalan because preverbal negation requires

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instantiated, and so a MoodP is projected, as in imperatives and subjunctives. Since agreement is defective in the language, I do not assume there to be an AgrP projection in the SA clause structure.

TP but true imperatives lack TP" (cited in Han 1998:18). Henry (1995) argues that tense is missing from the phrase marker of imperatives. Han (1998:17) states that imperative verbs lack tense morphology, and argues that "TP is absent in the syntactic representation of true imperatives". Rupp (1999) argues that imperative clauses lack tense and so do not have a TP. Jakab (2002:136-143) argues that "the imperative verb never marks tense distinctions", and so "imperatives contain no TP projection". Wratil (2005) argues that "CP and IP are fused into MoodP, TP is absent [in imperatives]" (cited in Schwager 2008:2). Mauck et al. (2005:13) state that imperative verbs do not allow tense markers. Pak et al. (2006:11, 2007:4) state that imperatives, promissives, and exhortatives in Korean (which are derived from the jussive form) do not allow tense markers. Bennis (2007:20) argues that "there is no formal expression of tense in imperative clauses". Given this general consensus, I will assume that SA imperative clauses have no TP.

On the other hand, Jensen (2003:158) argues that imperative clauses have a TP, but that the T^0 head of imperative clauses differs from the T^0 head of declarative ones in terms of the featural composition of the feature [T]. She argues that "tense morphology is cross-linguistically absent from imperative verbs due to the presence of an imperative-flavoured-T^0". This T^0 head is different from its declarative counterpart in that while the latter has a [T] feature that refers to the time of event, the former has a [T] feature which binds the event variable and is also anchored to speech time. I believe that this reasoning still does not argue for a canonical tense projection in imperative clauses, since, as Jensen states, "[c]ross-linguistically, imperative clauses lack overt tense and resist modal verbs" (p. 158). She uses this imperative TP (with a [T]-defective T^0 head) to support her assumption that imperative subjects receive Nom Case by checking their [uT] feature against the [iT] of the T^0 head, along the lines of Pesetsky & Torrego (2001). In addition, Platzack & Rosengren (1998:177) argue at length that imperatives in English, German, and Mainland Scandinavian do not have Tense or Mood. They argue that "the main difference between imperative clauses and other sentence types is the lack of FinP and hence finiteness in imperative clauses; having no FinP, imperative clauses also lack MoodP and TP". While I agree with them that imperative clauses have no TP, I will show in chapter 5 (where I discuss Case checking in imperatives in SA) that their view of imperative clauses (based on Germanic facts) does not extend to SA imperatives. Therefore, I will propose that SA imperative constructions

have a MoodP instead of the TP projection (hence a FinP), a proposal supported by the widely-held assumption that the imperative is a mood (Wright 1967 for SA).[32]

This view of imperative clauses having a MoodP (which provides for a FinP, and so finiteness) is in line with Potsdam's (1996:8) thesis that "imperative syntax is unexceptional and analyzable within a conventional model of clause structure". The claim made in this thesis is in agreement with Potsdam's finding that imperative subjects are not different from their tensed-clause counterparts. More on this will be presented and discussed in chapter 5.

After having shown that SA imperative clauses contain no tense category, let us now turn to showing that Nom and Acc Cases are licensed in those tenseless clauses. As the data in (28-29) show, the imperative construction in SA has an optional 2nd person pronominal subject which requires Case. Despite the fact that pronouns in SA do not show case morphologically, Case must be licensed in the imperative clause (since it appears morphologically on the nominal object). Moreover, SA also has another imperative pattern, one that can be addressed to 2nd as well as 3rd person subjects. The data in (30-31) provide examples.

28. ʔu-ktub-Ø   (ʔanta)   l-waajib-a

    Impr.2-write.sm-Juss   you.sm.Nom   the-homework-Acc

    '(you) write the homework!'

29. laa   tu-hmil-Ø   (ʔanta)   duruus-a-ka

    Neg.**Impr**   2-neglect.sm-Juss   you.sm.Nom   lessons-Acc-your

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[32] The introduction of a Mood[0] category in clause structure was posited by Schütze (1997) and Miller (2002), among others. Schütze (1997:200-201) proposes to "make one major revision to the system proposed by Halle and Marantz (1993), namely the addition of a M(ood) node in INFL (cf. Rizzi 1996), alongside Tense and (subject) Agreement. This M node distinguishes (at least) Indicative, Imperative, Subjunctive, and Modal moods". Miller (2002:29) also assumes "a separate syntactic M(ood) node in Infl along with Tense (T) … M includes indicative, subjunctive (etc.) moods and modals". Also, Amritavalli & Jayaseelan (2005:192) propose that finiteness in Kannada is marked by mood, and so Kannada finite clauses have a MoodP, rather than a TP.

'(you) don't neglect your lessons!'

30. li-ta-ktub-Ø   (ʔanta)   waajib-a-ka

Impr-2-write.sm-Juss   you.Nom   homework-Acc-you

'write your homework!'

31. li-ya-ktub-Ø   ʔax-**uu**-ka   waajib-**a**-hu

Impr-Impf-write.sm-Juss   brother-**Nom**-your   homework-**Acc**-his

'let your brother write his homework'

As a matter of fact, the verb form used in this imperative pattern is also derived from the jussive form (with no tense morphology) by affixing the modal prefix 'li-', called '*li-* of command' in the traditional grammar of Arabic. Moreover, examples of this imperative pattern can also be found in the Holy Qur'aan, as the verse in (32) shows.

32. "li-yu-nfiq-Ø   **TH-uu** saʕa-t-in   min   saʕa-t-i-hi"   (p.559)

Impr-Impf-spend.sm-Juss of-**Nom** wealth-f-Gen from   money-f-Gen-his

'Those (of you) who are financially capable, spend [in accordance]!'

Thus the data in (31-32) show that imperative subjects in SA receive Nom Case. I will propose that Nom in SA imperative constructions is licensed by a [VC] feature on Mood^0. Therefore, I take the morphosyntax and semantics of imperative constructions in SA as evidence that Case is *not* licensed by a [T] feature on T^0 and v*^{0}, contra Pesetsky & Torrego (2001, 2004).[33]

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[33] It could be argued that the Mood^0 in imperative clauses is φ-complete (not φ-defective), given the fact that the verb always realizes full agreement morphology, even in the presence of the post-verbal pronoun, as (i-ii) show.

  i. ʔu-ktub-uu-Ø   l-waajib-a

2.2.2.2. Disassociation between Acc Case and Tense

Pesetsky & Torrego (2001:361) propose that "[n]ominative case is uT on D". Among the arguments that they present for this claim is the observation that the Nom case suffixes in SA are identical to the mood (or VC) suffixes of the indicative verb form, which is the form that carries tense, and so there is a connection between Nom Case and tense. The data they present are reproduced in table 2.

Table 2

	Singular	**Dual**	**Plural**
1.	T-Taalib-**u** the-student-Nom	T-Taalib-**aan** the-student-d.Nom	l-muʕallim-**uun** the-teacher-p.Nom
2.	ya-ktub-**u** 3m-write-Ind	ya-ktub-**aan** 3m-write-d.Ind	yu-ʕallim-**uun** 3m-teach-p.Ind

    Impr.2-write-**p**m-Juss   the-homework-Acc

    'write the homework!'

ii. ʔu-ktub-uu-Ø   ʔantum   l-waajib-a

   Impr.2-write-**p**m-Juss   you.**p**m.Nom   the-homework-Acc

   'you write the homework!'

However, this observation is just apparent. This is because Mood^0 is φ-complete so as to reveal the φ-content of the empty category *pro* in (i); this is *not* contradicted by the fact that Mood^0 is still φ-complete in the presence of the overt pronouns in (ii) since (ii) is very unnatural/marked compared to (i). Also, my claim that Mood^0 is φ-defective in the presence of an overt subject is supported by (iii-iv), which show the 3rd person imperative construction, where the verb must realize singular morphology in the presence of a plural lexical subject.

iii. li-ya-ktub-Ø   ʔixwaan-u-ka   l-waajib-a

   Impr-Impf-write-**s**m-Juss   brothers-Nom-your   the-homework-Acc

    'let your brothers write the homework!'

iii. *li-ya-ktub-**uu**-Ø   ʔixwaan-u-ka   l-waajib-a

    Impr-Impf-write-**p**m-Juss   brothers-Nom-your   the-homework-Acc

Thus φ-features are always defective in SA.

In fact, given this observation, the assumption that the licensing of Nom Case on the subject can be thought of as the result of checking a [uT] feature on the subject (via Agree with an [iT] counterpart on I^0) is not implausible. However, it has two problems. First, if Nom Case suffixes are identical to mood suffixes, as Pesetsky & Torrego argue, then Nom Case must be associated with *mood*, rather than tense. As we will see in chapters 3-5, an analysis of these verbal suffixes in terms of Verbal Case, rather than mood, makes vivid the relation between Case and VC (the former being licensed by the latter).

Second, this analysis cannot be extended to Acc Case licensing, since Acc is not ordinarily associated with tense. Therefore, Pesetsky & Torrego (2004:496) go so far as to propose that the checking of structural Case, in general, can be thought of as a [uT] on D^0, and so "[a]ccusative case (like nominative) is an instance of uT on D". However, the data in table 3 reveal a counterargument to Pesetsky & Torrego's (2004) proposal.

Table 3

		Subjunctive		Acc-marked DPs
1.	1s	lan	ʔu-darris-**a**	ʔal-mudarris-**a**
		Neg.**Fut**	1-teach-Sub	the-teacher-Acc
2.	2sm	lan	tu-darris-**a**	ʔal-mudarris-**a**
		Neg.**Fut**	2-teach-Sub	the-teacher-Acc
3.	3sm	lan	yu-darris-**a**	ʔal-mudarris-**a**
		Neg.**Fut**	Impf-teach-Sub	the-teacher-Acc
4.	3sf	lan	tu-darris-**a**	ʔal-mudarrisat-**a**
		Neg.**Fut**	f-teach-Sub	the-teacher.f-Acc

To illustrate, if Pesetsky & Torrego's (2001) proposal is on the right track in assuming that Nom Case is a [uT] on D^0 because of the morphological similarity between Nom m-case and (tense-realizing) indicative suffixes, then their (2004) proposal might be unjustified given the fact that there is morphological similarity between Acc m-case and the subjunctive verb

mood/VC suffixes (as table 3 shows). This is because the subjunctive form does *not* bear tense, since tense is realized on the particle 'lan'. Thus the licensing of Acc Case cannot be a reflex of tense, contra Pesetsky & Torrego (2004). The Case account proposed in this thesis argues against both proposals, Pesetsky & Torrego (2001) and Pesetsky & Torrego (2004).

3. SA Verbal System, Verbal Case, and Verbless Sentences

3.1. SA Verbal Forms and Verbal Particles

This section presents the aspect of the SA verbal system that is relevant for the purposes of this thesis, and argues that SA verbs can be grouped under three main inflectional forms, which I call Verbal Cases (VC). These verbal case forms are indicative, subjunctive, and jussive; in this regard, this account abstracts away from any modality-related connotations that these terms might have. This section also presents the verbal case assigning particles in SA and shows that some of them assign subjunctive verbal forms, while the others assign jussive verbal forms. Indicative verbal forms obtain as a result of the absence of subjunctive and jussive form assigning particles.[34]

3.1.1. SA Verbal Forms

This section reviews two main classifications of the SA verbal system from the literature. After showing their shortcomings, it presents a third, more plausible classification of the SA verbs. The feasibility of the third classification partly stems from its simplicity in that the division it proposes correlates with the three verbal case forms in SA (given the particles to be discussed in section 3.1.2). Nonetheless, the main goal of this section must be explicitly stated. Although it might seem to some that this section is concerned with terminology, this is definitely not the case. The goal of this section is to make the case for subsuming all SA verbs under three verbal case categories, indicative, subjunctive, and jussive. I use these three verbal case labels as cover terms for the indicative, subjunctive, optative, conditional, imperative, jussive, and emphatic

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[34] As a matter of fact, this is one of the views on how the indicative VC form obtains (see Owens 1988:62-63 for discussion of the proposals in the traditional grammar of Arabic). To illustrate, some Kufan grammarians argue that the indicative form obtains as a result of the absence of a governor/particle. Other Kufan grammarians suggest that the indicative verbal case is assigned by its person prefixes. In contrast, the Basran grammarians argue that the indicative form obtains as a result of its taking a position analogous to those of inflected nouns. Ibn Al-Anbari (1961), on the other hand, suggests that it obtains as a result of its being in the position of the topic, which takes Nom by default/as a result of not being in the scope of a Case assigner. This issue will be revisited in section 3.1.2, where I propose that what obtains by default is the indicative morphological verbal case (m-vc), and that the abstract indicative VC is licensed structurally.

moods, which are the moods expressed by the SA verbs. In other words, the proposed division is not based on temporal reference, modality, or event viewpoint (tense, mood, or aspect), but rather on morphological inflection in terms of verbal case assignment, which has a syntactic function in terms of abstract verbal licensing (to be formalized in section 3.2.2). This division, in terms of verbal case, will show that VC, which is the feature that licenses verbs in SA, also licenses DPs (as will be formalized in chapter 4).[35]

3.1.1.1. Traditional Arabic Grammarians' Division

Traditional Arabic Grammarians (TAGs) (Siibawayhi 8th century, and associates) maintained that SA verbs come in three paradigms: Perfective (Perf), Imperfective (Impf), and Imperative (Impr), as in Table 1.

Table 1

Perfective: one form	**Imperfective**: three forms	**Imperative**: two forms
Past tense	Indicative	Positive imperative
	Subjunctive	Negative imperative
	Jussive	

First, the perfective verb forms differ from the imperfective and imperative ones in being exclusively suffixal; that is, all their agreement affixes are suffixes, as table 2 shows. The main temporal interpretation associated with perfective verbs is past tense. Since the perfective verbs keep one inflectional form, TAGs proposed that they are 'uninflected' in the sense that they are not affected by particles, and so called them 'mabnii', meaning 'a perfective verb does not change its inflectional form regardless of syntactic context'.

Table 2

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[35] This division, based on verbal case, could also have a morphological utility in terms of suggesting a relation between the Nom m-case suffixes and the indicative m-vc suffixes, and between the Acc m-case suffixes and subjunctive m-vc suffixes, as will be sketched in the appendix, thus helping to explain intriguing terminological similarities in the traditional grammar of Arabic.

		Perfective
1.	1s	daras-tu Pst.study-1
2.	1p	daras-naa Pst.study-1p
3.	2sm	daras-ta Pst.study-2
4.	2sf	daras-t-i Pst.study-2-f
5.	2dm	daras-t-um-aa Pst.study-2-p-d
6.	2df	daras-t-um-aa Pst.study-2-p-d
7.	2pm	daras-t-um Pst.study-2-p
8.	2pf	daras-t-unna Pst.study-2-pf
9.	3sm	darasa Pst.study
10.	3sf	darasa-t Pst.study-f
11.	3dm	daras-aa Pst.study-d
12.	3df	darasa-t-aa Pst.study-f-d
13.	3pm	daras-uu Pst.study-p

14.	3pf	daras-na
		Pst.study-pf

Second, the imperfective paradigm has three forms: Indicative (Ind), Subjunctive (Sub), and Jussive (Juss). As a matter of fact, TAGs did not use modality-related terms like indicative, subjunctive, and jussive, which were a European contribution to the inquiry (Wright 1967). TAGs used 'marfuuʕ' for indicative, 'manSuub' for subjunctive, and 'majzuum' for jussive, terms that speak of the inflectional state of the verb, rather than the semantic interpretation it is associated with.[36] Table 3 presents the three forms of the imperfective; the subjunctive and jussive forms are accompanied by a verbal case assigning particle each.

Table 3

		Indicative	Subjunctive	Jussive
1.	1s	ʔa-drus-**u** 1-study-Ind	lan ʔa-drus-**a** Neg.Fut 1-study-Sub	lam ʔa-drus-Ø Neg.Pst 1-study-Juss
2.	1p	na-drus-**u** 1p-study-Ind	lan na-drus-**a** Neg.Fut 1p-study-Sub	lam na-drus-Ø Neg.Pst 1p-study-Juss
3.	2sm	ta-drus-**u** 2-study-Ind	lan ta-drus-**a** Neg.Fut 2-study-Sub	lam ta-drus-Ø Neg.Pst 2-study-Juss
4.	2sf	ta-drus-ii-**n** 2-study-f-Ind	lan ta-drus-ii-Ø Neg.Fut 2-study-f-Sub	lam ta-drus-ii-Ø Neg.Pst 2-study-f-Juss
5.	2dm	ta-drus-aa-**n** 2-study-d-Ind	lan ta-drus-aa-Ø Neg.Fut 2-study-d-Sub	lam ta-drus-aa-Ø Neg.Pst 2-study-d-Juss
6.	2df	ta-drus-aa-**n** 2-study-d-Ind	lan ta-drus-aa-Ø Neg.Fut 2-study-d-Sub	lam ta-drus-aa-Ø Neg.Pst 2-study-d-Juss

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[36] This is because the first of these terms is also used for Nom-marked nouns, and the second for Acc-marked nouns, perhaps for the morphological similarity between the suffixes of these categories.

7.	2pm	ta-drus-uu-**n**	lan	ta-drus-uu-Ø	lam	ta-drus-uu-Ø
		2-study-p-Ind	Neg.Fut	2-study-p-Sub	Neg.Pst	2-study-p-Juss
8.	2pf	ta-drus-na-Ø	lan	ta-drus-na-Ø	lam	ta-drus-na-Ø
		2-study-pf-Ind	Neg.Fut	2-study-pf-Sub	Neg.Pst	2-study-pf-Juss
9.	3sm	ya-drus-**u**	lan	ya-drus-**a**	lam	ya-drus-Ø
		Impf-study-Ind	Neg.Fut	Impf-study-Sub	Neg.Pst	Impf-study-Juss
10.	3sf	ta-drus-**u**	lan	ta-drus-**a**	lam	ta-drus-Ø
		f-study-Ind	Neg.Fut	f-study-Sub	Neg.Pst	f-study-Juss
11.	3dm	ya-drus-aa-**n**	lan	ya-drus-aa-Ø	lam	ya-drus-aa-Ø
		Impf-study-d-Ind	Neg.Fut	Impf-study-d-Sub	Neg.Pst	Impf-study-d-Juss
12.	3df	ta-drus-aa-**n**	lan	ta-drus-aa-Ø	lam	ta-drus-aa-Ø
		f-study-d-Ind	Neg.Fut	f-study-d-Sub	Neg.Pst	f-study-d-Juss
13.	3pm	ya-drus-uu-**n**	lan	ya-drus-uu-Ø	lam	ya-drus-uu-Ø
		Impf-study-p-Ind	Neg.Fut	Impf-study-p-Sub	Neg.Pst	Impf-study-p-Juss
14.	3pf	ya-drus-na-Ø	lan	ya-drus-na-Ø	lam	ya-drus-na-Ø
		Impf-study-pf-Ind	Neg.Fut	Impf-study-pf-Sub	Neg.Pst	Impf-study-pf-Juss

TAGs referred to verbs in the imperfective paradigm with their morphologically realized inflectional values, ones that are assigned to verbs by particles (or obtained by default). In other words, a verb is defined in terms of its inflection, or the lack thereof; that is, a verb form is different from another form in terms of its inflectional suffix. Thus, unlike the perfective and imperative forms (as we will see shortly), the imperfective is 'inflected'. Indicative obtains in the absence of particles; subjunctive is assigned by the future negative particle 'lan', plus other particles; jussive is assigned by the past negative particle 'lam', plus other particles.

Third, the SA imperative paradigm has two verb forms, positive imperative and negative imperative, as shown in table 4. These are the canonical 2nd person imperative forms. Since the

imperative verbs keep one inflectional form irrespective of their syntactic context, like the perfective ones, TAGs also called them 'mabnii', meaning 'uninflected'.

Table 4

		Positive Imperative	**Negative Imperative**
1.	2sm	ʔu-drus-Ø Impr.2-study-Juss	laa ta-drus-Ø Neg.Impr 2-study-Juss
2.	2sf	ʔu-drus-ii-Ø Impr.2-study-f-Juss	laa ta-drus-ii-Ø Neg.Impr 2-study-f-Juss
3.	2dm	ʔu-drus-aa-Ø Impr.2-study-d-Juss	laa ta-drus-aa-Ø Neg.Impr 2-study-d-Juss
4.	2df	ʔu-drus-aa-Ø Impr.2-study-d-Juss	laa ta-drus-aa-Ø Neg.Impr 2-study-d-Juss
5.	2pm	ʔu-drus-uu-Ø Impr.2-study-p-Juss	laa ta-drus-uu-Ø Neg.Impr 2-study-p-Juss
6.	2pf	ʔu-drus-na-Ø Impr.2-study-pf-Juss	laa ta-drus-na-Ø Neg.Impr 2-study-pf-Juss

3.1.1.2. Wright's Division

Wright (1967) proposed that SA verbs come in two paradigms: Perfective and Imperfective. While the perfective has one form, the imperfective has five forms, which he calls 'moods of the imperfective'. These are called, indicative, subjunctive, jussive, imperative, and energetic (or emphatic), as in table 5.

Table 5

Perfective: one form	**Imperfective**: five moods
Past tense	Indicative
	Subjunctive
	Jussive
	Imperative
	Energetic

Wright's division has two characteristics. First, it contributed the modality-related terminology, since TAGs did not use verbal terms equivalent to 'mood' to characterize the different verbal forms. Wright (1967) was (to my knowledge) the first to name these five forms 'moods of the imperfective'. This labeling, which is most relevant to modality, created some confusion for researchers who attempted to investigate the SA verbal system. This confusion was also clear when attempts were made to utilize the structure of the verb for purposes of analyzing clause structure. Second, it lumped the imperative together with the forms of the imperfective and initiated the energetic as a separate mood. While I agree with him that the imperative and energetic are moods, I think that the other three forms, namely, indicative, subjunctive, and jussive are not totally moods. This is because the 'indicative mood' is not specific to the imperfective form which denotes present tense; indicative mood is also conveyed by the perfective form, which denotes past tense. Also the subjunctive form (or mood, for him) conveys subjunctive and optative moods as well as other functions. Likewise, the jussive form conveys imperative and conditional forms besides other functions. In other words, although Wright's indicative, subjunctive, and jussive moods overlap with my indicative, subjunctive, and jussive verbal case forms, respectively, my division has the advantage of subsuming the imperative and energetic moods under the jussive verbal case form (as we will see in the next section), since both can be shown to be derived from the jussive form.

Moreover, Fassi Fehri (1993:82-83) proposes that what Wright (1967) calls moods do not really make reference to modality. He states that the so-called mood suffixes are inflectional elements affixed to verbs (as is clear from the data in the previous sections), whereas modality is usually

expressed by independent morphemes, like the particles 'qad' and 'sawfa'. 'qad' means roughly 'already', and expresses certainty when it occurs with perfective verbs and uncertainty when it occurs with imperfective verbs, as (1-2) show. 'sawfa' means 'will' and expresses certainty or "effective happening" when occurring with imperfective verbs, as (3) shows; it does not co-occur with perfective verbs, as (4) shows.

    1. qad   jaaʔa-Ø   r-rajul-u

      already Pst.come.3sm-Ind   the-man-Nom

      'the man has already/definitely come'

    2. qad   ya-jiiʔ-u   r-rajul-u

      already Impf-come.sm-Ind   the-man-Nom

      'the man might come'

    3. sawfa   ya-jiiʔ-u   r-rajul-u

      will   Impf-come.sm-Ind the-man-Nom

      'the man will come'

    4. *sawfa   jaaʔa-Ø   r-rajul-u

       will   Pst.come.3sm-Ind   the-man-Nom

Despite the grammatical distinction he establishes, Fassi Fehri admits that there might be some confusion and overlap between modality and the so-called mood suffixes (which I agree with). In addition, Benmamoun (2000:31) states that the SA imperfective mood suffixes do not seem to have semantic interpretations. This is because "[e]ach mood ending seems to comprise a heterogeneous class of temporal and syntactic contexts". For example, the subjunctive form occurs in future negatives and embedded clauses; the jussive occurs in imperatives, past

negatives, and conditional sentences; the indicative occurs in present and future tense affirmative sentences. He assumes that these so-called mood markers are morphological elements that mark syntactic dependency relations between verbs or tensed negatives and their complements, and as such "do not translate into formal features that head projections in the syntactic representation of their sentences" (p.31). I will agree with Fassi Fehri and Benmamoun and assume that the forms of the imperfective are *not* moods.

3.1.1.3. The Proposed Division

In this section I present the division of SA verbal forms that I propose for purposes of (morpho)syntactic analysis. It is noteworthy that both TAGs and Wright assumed that the imperative is derived from the jussive, but that TAGs assumed that it is a separate paradigm, and Wright assumed that it is a mood on a par with the jussive. Thus unlike TAGs who assume that the imperative constitutes a separate paradigm, I will propose that it is a mood derived from the jussive verbal case form. Also, unlike Wright (1967) who assumes that the imperative and energetic are separate moods under the imperfective paradigm, I will propose that the imperative and energetic are moods derived from the jussive verbal case form. Unlike both TAGs and Wright, I propose that the optative function of the subjunctive form constitutes another mood derived from the subjunctive verbal case form, and that the conditional function of the jussive makes yet another mood derived from the jussive verbal case form.

Therefore, SA has only perfective and imperfective paradigms, as table 6 shows. The four suggested moods (optative, imperative, conditional, and energetic) will not be part of the larger picture, but will be mentioned when relevant. This simpler division illustrates the correlation between the four suggested forms (perfective, indicative, subjunctive, and jussive) and the three verbal case forms that SA has. Basically, I assume that the perfective and indicative forms constitute the indicative verbal case, and that the subjunctive and jussive forms are related to the subjunctive and jussive verbal cases, respectively. This way, the optative mood comes in the subjunctive verbal case, and the imperative, conditional, and energetic moods come in the jussive verbal case. Table 6 presents the division in its initial version. After showing that the perfective form is similar to the indicative form, I will present the proposed division in its final version.

Table 6: Initial Version

Perfective: one form	**Imperfective**: three forms
Past tense	Indicative
	Subjunctive
	Jussive

In section 2.2.2.1, I presented the rule proposed to derive the positive imperative verb form from the jussive form. The negative imperative verb form is identical to the jussive form. In addition, SA has another imperative verbal form, one that can also be addressed to 3rd person. Table 7 presents these 2nd and 3rd person verb forms. As a matter of fact, this positive imperative verb form is also derived from the jussive form by prefixing (to the jussive) the modal-like morpheme 'li-', which, I assume, encodes the [Impr] feature, following TAGs who call it '*li*- of command'.

Table 7

		Positive Imperative
1.	2sm	li-ta-drus-Ø Impr-2-study-Juss
2.	2sf	li-ta-drus-ii-Ø Impr-2-study-f-Juss
3.	2dm	li-ta-drus-aa-Ø Impr-2-study-d-Juss
4.	2df	li-ta-drus-aa-Ø Impr-2-study-d-Juss
5.	2pm	li-ta-drus-uu-Ø Impr-2-study-p-Juss
6.	2pf	li-ta-drus-na-Ø Impr-2-study-pf-Juss

7.	3sm	li-ya-drus-Ø
		Impr-Impf-study-Juss
8.	3sf	li-ta-drus-Ø
		Impr-f-study-Juss
9.	3dm	li-ya-drus-aa-Ø
		Impr-Impf-study-d-Juss
10.	3df	li-ta-drus-aa-Ø
		Impr-f-study-d-Juss
11.	3pm	li-ya-drus-uu-Ø
		Impr-Impf-study-p-Juss
12.	3pf	li-ya-drus-na-Ø
		Impr-Impf-study-pf-Juss

The sentences in (5-7) are examples of imperative sentences which show that the imperative mood is derived from the jussive form, and so is a function of the jussive verbal case.

    5. Ɂu-ktub-**Ø**   (Ɂanta)   r-risala-t-a

       Impr.2-write-**Juss** you.sm   the-latter-f-Acc

       '(you) write the letter!'

    6. laa   ta-ktub-**Ø**   (Ɂanta)   r-risala-t-a

       Neg.Impr 2-write-**Juss** you.sm   the-latter-f-Acc

       'Don't (you) write the letter!'

    7. li-ya-ktub-**Ø**   Ɂax-uu-ka   r-risala-t-a

       Impr-Impf-write-**Juss** brother-Nom-your   the-latter-f-Acc

'let your brother write the letter!'

Moreover, the assumption that the conditional mood is a function carried by the jussive verbal case is shown by (8-9).

8. **ʔayyaana**   ta-xruj-**Ø**   ʔa-xruj-**Ø**   maʕa-k

    whenever   2-go.out.sm-**Juss**   1s-go.out.sm-**Juss**   with-you.sm

    'whenever you go out, I go out with you'

9. mataa   tu-hmil-**Ø**   duruus-a-ka   ta-rsub-**Ø**

    whenever   2-neglect-**Juss** lessons-Acc-your 2-fail-**Juss**

   'whenever you neglect your lessons, you fail'

In addition, the assumption that the emphatic mood is a function derived from the jussive verbal case is shown by (10-11).

10. ta-rbaH-u   maa   lam   ta-Gushsh-**Ø**-**an**

     2-gain-Ind   if   Neg.Pst   2-cheat-**Juss**-**Ener**

     'you make profit if you do not cheat'

11. ʔa-baʕda   kindat-a   ta-mdaH-**Ø**-**anna**   qabiil-a

     Inter-after   Kindah-Acc   2-praise-**Juss**-**Ener**   Qabiil-Acc

     'you praise Qabiil after you have praised Kindah!'

The sentence (10) illustrates the so-called 'light' emphatic form, whereas (11) shows the 'heavy' one, as illustrated by the morphology. Furthermore, the emphatic mood could also be derived

from the imperative (which itself is derived from the jussive); (12-13) show the light and heavy forms, respectively.

    12. ʔi-qraʔ-**Ø**-**na**   l-qurʔaan-a

        Impr.2-read-**Juss**-**Ener**   the-Qur'aan-Acc

        'read the Qur'aan!'

    13. ʔi-qraʔ-**Ø**-**anna**   l-qurʔaan-a

        Impr.2-read-**Juss**-**Ener**   the-Qur'aan-Acc

        'read the Qur'aan!'

Given these data, it becomes clear that, as noted by Benmamoun (2000), the jussive denotes a heterogeneous set of functions comprising imperatives, energetic/emphatic, and conditional sentences as well as some past tense negative sentences, as in (14).

    14. lam   ya-ktub-**Ø**   l-walad-u   d-dars-a

        Neg.Pst   Impf-write.sm-**Juss**   the-boy-Nom the-lesson-Acc

        'the boy did not write the lesson'

Likewise, the subjunctive denotes a heterogeneous set of functions comprising the optative mood, assigned by 'likay', as shown by (15), and also future negative sentences, as (16) shows.

    15. ya-drus-u   l-walad-u   likay   ya-njaH-**a**

        Impf-study-Ind   the-boy-Nom   so.that/for   Impf-succeed-**Sub**

        'the boy studies so that he would pass'

    16. lan   ya-ktub-**a**   l-walad-u   d-dars-a

Neg.Fut   Impf-write.sm-**Sub**   the-boy-Nom   the-lesson-Acc

'the boy will not write the lesson'

Also, the subjunctive form is the one used in embedded clauses, as (17) shows.

17. Haawala-Ø   l-walad-u   ʔan   ya-ktub-**a**   r-risaala-t-a

Pst.try.3sm-Ind   the-boy-Nom   Comp   Impf-write-**Sub**   the-letter-f-Acc

'the boy tried to write the letter'

Finally, the indicative VC form is used in affirmative present tense sentences, as in (18), affirmative present tense progressive sentences, as in (19), affirmative future sentences, as in (20), present negative sentences, as in (21), and in the embedded clause of causatives, as in (22).

18. ʔal-walad-u   yu-Hibb-**u**   l-laHm-a

the-boy-Nom   Impf-love.3sm-**Ind**   the-meat-Acc

'the boy loves meat'

19. ʔal-walad-u   ya-ktub-**u**   r-risaala-t-a

the-boy-Nom   Impf-write.3sm-**Ind**   the-letter-f-Acc

'the boy is writing the letter'

20. sa-ya-ktub-**u**   l-mudarris-u   d-dars-a

Fut-Impf-write.sm-**Ind**   the-teacher-Nom   the-lesson-Acc

'the teacher will write the lesson'

21. laa/maa   yu-Hibb-**u**   l-walad-u   l-laHm-a

Neg/Neg   Impf-love.3sm-**Ind**   the-boy-Nom   the-meat-Acc

'the boy does not like meat'

22. jaʕala-Ø   l-mudarris-u   T-Tullaab-a   ya-qraʔ-uu-**n**   l-kitaab-a

   Pst.make.3sm-Ind the-teacher-Nom the-boy-Nom Impf-read-pm-**Ind** the-book-Acc

   'the teacher made the students read the book'

This characteristic of the indicative, subjunctive, and jussive forms indicates that they do not denote moods, and so might be marked for what Fassi Fehri (1993) calls 'Temporal Case' (which I call 'Verbal Case') since their inflectional values are assigned by particles (as we will see in section 3.1.2). It is worth emphasizing, however, that my concept of VC is totally distinct from Fassi Fehri's concept of temporal case, since while the latter is only concerned with morphological realization, the former has morphological as well as syntactic utility, as will be formalized in section 3.2.2 and chapter 4.

Now I will turn to the perfective paradigm to show that it is less distinct than traditionally assumed from the three forms of the imperfective, thus showing that it constitutes the past tense indicative verbal case form. The sentences (23-24) indicate that the perfective form conveys the indicative verbal case as well as indicative mood.

23. kataba-**Ø**   l-walad-u   l-waajib-a

   Pst.write.3sm-**Ind**   the-boy-Nom   the-homework-Acc

   'the boy wrote the homework'

24. maa   kataba-**Ø**   l-walad-u   l-waajib-a

   Neg   Pst.write.3sm-**Ind**   the-boy-Nom   the-homework-Acc

   'the boy did not write the homework'

It is noteworthy that the perfective verb in SA is not considered as a mood by traditional grammarians. Nonetheless, I will propose that it is not different from the imperfective forms, and so it, too, receives verbal case (albeit with no morphological marking). First, like the indicative form (of the imperfective) which can receive verbal case without particles, as (25) shows, the perfective verb can also receive verbal case without particles, as (26) shows; the most common interpretation of the perfective is past tense.

25. ya-ktub-u   l-qiSaS-a

    Impf-write.sm-Ind   the-stories-Acc

    'he writes stories'

26. kataba-Ø   l-waajib-a

    Pst.write.3sm-Ind   the-homework-Acc

    'he wrote the homework'

Second, the perfective form is like the indicative form in not co-occurring with particles that can carry tense, as the data in (27-30) show.

27. * lam   ya-ktub-**u**   l-walad-u   d-dars-a

    Neg.Pst   Impf-write.sm-**Ind**   the-boy-Nom   the-lesson-Acc

    'the boy did not write the lesson'

28. * lan   ya-ktub-**u**   l-walad-u   d-dars-a

    Neg.Fut   Impf-write.sm-**Ind**   the-boy-Nom   the-lesson-Acc

    'the boy will not write the lesson'

29. * lam   kataba-**Ø**   l-walad-u   d-dars-a

    Neg.Pst   Pst.write.3sm.**Ind**   the-boy-Nom   the-lesson-Acc

'the boy did not write the lesson'

30. * lan   kataba-Ø   l-walad-u   d-dars-a

      Neg.Fut   Pst.write.3sm-**Ind**   the-boy-Nom   the-lesson-Acc

      'the boy will not write the lesson'

Thus the perfective and indicative verbs can be thought of as independent forms, in the sense that they do not need to co-occur with particles, as (31-32) show.

31. ʔal-walad-u   ya-ktub-**u**   l-ʕarabiyya-t-a

     the-boy-Nom   Impf-write.sm-**Ind**   the-Arabic-f-Acc

     'the boy writes Arabic'

32. ʔal-walad-u   kataba-Ø   l-waajib-a

     the-boy-Nom   Pst-write.3sm-**Ind**   the-homework

     'the boy wrote the homework'

In contrast, the subjunctive and jussive are dependent forms since they yield ungrammaticality when they are not accompanied by the relevant particles, as (33-34) show.

33. *ʔal-walad-u   ya-ktub-**a**   l-ʕarabiyya-t-a

     the-boy-Nom   Impf-write.sm-**Sub**   the-Arabic-f-Acc

     'the boy writes Arabic'

34. * ya-ktub-Ø   l-walad-u   l-ʕarabiyya-t-a

     Impf-write.sm-**Juss**   the-boy-Nom   the-Arabic-f-Acc

'the boy writes Arabic'

This similarity between the perfective and indicative form (of the imperfective) was noted in Wright (1967:51-52) who states that "[t]he Arabic verb has *five* moods; namely, the Indicative, Subjunctive, Jussive or Conditional, Imperative, and Energetic. Of these moods the first is common to the perfective and imperfective states". In addition, Fassi Fehri (1993:83-84) states that the "perfective form of the verb is almost exclusively used for the indicative Mood (presumably by default)". I take these data and statements to indicate that the perfective verb can receive verbal case, on a par with the indicative, at least.

Third, the perfective form is similar to the jussive in that both do not realize their verbal case marking overtly. In other words, since the jussive form, which has no overt morphological verbal case (m-vc), is assumed by European grammarians to be marked for mood (Wright 1967, and Holes 2004), then, by analogy, I will assume that the perfective form is also marked for indicative mood, hence indicative verbal case; that is, it has null verbal case marking.[37]

Not claiming to have resolved the most controversial issue in the structure and function of the SA verbal system, I will assume that the imperative, conditional, and energetic/emphatic functions of the jussive qualify as moods, since each one is used solely for one function; similarly, the optative function qualifies as a mood. Thus I will assume that the three forms of the imperfective (indicative, subjunctive, and jussive) as well as the perfective form (which is indicative) are verbal cases. The goal of this section has been to show that a more feasible characterization of the variety of verbal forms that SA has is in terms of verbal case rather than mood; that is, SA has three verbal cases, as illustrated in table 8 where the proposed division is laid out in its final version.

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[37] One could also argue that the perfective is similar to the imperative form, which is considered another mood of the imperfective (derived from the jussive form) in that both are 'mabnii', that is, uninflected (except for φ-features). This is because they both keep the same suffixes (or inflectional value) regardless of syntactic context, which makes the perfective look even more similar to the forms of the imperfective.

Table 8: Final Version

	Verbal Case Form	Associated Interpretations/Moods
1.	Indicative	Indicative present, past, and future
2.	Subjunctive	Subjunctive and optative moods
3.	Jussive	Imperative, conditional, and emphatic moods

Given the data and discussion in section 3.1.1.3, I propose that the four forms (indicative, perfective, subjunctive, and jussive) form a homogenous group, with regard to inflection in terms of verbal case. In other words, all four forms receive verbal case, whether through assignment or by default. Table 9 presents the four forms with their verbal case marking/suffixes.

Table 9

		Present Tense Indicative	Past Tense Indicative	Subjunctive assigned by 'lan'	Jussive assigned by 'lam'
1.	1s	ʔa-drus-**u** 1-study-Ind	daras-tu-Ø study-1-Ind	ʔa-drus-**a** 1-study-Sub	ʔa-drus-Ø 1-study-Juss
2.	1p	na-drus-**u** 1p-study-Ind	daras-naa-Ø study-1p-Ind	na-drus-**a** 1p-study-Sub	na-drus-Ø 1p-study-Juss
3.	2sm	ta-drus-**u** 2-study-Ind	daras-ta-Ø study-2-Ind	ta-drus-**a** 2-study-Sub	ta-drus-Ø 2-study-Juss
4.	2sf	ta-drus-ii-**n** 2-study-f-Ind	daras-t-i-Ø study-2-f-Ind	ta-drus-ii-Ø 2-study-f-Sub	ta-drus-ii-Ø 2-study-f-Juss
5.	2dm	ta-drus-aa-**n** 2-study-d-Ind	daras-t-um-aa-Ø study-2-p-d-Ind	ta-drus-aa-Ø 2-study-d-Sub	ta-drus-aa-Ø 2-study-d-Juss

6.	2df	ta-drus-aa-**n**	daras-t-um-aa-Ø	ta-drus-aa-Ø	ta-drus-aa-Ø
		2-study-d-Ind	study-2-p-d-Ind	2-study-d-Sub	2-study-d-Juss
7.	2pm	ta-drus-uu-**n**	daras-t-um-Ø	ta-drus-uu-Ø	ta-drus-uu-Ø
		2-study-p-Ind	study-2-p-Ind	2-study-p-Sub	2-study-p-Juss
8.	2pf	ta-drus-na-Ø	daras-t-unna-Ø	ta-drus-na-Ø	ta-drus-na-Ø
		2-study-pf-Ind	study-2-pf-Ind	2-study-pf-Sub	2-study-pf-Juss
9.	3sm	ya-drus-**u**	darasa-Ø	ya-drus-**a**	ya-drus-Ø
		3-study-Ind	study-Ind	3-study-Sub	3-study-Juss
10.	3sf	ta-drus-**u**	darasa-t-Ø	ta-drus-**a**	ta-drus-Ø
		f-study-Ind	study-f-Ind	f-study-Sub	f-study-Juss
11.	3dm	ya-drus-aa-**n**	daras-aa-Ø	ya-drus-aa-Ø	ya-drus-aa-Ø
		3-study-d-Ind	study-d-Ind	3-study-d-Sub	3-study-d-Juss
12.	3df	ta-drus-aa-**n**	darasa-t-aa-Ø	ta-drus-aa-Ø	ta-drus-aa-Ø
		f-study-d-Ind	study-f-d-Ind	f-study-d-Sub	f-study-d-Juss
13.	3pm	ya-drus-uu-**n**	daras-uu-Ø	ya-drus-uu-Ø	ya-drus-uu-Ø
		3-study-p-Ind	study-p-Ind	3-study-p-Sub	3-study-p-Juss
14.	3pf	ya-drus-na-Ø	daras-na-Ø	ya-drus-na-Ø	ya-drus-na-Ø
		3-study-pf-Ind	study-pf-Ind	3-study-pf-Sub	3-study-pf-Juss

Binnick (1991:69) proposes that the finite moods include "the indicative, subjunctive, and (in Greek, though not in Latin) the optative [since these] may appear as the main verb of a full, independent clause, and these are the only moods which allow personal endings on the verb". He also argues that the infinitive is not finite. I agree with him on the indicative, subjunctive, optative, and infinitive. Binnick then suggests that since the imperative has no distinct/unique stem, it cannot be regarded as a finite mood even though it sometimes carries personal endings/agreement suffixes. However, since the imperative verb in SA both has a unique stem (with the 'Impr' prefix) and always carries agreement morphology, I will argue that it is a finite mood/form. Given the observation that the imperative is derived from the jussive form, I will

also argue that the jussive is a finite form given the fact that it realizes subject agreement and also can be the main verb of a full and independent clause. As such, the conditional as well as the energetic forms also count as finite forms, since they share these characteristics with the jussive and imperative. In other words, all the verb forms that belong to the three proposed verbal case forms in SA are finite.

3.1.2. SA Verbal Particles[38]

This section lists the various verbal case assigning particles that SA has, and briefly discusses their relation to this thesis. In the previous section, we saw that SA has three verbal case values, indicative, subjunctive, and jussive. While indicative verbal case is not dependent on or associated with any particles, subjunctive and jussive verbal case values are assigned by certain particles. Before proceeding to those particles (listed in sections 3.1.2.1 and 3.1.2.2), let us discuss the indicative verbal case form and the proposal that it obtains by default.

The consensus in the traditional grammar of Arabic is that the indicative verbal case form obtains by default. Fassi Fehri (1993:164) states that he "follow[s] traditional grammarians in taking the first TCase [Temporal Case] [meaning indicative] to be assigned by default (thus paralleling Nominative in the nominal system), whereas other cases are assigned/checked under government". Thus both TAGs and Fassi Fehri (1993) seem to be concerned with morphological realization, since the indicative form is also the citation form of the verb. That indicative verbal forms obtain without particles is illustrated by (35-38). This is especially clear since the verbs in (35) and (37) look exactly like those in (36) and (38), respectively, that is, in the presence of the (negative) particles.[39]

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[38] SA has different kinds of particles, some precede nouns (nominal particles) and some precede verbs (verbal particles); very few of these particles apply to both categories. It is noteworthy that some of the particles listed in this section are synonymous, like 'kay' and 'likay'; I think that the meaning differences between these particles, if any, are very subtle, and so irrelevant to the purposes of this proposal.

[39] Also, the fact that the particles that the indicative verb forms co-occur with are (mainly) negative particles indicates that those particles are not likely to be associated with verbal case (assignment), but are there for the

35. ʔal-walad-u   yu-Hibb-**u**   l-laHm-a

    the-boy-Nom   Impf-love.3sm-**Ind**   the-meat-Acc

    'the boy loves meat'

36. ʔal-walad-u   laa   yu-Hibb-**u**   l-laHm-a

    the-boy-Nom   Neg   Impf-love.3sm-**Ind**   the-meat-Acc

    'the boy does not love meat'

37. kataba-**Ø**   l-walad-u   l-waajib-a

    Pst.write.3sm-**Ind**   the-boy-Nom   the-homework-Acc

    'the boy wrote the homework'

38. maa   kataba-**Ø**   l-walad-u   l-waajib-a

    Neg   Pst.write.3sm-**Ind**   the-boy-Nom   the-homework-Acc

    'the boy did not write the homework'

However, since this thesis is concerned with abstract/structural Case, I argue that what obtains by default (as a result of the absence of particles) is the morphological indicative verbal case (m-vc), and that the indicative verb form receives formal (abstract) licensing (VC), on a par with the other two verbal case forms. Thus I argue that verbs always receive verbal licensing. This concept of abstract verbal licensing is discussed in section 3.2.2. This way, particles assign m-vc, rather than VC. This difference between VC and m-vc will be illustrated in chapter 4, where I

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semantic function of negation. In contrast, as will be shown in sections 3.1.2.1 and 3.1.2.2, subjunctive and jussive verbal case verb forms co-occur with all kinds of particles.

claim that the VC feature that licenses verbs also licenses DPs. Thus the next two sections list the m-vc assigning particles in SA.

3.1.2.1. The Subjunctive Form Assigning Particles

This section presents the particles that assign subjunctive verbal case, which (in addition to abstract licensing, to be introduced in section 3.2.2) appears morphologically as a suffix on the verb. As I mentioned in the previous section, the subjunctive form conveys different semantic functions, among which is the optative mood. The data (39-49) illustrate these functions.

Miscellaneous Functions

- 'ʔan' = Comp (= to/that)

39. yu-riid-u   l-walad-u   **ʔan**   ya-lʕab-**a**   bi-l-kurat-i

  Impf-want-Ind   the-boy-Nom   Comp   Impf-play-**Sub**   with-the-ball-Gen

  'the boy wants to play with the ball'

- 'lan' = Not.Fut

40. **lan**   ya-ktub-**a**   l-mudarris-u   d-dars-a

  Neg.Fut   Impf-write-**Sub**   the-teacher-Nom   the-lesson-Acc

  'the teacher will not write the lesson'

- 'wa' of simultaneity

41. laa   ta-ʔmur-Ø   bi-S-Sidq-i   **wa**   ta-kTHib-**a**

  Neg.Impr   2-command-Juss   with-the-truth   and   2-lie-**Sub**

  'don't order others to tell the truth and lie (yourself)'

- 'li-' = 'li of denial'

42. lam   ya-kun-Ø   Allah-u   **li**-ya-Gfir-**a**   la-hum

    Neg.Pst   Impf-be-Juss   God-Nom   to-Impf-forgive-**Sub** to-them

    'God was not to forgive them'

- 'ʔiTHan' = in that case/then

43. A: sa-ʔa-jtahid-u   B: **ʔiTHan**   ta-njaH-**a**

      Fut-1-work.hard-Ind   in.that.case   2-succeed-**Sub**

      'I will work hard'   'then, you will succeed/pass'

- 'Hattaa' = until

44. sa-ʔa-ʕbud-u   Allah-a   **Hattaa**   ʔa-muut-**a**

    Fut-1-study-Ind   God-Acc   until   1-die-**Sub**

    'I will worship God until I die'

Optatives

- 'kay' = so that

45. ya-drus-u   l-walad-u   **kay**   ya-njaH-**a**

    Impf-study-Ind   the-boy-Nom   so.that   Impf-succeed-**Sub**

    'the boy studies so that he would pass'

- 'li-' = so that

46. ya-drus-u   l-walad-u   **li**-ya-njaH-**a**

   Impf-study-Ind the-boy-Nom so-Impf-succeed-**Sub**

   'the boy studies so that he would pass'

- 'likay' = so that

47. ya-drus-u   l-walad-u   **likay**   ya-njaH-**a**

   Impf-study-Ind the-boy-Nom so.that Impf-succeed-**Sub**

   'the boy studies so that he would pass'

- 'Hattaa' = so that

48. ya-drus-u   l-walad-u   **Hattaa**   ya-njaH-**a**

   Impf-study-Ind the-boy-Nom in.order.that succeed-**Sub**

   'the boy studies so that he would pass'

- 'fa-' = so that

49. ʔi-jtahid-Ø   **fa**-ta-njaH-**a**

   Impr-work.hard-Juss so-2-succeed-**Sub**

   'work hard so that you succeed/pass'

3.1.2.2. The Jussive Form Assigning Particles

This section lists the particles that assign jussive verbal case. As mentioned in the previous section, the jussive form conveys different semantic functions, among which are the imperative and conditional moods. The data (50-68) illustrate these different functions.

Miscellaneous Functions

- 'lam' = Not.Pst

50. **lam**   ya-njaH-Ø   l-walad-u

    Neg.Pst   Impf-pass.3sm-**Juss**   the-boy-Nom

    'the boy did not pass'

- 'ʔalam' = Interro.Not.Pst

51. **ʔa-lam**   ya-njaH-Ø   l-walad-u

    Interro-Neg.Pst   Impf-pass.3sm-**Juss**   the-boy-Nom

    'didn't the boy pass?'

- 'lammaa' = Not.Pst.yet

52. **lammaa**   ya-rjiʕ-Ø   l-walad-u

    Neg.Pst.yet   Impf-return.3sm-**Juss**   the-boy-Nom

    'the boy has not returned yet'

- 'ʔalammaa' = Interro.Not.Pst.yet

53. **ʔa-lammaa**   nu-Hsin-Ø   ʔilay-ka

    Interro-Pst.Neg.yet   1p-do.good-**Juss**   to-you

    'haven't we been good to you yet?'

- 'li-' = 'li- of command'

54. **li**-ya-ktub-Ø   ʔax-uu-ka   waajib-a-hu

Impr-Impf-write.sm-**Juss**   brother-Nom-your   homework-Acc-his

'let your brother write his homework!'

- 'laa' = Not.Impr

55. **laa**   ta-ktub-Ø   (Ɂanta)   l-waajib-a

Neg.Impr   2-write.sm-**Juss**   you.sm.Nom   the-homework-Acc

'don't (you) write the homework!'

- 'Ɂayna' = where (interrogative)

56. **Ɂayna**   ya-THhab-Ø   Ɂaliyy-un

where   Impf-go.3sm-**Juss**   Ali-Nom

'where does Ali go?'

Conditionals

- 'Ɂin' = if

57. **Ɂin**   tu-THaakir-Ø   ta-njaH-Ø

if   2-study.sm-**Juss**   2-pass.sm-**Juss**

'if you study, you pass'

- 'ɁiTH-maa' = whenever

58. **ɁiTH-maa**   ta-qum-Ø   Ɂa-qum-Ø

whenever   2-stand.up.sm-**Juss**   1s-stand.up.sm-**Juss**

'whenever you stand up, I stand up'

- 'man' = who

59. **man**   yu-THaakir-**Ø**   ya-njaH-**Ø**

    who   Impf-study.3sm-**Juss**   Impf-pass.3sm-**Juss**

    'who studies, passes'

- 'maa' = what

60. **maa**   ta-zraʕ-**Ø**   ta-HSud-**Ø**

    what   2-plant.sm-**Juss**   2-harvest.sm-**Juss**

    'what you plant, you harvest'

- 'mahmaa' = whatever

61. **mahmaa**   ta-zraʕ-**Ø**   ta-HSud-**Ø**

    whatever   2-plant.sm-**Juss**   2-harvest.sm-**Juss**

    'whatever you plant, you harvest'

- 'mataa' = when

62. **mataa**   tu-THaakir-**Ø**   ta-njaH-**Ø**

    when   2-study.sm-**Juss**   2-pass.sm-**Juss**

    'when you study, you pass'

- 'ʔayyaana' = whenever

63. **ʔayyaana**   ta-xruj-**Ø**   ʔa-xruj-**Ø**   maʕa-k

whenever   2-go.out.sm-**Juss**   1s-go.out.sm-**Juss**   with-you.sm

'whenever you go out, I go out with you'

- 'ʔaynamaa' = wherever

64. **ʔaynamaa**   ta-THhab-Ø   ʔa-THhab-Ø

    wherever   2-go.sm-**Juss**   1s-go.sm-**Juss**

    'wherever you go, I go'

- 'Haythumaa' = whenever

65. **Haythumaa**   ta-staqim-Ø   ta-njaH-Ø

    whenever   2-be.pious.sm-**Juss**   2-succeed.sm-**Juss**

    'whenever you become pious, you succeed'

- 'ʔannaa' = when

66. **ʔannaa**   ta-xruj-Ø   ʔa-xruj-Ø   maʕa-k

    when   2-go.out.sm-**Juss**   1s-go.out.sm-**Juss**   with-you.sm

    'when you go out, I go out with you'

- 'kayfamaa' = however

67. **kayfamaa**   tu-ʕaamil-Ø   n-naas-a   yu-ʕaamil-uu-**Ø**-ka

    however   2-treat.sm-**Juss**   the-people-Acc   Impf-treat-pm-**Juss**-you.sm

    'however you deal with people, they deal with you'

- 'ʔayy' = which(ever)

68. **ʔayyu** Taalib-in ya-jtahid-**Ø**   ya-tafawwaq-**Ø**

   whichever student-Gen Impf-work.hard.3sm-**Juss** Impf-ace.3sm-**Juss**

   'whichever student works hard, aces'

One crucial observation to be made from the data in (39-68) is that (at least) most of these particles are Comp elements, since they all reside in positions higher than the Infl domain. The fact that a particle must assign its verbal case, which must appear as a suffix on the verb, is shown by (69-70).

69. *<u>lan</u>   ya-ktub-**u**   l-waajib-a

  Neg.Fut Impf-write.sm-**Ind** the-homework

70. *<u>lam</u>   ya-ktub-**a**   l-waajib-a

  Neg.Pst Impf-write.sm-**Sub** the-homework

The sentence (69) is ungrammatical because 'lan' assigns subjunctive verbal case, but the verb realizes indicative verbal case; (70) is ungrammatical because 'lam' assigns jussive verbal case, but the verb realizes subjunctive verbal case. Moreover, the fact that verbal case must be received by verbs and never by other elements is shown by (71-73).

71. *lan   <u>l-walad-u</u>   ya-ktub-**a**   l-waajib-a

  Neg.Fut the-boy-Nom Impf-write.sm-**Sub** the-homework

72. *lan   <u>l-kasuul-u</u>   ya-ktub-**a**   l-waajib-a

  Neg.Fut the-lazy-Nom Impf-write.sm-**Sub** the-homework

73. *lam   <u>ʔams</u> ya-ktub-**Ø**   l-walad-u l-waajib-a

  Neg.Pst yesterday Impf-write.sm-**Juss** the-boy-Nom the-homework

There are two observations to make from (71-73). First, verbal case cannot be received by non-verbal elements. Second, the verbal case assigning particle and the verb cannot be separated, which could refer to an adjacency requirement on verbal case assignment, but I will not dwell on this observation here; see Fassi Fehri (1993:164) for an account.

Since the observation that verbs realize tense, mood, agreement, and aspect morphologically led to the assumption that they encode formal [T], [Mood], [ϕ], and [Asp] features, I would like to suggest that the fact that verbs in SA carry verbal case morphology (m-vc) should also indicate that they have a formal feature called Verbal Case [VC]. Like other formal features, one could argue that this [VC] feature is encoded on the I^0 and $v*^0$ heads. Unlike formal features like [T], [Mood], and [Asp], which are valued on I^0 and $v*^0$, [VC] is unvalued on I^0 and $v*^0$ since the valuation comes from another element/head in the clause; this way, [VC] is similar to [ϕ], which is valued by the relevant DP. Thus I^0 and $v*^0$ have unvalued [VC] features. The element/head responsible for valuing these [VC] features will be introduced in chapter 4.

3.2. The concept of Verbal Case

3.2.1. Attempts in the Generative Framework

The generative framework witnessed some attempts to formalize systems where verbs can have Case. For example, Zagona (1982) argues that "VP licensing conditions parallel those of NP rather than other predicate categories, particularly in that there is a requirement for verbal 'Case'" (Zagona 1988:26). She argues that assigning verbal Case to the VP accounts for its restricted distribution to complement positions, but not in adjunct positions, since the latter are not assigned case by a head. Within Zagona's (1982) system, VP Case assigners are verbal affixes and INFL elements such as modals, *do* and *to* (Zagona 1988:84).

However, Zagona (1988:24) suggests that verbal Case cannot be maintained since the tense feature [±Past] is better treated as analogous to NP person/number features, rather than to Case features. She also argues that the "VP cannot have a Case requirement at S-structure, since it

would then be visible as an argument, which would incorrectly block adjunction to VP" (p.84). In addition, she states that the VP Case hypothesis is not needed since the distribution of VP is restricted by the Theta Criterion.

In addition, Fabb (1984) argues that all categories (NPs, modifiers, predicates, and verbs) require Case. Fabb proposes the 'Visibility Requirement on Theta-Assignment' condition, according to which "[e]very node in a theta-indexed chain must be visible". In other words, he claims that verbs need Case so as to be visible when they assign their θ-roles to the relevant NPs. For him, θ-assignees as well as θ-assigners must be visible at LF. Verbal Case assigners in Fabb's system comprise some causative and perception verbs, verbal affixes (-ing, -en, …), prepositions, AGR, and *do* and modals, which are manifestations of AGR. It is noteworthy that Fabb's system assumes that verbal Case is assigned to the VP, and then percolates to the head, V^0. Despite the elegance and novelty of Fabb's Case theory, it was not developed further, nor was it tested by applying it to other languages. Perhaps one issue with Fabb's theory is its concern with visibility (which was intended as a DP characteristic), rather than a possible connection between verbal Case and DP licensing/structural Case.[40]

Moreover, a similar proposal was made in Roeper & Vergnaud (1980) who "suggested that stems are assigned Case by perception verbs" (Fabb 1984:72), and "that "to" [being one element, of both a prepositional and an infinitival nature] assigned case to verbs as it did to nouns and that case-licensing was more extensive than thought" (Roeper p.c.). Furthermore, Roberts (1985a) made a similar proposal based on the observation that "verbs […] appear in a special subset of government configurations, which could be seen as a counterpart to the special set of Case-assignment environments defined in GB Case theory" (Roberts p.c.).[41]

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[40] In chapter 4, I will summarize Fabb's theory of verbal Case and show how it is relevant to the present thesis. In chapter 6, I will use some of its 'verbal Case assigners' to extend the proposed theory to English.

[41] This idea was further developed in Roberts's (1985b:29) notion of V-Visibility which states that "V assigns θ-roles [and so becomes visible] iff V is governed".

Thus the claim that verbs can have Case is no longer maintained, or at least viewed as promising, in generative syntax. In fact, I agree with the motive behind eliminating verbal Case from syntax given the fact that it did not provide any insights into how it is related to nominal/structural Case, which is the contribution that this thesis attempts to make.

3.2.2. Verbal Case in SA as the Source of Verbal Licensing

The assumption that verbs in SA can have some form of case was made as early as the 8th century (Siibawayhi and associates), and was adopted later in Wright (1967). The incentive for this assumption was the observation that verbs in SA realize inflectional marking (apart from agreement) that is similar to the case morphology realized by nouns, in roughly the same (structural) configurations. This parallelism is clearest when comparing the Nom case morphology to the indicative verbal marking, and when comparing the Acc case morphology to the subjunctive verbal marking. Basically, Traditional Arabic Grammarians (TAGs) observed that Nom is the case specification obtained by a noun not in the scope of a case assigner. Likewise, they observed that indicative verbal case is obtained by a verb not in the scope of a verbal case assigner. This observation, together with the morphological similarity between the Nom case suffixes and the indicative verbal case suffixes, prompted TAGs to refer to forms with both sets of suffixes as 'marfuuʕ'. In addition, Acc and Gen case values are assigned if a noun is in the scope of an Acc or a Gen case assigner, respectively. Similarly, subjunctive and jussive verbal case values are assigned to a verb if it is in the scope of a subjunctive or a jussive verbal case assigning particle, respectively. TAGs referred to both Acc case forms and subjunctive verbal forms as 'manSuub', given the morphological similarity between the two sets of suffixes. In other words, while the Acc case suffix is realized as a result of co-occurring with verbs and nominal particles, the subjunctive verbal case suffix results from co-occurring with verbal

particles. This led TAGs to assume case assignment in the verbal as well as the nominal system.[42]

Since abstract Case was not a (major) concern in the traditional grammar of Arabic, I will interpret this insight to make reference to the morphological realization of case, on both nouns and verbs. In other words, I infer from this observation and terminology that TAGs considered the verbal particles presented in section 3.1.2 to be morphological verbal case (m-vc) assigners (rather than abstract Verbal Case licensers). This is supported by the fact that they considered the indicative verb form to be the default verbal case form because it is obtained when the verb is not assigned case by a verbal case assigning particle. Moreover, Fassi Fehri (1993:163-164) interpreted this insight such that verbs receive Temporal Case (TCase); that is, he proposed that the inflectional suffixes of the three SA imperfective forms (so-called 'mood suffixes' in Wright 1967) are temporal cases assigned to verbs by particles or by default in the same manner nominal cases are assigned to nouns. Following Fassi Fehri, Soltan (2007:190) assumed that temporal case is an uninterpretable feature [uTC] on I^0 that required valuation by verbal case assigning particles.[43] Thus all these authors were concerned about the morphological forms that the various particles effect on the verb. I follow these authors and assume that these particles are m-vc assigners.

Now the question is: what is the syntactic value of this morphological phenomenon (m-vc assignment) to the topic of this section (and thesis), which is abstract Verbal Case (and abstract Case)?[44] The answer to this question, I suggest, can be approached by examining a similar

[42] Gen case suffixes and jussive verbal case suffixes do not have similar morphology, and that is perhaps why they ended up having different terms in the traditional grammar of Arabic, but jussive is considered a verbal case form.

[43] I think that 'verbal case' is a better term than 'temporal case' since it is assigned to verbs not to tense. In section, 3.3.3, we will see that verbless sentences, which have tense, do not instantiate verbal case due to the absence of the verb.

[44] Form now on, I will be using 'case' to refer to default case (as well as lexical case), and 'm-case' to refer to the morphological realization of Case, so called 'morphological case'. Also, I will use 'VC' to refer to abstract Verbal Case, and 'm-vc' to refer to morphological verbal case.

phenomenon in natural language, one which received some particularly enlightening proposals. The proposed answer is based on insights related to the relation between morphological nominal case (m-case) and abstract Case. These insights come from the discussion and issues raised in Chomsky & Lasnik (1977), Vergnaud (1977), Chomsky (1980), and Chomsky (1981). To anticipate the upcoming discussion, I will claim that m-vc indicates the presence of abstract verbal licensing; that is, verbs in SA receive abstract VC, on a par with DPs which receive abstract Case.

More than three decades ago, syntacticians were (and still are) concerned about the distribution of NPs; (74-75) provide examples.

74. I would prefer [that he/*him/*PRO leave early].

75. I would prefer [for *he/him/*PRO to leave early].

On standard assumptions, only 'he' is grammatical in (74) because it is in a position where Nom Case is assigned, being in the context of tensed I^0. Also, only 'him' is grammatical in (75) since it is in a position where Acc is assigned, being in the context of 'for'. Comparing (74) to (75) reveals that the morphological difference between the embedded subject DPs, 'he' and 'him', which refers to morphological nominal case (m-case), also makes reference to abstract licensing, that is, structural Case. In other words, realizing the Nom m-case, as opposed to the Acc m-case, is a consequence of being (licensed) in a Nom-Case-assigning context, rather than in an Acc-Case-assigning one. Thus m-case is an indicator of abstract Case. This observation was first made in Vergnaud (1977) who took m-case (though impoverished in English) to reflect the distribution and licensing of NPs (abstract Case). Chomsky (1980), who used Vergnaud's insight to build a theory of abstract Case, assumed that abstract Case is related to m-case in the sense that the formal features that regulate the syntactic licensing of NPs are the same ones that appear as case morphology. Together with other facts, this reasoning prompted the introduction of the Case Filter in Chomsky (1980:25), in (76).

76. *N, where N [has phonetic content and] has no Case

Now, examination of similar SA data indicates that this filter could also hold of another lexical category. The data in (77-79) show that verbs in SA share some characteristics with the embedded English DPs in (74-75). Basically, only the verb in the subjunctive m-vc form is grammatical in (77) because it is in a position where the subjunctive form is licensed (future negatives). Similarly, only the verb in the jussive m-vc is grammatical in (78) because it is in a position where the jussive form is licensed (past negatives). Likewise, only the verb in the indicative form is grammatical in (79) because it is in a position where the indicative form is licensed. In a sense, the relation between these verbal forms and the positions in which they are licensed (signaled by their m-vc suffixes) is similar to the relation between the DPs 'he' and 'him' in (74-75) and the positions in which they are licensed (indicated by their m-case).

77. lan   ya-ktub-**a**/*-u/*-Ø   l-walad-u   d-dars-a

    Neg.Fut   Impf-write.sm-**Sub**/-Ind/-Juss   the-boy-Nom   the-lesson-Acc

    'the boy will not write the lesson'

78. lam   ya-ktub-**Ø**/*-a/*-u   l-walad-u   d-dars-a

    Neg.Pst   Impf-write.sm-**Juss**/-Sub/-Ind   the-boy-Nom   the-lesson-Acc

    'the boy did not write the lesson'

79. ya-ktub-**u**/*-a/*-Ø   l-walad-u   d-dars-a

    Impf-write-**Ind**/-Sub/-Juss   the-boy-Nom   the-lesson-Acc

    'the boy is writing the lesson'

This observation about verbs in SA (receiving a form of case that must be morphologically realized) indicates the existence of a (language-specific) filter on the realization of m-vc (similar to Chomsky's 1980, 1981 Case Filter which is a phonetic condition on Case). By analogy with nouns/DPs, one could posit the filter in (80), which could be termed the 'VC Filter'.

80. *V, where V has phonetic content and has no m-vc

Back to the question raised earlier in this section about the significance of m-vc (as a morphological phenomenon) for the claimed abstract verbal licensing, I would like to argue that the relation between m-case and abstract Case also exists between m-vc and abstract Verbal Case (VC); that is, verbs in SA must be licensed on a par with DPs. In other words, by analogy with m-case, which reflects structural positions (Case), I claim that m-vc also reflects structural licensing of verbs. To support this claim, let us examine (81-84).

81. I would prefer [*he/*him/PRO to leave early].

On standard assumptions, only PRO is grammatical in (81) because there is *no* Case assigner for the relevant position (Spec, IP/Spec, v*P). Thus elements that must satisfy the Case Filter (which Chomsky 1981:49 assumes to be a filter in the PF-component), like lexical DPs, are not allowed in a position where they are not assigned structural Case, since this would result in them not realizing m-case, thus not satisfying the Case Filter. In other words, only elements that cannot realize m-case, like PRO, are allowed where Case is not assigned. This means that there is a relation between m-case and Case, such that m-case indicates the presence of Case (except in default case contexts, as will be discussed in section 3.3). Indeed, Chomsky (1981:49) excludes gerunds and lexical NPs from the subject position of an infinitival clause based on the Case Filter, since these two elements are not allowed "in positions in which no Case is assigned". Basically, the fact that DPs must realize m-case means that they must be licensed in positions in which they would receive abstract licensing, Case. From this reasoning, I infer that Chomsky (1980, 1981) took m-case to be indicative of abstract Case.

Moving on to SA verbal data, examination of (82-84) shows that, like 'he' and 'him' in (81), verbs are *not* licensed in a certain context in SA.[45]

82. *ya-kuun-u   r-rajul-u   mariiD-an/-un

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[45] These ungrammatical sentences provide an argument against TAGs' and Fassi Fehri's proposal that indicative verbal case is obtained by default. This is because if they were right, these sentences would have been grammatical since the verb is in the indicative form.

Impf.Prs-be.3sm-Ind   the-man-Nom   sick-Acc/-Nom

83. *ʔar-rajulu-u   ya-kuun-u   mariiD-an/-un

the-man-Nom   Impf.Prs-be.3sm-Ind   sick-Acc/-Nom

84. ʔar-rajul-u   mariiD-un

the-man-Nom   sick-Nom

'the man is sick'

Given the grammaticality of the verbless sentence (84), I infer that (82-83) are ungrammatical because the verb is *not* licensed in these sentences. Basically, verbless sentences in SA (to be examined in detail in section 3.3) provide a context where verbs are not licensed. In other words, like the embedded subject position in (81) where lexical DPs (which realize m-case) are *not* licensed, verbless sentences provide a context where verbs (which realize m-vc) are not licensed.[46] Thus, in addition to abstract structural/nominal Case, SA exhibits abstract verbal licensing, that is, VC. Based on this, I conclude that m-vc indicates the existence of VC. Thus since [VC] is not licensed in (82-83), elements that realize m-vc are not allowed. Therefore, I argue that the different verbal forms (indicative, subjunctive, and jussive) in SA reflect abstract verbal licensing, [VC], similar to abstract nominal licensing (Nom, Acc,…) shown by DPs. Thus, like DPs (which have [Case]), verbs in SA have a [VC] feature that, I assume, is encoded on I^0 and $v*^0$. This VC licensing will prove to have a valuable syntactic utility for structural Case licensing (to be introduced in chapter 4). Basically, I will propose that VC is the feature that licenses structural Case.

Thus besides [T], [φ], and [Mood] (and possibly [Asp]), verbs in SA have [VC]. However, unlike [T], [φ], and [Mood], which could exist in the absence of the verb (as we will see in section 3.3),

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[46] See Benmamoun (2000) for arguments against the presence of a null copula in verbless sentences. I adopt his position, and take his arguments to indicate the absence of a verbal element equivalent to PRO.

[VC] only exists with verbs. In addition, assuming that [VC] is contributed by a category higher than Infl (because particles are either merged in or moved to Fin^0), and also assuming that [VC] is the feature that licenses structural Case in SA, then the crucial insight that this thesis contributes is that the licensing of structural Case comes from the domain higher than the verbal extended projection, or Infl. It is noteworthy that these observations and this reasoning of the link between m-vc and VC and between VC and structural Case, that is, licensing DPs being contingent on licensing verbs, has not been mentioned in either literature, traditional nor generative. Therefore, this is the main contribution that this thesis aims to make. I now move on to verbless sentences, where the link between VC and Case is established.

3.3. Verbless Sentences and the Present Account

This thesis argues that structural Case in SA is licensed by VC. Since the presence of VC is detected from the presence of the (licensed) verb, then verbless sentences are not expected to license structural Case. Therefore, showing that verbless sentences in fact do not witness the licensing of structural Case provides support for this thesis. Thus this section examines the morphosyntax of verbless sentences and shows that though they encode tense, agreement, and mood, they do not license Case, thus indicating that Case is absent due to the absence of VC. The first section will review relevant literature to establish that the pre-predicate DP in verbless sentences is a topic that receives default Nom case, and that the predicate, too, receives default Nom case. The second section will present the adopted conception of default case. The third section will show that verbless sentences are finite clauses. The fourth section will present the clause structure proposed for SA verbless sentences (which only denote present tense) as well as the one proposed for copular sentences (which only denote non-present tense), and discusses the relevance of verbless sentences to this thesis. The data (85-87) provide examples of verbless sentences, where the predicate could either be nominal, or adjectival, or even a Prepositional Phrase (PP), respectively.

    85. ʔar-rajul-u   muʕallim-un

        the-man-Nom   teacher-Nom

'the man is a teacher'

86. ʔar-rajul-u   mariiD-un

the-man-Nom   sick-Nom

'the man is sick'

87. ʔar-rajul-u   fii   l-madrasat-i

the-man-Nom   in   the-school-Gen

'the man is in the school'

3.3.1. Subjects and Topics in SA[47]

One intriguing fact about SA clause structure is that (unlike Welsh and Irish, another two VSO languages) it allows both the VSO order and the SVO order in simple finite clauses, as (88-89) respectively show. The former structure is characterized by partial subject-verb agreement, while the latter by full subject-verb agreement, as shown by the verbal morphology.

88. qaraʔa-Ø   <u>l-mudarris-uun</u>   l-kitaab-a

Pst.read.3**s**m-Ind   the-teacher-p.Nom   the-book-Acc

'the teachers read the book'

89. <u>ʔal-mudarris-uun</u>   qaraʔ-uu-Ø   l-kitaab-a

the-teacher-p.Nom   Pst-read.3-**p**m-Ind   the-book-Acc

'the teachers read the book'

---

[47] The material and discussion in the second part of this section are based on Soltan (2007) section 2.2.

Research in the generative framework on different aspects of these two word orders in SA maintained that both underlined DPs in (88-89) are subjects (Benmamoun 1992, 1998:1, 1999:111, 2000:128; Mohammad 1990:96; Aoun et al. 1994:204; Ouhalla 1994:48; Harbert & Bahloul 2002:45, among others).[48] This approach to the issue of word order in SA was motivated by the theoretical framework of transformational grammar, and so many of these analyses were based on the view that the VSO order is derived from the SVO order (base-generated in the thematic domain) by moving the verb to I^0, or alternatively the SVO order is derived from the VSO order by moving 'S' from Spec, VP/v*P to Spec, IP (where the verb is in I^0); that is, the post-verbal DP and the preverbal one are transformationally related.

However, the Basran grammarians of Arabic (Siibawayhi and associates) have maintained that while post-verbal DPs are subject, preverbal DPs are topics, (left-dislocated) elements of the A-bar domain (stated in Fassi Fehri 1993:91).[49] So-called the incorporation analysis, this view suggests that while the subject in (88) is the DP 'l-mudarris-uun', meaning 'the teachers', the subject in (89) is an incorporated pronominal encliticized onto the verb; that is, the agreement morphology is viewed as an argument of the verb. In the generative framework, the view that the agreement affixes are pronominal has been proposed in Benmamoun (2000:60) where it is argued that "[t]he Arabic agreement system […] evolved from a pronominal system that has been incorporated into the verb and became pure agreement". Also, Platzack (2003) argues that agreement in SA is pronominal. One argument for the incorporation analysis comes from the fact that the subject and the full agreement, which constitutes an argumental pronoun, are in complementary distribution (Fassi Fehri 1993), as (90) shows, compared to (88-89).

    90. *qaraʔa-uu-Ø   l-mudarris-uun   l-kitaab-a

        Pst.read.3-**p**m-Ind   the-teacher-**p**.Nom   the-book-Acc

---

[48] Fassi Fehri (1993:27-28) proposes that while the post-verbal DP is a subject, the preverbal DP can receive two interpretations, that of a subject and that of a topic.

[49] Fassi Fehri also states that the Kufan grammarians of Arabic admit the existence of preverbal subjects.

Soltan (2007) picks up on this insight from the Basran grammarians and argues that while preverbal DPs are topics, post-verbal DPs are subjects; that is, the two DPs are not related by A-movement. Soltan revived the Basran grammarians' view and established that SA does not exhibit A-movement (in SVO structures, passives, raising-to-subject constructions, and raising-to-object constructions, as well as in object shift). He argues persuasively that the SVO order is *not* derived from the VSO order via movement, contrary to what has been proposed for SA since the 1980s. Soltan's analysis, however, is different from that of the Basran grammarians in that while they argue that the subject in the SVO order is the agreement morphology on the verb (which is an argument incorporated onto the verb), he argues that the subject is the phonetically null element *pro*, base-generated in Spec, v*P. In section 5.6, where I present my proposal for the structure of *pro* as well as its Case requirements, I will show that both of these views on the nature of the subject in the SVO structure are compatible with the theory of Case proposed in this thesis.

Adopting an Agree-based model (Chomsky 2001, and subsequent work), Soltan showed that the licensing of Case and agreement (as well as other formal relations/features) can be carried out without A-movement. To argue that SVO is not derived from VSO by movement, Soltan (2007:50-61) provides a number of arguments that show that while post-verbal DPs are canonical subjects, preverbal DPs fit the syntactic and semantic properties associated with topics (and left-dislocated elements). In what follows, I re-present his arguments for this account. After that, I will show that his arguments that the preverbal DP in the SVO order is a topic apply to the pre-predicate DP in verbless sentences.

First, Soltan showed that the SV order is associated with categorical readings, and as such, the preverbal DP is the topic (A-bar element) of the discourse. In contrast, the VS order is associated with thetic interpretations, and so the post-verbal DP is the subject of the clause. On this distinction, Basilico (1998:546) states that "[w]ith a categorical judgment, a particular individual is singled out and then some property is attributed to that individual…. With a thetic judgment, our attention is drawn to the event itself and not the participants of the event". As such, the SVO order receives the schematic representation S[V*pro*O], where 'S' is the topic on which the

[V*pro*O] constituent is the comment, whereas the VSO receives the schematic representation [VSO], which is a neutral presentation of the event.

Second, the fact that indefinite nonspecific NPs cannot occur preverbally, but are grammatical post-verbally, as shown in (91-92), indicates that the two positions are in two different domains; that is, the preverbal position does not obtain as a result of A-movement from the post-verbal position.

      91. *<u>walad-un</u>   kasara-Ø   l-baab-a

         boy-Nom   Pst.break.3sm-Ind   the-door-Acc

      92. kasara-Ø   <u>walad-un</u>   l-baab-a

        Pst.break.3sm-Ind   boy-Nom   the-door-Acc

        'a boy broke the door.'

Third, preverbal DPs are better characterized as left-dislocated elements since left-dislocated elements can be associated with both subjects and non-subjects, as (93-94) show, respectively.

      93. <u>ʔal-walad-u</u>   kasara-Ø   l-baab-a

        the-boy-Nom   Pst.break.3sm-Ind   the-door-Acc

        'the boy broke the door'

      94. <u>ʔal-baab-u</u>   kasara-Ø-hu   l-walad-u

        the-door-Nom   Pst.break.3sm-Ind-it   the-boy-Nom

        'the door, the boy broke it'

Fourth, the fact that extraction is allowed across a post-verbal DP, but not across a preverbal DP, as (95-96) show, indicates that the post-verbal DP is in an A-position, whereas the preverbal DP is in an A-bar position, which makes it block wh-movement.

95. man   Daraba-Ø   Zayd-un

    who   Pst.hit.3sm-Ind   Zayd-Nom

    'who did Zayd hit?'

96. *man   Zayd-un   Daraba-Ø

     who   Zayd-Nom   Pst.hit.3sm-Ind

Fifth, given the observation that raising does not undermine idiomaticity, one would expect changing the word order of idioms not to affect idiomatic interpretations if A-movement has taken place. However, the fact that SA idioms lose idiomaticity when the post-verbal DP is spelled out preverbally, as (97-98) show, indicates that A-movement has not occurred.

97. sabaqa-Ø   s-sayf-u   l-ʕaTHl-a

    Pst.preced.3sm-Ind   the-sword-Nom   the-censure-Acc

    Literal: 'The sword preceded the censure'

    Idiomatic: 'It is too late to do anything'

98. ʔas-sayf-u   sabaqa-Ø   l-ʕaTHl-a

    the-sword-Nom   Pst.preced.3sm-Ind   the-censure-Acc

    No literal reading, and structure sounds unnatural on the idiomatic reading

Sixth, another argument Soltan provides for his thesis that the SV order results from a base-generation structure "comes from the fact that the resumptive pronoun in post-verbal position

under certain conditions is forced to appear overtly" (p. 58). In this regard, he discusses predicates with experiencer PP arguments, as in (99-100).[50]

99. yajib-u   ʕalaa   Zayd-in   r-raHiil-u

    must-3sm-Ind   on   Zayd-Gen   the-leaving-Nom

    'Zayd has to leave'

100. Zayd-un   yajib-u   ʕalay-**hi**   r-raHiil-u

     Zayd-Nom   must-3sm-Ind   on-**him**   the-leaving-Nom

     'Zayd, he has to leave'

Basically, the fact that 'Zayd-un' is represented in the thematic domain by a resumptive pronoun showing up on the preposition indicates that it is a topic/A-bar element; the sentence (101) shows that the resumptive pronoun is obligatory.

101. *Zayd-un   yajib-u   ʕalaa   r-raHiil-u

     Zayd-Nom   must-3sm-Ind   on   the-leaving-Nom

More evidence that the position 'Zayd-un' occupies in (100) is in the left periphery is shown by the fact that it has to be resumed by an overt pronoun within an island, as (102) shows. He also provides examples where resumptive pronouns for non-subjects show up in complex NP and adjunct islands, as (103-104) show.

102. Zayd-un   yajib-u   ʕalaa   l-marʔat-i   llatii

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[50] The preposition 'ʕalaa', meaning 'on', is pronounced as 'ʕalay' when it has suffixes.

Zayd-Nom   must-3sm-Ind   on   the-woman-Gen   who.fem

maʕa-**hu**   r-raHiil-u

with-**him**   the-leaving-Nom

'Zayd, it is necessary for the woman that is with him to go'

103. Zayd-un   HaDara-Ø   [r-rajul-u   llaTHii   ya-ʕrif-u-**hu**]

Zayd-Nom   Pst.come.3sm-Ind   the-man-Nom   who   Impf-know.3sm-Ind-**him**

'Zayd, the man who knows him came'

104. Zayd-un   saafar-Ø-tu   [qabla   ʔan   ʔu-qaabil-a-**hu**]

Zayd-Nom   Pst.travel-Ind-1s   before   Comp   1s-meet-Sub-**him**

'Zayd, I traveled before I meet him'

Seventh, a further argument comes from the fact that when a post-verbal DP in a coordinate structure is spelled out preverbally, it has to be resumed by a pronoun in the coordinate structure island, as (105-106) show.

105. HaDara-Ø   Zayd-un   wa   ʕaliyy-un

Pst.come.3sm-Ind   Zayd-Nom   and   Ali-Nom

'Zayd and Ali came'

106. Zayd-un   HaDara-Ø   **huwwa**   wa   ʕaliyy-un

Zayd-Nom   Pst.come3sm-Ind   **he**   and   Ali

'Zayd, he and Ali came'

Soltan states that the post-verbal DP, being in a coordinate structure island, could not have moved out of the island. This state of affairs supports a left periphery/base-generation analysis. Eighth, Case facts also indicate that post-verbal DPs are subjects while preverbal DPs are topics. To illustrate, post-verbal DPs are always assigned structural Nom, as (107-108) show.

107. kataba-Ø   l-mudarris-**u**   d-dars-a

   Pst.write.sm-Ind   the-teacher-**Nom**   the-lesson-Acc

   'the teacher wrote the lesson'

108. ya-xshaa-Ø   Allah-a   l-ʕulamaaʔ-**u**

   Impf-fear.3sm-Ind   God-Acc   the-scientists-**Nom**

   'scientists fear God'

In contrast, preverbal DPs receive default Nom (at PF), since they can receive lexical Acc when preceded by Comp elements like 'ʔinna',[51] as in (110), or when in the embedded subject position of an ECM construction (where it receives Acc from the matrix verb), as (111) shows.[52]

109. ʔal-mudarris-**u**   kataba-Ø   d-dars-a

   the-teacher-**Nom**   Pst.write.sm-Ind   the-lesson-Acc

   'the teacher wrote the lesson'

110. ʔinna l-mudarris-**a**   kataba-Ø   d-dars-a

---

[51] More on the nature of this lexical Acc case as well as the one received by predicates in copular sentences, and also on how it is different from structural Case will be discussed in section 4.2.2.

[52] In chapter 5, I will show that the position occupied by the DP 'l-mudarris-a' in (111) is not the subject position, but rather the topic position (Spec, TopP) of the embedded clause.

Comp   the-teacher-**Acc**   Pst.write.sm-Ind   the-lesson-Acc

'certainly the teacher wrote the lesson'

111. Zanna-Ø   l-walad-u   l-mudarris-**a**   kataba-Ø   d-dars-a

Pst.believe.3sm-Ind the-boy-Nom the-teacher-**Acc** Pst.write.sm-Ind the-lesson-Acc

'the boy believed that the teacher has written the lesson'

Basically, assuming the Case Freezing Condition (CFC) of Uriagereka (2008) according to which a DP may not realize more than one Case value, the data in (109-111) indicate that the relevant DP is not in the scope of a Case assigner in the absence of 'ʔinna' and the ECM verb, which is why it receives default case (to be discussed in section 3.3.2).

Having shown that the preverbal DP in the SVO structure is a topic, I would like to argue that the pre-predicate DP in (112) is also a topic, base-generated in the left periphery, thus contra Fassi Fehri (1993:33) and Benmamoun (2000:40, 2008:107) who assume that it is a subject.[53]

112. ʔal-mudarris-u   mariiD-un

the-teacher-Nom   sick-Nom

'the teacher is sick'

The first argument that the DP 'the teacher' is a topic comes from the observation that (112) conveys a categorical interpretation (rather than a thetic one) where the DP is interpreted as the topic of the discourse, with the predicate commenting on it. The second argument comes from

[53] In fact, Bakir (1980:176), who suggests that there is a verbal copula in verbless sentences, proposed that the pre-copula DP is a topic, not a subject. He, though, proposed an analysis where the subject is a post-copula pronoun. He thus posited two deletion operations, one that deletes the copula, and the other deletes the pronoun.

the fact that the underlined DP in (112), like the preverbal DP in the SVO structure, cannot be indefinite nonspecific, as the comparison between (113) and (114) shows.

113. ʔar-rajul-u   mariiD-un

the-man-Nom   sick-Nom

'the man is sick'

114. rajul-un   mariiD-un

man-Nom   sick-Nom

'a sick man'

'a man is sick' ≠ (114)

In other words, compared to (113), which is a full clause, (114), with an indefinite nonspecific pre-predicate nominal, is a DP. Thus the DP in (112) is a topic, not a subject. The third argument is based on the fact that the DP in (112) has to be resumed by a pronoun within a coordinate structure island, as (115) shows, which suggests that it is base-generated in the left-periphery, since it could not have moved out of such a structure, thus ruling out A-movement.

115. ʔar-rajul-u   **huwa**   wa   ʔax-uu-hu   marDaa

the-man-Nom   **he**   and   brother-Nom-his   sick.p.Nom

'the man, he and his brother are sick'

The fourth argument for this claim comes from the fact that this DP can realize lexical Acc in the presence of 'ʔinna', as (116) shows, and also when it occupies the embedded subject position of an ECM predicate, as in (117).

116. ʔinna   l-mudarris-**a**   mariiD-un

Comp   the-teacher-**Acc**   sick-Nom

'certainly the teacher is sick'

117. Zanna-Ø   l-walad-u   l-mudarris-**a**   mariiD-un

Pst.believe.3sm-Ind   the-boy-Nom   the-teacher-**Acc**   sick-Nom

'the boy believed the teacher to be sick'

This indicates that this DP is *not* in the scope of a case assigner in (112), thus in a left peripheral/A-bar position, otherwise it would not have assumed the case assigned by 'ʔinna' or the ECM verb, assuming the CFC (Uriagereka 2008). Therefore, the DP in (112) fits the syntactic and semantic properties associated with the preverbal DP in the SVO sentences. Thus the pre-predicate DP in (112) realizes default Nom case at PF (which is what Soltan claims for the preverbal DP in the SVO structure).

Likewise, predicates of verbless sentences also receive default Nom case since they receive lexical Acc in the presence of the copula 'kaana', as (118) shows. Basically, the difference between (118) and (119) is based on the value of tense, past in (118) and present in (119). Thus, since this difference does not usually lead to a change/difference in Case values, I propose that in (119), the predicate receives default Nom, on a par with its topic.[54]

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[54] This assumption is supported by English data like (i-iii).

i. he is sick.

ii. he was sick.

iii. he will be sick.

As we can see, the Case value of the subject does not change as the tense of the sentence/verb changes, that is, as the value of [T] on I^0 changes.

118. kaana-Ø   l-mudarris-u   mariiD-**an**

   Pst.be.3sm-Ind the-teacher-Nom sick-**Acc**

   'the teacher **was** sick'

119. ʔal-mudarris-u   mariiD-**un**

   the-teacher-Nom   sick-**Nom**

   'the teacher **is** sick'

As a matter of fact, Basran grammarians of Arabic referred to both the preverbal DP in the SVO structure and the pre-predicate DP in verbless sentences as 'mubtadaʔ', meaning 'topic', and maintained that they both receive Nom case through 'ʔibtidaaʔ', roughly, by virtue of not being preceded by a verb (Ibn Al-Anbari 1961:40).[55] Thus given the contribution of what might be termed the Basran/Soltan approach, preverbal DPs are topics. The relevant aspect of this work to the present thesis is that, like preverbal DPs, topics and predicates of verbless sentences receive default Nom case since they receive other Case values in the presence of Case assigners. This indicates that in the absence of these case assigners ('ʔinna', the ECM verb, and the copula) the topic and predicate of verbless sentences are *not* in the scope of a case assigner (which is the condition that triggers default case, as we will see in the next section).

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[55] As far as the Nom case realized by the predicate is concerned, some Basran grammarians argue that it comes from 'ʔibtidaaʔ' (not being preceded by a verb), while others argue that it comes from the 'mubtadaʔ/topic', and yet other Basrans argue that it comes from both the 'mubtadaʔ' and 'ʔibtidaaʔ' (Ibn Al-Anbari 1961:40). Kufan grammarians, on the other hand, maintained that the topic is Nom-marked by the predicate and that the predicate is Nom-marked by the topic.

3.3.2. Default Case is Part of UG

Given the data in the previous section, it seems necessary to have a theory of default case in SA. Schütze's (1997, 2001) theory of default case lends itself perfectly to the default case facts in SA. To illustrate, Schütze (2001) proposes that when there is no structural Case assigner in the sentence, the DP has no unvalued [Case] feature (to be valued) in the narrow syntax.[56] In this respect, he argues that "the caseless DP […] survives to LF and PF, given that it never had any uninterpretable features that needed to be checked"; thus "no (PF or LF) crash is caused by the absence of case features on a DP" (p. 207). This [Case]-less DP reaches the morphological component (or PF) without any Case specification, in which case a certain procedure applies to grant this DP the default case specification of the language; thus different languages have different default case specifications. Based on a variety of English data, Schütze (2001) argues that the default case specification for English is Acc, as (120) shows.

120. The best athlete, her/*she, should win.   (from Schütze 2001:210)

The sentence (120) presents a context in English where the DP has no [Case] feature in the narrow syntax given the fact that it is not in the scope of a Case assigner.

Default case in SA applies to preverbal DPs, as well as to topics and predicates of verbless sentences. Adopting Schütze's conception of default case, I will propose that the preverbal DP, and the topic and predicate of verbless sentences reach the morphological component with no case specification. Here Schütze proposes "that default case is implemented by a feature filling or "redundancy" rule early in the morphological component. This rule states that a nominal that lacks any case features when it comes from the syntax should be supplied with the set of features corresponding to the default case setting for the language" (Schütze 1997:161). Therefore, applying   Schütze's   (1997:161,   2001)   conception   of   default   case   results   in

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[56] As we will see later, in the absence of Case licensers, the DP has no [Case] feature because it is merged in a position where [Case] is irrelevant (Spec, TopP). In this case, the feature [Topic] is the licensing one and also the one that makes the DP visible at LF for θ-role assignment (as we will see later).

'morphophonologically' assigning Nom m-case to preverbal DPs (which count as topics) as well as to the topic and predicate of verbless sentences at PF, since Nom is the default case in SA (Mohammad 1990, 2000, and Ouhalla 1994). As far as the system proposed in this thesis is concerned, default Nom case applies only to topics (DPs occupying Spec, TopP) and predicates (predicative nominal and adjectival elements, which have no D^0 node) when they are not in the scope of a case assigner.[57] The relevant point in this section is that preverbal DPs, and topics and predicates of verbless sentences receive default, rather than structural, Nom in SA.

3.3.3. Verbless Sentences are Finite Clauses

Despite the fact that verbless sentences in SA lack a (copular) verb, they can be shown to be finite clauses. First, verbless sentences have been argued to encode the functional category of tense. Fassi Fehri (1993) states that since contrasting (121) with (122) shows that a verbal sentence contains tense, then, by analogy, contrasting (123) with (124) must indicate that a verbless sentence contains tense.

121. ʔar-rajul-u   ya-ʔkul-u   l-ʔaan-a

the-man-Nom   Impf-eat.sm.**Prs**-Ind   the-now-Acc

'the man is eating now'

122. *ʔar-rajul-u   ya-ʔkul-u   ʔams

the-man-Nom   Impf-eat.sm.**Prs**-Ind   yesterday

123. ʔar-rajul-u   mariiD-un   l-ʔaan-a

the-man-Nom   sick-Nom   the-now-Acc

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[57] In chapter 4 where I make the distinction between Case checking and case assignment, we will discover that these elements (topics and predicates) are subject to lexical case assignment, but *not* to structural Case checking.

'the man is sick now'

124. *ʔar-rajul-u   mariiD-un   ʔams

      the-man-Nom   sick-Nom   <u>yesterday</u>

Basically, the ungrammaticality of (124) indicates that the past tense contributed by the adverb contradicts the present tense contributed by the verbless sentence. Moreover, Benmamoun (2000:40) argues that support for the assumption that verbless sentences have a tense operator comes from the fact that they are grammatical with temporal adverbs, as (123) shows, which must be anchored by tense, as argued in Eisele (1988). In addition, Benmamoun (2000) argues that verbless sentences contain tense since a verbless sentence embedded under a clause in the past tense can have an independent temporal reference, which is the present tense deictic interpretation, as (125) shows.[58]

125. qaala-Ø   l-ʔab-u   ʔanna ʔabn-a-hu   fii l-bayt-i

      Pst.say.3sm-Ind the-father-Nom that   son-Acc-him in the-house-Gen

      'the father **said** that his son **is** in the house'

Moreover, as Benmamoun (2000) observes, verbless sentences are tensed clauses since they can co-occur with the Comp-element 'ʔinna', as (126) shows, given the fact that 'ʔinna' selects only tensed clauses, as the matrix clause of (127) shows, but not tenseless clauses, as the embedded clause of (127) shows; the latter are selected by 'ʔan', which cannot co-occur with verbless sentences, as (128) shows.[59]

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[58] It is noteworthy that this is the SA equivalent of Benmamoun's Moroccan Arabic sentence.

[59] It is also noteworthy that Benmamoun's argument is based on the distribution of the Moroccan Arabic equivalent of 'ʔinna', which is 'bəlli'.

126. ʔinna   l-walad-a   mariiD-un

     Comp   the-boy-Acc   sick-Nom

     'certainly the boy is sick'

127. ʔinna   r-rajulu   Haawala-Ø   [*ʔinna/ʔan   ya-naam-a]

     Comp   the-man-Nom   Pst.try.3sm-Ind   Comp   Impf-sleep.3sm-Sub

     'the man tried to sleep'

128. *ʔan   l-walad-a   mariiD-un

      Comp   the-boy-Acc   sick-Nom

In addition to tense [T], verbless sentences can also be argued to encode a [Mood] feature that denotes indicative mood since they express facts, ideas, beliefs, and assertions. In this regard, Binnick (1991:67) states that the indicative is the 'indicating' or 'pointing out' mood. Also, Winford (2000:67) states that the "'indicative' mood […] covers areas of actuality where the speaker merely asserts a proposition as fact". Besides [T] and [Mood], verbless sentences have also been argued to encode agreement, as in Fassi Fehri (1993:88), who argues that verbless sentences show evidence of sentential agreement, as shown by his sentence, reproduced in (129).

129. lays-at   Hind-un   shaaʕir-at-an

     Neg-sf   Hind-Nom   poet-f-Acc

     'Hind is not a poet'

Basically, the fact that the negative particle 'laysa' realizes agreement with the two nominals indicates that these clauses encode agreement. While I agree with him that verbless sentences encode agreement, I think that his evidence is somewhat lacking given Wright's (1967) proposal

that the negative particle 'laysa' is a composite form, composed of both the negative particle, 'laa', and the archaic copula, 'ʔays', which means that the sentence is not technically verbless. Wright's proposal is supported by the fact that the predicate realizes lexical Acc, which is the case value that it realizes in the presence of the copular verb 'kaana'. Despite this, I think that Fassi Fehri's idea can be strengthened. First of all, Fassi Fehri's sentence does not depict the canonical (or unmarked) word order of present tense sentences.[60] In other words, a negative verbless sentence (which denotes present tense) in the unmarked order should look as in (130-131), that is, noun-initial.

130. Hind-un   lays-at   mariiDat-an

       Hind-Nom   Neg-**sf**   sick.sf-Acc

       'Hind is not sick'

131. ʔal-ʔawlaad-u   lays-uu   marDaa

       the-boys-Nom   Neg-**pm**   sick.pm.Acc
       'the boys are not sick'

This way, the Neg+V complex realizes the ϕ-features on I^0. Now, the claim that verbless sentences encode agreement can be supported by the fact that verbless sentences are ungrammatical with the non-ϕ-inflecting negative particles, as (132-133) show.

132. *ʔal-ʔawlaad-u   maa   marDaa
        the-boys-Nom   Neg   sick.pm.Nom

133. *ʔal-ʔawlaad-u   laa   marDaa

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[60] In Al-Balushi (Forthcoming), where I investigate the question of why verbless sentences are verbless, I provide evidence that the unmarked word order of present tense sentences (verbal and verbless) in SA is noun-initial, that is, topic-(verb-)object/predicate, whereas the unmarked word order of non-present tense sentences (verbal and copular) is verb-initial, that is, verb-subject-object/-predicate.

the-boys-Nom   Neg   sick.pm.Nom

In other words, verbless sentences are only grammatical with the kind of negative particle that can realize their φ-features, and so they encode agreement.[61]

Thus, verbless sentences have a φ-complete I^0. However, Soltan (2007) argues that I^0 in verbless sentences (as well as in present tense verbal sentences) is φ-less, which is how he accounts for the observation that structural Nom Case is not licensed in verbless sentences. However, since I argue that structural Case is not licensed by agreement (or φ-features), I will not assume that the I^0 in verbless sentences is φ-less simply because it cannot license structural Nom Case. Therefore, I will argue that the I^0 head in verbless sentences is φ-complete, a property that enables it to license *pro* in Spec, PredP (as will be proposed in section 3.3.4). The presence of

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[61] Support for the claim that verbless sentences encode agreement comes from the fact that this agreement morphology must be phonetically realized by some element. To illustrate, in verbless sentences, like (i), those agreement features are spelled out by the topic itself. In negative verbless sentences, these agreement features are spelled out by the negative particle, as in (ii). Thus a sentence like (iii), where the negative particle precedes the topic (which can be in Spec, IP, which is an A-bar position in SA for Soltan 2007), should be grammatical since the assumed agreement features (in I^0) are spelled out by the topic (where NegP is higher than IP), as in a regular verbless sentence. This means that those φ-features must be spelled out by the preceding lexical element.

    i. ʔal-ʔawlaad-u   marDaa

      the-boys-Nom   sick.pm.Acc

      'the boys are not sick'

    ii. ʔal-ʔawlaad-u   lays-uu   marDaa

      the-boys-Nom   Neg-**pm**   sick.pm.Acc

      'the boys are not sick'

    iii. maa   l-ʔawlaad-u   marDaa

      Neg   the-boys-Nom   sick.pm.Nom

      'the boys are not sick'

So, basically, the main point here is that the φ-content of *pro* must be spelled out by something. If this reasoning (that pre-agentive-DP elements, verbs, as in VSO structures, and negative particles, as in (iii) do not have to be φ-complete, since they are followed by the nominal element that realizes the relevant φ-features) is on the right track, then it provides more support for my claim (from chapter 2) that I^0, or even Neg^0, is φ-complete only to reveal the φ-content of the *pro* in Spec, v*P/Spec, PredP (for verbless sentences, as will be shown in the next section), that is, to license *pro*, but crucially *not* to license structural Case.

pro in this thematic position is necessary to license the topic, which is a non-argumental element licensed in the A-bar domain through co-indexation with *pro*. In other words, unlike Soltan who assumes that the topic receives default Nom because I^0 of the verbless sentence is ϕ-less, I believe that the topic gets default Nom as a result of the absence of the structural Case licensing feature ([VC]) from I^0, due to the absence of the (copular) verb. My justification is in line with the analysis to be presented and formalized in chapter 4. On the other hand, Benmamoun (2000, 2008) uses the arguments that verbless sentences have a [T] feature to suggest that the topic (for him 'subject') receives structural Nom Case from I^0. While I agree with him that verbless sentences have an IP/TP, I disagree with him that this Infl projection is the source of the Nom case on the topic/subject (and predicate) of the verbless clause. To sum up, the relevant point this section contributes to this thesis is that <u>verbless sentences</u> are <u>finite clauses</u>.

3.3.4. The Structure of SA Copular and Verbless sentences

Assuming the insights discussed in the previous sections, this section makes a proposal for the clause structure of SA verbless sentences and another one for SA copular sentences. I will first discuss the thematic core of these constructions where I make some assumptions about their internal structure; (134) is a verbless sentence, and (135-136) are copular sentences. Then I will discuss their functional properties. After stating the assumptions (with support from both the literature and the SA relevant facts), I will present the proposed analyses.

134. ʔar-rajul-u   mariiD-un

   the-man-Nom   sick-Nom

   'the man is sick'

135. kaana-Ø   r-rajul-u   mariiD-an

   Pst.be.3sm-Ind   the-man-Nom   sick-Acc

   'the man was sick'

136. sa-ya-kuun-u   r-rajul-u   mariiD-an

Fut-Impf-be.sm-Ind   the-man-Nom   sick-Acc

'the man will be sick'

First, I assume that SA verbless and copular sentences must be analyzed in terms of Small Clause (SC), which, in copular sentences, is selected by the copular verb. The proposal that the copula in copular constructions selects a SC was made in Stowell (1978) and Soltan (2007:114), among others. Second, I assume that this SC has a functional head, $Pred^0$, which is responsible for regulating the predicational relation between the argument and the predicate (Bailyn 2001, and Adger & Ramchand 2003). This SC head has a maximal projection, PredP, as well as an intermediate projection, thus a specifier and a complement; Stowell (1981, 1983) proposes that a SC is a maximal projection of the predicate. The proposal that the SC (represented configurationally by PredP) has a functional head ($Pred^0$) was made in Bowers (1993), Bailyn (2001), Bailyn & Citko (1999), Bailyn & Rubin (1991), Baker (2003), and Adger & Ramchand (2003), as well as in Citko (2008) who uses πP instead of PredP. Unlike many of these proposals, the present one claims that the head of the SC, $Pred^0$, is *not* responsible for the case that the predicate realizes. As far as SA is concerned, the predicate realizes lexical Acc case when there is a copula in the sentence, and default Nom case when there is no copula in the sentence, as (134-136) show. Since this thesis is on Case, I will not get into detail about the internal structure of the SC; rather, I will move on to discussing the functional domain of SA verbless and copular sentences.

First, the data in (137-139) show that SA verbless sentences also have a CP layer. Benmamoun (2000:41) suggests that the fact that "both the subject and the predicate can be wh-moved in questions and relatives" indicates that verbless sentences constitute CPs; (137-139) are the SA equivalents of Benmamoun's Moroccan Arabic examples.

137. man   fii   l-bayt-i

     who   in   the-house-Gen

     'who is in the house?'

138. ʔayna   Omar

    where   Omar.Nom

    'where is Omar?'

139. ʔal-walad-u   llaTHii fii   l-bayt-i

    the-boy-Nom   who   in   the-house-Gen

    'the boy who is in the house'

Second, as shown in section 3.3.3, SA verbless sentences are finite clauses, and so have an IP projection, where I^0 is the locus of inflectional properties ([T], [Mood], and [φ]). Using similar diagnostics (or even by virtue of having a copular verb that can show tense, mood, and agreement inflections), SA copular sentences can also be argued to have an IP projection. Third, SA copular sentences can also be shown to have a CP layer, as illustrated by (140-142).

140. man   kaana-Ø   fii   l-bayt-i

    who   Pst.be.3sm-Ind   in   the-house-Gen

    'who was in the house?'

141. ʔayna   kaana-Ø   l-walad-u

    where   Pst.be.3sm-Ind   the-boy-Nom

    'where was the boy?'

142. ʔal-walad-u   llaTHii sa-ya-kuun-u   fii   l-bayt-i

    the-boy-Nom   who   Fut-Impf-be.3sm-Ind   in   the-house-Gen

    'the boy who will be in the house'

These findings about the structure of SA verbless and copular sentences (having a PredP layer as well as IP and CP domains) are consistent with Adger & Ramchand's (2003:325-326) view that "a clause consists of a predicational core where thematic relations are licensed, which is delimited by a head, Pred. Pred acts as the syntactic edge of the predicational core (Chomsky 2000, 2001), and its projection is surmounted by an articulated functional domain containing heads that check formal features, trigger displacement, and mediate other important grammatical and information-structural properties of the clause".[62]

Given the finding that both verbless and copular sentences have (besides their thematic domains) a full functional domain, one would be tempted to assume the same structural treatment for the underlined DPs in (143-144), that is, both are subjects.

143. ʔar-rajul-u   mariiD-un

       the-man-Nom   sick-Nom

       'the man is sick'

144. kaana-Ø   r-rajul-u   mariiD-an

       Pst.be.3sm-Ind   the-man-Nom   sick-Acc

       'the man was sick'

As I showed in section 3.3.1, the underlined DP in (143) is a topic, not a subject. I assume that it is merged in Spec, TopP, licensed through co-indexation with *pro* in Spec, PredP, which itself is

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[62] This view of SA verbless and copular sentences as having both a SC layer (with no IP) and a functional layer (comprising an IP and a CP) is in line with Verkuyl (1993) who suggests that SCs are semantically non-durative and that they represent an end state. Also, Boskovic (1997:131) states that "there seems to be general consensus that small clauses do not contain a CP projection"; note that the CP and IP projections in my proposal are not part of the small clause component, which is represented by PredP.

licensed by a φ-complete I^0. The predicate is merged in the complement to $Pred^0$ position. Thus the proposed structure for the verbless sentence in (143) is in (145).

145.

```
                          TopP
                         /    \
    the man   ʔar-rajul-u i      IP
                              /    \
                            I       PredP
                                   /     \
                               pro_i      Pred'
                                         /     \
                                      Pred      AP
                                      sick      mariiD-un
```
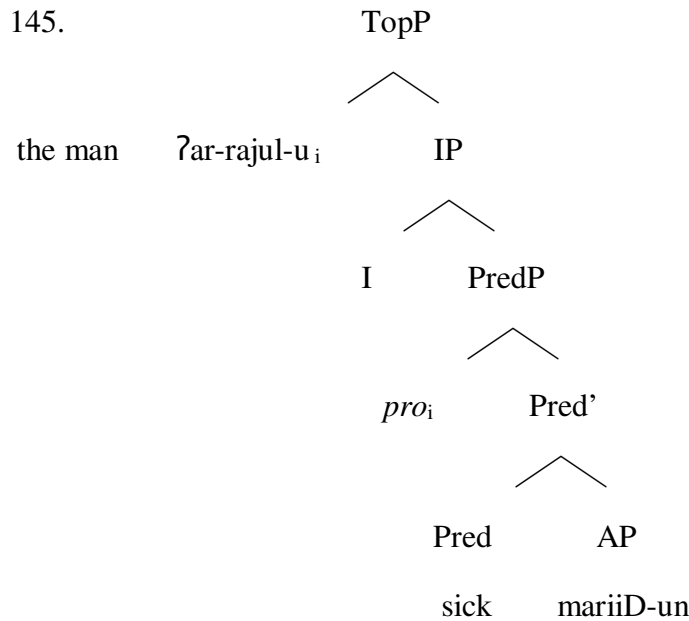
As for the underlined DP in (144), I will follow the standard view (Fassi Fehri 1993, Benmamoun 2000, among others) that it is a subject. Thus the DP is merged in Spec, PredP, and receives structural Nom Case from I^0, which is where the verb eventually moves. One piece of evidence for the claim that this DP is a subject (not a topic) comes from the fact that ungrammaticality arises if it is preceded by 'ʔinna', as (146-147) show. This is because this DP is already in the scope of a structural Case-checking category, I^0, which makes it qualify for structural Nom Case. Therefore, being in the scope of I^0 precludes this DP from receiving lexical Acc case from 'ʔinna', which has to discharge its Acc case to a DP. This reasoning is in line with the Case Freezing Condition (CFC) (Uriagereka 2008) according to which a nominal may not receive more than one Case value. It is noteworthy that ungrammaticality is induced regardless of the Case values the nominals in (146-147) realize.

146. *ʔinna   kaana-Ø   <u>r-rajul-u/-a</u>   mariiD-an/-un

     Comp   Pst.be.3sm-Ind   the-man-Nom/-Acc   sick-Acc/-Nom

147. *kaana-Ø   Ɂinna   r-rajul-u/-a   mariiD-an/-un

     Pst.be.3sm-Ind   Comp   the-man-Nom/-Acc   sick-Acc/-Nom

Given the preceding discussion, I propose that the sentence (144) has the clause structure in (148).[63] Throughout the thesis, I follow Fassi Fehri (1993:16-19) in assuming that the verb always moves to I^0 in the SA clause structure.[64]

148.

```
                      CP
                     /  \
                    C    IP
                        /  \
                       I    VP
                  was kaana-Ø  / \
                             V   PredP
                      was  kaana-Ø  / \
                    the man r-rajul-u  Pred'
                                      /  \
                                    Pred  AP
                                    sick  mariiD-an
```
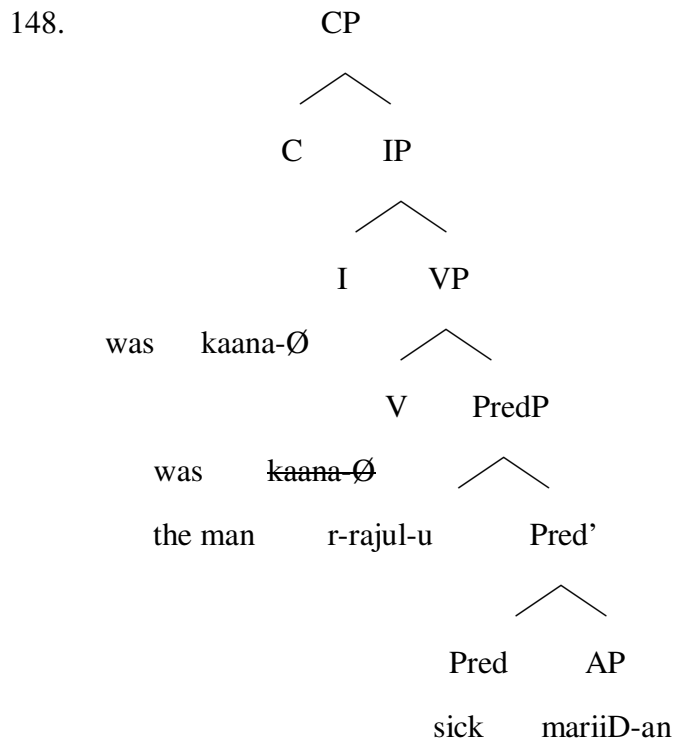
Thus verbless sentences (as well as copular sentences) "are full-fledged clauses that display the same properties that obtain in tensed clauses" Benmamoun (2000:42). These clause structure

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[63] This structure is different from the one in Fassi Fehri (1993:88) in that his includes an AgrP projection above a TP one. Throughout the thesis, a strikethrough on a vocabulary item in a tree indicates an 'unpronounced copy'.

[64] See Benmamoun (2000:51-66) for the view that the verb in SA moves to I^0 in the past but not in the present tense.

proposals will be very important for the account of the Case checking/assignment facts of verbless and copular sentences in SA (to be discussed in chapter 4).[65]

The data, findings, and discussion in section 3.3 have some implications for the theory of Case to be laid out in chapter 4. To illustrate, section 3.3.1 showed that the pre-predicate DP in verbless sentences is a topic, base-generated in the A-bar domain. It also showed that verbless sentences have no Case licensers, which triggers the application of the default case mechanism, since the relevant elements do not have [Case] features in the syntax (as described in section 3.3.2). Section 3.3.3 showed that verbless sentences have all the three features that have been proposed to license structural Case, [T] (Pesetsky & Torrego 2001, 2004), [φ] (Schütze 1997, Chomsky 2001, Soltan 2007), [Mood] (Aygen 2002). Section 3.3.4 showed that unlike verbless sentences, copular sentences have a subject, rather than a topic, and also license structural Case. These findings about verbless sentences indicate that structural Case is not licensed by the Infl domain features, [T], [φ], or [Mood], but rather by [VC], which is the only (relevant) verbal feature missing in verbless sentences, due to the fact that verbs are not licensed in these clauses, as shown in section 3.2.2. Thus Case co-exists only with [VC]. Therefore, I claim that structural Case in SA is licensed by [VC]. Support for this reasoning comes from copular sentences, which

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[65] However, one question remains, regarding the assumption that the *pro* in verbless sentences does not receive Case (since verbless sentences do not license structural Case), unlike the *pro* proposed for the same purpose (licensing the topic) in Spec, v*P in verbal SVO sentences, as (i-ii) schematically show. In (ii), *pro* is assumed to license the Nom Case feature on I^0, since there is one.

     i. ʔar-rajul-u$_i$ *pro*$_i$ mariiD-un

      the-man-Nom   ec   sick-Nom

      'the man is sick'

     ii. ʔar-rajul-u$_i$ yu-Hibb-u   *pro*$_i$ l-laHm-a

      the-man-Nom   Impf-like.3sm-Ind   ec   the-meat-Acc

      'the man like meat'

This state of affairs is problematic since a system should ideally be consistent with respect to whether or not an element receives Case. Since addressing the Case requirements of *pro* requires reference to issues discussed in chapters 4-5 (especially the case of participial sentences), I will get back to this issue in section 5.6.

having a verb, thus [VC], license structural Nom Case. The link claimed between VC and Case is formalized in chapter 4.[66]

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[66] After presenting and defending the proposed theory of Case in chapters 3-5 using SA data, I will, in chapter 6, attempt to apply this theory of DP/Case licensing as dependent on VC licensing to English, an SVO language, taking auxiliaries and modals, as well as certain verbs as verbal licensers or VC assigners. If this application proves successful in accounting for the English facts, it could show that this theory can potentially accounts for Case licensing in other languages.

4. Verbal Case as the Structural Case Licenser

If ɸ-agreement and tense do not license Case in SA (as argued in chapter 2), what does? In this chapter, I claim that structural Case in SA is licensed by Verbal Case (VC), the feature that licenses verbs in the language (as shown in section 3.2.2). Section 4.1 presents a novel account of VC as the feature of 'Comp finiteness', which licenses Case to the arguments in the Infl domain. In section 4.2, I formalize a Case-checking system that accounts for the Case facts in SA. Section 4.3 reviews a number of Case-related analyses from the literature where one or some of the assumptions or claims that this account is based on have been proposed. Section 4.4 responds to Chomsky's (2005, 2006) notion of 'feature inheritance' as the mechanism responsible for structural Case checking/assignment, and shows that it is both insufficient (given the SA facts) and superfluous (given the availability of Agree).

4.1. The Concept of Verbal Case Revisited

This section starts by discussing two perspectives on the concept of 'finiteness', Infl-related and Comp-related, and argues that structural Case is dependent on the latter. Basically, given the data examined in chapters 2 and 3, [T], [ɸ], and [Mood] do *not* license Case in SA, which indicates that there is another feature responsible for the licensing of structural Case. Section 4.1.2 then argues that structural Case is licensed by a [VC] feature that resides in the Comp domain, specifically in Fin^0.

4.1.1. Finiteness

4.1.1.1. Infl-related Finiteness[67]

The concept of 'finiteness' has received a number of definitions. One of these is based on distribution. Syntacticians have assumed that a finite verb is one "whose form is such that it can

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[67] Much of the discussion in this section is based on Nikolaeva (2007b).

stand in a simple declarative sentence" (Matthews 1997). In other words, finite verbal forms are the independent ones (which make a clause independent), whereas the nonfinite ones are those that make a clause dependent. Another definition is based on inflection. Basically, syntacticians maintained that a finite verbal form is one that is "limited by properties of person, number and tense" (Huddleston 1988:44).[68] In other words, a finite verb is one which is inflected for both tense and agreement. The common property of these two definitions is that they assume that 'finiteness' is a property of the verb (rather than the clause).

Given these two definitions, the natural intuition is that verbs inflected for tense and agreement would occur in independent clauses. However, these verb-based definitions of finiteness are not infallible. For example, in Kannada participles and gerunds (which are considered nonfinite) are inflected for tense, but not agreement (Sridhar 1990). By contrast, inflected infinitives in European Portuguese are inflected for agreement, but not tense (Raposo 1987).[69] As Nikolaeva (2007b:2) states, "neither tense nor agreement is a universal category, so whichever is chosen [as responsible for/the indicator of finiteness] will be absent in a number of languages". For example, Lango verbs do not inflect for tense, whereas the Japanese ones do not inflect for agreement. Given the fact that there are languages without inflectional morphology, like Chinese and Vietnamese, and "languages like Slave, where the same verbal form is used in all syntactic contexts … (Rice 1989)", this indicates that "the traditional notion of finiteness is ill-defined" (Nikolaeva 2007b:3), which may cast doubt on its universality.

This situation led to the view that finiteness must be defined as an element more abstract than verbal inflectional morphology. In other words, it should be "reanalyzed as something more abstract, essentially a clausal category that is only secondarily reflected in the form of the verb" (Nikolaeva 2007b:4); this way, finiteness receives "the status of a clausal head". By 'a clausal category/head', Nikolaeva refers to the Infl node (previously Aux, and later T) as the

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[68] Both of these criteria, independence and inflection, are also assumed in Binnick (1991).

[69] See Cowper (2002) for a review of such cases where non-finite verbal forms carry either tense or agreement and crucially license Nom Case, a situation that she dubs 'pseudofiniteness'.

representation of finiteness. Now, Infl carries tense and agreement information, which if present make the clause/I^0 finite, and nonfinite if absent. Thus finiteness correlates with Nom Case, and hence overt subjects; the absence of finiteness correlates with the absence of Nom Case. Nonetheless, data from a number of languages show that only agreement could make Infl finite, and so a Case licenser (e.g. Turkish, George & Kornfilt 1981).

Though I agree with Nikolaeva that a clause-based conception of finiteness is needed if finiteness is to be responsible for structural Case, I think associating finiteness with tense and agreement is not an improvement over the initial conception of finiteness. I think that a tense-/agreement-based conception of finiteness is still related to the verb, since tense and agreement are realized on a head associated with the verb, Infl. Thus like the previous conception of finiteness, this one also is not infallible. For example, European Portuguese inflected infinitives still pose a problem for being [+Agr, -T] and having overt subjects. Also, the Welsh infinitives agree with pronominal subjects. Moreover, the Quebec French infinitival conditionals have uninflected verbs but Nom subjects (Martineau & Motapanyane 1996). As Nikolaeva (2007b:6) states, "[r]elating finiteness to inflection predicts that languages without inflectional morphology do not have a structural distinction equivalent to that of finite/nonfinite". As far as I am concerned, this means that the notion of finiteness should be restricted neither to the verb nor to the Infl domain.

Given the fact that inflectional categories might also be spelled out on C^0 (Vincent 1997, 1998) as well as the correlation between the choice of the complementizer and the finiteness of the introduced clause, a new locus was recognized for finiteness, namely the Comp domain. Another finding pointing in the same direction is Platzack & Holmberg's (1989) that finiteness is an operator in C^0 whose realization is necessary for licensing Nom Case. This line of thought was also supported by the proposal that finiteness requires incorporation of I^0 into C^0 (Kayne 1994), and that C^0 encodes tense (Stowell 1982). This approach culminated in Rizzi (1997) where the Split-Comp-Hypothesis was proposed, according to which the C^0 domain has a Fin^0 head (besides $Force^0$, Top^0, and Foc^0 ones) where traditional inflectional finiteness categories are realized; the crucial thing about finiteness in the Comp domain is that it "is not reduced to the

presence of agreement or tense. Instead, it constitutes a more basic property of the C system that interacts with functional heads in the IP domain" (Nikolaeva 2007b:8).[70] This way, finiteness in the Comp domain is not necessarily relevant to Infl-domain properties like tense or agreement. While I agree that tense, agreement, and mood mark finiteness in the Infl domain (usually on the verb), I believe that there is another type of finiteness that is related to abstract Case. This is the topic of the next section.

4.1.1.2. Comp-related Finiteness

Given the non-universality of the verb-related finiteness properties (tense, agreement, and mood, realized on Infl), we seem to be in a dilemma as to what finiteness is, such that it licenses Nom Case. To overcome this dilemma, I propose that there is another type of finiteness that is universal (as far as the Case Filter and the Visibility Condition are correct), and which does not reside in the Infl domain, but rather in the Comp domain. This Comp-domain finiteness makes reference to VC and so to structural Case. Given the SA data that this thesis comes from, I propose that structural Case is the truly clause-based criterion for finiteness.

But was structural Case ever been proposed as the criterion for finiteness? Perhaps yes. For example, Aygen (2002) argues for a definition of finiteness (in Turkish and some other languages) in terms of Nom Case. Moreover, in his discussion of the concept 'finiteness' in Head-Driven Phrase Structure Grammar (HPSG) and Lexical Functional Grammar (LFG), Sells (2007:59) states that "finiteness is considered to really be a property of a clause", represented in terms of assertion and nominativity. In addition, Kornfilt (2007) shows that finiteness in Turkish can be expressed at the clause level as either Nom or Genitive subject Case, thus suggesting that finiteness makes reference to the notion of licensing, rather than to particular Case values, which concerns subject Case in general. In contrast to these contributions, I propose that finiteness is related to Nom and Acc structural Cases, not just Nom or subject Case. In other words, finiteness

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[70] This statement from Nikolaeva (2007b) is asserted by the current proposal of 'finiteness in Comp as Case' since Case is not reduced to the presence of agreement or tense as we saw in chapter 2; Case in SA is licensed in declarative sentences, where I^0 and v^{*0} are ϕ-defective, and in imperative sentence, where I^0 and v^{*0} have no tense.

is better associated with the feature responsible for licensing structural Case, which is VC, rather than with Infl-related features, since these features are not universal.

4.1.2. Verbal Case in SA as the Source of DP Licensing

In this section, I propose that the feature that licenses verbs in SA, [VC], also licenses argumental DPs. Given the observation (from sections 3.2.2 and 3.3) that the licensing of structural Case is contingent on the licensing of verbs, as well as the observation (from section 3.1.2) that verbs in SA receive a VC specification that is morphologically realized, then the licensing of VC seems to have two manifestations, one abstract and the other morphological. Thus, if the proposed analysis is on the right track, it seems that the computational system includes two operations related to VC. To illustrate, narrow syntax first witnesses the abstract manifestation of VC licensing (seen in the form of licensing structural Case), which I will call 'VC checking'. Narrow syntax next witnesses the morphological specification of VC (seen in the form of the m-vc specification realized by the verb), which I will call 'VC assignment'. To explain the two concepts, as well as the operations underlying them, we first need to specify the source of each.

Given the observation that (almost) all the VC-assigning particles are Comp elements (section 3.1.2), as well as the observation that structural Case is not licensed unless VC is licensed, it is reasonable to assume that the source of VC checking is the Comp domain. Also, given the observation (section 3.1.2) that, unlike subjunctive and jussive VC verb forms, indicative VC verb forms do not require VC-assigning particles, it is plausible to assume that the source of VC checking is *not* the particle, thus pointing to the presence of an 'abstract' licenser. Therefore, assuming Rizzi's (1997) Split-Comp-Hypothesis where he suggests that Fin^0 is the locus of finiteness in the Comp domain, I claim that the Fin^0 head is the source of 'VC checking'.

In addition, given the observation that the presence of the VC-assigning particles results in the verb realizing a form other than the so-called 'citation form' (which is *morphologically* the indicative VC form), then it is, again, reasonable to assume that the source of VC assignment is

the particle. Thus since SA has only subjunctive and jussive VC-assigning particles, VC assignment does not take place when the verb is in the indicative VC. Having identified the source of the two VC-related operations, let us see how they obtain.

Since the observation that DPs receive structural Case led to the (standard) assumption that [Case] is a feature on D^0,[71] I will infer from the fact that verbs receive VC that [VC] is a feature on I^0 and $v*^0$, the two functional heads in the VP (extended projection). This way, VC checking proceeds as follows. Assume that Fin^0 has a valued [VC] feature that, via Agree, values the unvalued [VC] features on I^0 and $v*^0$. This results in I^0 and $v*^0$ valuing, via Agree, the [Case] features on the subject and object, respectively. Therefore, VC checking results in Case checking, or rather DP licensing is contingent on verbal licensing.

VC assignment proceeds as follows. Upon introduction in the derivation, the particle enters an Agree relation with the verb, which results in assigning the verb a VC specification that will be relevant for the morphological component. Thus particles have indices that specify the VC values that they assign. For example the subjunctive VC-assigning particle 'ʔan' looks like 'ʔan$_{Sub(junctive)}$'; likewise, the jussive VC assigning particle 'lam' looks like 'lam$_{Juss(ive)}$'. Thus VC Assignment makes *no* contribution to the licensing of structural Case.

Given the fact that SA has verbal sentences, where both structural Nom and Acc are licensed, and copular sentences, where only structural Nom is licensed, and participial sentences, where only structural Acc is licensed (as we will see in chapter 5), as well as verbless sentences, where neither structural Nom nor Acc is licensed, we seem to need a condition as to when structural Case needs to be licensed. In other words, we need a condition that regulates when Fin^0 must and

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[71] This idea is entertained in Pesetsky & Torrego (2001, 2004), among others. Moreover, as pointed out to me by Gary Miller, it is generally held that "bare nouns cannot get Case (and must be treated as incorporated), making Case a D feature, or rather a feature checked on D".

must not have a [VC] feature. Since the answer to this question makes reference to the notion of categorial selection introduced in section 4.2, the answer will make more sense if stated there.[72]

4.2. The Proposal

Before turning to the syntactic proposal, note that I assume that valuation of features is subject to 'Match'. In other words, for an element (X^0 or XP) to value an unvalued feature, [F], on another element, the valuing element must have a valued version of that feature [F]. Thus I propose that the structural [Case] feature (on a DP) is valued (via Agree) by a [VC] feature on the relevant functional head, I^0 for Nom, and $v*^0$ for Acc.[73] This [VC] feature (which starts as unvalued) is valued (via Agree) by a valued [VC] feature on Fin^0.

For Fin^0 to value [VC], as the feature of clausal finiteness, on I^0, I^0 must first value a certain Infl-finiteness feature on Fin^0. As we will see in section 4.2.2, this mutual valuation procedure obtains in verbal sentences (section 4.2.2.1) and copular sentences (section 4.2.2.2), which witness the licensing of *structural Case*. By contrast, in verbless sentences (section 4.2.2.3) and verbless sentences with 'Ɂinna' (section 4.2.2.4), where the relevant nominals (topic and predicate) receive *default* and *lexical case* values, as shown in section 3.3, Fin^0 does *not* value features in the Infl domain. More on this important issue is in section 4.2.2.

As far as finiteness is concerned, I claim that there are two types of finiteness. First, Infl-finiteness (I-finiteness), which is traditionally taken to be marked by tense, mood, or agreement, since their presence marks verbs as finite, and their absence makes verbs non-finite. In other words, I-finiteness marks I^0 as having a valued [T] feature, or a valued [Mood] feature, or an

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[72] I will call the key feature in licensing structural Case [VC] (rather than Temporal Case [TC]), licensed by Fin^0, since this Case-licensing feature does not exist in the absence of the verb, as in verbless sentences (which have tense but do not witness the licensing of structural Case). This, at least informally, indicates that the verb provides for it.

[73] In this regard, I follow Chomsky (2001:6) who states that the "value [of Case] assigned depends on the probe: nominative for T, accusative for *v* (alternatively ergative-absolutive, with different conditions)".

unvalued set of [ϕ] features (to be valued via Agree with the subject), or a combination thereof; this claim is in line with standard views on finiteness (Rizzi 1997, among others). Second, based on the dependency observed between verbal licensing and DP licensing (sections 3.2.2 and 4.1.2), I am going to argue for the existence of what I call Comp-finiteness (C-finiteness), which I associate with VC (in its valued version) which resides in the Comp domain and licenses structural Case to the DPs in the clause. This novel view is based on the intuition that since Fin^0 values [VC] on I^0 and $v*^0$ (thus licensing the verb) and that I^0 and $v*^0$ value [Case] on the D^0 heads (thus licensing the relevant DPs), then it is plausible to assume that Fin^0 licenses Case to the DP. Therefore, since VC licenses structural Case, and VC constitutes C-finiteness, then C-finiteness is structural Case.

As far as the substantive categories TP, MoodP, AgrP are concerned, I will assume that the appropriate XP category is determined by the X^0 head that projects it, which, in turn, is determined by the I-finiteness feature [X] that instantiates it. This way, [T] instantiates a T^0 head, which projects a TP, as in declaratives/main clauses. Also, [Mood] instantiates a $Mood^0$ head, which projects a MoodP, as in imperatives, optatives, subjunctives, and jussives. Also, since [ϕ] in SA is defective in the Infl category (as shown in chapter 2), Agr^0 will *not* be instantiated, hence the absence of an AgrP projection in the language.[74] Also, since [T] and [Mood] (as well as [ϕ]) are inflectional features, I will use the label I^0 in general discussion on the Nom Case checking head. I will also use the label IP in general discussion as a cover term for TP, MoodP, and AgrP. The structural Case proposal in this thesis is based on a number of assumptions; these are listed in (1-5).

     1. Fin^0 can have a valued [VC] feature.

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[74] As we will see in chapter 5, the SA participial sentences have an [Asp] feature which instantiates an Asp^0 head, which means that the clause has an AspP projection. Nonetheless, the I-finiteness feature in the participial clause will be argued to be [ϕ], which in conjunction with [V] will license structural Acc Case to the object, but crucially not Nom Case. This is because the participle has a full [ϕ] specification by virtue of its being a quasi-nominal quasi-verbal element (hence 3rd person); thus the full [ϕ] on Asp^0 is a nominal not a verbal feature. In chapter 6, we will see that I^0 in European Portuguese inflected infinitivals is $Agrs^0$ (instantiated by a truly verbal [ϕ] category), which projects an AgrsP, hence Nom Case is licensed to the embedded subject.

2. I^0 can have an unvalued [VC] feature.

3. $v*^0$ has an unvalued [VC] feature.

4. I^0 has a valued [T], or [Mood], or [ϕ].

5. Fin^0 has an unvalued [T], or [Mood], or [ϕ].

While (1-3) are based on the SA-specific verbal and clausal data reviewed in chapter 3, (4) is a standard assumption, since I^0 is the locus of inflectional properties. Section 4.2.2, where an additional assumption related to categorial selection is made, will discuss the assumptions in (1-3), as well as the ones in (4-5), and their implications for the proposed Case feature valuation operations. As for (5), it sounds somewhat unfamiliar. Thus section 4.2.1 will review a number of studies where it was suggested that the Comp domain encodes some I-finiteness features, like tense, agreement, or mood. Some of these proposals also provide evidence for (4).

4.2.1. Fin^0 Encodes Some I-finiteness Features

4.2.1.1. Stowell (1982)

Stowell (1982) argues for the presence of a tense specification in the Comp domain. To do so, he argues for a difference between control infinitival clauses, on the one hand, and ECM and raising infinitival clauses, on the other hand. This difference is based on the nature of the tense property in these complement clauses. Basically, he argues that the control infinitives are similar to tensed clauses in that they have a tense operator, which he terms 'unrealized tense/quasi-future'' that is, "the time frame of the infinitival clause is unrealized with respect to the tense of the matrix in which it appears" (p. 562). In contrast, he suggests that ECM and raising infinitives are like gerunds in that they lack any tense operator. This contrast in terms of the availability of a tensed interpretation, proposes Stowell, correlates with the observation that while control infinitival clauses, like tensed clauses, have a Comp node, that is, have a CP layer (then called S'), the raising and ECM infinitivals lack a Comp position. To make sense of both characteristics, argues Stowell (1982:563), we should "assume that the COMP position is where tense operators must

appear, at some level of grammatical representation", be it Deep Structure, as den Besten (1978) assumes, or at LF, as Stowell himself suggests, so that it would take scope over the clause. Stowell's proposal that "infinitival control complements have a uniform internally determined tense, just as finite tensed clauses do" might prove both plausible and crucial in case we needed to extend the Case theory presented in this thesis to English. However, I will not discuss this here. I will just use Stowell's proposal that C^0 has a tense operator to support my proposal that C^0 has a [T] feature, but that since tense is crosslinguistically realized on verbs, and never on C^0 (see Chomsky 2006:14), I will assume that [T] on C^0 is unvalued.[75]

Stowell's proposal that the English control embedded C^0 encodes tense can be extended to SA embedded clauses, since those are either in the indicative mood/VC (hence both finite and deictic, Cowper 2005) or in the subjunctive mood/VC (hence finite, Cowper 2005), and so they are very likely to be specified for either a true tense specification (owing to the feature [Precedence] with indicatives) or a futurity-oriented temporal specification in the case of subjunctives. Thus SA embedded C^0 has either a [T] feature, as in (6-7), or a [Mood] feature, as in (8-9), given the assumption that 'future' makes reference to modality, hence a mood, Cowper (2005), among others.

6. yabduu   ʔanna   l-walad-a   (qad)   raHala-Ø

    seem.3sm   Comp   the-boy-Nom   (mod=already)   **Pst**.leave.3sm-Ind

    'it seems that the boy (has) left'

7. yabduu   ʔanna   l-walad-a   yu-Hibb-u   sh-shiʕr-a

    seem.3sm   Comp   the-boy-Nom   Impf.**Prs**-like.3sm-Ind   the-poetry-Acc

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[75] Stowell admits that the kind of 'tense' he is proposing for control infinitives is not the typical one seen in tensed clauses, and specified for [±Past]; see Cowper (2005) where this feature is crucial for tense. He though argues that it is available, given the distinction in interpretation between the tense of control infinitives and that of the ECM and raising ones. He argues that "their status as being neither present nor past has the effect of specifying that the time frame of the infinitival clause is *unrealized* with respect to the tense of the matrix in which it appears" (p. 562).

'it seems that the boy likes poetry'

8. yabduu   ʔanna   l-walad-a   sa-ya-rHal-u

   seem.3sm   Comp   the-boy-Nom   **Fut**-Impf-leave.3sm-Ind

   'it seems that the boy will leave'

9. yu-riid-u   l-walad-u   [ʔan   ya-naam-a]

   Impf-want-Ind   the-boy-Nom   Comp   Impf-play.3sm-Sub

   'the boy wants to sleep'

4.2.1.2. Enç (1987)

Enç (1987) argues that C^0 encodes a tense feature. To do so, she develops a theory of tense in which tenses are referential expressions that denote intervals. After presenting evidence (from Partee (1973) and Larson (1985)) that shows that tenses (and temporal expressions) in fact share some characteristics with referential elements like (pro)nominals, she suggests that tenses, similar to genitive NPs like *John's car*, require specifiers. She takes the "close connection between Comp and Infl", proposed in Stowell (1981), to propose that the specifier of tense is located in Comp. She thus assumes that "Comp can optionally carry a temporal index and that when it does, it functions as the specifier of tense, yielding an interval as its semantic value" (p. 641). Relevant to our purposes are her notions of 'shifted reading' and 'simultaneous reading' and how they interact with tenses of complement clauses, and also what they reveal about the presence of a temporal index (for me a [T] feature) on Comp, and to that I now turn.

Basically, Enç (1987) argues that (10) (her (5)) has both readings in English, shifted and simultaneous, as in (11-12) respectively, from Enç (1987:635).

10. John hear**d** that Mary **was** pregnant.

11. on the shifted reading "John hears at a <u>past time</u> that Mary was pregnant at <u>a time prior to tha</u>t".

12. on the simultaneous reading "John hears at a <u>past time</u> that Mary is pregnak at <u>the time of the hearing</u>".

In contrast to English (and other languages), states Enç (1987:649), languages like Russian and Hebrew would only have the shifted reading for the equivalent of (10); these languages express the simultaneous reading with "sentences where the matrix has past tense, but the complement has present tense". Given this difference between languages like English and languages like Russian, Enç (1987:649, fn. 19) qualifies by arguing that "we must assume that in these languages [Russian and Hebrew] Comps always carry a temporal index. This forces tenses to be anchored through their Comps". Like Russian and Hebrew, SA also has only the shifted reading for the equivalent of (10), as in (13).

13. samiʕa-Ø   Ahmad-u   ʔanna   Maryam-a   kaana-t   Haamil-an

     Pst.hear.3sm-Ind   Ahmad-Nom   Comp   Maryam-Acc   **Pst**.be.3s-f   pregnant-Acc

     'Ahmad heard that Maryam was pregnant (prior to the time of hearing)'

As in Russian and Hebrew, the simultaneous reading is obtained in SA if the complement has present tense, as shown in (14). As a matter of fact, this is the situation where a verbless sentence is used (in the embedded clause), since it expresses (deictic) present tense, given Jelinek (1981) and Ouhalla (1988).

14. samiʕa-Ø   Ahmad-u   ʔanna   Maryam-a   Haamil-un

     Pst.hear.3sm-Ind   Ahmad-Nom   Comp   Mary-Acc   pregnant-Nom

     'Ahmad heard that Mary was pregnant'

Intended reading: 'Ahmad heard that Mary is pregnant now' (deictic), or 'Ahmad heard that Mary was pregnant at the time of hearing' (simultaneous).

Given Enç's (1987) theory of tense, the data (13-14) show that SA Comps, like their Russian and Hebrew counterparts, *always* carry a temporal index, which, for my purposes, provides further support to the claim that C^0 (or Fin^0) has a tense feature [T], which I assume is unvalued.

4.2.1.3. Raposo (1987)[76]

Raposo (1987:89) argues that the head of the CP complements to epistemic and declarative but not volitional predicates dominates an abstract tense operator. In other words, epistemic and declarative predicates "select for a TENSEd CP. Volitional predicates, on the other hand, do not select for TENSEd CPs". When the tense operator is present in C^0, "the complement clause forms a semantically tensed domain; that is, it is a proposition with a time frame independent of the time frame of the matrix clause (although not necessarily distinct from it)". When the tense operator is not present in C^0, "the time frame of the complement clause is (at least partially) dependent on the time frame of the matrix clause". Though Raposo argues that the tense operator in C^0 is distinct from the tense specification in Infl, he acknowledges that they are related to each other. This proposal is similar to Rizzi's (1997) and to the one made in this thesis in that they assume that finite clauses have a tense specification in both domains, Comp and Infl. My proposal, however, elaborates on this view by suggesting that while tense is valued in the Infl domain, it is unvalued in the Comp domain.

4.2.1.4. Rizzi (1997)

Rizzi (1997) proposes that the Comp domain is specified for tense (and perhaps for other inflectional features encoded in the Infl domain). To do so, he first proposes that the complementizer system is "the interface between a propositional content (expressed by IP) and

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[76] The material in this section comes from Raposo (1987:89).

the superordinate structure (a higher clause or, possibly, the articulation of discourse, if we consider a root clause)" (p. 283). Rizzi (1997:283-286) proposes the Split-Comp-Hypothesis which assumes that the Comp system is composed of four distinct projections, ForceP, TopP, FocP, and FinP. Of these four projections, FinP (Finiteness Phrase) will be the most relevant to my proposal since finiteness "is the core IP-related characteristics that the complementizer system expresses" (p.284). Relevant to my purposes, Rizzi (1997:283) proposes that "C contains a tense specification which matches the one expressed on the lower inflectional system". Rizzi qualifies by stating that "the 'temporal' properties encoded by C are very rudimentary" compared to "tense and other inflectional specifications on the verbal system" (p. 283-284). Rizzi (1997:284) further assumes that finiteness is related to tense, mood, agreement, and Nom Case. I also follow Rizzi (1997:284) in assuming that the Comp-domain is distinct from the Infl-domain in that the latter but not the former is an extension of the verbal projection. Besides, I adopt his assumption that "the C system expresses a specification of finiteness, which in turn selects an IP system with the familiar characteristics of finiteness" (p. 284). Based on this distinction and characterization, I will assume that whatever inflectional feature there is in the Infl domain (represented by I^0), the Comp domain (represented by Fin^0) will have a copy of it, albeit in the unvalued form.

4.2.1.5. Other Proposals

This section reviews similar relevant insights from the literature. First, Pesetsky & Torrego (2001:360) propose that "C bears an uninterpretable T-feature with the EPP property" [77] (a proposal they make to motivate T-to-C movement). Second, Carstens (2003) argues for the presence of uninterpetable ϕ-features on C^0. Third, Tanaka (2005) also argues that C^0 has uninterpretable ϕ-features. Fourth, Bianchi (2003:26) argues that "both person agreement and tense are anchored to the local Logophoric Centre of the clause, encoded in Fin^0". Fifth, Adger (2007) shows that the complementizer in Irish is marked for past vs. non-past tense (whereas the verb has past vs. present vs. future specification). He also shows that in West Flemish, Fin^0

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[77] Branigan (1996:67-68) also argues that Fin^0 has an EPP feature (which attracts the subject to the Comp domain in his analysis of V-2 languages), which he calls [finite]; I will abstract away from associating EPP with finiteness.

encodes agreement features. Sixth, Rizzi (1997:307, 324) proposes that Fin^0 and Top^0 may have Agr features. Seventh, Chomsky (2001:8) also proposes that C^0 is ϕ-complete. Eighth, Stowell (1981) and Pesetsky (1982) argue that Tense/Agr moves from Infl to Comp at LF (cited in Stowell 1986:489-490). Along the same lines, Stowell (1986) states that "[a]t LF, Comp (C^0) is coindexed with Infl (I^0) by movement, and with IP by the transitivity of indexing; hence the subject of IP is governed by C^0 at LF, where Nominative Case is checked, …". Ninth, Kayne (1994:95) also proposes that finiteness may require incorporating Infl to Comp in the overt syntax. Tenth, Aygen (2002) argues that Nom Case in Turkish is licensed by a [Mood] feature on Comp and an epistemic modality feature on Fin^0. All these insights indicate that C^0 encodes some Infl property, be it tense, agreement, or mood. In the next section, I discuss the stipulation that regulates the exclusive co-existence of the [VC] feature with verbs, hence its absence in verbless sentences.

4.2.2. Case Feature Valuation: The Syntactic System

Given the current proposal, the presence of (at least one of) the I-finiteness features in the Comp domain (in its unvalued version) and its valuation (via Agree) by the valued counterpart in the Infl domain (on I^0) is an indication that the Infl domain is finite as far as I-finiteness is concerned, that is, encoding either tense, or mood, or agreement. This, in turn, informs the Comp domain that the (argumental) DPs in the Infl domain deserve (or require) licensing through Case checking/assignment. Up to this point, however, two scenarios are possible, one witnessed in verbal and copular sentences, and the other in verbless sentences (and verbless sentences with 'ʔinna'). The particulars of Case checking/assignment in these constructions are discussed in detail in the next sections, based on the system that is about to be formalized. Thus let us first establish the narrow syntactic system.

Given the observation that, while structural Case is licensed in verbal and copular sentences, verbless sentences (in general) do not witness the licensing of structural Case (as shown in section 3.3) we need to devise a system that predicts these Case facts. Thus since structural Case is licensed by the valuation of [VC] on I^0 by Fin^0, then the inability of verbless sentences (in

general) to license structural Case is expected if they lacked I^0, or Fin^0, or [VC].[78] However, given the facts discussed in sections 3.3.3 and 3.3.4, verbless sentences have both an IP projection and a CP layer (hence Fin^0). Therefore, I propose that structural Case is not licensed in verbless sentences because of the absence of the [VC] feature (due to the absence of the verb, which is the element that receives VC). Thus we need a system where I^0 and Fin^0 of verbless sentences lack [VC] features. As always, there seem to be several means to this end; three possible solutions will be discussed, of which one will be favored.

First, one could postulate a system where I^0 and Fin^0 in SA have no [VC] features in the numeration,[79] but upon Merge in a verbal or a copular sentence (where structural Case is licensed/needed), they somehow see a verbal projection, and so *gain* [VC] features.[80] However, this solution seems to violate the Inclusiveness Condition (IC) according to which "outputs consist of nothing beyond properties of items of the lexicon (lexical features) – in other words, that the interface levels consist of nothing more than arrangements of lexical features" (Chomsky 1995:225). In other words, as Chomsky (2001:2-3) maintains, the IC "bars introduction of new elements (features) in the course of computation". Basically, the constructed syntactic object must include *no* elements or features not available in the numeration. Thus this solution cannot be maintained.

Second, one could alternatively postulate that I^0 and Fin^0 always have [VC] features in the numeration, but that upon Merge in a verbless sentence, with or without 'Ɂinna' (where structural Case is not licensed), they somehow see that there is no verb and so *lose* their [VC] features.

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[78] As I will show later, valuation of [VC] on I^0 by Fin^0 automatically results in valuing [VC] on $v*^0$, since the two Infl-domain heads are linked, given the conception of Agree 'as feature sharing' (Frampton & Gutmann 2000, Pesetsky & Torrego 2007).

[79] In SA, $v*^0$ always has a [VC] feature, since it is absent when structural Acc Case is not licensed, as in unaccusatives (Chomsky 1995).

[80] The proposal that verbs must be visible was made in Fabb (1984) and Roberts (1985b), but for purposes of θ-role assignment. However, given the data I investigate in this thesis, there is no indication or motivation for verbs to be visible when they assign θ-roles (at LF).

Though it might seem at odds with the IC, it could be argued that this solution does not really violate the IC since it does not propose adding (or introducing) new features to I^0 and Fin^0 (or to the computation). In other words, while the IC states that 'the output must not contain anything that is not present in the input', it does not state that everything in the numeration must end up in the computed/spelled out structure. Thus the second solution does not constitute a violation of the IC. However, this solution violates the No Tampering Condition (NTC), according to which "Merge of X and Y leaves the two SOs [syntactic objects] unchanged" (Chomsky 2005:5). Since the assumption that I^0 and Fin^0 can lose features upon Merge indicates a change to their initial state (in the numeration), then the NTC is violated. Thus this solution, too, cannot be maintained.

Third, one could also postulate that SA has two versions of I^0, one with a [VC] feature (seen in verbal and copular sentences) and one without a [VC] feature (seen in the case of verbless sentences, with and without 'ʔinna'). Similarly, SA has two versions of Fin^0, one with a [VC] feature (in verbal and copular sentences), and the other without a [VC] feature (in verbless sentences, in general). As far as $v*^0$ is concerned, SA has only one version of $v*^0$, seen in verbal sentences with transitive and ditransitive verbs (as well as unergative verbs).[81] This is because this functional head does not appear when structural Acc Case is not licensed (Chomsky 1995), as in verbal sentences with intransitive verbs as well as in copular sentences. Given the fact that this solution does not violate any conditions, it is worth pursuing. A proposal along these lines, however, poses the following question; what conditions the appearance of the right versions of I^0 and Fin^0 exactly where they are needed?

To answer this question, I will appeal to the notion of c(ategorial) selection.[82] The conception of c-selection that this proposal is based on is that of Chomsky (1995:54) where he proposes that "[e]ach functional element has certain selectional properties: it will take certain kinds of complements, and may or may not take a specifier". Thus c-selection makes reference to the

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[81] Case checking in unergative and unaccusative constructions is discussed in chapter 5.

[82] I thank Diane Massam for suggesting selection to me.

category that the functional element selects. Also, Hallman (2004:79) states that "categorial selection is the relationship between a selecting head and the syntactic category that its dependent must have". Thus c-selection refers to the situation where a head (functional or lexical) selects its sister.[83]

Given the adopted conception of c-selection, I will propose that the version of I^0 that has a [VC] feature selects a verbal projection, a v*P (as in transitive and ditransitive clauses) or a VP (as in intransitive and copular clauses), whereas the version without a [VC] feature selects a non-verbal projection, a PredP, where the predicate can be either nominal or adjectival, or even a PP. Similarly, the version of Fin^0 that has a [VC] feature selects an IP projection instantiated by the version of I^0 that has a [VC] feature, whereas the version of Fin^0 that has no [VC] feature selects an IP projected by the version of I^0 that has no [VC] feature. This proposal realizes the observation that [VC] (and so structural Case) co-exists only with verbs. However, the question becomes how is this c-selection operation formalized and implemented in the narrow syntax?

To address this question, I will assume that verbs have a valued categorial [V] feature (Chomsky 1995:54). This feature is 'projected' from the verb to the highest verbal projections, v*P (in transitive and ditransitive clauses) or VP (in intransitive and copular clauses).[84] Thus this categorial [V] feature is realized on the maximal projection level (XP), where it is matched with an unvalued counterpart, categorial [V] feature, on the selecting head.

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[83] Though positing categorial features goes against Chomsky (2001:7) who dispenses with categorial features, on minimalist grounds, their presence seems inevitable. Also, Ian Roberts (p.c.) points out to me that resort to categorial features is necessary for "the question of the nature of the Agree relations between Tense and V", which is kind of the reason why they are introduced here.

[84] Adger (2003:135) states that the relation between v and VP is distinct from selection; that is, it is not the case that v selects a VP. He suggests that the relation between v and VP could be stated in terms of hierarchy of projections "such that whenever we have a little v, it always has a VP complement. In an intuitive sense, little vP is an extension of the projection of VP …".

In other words, the version of I^0 that has a [VC] feature also has an unvalued categorial [V] feature, which selects a sister with a valued categorial [V] feature. This way, this version of I^0 selects a v*P or a VP, in which case the valued [V] feature on the v*P or VP projection (projected from the verb) values the unvalued categorial [V] feature on I^0, via Agree. Likewise, the version of Fin^0 that has a [VC] feature also has an unvalued categorial [V] feature, which means that this version of Fin^0 selects an element with a valued categorial [V] feature. This way, the now valued categorial [V] feature on I^0 (projected to the IP level) matches the unvalued categorial [V] feature on Fin^0 and values it via Agree, upon Merge, under sisterhood; that is, these c-selectional [V] features are valued as soon as the selecting element is merged.

In contrast, the version of I^0 that has no [VC] feature has no categorial [V] feature, and so it is merged with elements that have no categorial [V] feature, hence with a PredP, as in verbless sentences, in general. Similarly, the version of Fin^0 that has no [VC] feature also has no categorial [V] feature, and so it is merged with the IP projected by the version of I^0 that has no categorial [V] feature. The versions of I^0 and Fin^0 that have no [VC] features (and seen in verbless sentences) may have unvalued categorial [Pred] features (parallel to the c-selectional [V] features), in which case the PredP projection will have a valued categorial [Pred] feature (projected from $Pred^0$), but they do not have to. In other words, for purposes of simplicity and economy, I will assume that merging these two versions of I^0 and Fin^0 is the elsewhere case that applies when the element to be selected has *no* categorial [V] feature, which is invariably PredP.

Going back to the question raised in section 4.1.2 about the ultimate diagnostic of whether Fin^0 has a [VC] feature (and thus structural Case will be licensed in the clause), I claim that Fin^0 has a [VC] feature iff it selects an XP projection that has at least one I-finiteness feature, [T], [Mood], or [ϕ], and a categorial [V] feature. This system excludes only verbless sentences due to the fact that the IP selected by Fin^0 has no [V] feature.

Having established the syntactic system, the following sections will utilize this system to account for structural Case licensing in SA. As we will see, SA also exhibits lexical case, which is Acc, assigned by lexical elements, 'ʔinna' and verbs (among other elements, mostly particles).[85]

4.2.2.1. Case in Verbal Sentences

As far as verbal sentences are concerned, the presence of the verbal projection (v*P or VP) indicates the presence of a categorial [V] feature, which means that the selector is the version of I^0 that has both a categorial [V] feature and a [VC] feature. Moreover, since indicative verbs in SA are inflected for tense, then the selected IP has an I-finiteness feature, [T]. Therefore, the version of Fin^0 that selects this IP is the one with a categorial [V] feature and a [VC] feature. Since this I-finiteness feature is [T], then it instantiates a T^0 head, and so the selected XP is TP.

Let us now see how the proposed system accounts for Case checking in (15), which has the clause structure in (16). I assume with Soltan (2007) that the subject, merged in Spec, v*P, remains in its base-generation position.

15. lam   ya-ktub-Ø   l-mudarris-uun   T-Talab-a

  Neg.Pst Impf-write.sm-Juss the-teacher-p.Nom the-request-Acc

  'the teachers did not write the request'

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[85] One argument for a solution based on selection (which implies that selection is an indispensable operation in UG) comes from Hallman (2004:79) who argues that "there is no fundamental difference between feature checking and selection". Hallman presents a number of arguments that show that "no empirical considerations indicate that checking is anything other than a particular instance of selection, whose structural correlate is the mutual c-command relation, a symmetric configuration".

16.[86]

```
                        FinP
                       /    \
                    Fin      NegP
                    not      /   \
                    lam    Neg    TP
                         write    /  \
                       ya-ktub-Ø T    v*P
                              the-teachers    v*'
                              l-mudarris-uun  /  \
                                    write    v*   VP
                                  ya-ktub-Ø  /  \
                                      write V    DP
                                    ya-ktub-Ø  /\
                                        the-request
                                        T-Talab-a
```
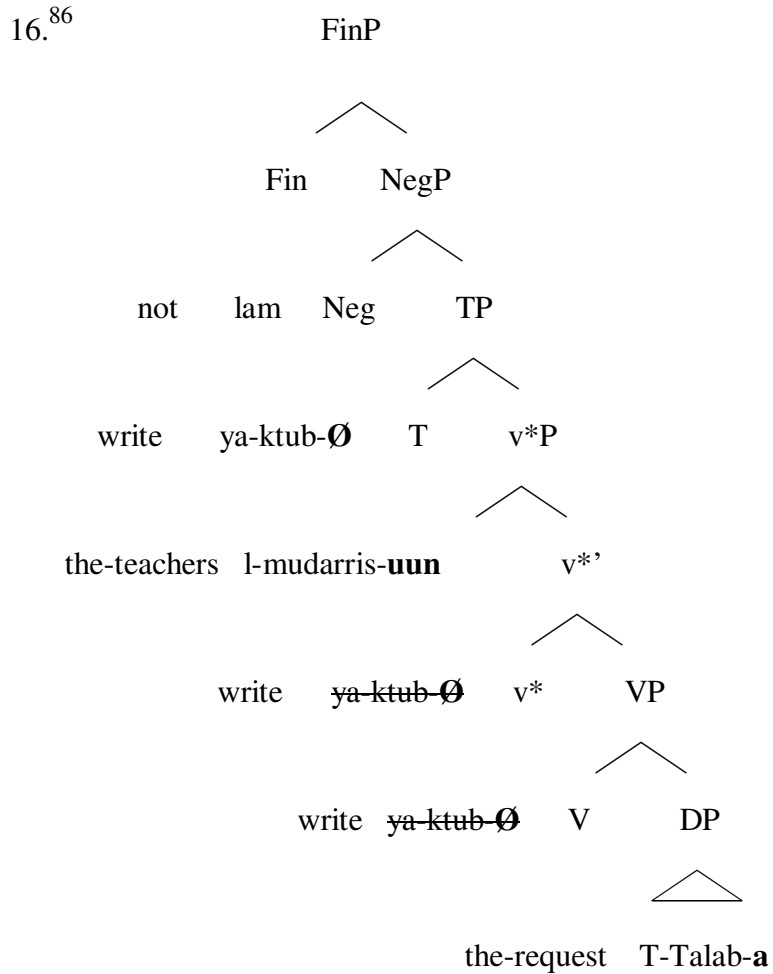
Merge and formal feature checking proceed as follows. First, the verb, which has a valued categorial [V] feature, is merged in V^0 with the object in its complement position. Then, v^{*0} which has an unvalued [VC] feature is merged with the VP. Now the external argument is merged in Spec, v*P. Next, T^0, which has an unvalued categorial [V] feature as well as an unvalued [VC] feature and a valued [T] feature is merged with the v*P; this unvalued [V] feature enables T^0 to select the v*P. After that, the negative particle, which has an unvalued [T] feature, as well as an unvalued categorial [V] feature, is merged in Neg^0 with the TP. Finally, Fin^0 is

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[86] I assume Soltan's (2007:185) proposal that NegP is higher than TP; see Benmamoun (2000:95) for the opposite view.

merged with NegP, forming FinP.[87] Since this Fin^0 selects an XP (TP or NegP) with a categorial [V] feature, then it must be the version of Fin^0 that has an unvalued categorial [V] feature as well as a valued [VC] feature and an unvalued [T] feature.

Then the valued categorial [V] feature on the verb is projected (or transmitted) to the v*P projection. This way, the version of T^0 with unvalued categorial [V] feature (as well as unvalued [VC] feature and valued [T] feature) merges and selects the v*P as its sister. Match between the valued [V] on the v*P and the unvalued [V] feature on T^0 takes place resulting in the former valuing the latter, realizing the c-selection operation. At this point (upon Merge of T^0), $v*^0$ enters an Agree relation with T^0 to get its unvalued [VC] feature valued, but no valuation takes place (since both heads have negative specification of the feature). However, a permanent link is created between the two features, and they become two instances of one feature, a situation dubbed 'Agree as feature sharing' (Frampton & Gutmann 2000, and Pesetsky & Torrego 2007). Now if one instance is valued via Agree with another head, the other instance is automatically valued.

Next, given the fact that the TP projection has a valued categorial [V] feature, it must be selected by a Neg^0 that has an unvalued categorial [V] feature.[88] Upon merge of Neg^0, Agree applies between Neg^0 and T^0, which results in valuing [T] and [V] on Neg^0. This way, NegP has a valued categorial [V] feature. Thus it will be selected by the version of Fin^0 that has an unvalued categorial [V] feature as well as a valued [VC] feature and an unvalued [T] feature. Agree

[87] It is noteworthy that there is more than one approach to labeling of merged elements; I will not get into the debate since nothing in my proposal is contingent on this specific approach to labeling (and so I will not attempt to promote it).

[88] The need to have the highest projection in the tree have a valued categorial [V] feature (so as to always be selected by the version of Fin^0 that has both an unvalued [V] feature and a valued [VC] feature) can be satisfied by (at least) two approaches. The first is just to assume that the valued categorial [V] feature on the IP is projected to the NegP projection. The second, as assumed here, is to suggest that Neg^0 (or the negative particle) can have an unvalued categorial [V] feature. I think the second approach is more plausible since it is supported by the fact that 'lam' does not appear in verbless and participial sentences, thus, it always selects a IP with a valued categorial [V] feature (formalizing co-existence with verbs).

between NegP and Fin[0] results in valuing [T] as well as [V] on Fin[0], thus realizing the selection operation. In the absence of Neg[0], as in affirmative sentences, T[0] values [V] and [T] on Fin[0].

Now T[0], looking to get its unvalued [VC] feature valued, enters in an Agree relation with Fin[0]. This Agree operation results in Fin[0] valuing the unvalued [VC] feature of T[0], which automatically results in valuing the unvalued [VC] feature of $v*^0$. At this point, the subject and object enter Agree relations with T[0] and $v*^0$, respectively, and get their [Case] features valued as Nom and Acc, respectively. Thus, VC checking by Fin[0] on T[0] and $v*^0$ results in Case checking on the subject and object, respectively. Finally, the verb, which, being in the scope of a VC-assigning particle, 'lam', is assigned the VC specification that 'lam$_{Juss}$' has, which is 'jussive', to be realized in the morphological component as [m-vc$_{Juss}$]. This operation realizes the concept of 'VC assignment'.

Thus tense-inflecting VC-assigning negative particles might eventually move to Fin[0] if the latter proves to have an EPP requirement.[89] The movement of the tense-inflecting negative particle to Fin[0] might be motivated by an EPP property or requirement that C[0] has,[90] according to Branigan (1996) and Pesetsky & Torrego (2001).[91] Non-tense-inflecting VC-assigning particles are merged in Fin[0]; this happens in all embedded clauses in SA with subjunctive verbs.

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[89] In his treatment of tensed negative particles in SA, Soltan (2007:189-191) develops what he calls 'Condition R' to account for how 'lam', for example, realizes tense. He suggests that Neg[0] has an uninterpretable [T] feature, whereas I[0] has an uninterpretable [TC] feature (which I call [VC]). Agree between the two heads results in valuing [T] on Neg[0] and [TC] on I[0]. This way, tense is spelled out on Neg[0], but interpreted on I[0], hence on the verb.

[90] The same requirement might also motivate the movement of the verb to Fin[0] when the verb realizes the indicative VC (which realizes tense); however, when the verb realizes the subjunctive and jussive VC values, it does not move to Fin[0], rather, the particle is either merged in Fin[0] or moves to Fin[0]. Han (1998:107) states that "in subjunctives, the verb does not move to C[0] either in the overt syntax or at LF". Thus since 'laa' and 'maa' occur with indicative verbs and have to precede verbs, it could be argued that they, too, move to Fin[0] along with the verb. This assumption is not crucial to my proposal at this point, and so I will not elaborate on it.

[91] This assumption is supported by Qur'aan data like (i).

i. "man   kaana   ya-Zunn-u   ?an   lan   ya-nSur-a-hu   Allah-u …"   p. 333

   who   Pst.be.3sm   Impf-think-Ind   Comp   Neg.Fut   Impf-help-Sub-him   God-Nom

   'those who think that Allah will not help them…'

For the verb to realize the appropriate VC suffix (m-vc) in the morphology, I will just assume that it should realize whatever VC value is associated with the particle that c-commands it. For (15), the verb must realize jussive m-vc; if there were a subjunctive VC assigner, the verb must realize subjunctive m-vc at PF. In the absence of jussive and subjunctive VC assigners, no VC specification is assigned to the verb, which must then realize indicative m-vc. Thus indicative verbal case is default on the morphological level, but checked structurally on the abstract level, contra TAGs and Fassi Fehri (1993). Therefore, as a formal feature, [VC] is licensed by Fin^0 to the functional heads associated with the verb, I^0 and $v*^0$. As a morphological suffix, m-vc, verbal case is received by the verb from the particle. Thus at the end of narrow syntax, the verb is assigned a VC specification by the VC-assigning particle, which has an index as to what VC it is associated with. This results in the verb receiving an m-vc specification that is to be relevant for the morphological component. VC-assigning particles appear with indices that specify the m-vc values that they assign, like 'lan$_{Sub}$' and 'lam$_{Juss}$'. It could be argued that the particle assigns VC to the verb (as subjunctive or jussive) when it moves to Fin^0 (from Neg^0), if not already merged in Fin^0 (like the embedded clause VC assigner 'ʔan', which assigns subjunctive VC). When there is no particle, the verb morphologically realizes indicative m-vc.[92]

4.2.2.2. Case in Copular Sentences

As shown in section 3.3.4, copular sentences have an IP projection, as well as a CP layer, which indicates that they have a FinP (Rizzi 1997). As with verbal sentences, the assumption that the Fin^0 of copular sentences has a [VC] feature is supported by the fact that the version of I^0 selected by Fin^0 selects a VP, and also by the fact that the SA copular verbs realize tense (as well

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The relevance of the verse in (i) is illustrated by the assimilation between 'ʔan' and lan', that is, they are read/pronounced as 'ʔal-lan', as one word, with no possibility for intervening material, which indicates that 'lan' might have moved to Fin^0, where 'ʔan' is merged.

[92] It is noteworthy that the structural Case checking mechanism/scenario presented in this section is extendable to all the constructions listed in section 3.1.2 (regardless of the VC form that they realize), some of which will be discussed in detail in chapter 5.

as mood). Thus the XP selected by Fin[0] has both a categorial [V] feature and a [T] feature, which means that the selected XP is TP.

Let us see how this system accounts for Case checking in (17), which receives the clause structure in (18), given the structure proposed for SA copular sentences in section 3.3.4.

17. sa-ya-kuun-u   l-walad-u   sabbaaH-an

    Fut-Impf-be.3sm-Ind   the-boy-Nom   swimmer-Acc

    'the boy will be a swimmer'

18.   FinP
                                    /\
                              Fin   TP
                                      /\
                    will-be   sa-ya-kuun-a   T   VP
                                                      /\
                          will-be   ~~sa-ya-kuun-a~~   V   PredP
                                                              /\
                                the-boy   l-walad-u   Pred'
                                                            /\
                                                        Pred   NP
                                                      swimmer   sabbaaH-an
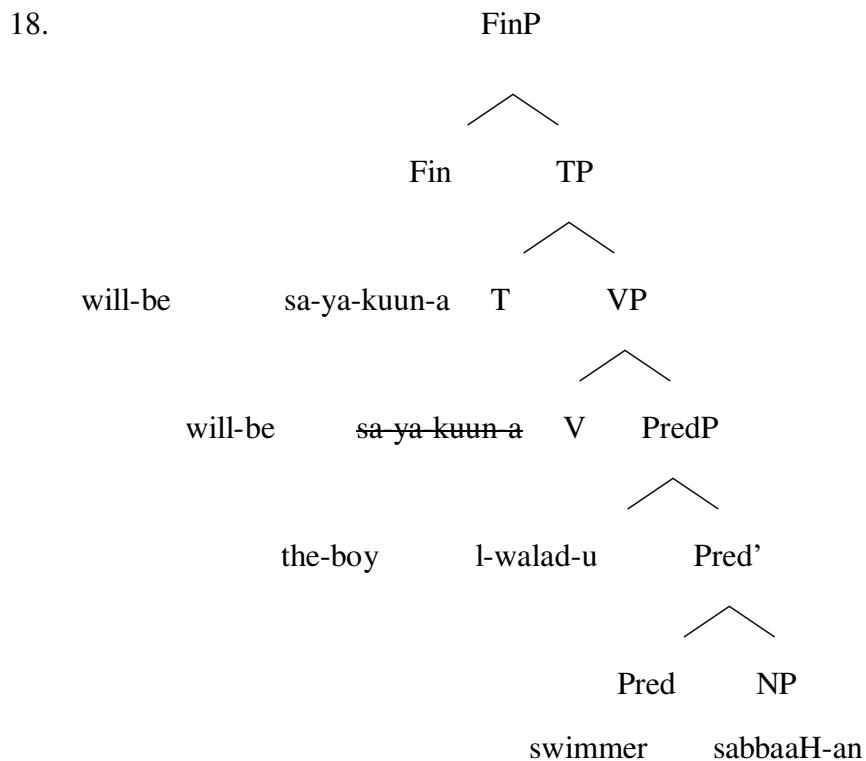
Merge and feature valuation proceed as follows. First, Pred[0] is merged with the predicate in its complement position.[93] Then the subject is merged with Pred' forming PredP. Now the verb,

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[93] It is noteworthy that Pred[0] is considered a functional head in the systems which postulate it. However, as for the present account, I will assume that Pred[0] is functional only as far as the predicational relation (between the subject

which has a valued categorial [V] feature, is merged in V^0 with PredP, forming VP. Having a valued categorial [V] feature (transmitted from the verb), the VP is selected by the version of T^0 which has an unvalued c-selectional [V] feature as well as an unvalued [VC] feature and a valued [T] feature. Now the two categorial [V] features, valued on the VP and unvalued on T^0 are matched, which results in the former valuing the latter. Now having a valued categorial [V] feature (transmitted from T^0), the TP is selected by the version of Fin^0 that has an unvalued categorial [V] feature as well as a valued [VC] feature and unvalued [T] feature. Agree between the two heads, T^0 and Fin^0, results in valuing [V] and [T] on Fin^0 and valuing [VC] on T^0; this realizes the c-selection operation.

Now, with T^0 having a valued [VC] feature, the subject enters an Agree relation with T^0, which results in valuing [Case] on the subject as Nom. Finally, since the verb is not in the scope of a VC assigning particle, it receives no VC specification. This way, the verb will morphologically realize the default m-vc specification of the language (at PF), which is the indicative m-vc.

However, since the predicate surfaces with Acc, which is not the default case specification for SA, we need to account for this case value. Basically, I argue that, unlike argumental DPs, which are licensed by [Case] (or entered with [Case]), this nominal predicate is licensed by a feature that I will call [Pred(icate)]. In other words, this predicate does not receive structural Case of the sort relevant for licensing and LF visibility (Aoun 1979 and Chomsky 1981); that is, the case value realized by the predicate (which can also be adjectival) is not abstract Case since it (by virtue of being a predicate) is not subject to the Visibility Condition. Thus I am going to claim that the Acc case realized by the predicate is idiosyncratic lexical case assigned by the copular verb, which is lexically specified as able to assign lexical Acc case [case$_{L(exical)}$].

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and the predicate) is concerned. In other words, $Pred^0$ has *no* Case licensing utility in the proposed system, though Bailyn (2001) proposes that $Pred^0$ licenses lexical Instrumental Case to the predicate in Slavic languages. My position that $Pred^0$ does not license (lexical) Case in SA is supported by the fact that it does not license Case in verbless sentences, that is, in the absence of the verb, as we will see in section 4.2.2.3.

My assumption that nominal/adjectival predicates of this sort are licensed by [Pred] and not by [Case] is supported by the fact that in verbless sentences, like (19) as compared to copular ones as in (20), these predicates realize default Nom at PF. Thus this lexical case on predicates of copular sentences has no licensing value whatsoever (otherwise it would not have changed given the fact that the predicate occupies the same position in both sentences, complement to $Pred^0$).

19. ʔal-walad-u   mariiD-**u**n

     the-boy-Nom   sick-**Nom**

     'the boy is sick'

20. kaana   l-walad-u   mariiD-**a**n

     Pst.be.3sm   the-boy-Nom   sick-**Acc**

     'the boy was sick'

In addition, the assumption that this lexical case, $[case_L]$, is distinct from the feature [Case] (relevant for licensing and visibility) is based on the assumption that while [Case] is encoded on D^0, $[case_L]$ is encoded on N^0, since predicates (at least in this case) lack a D^0 node, as shown by the ungrammaticality of (21).

21. *kaana   l-walad-u   l-mariiD-**a**

     Pst.be.3sm   the-boy-Nom   the-sick-**Acc**

Thus like verbal sentences, copular sentences witness the licensing of structural Nom Case on the subject. They also exhibit an instance of lexical case assignment by the copular verb to the predicate. The proposal that the verb assigns lexical Acc case to the predicate was made in Fassi Fehri (1993:89) (where it is argued that verbless sentences have a null copula) who states that "lexicalization of the copula [which is the case of copular sentences] is a necessary requirement for Case assignment [to the predicate]". Also, Benmamoun (2000:43) suggest that "when the

copula is overt in Standard Arabic, it assigns accusative Case to the predicate". Finally, Soltan (p.c.) assumes that the predicate receives Acc case from 'kaana', the copula.

4.2.2.3. Case in Verbless Sentences

Given the data and discussion in section 3.3.4, verbless sentences have a CP layer (since their topic is merged in Spec, TopP, and also because they exhibit wh-movement); this means that they have a FinP. However, unlike verbal and copular sentences, the version of Fin^0 that SA verbless sentences have has no [VC] feature. This claim is supported by the fact that the XP selected by Fin^0, though has tense, mood, and agreement, lacks a categorial [V] feature.

Also, given the observation that verbless sentences have a FinP, and also the finding (from section 3.3.3) that they encode tense (hence have a TP), as well as Rizzi's (1997:283) insight that "C [or Fin^0] contains a tense specification which matches the one expressed on the lower inflectional system", I propose that the Fin^0 of verbless sentences has an unvalued [T] feature. This way, the valuation of [T] on Fin^0 by T^0 indicates to the Comp domain that the Infl domain is finite (as far as I-finiteness is concerned), and so the argumental DPs in the Infl domain deserve/require licensing through Case checking.

However, there are a number of observations and assumptions that make structural Case irrelevant for verbless sentences. First, verbless sentences are composed of a topic, which is the only argument-related phonetically-overt element in the sentence (as argued in section 3.3.1), and a predicate. Second, unlike arguments (which are licensed by [Case]), topics (in SA) are licensed by a feature called [Topic][94] through co-indexation with *pro* in the thematic domain.[95]

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[94] The idea that topics enter the derivation with [Topic] (compared to arguments which enter the derivation with [Case]) came up in the discussion with Diane Massam; [Case] and [Topic] are in complementary distribution.

[95] The Case requirements of *pro* will be discussed in section 5.6; until then, I will assume that it receives Case only if it is in the scope of a Case-checking category. This should not lead to a crash since *pro* does not need Case for the Case Filter purposes, being phonetically null, nor for the Visibility Condition purposes, being co-indexed with a topic, which, I assume, is visible by [Topic].

Third, topics are merged in Spec, TopP (A-bar position), that is, not in the scope of a Case licenser. This way, a topic qualifies for default Nom case at PF (or lexical Acc in the presence of 'ʔinna'), which is how it satisfies the Case Filter. Fourth, as far as the Visibility Condition is concerned, I propose that topics are made visible at LF also by the feature [Topic].[96] This state of affairs renders structural Case *irrelevant* as far as verbless sentences are concerned, which means that [VC] (which is the structural Case licenser in the proposed system) is also *irrelevant*. This reasoning indicates that the copular verb, which is the [VC] receiver, should be dropped, by economy; in Al-Balushi (forthcoming), I show that this is how verbless sentences obtain in SA. Thus the absence of the VP projection in verbless sentences means that the versions of T^0 and Fin^0 that these clauses have are the ones without [VC] features.

In what follows, I will present a sample derivation of a verbless sentence, and handle the related issues; (22) receives the clause structure in (23).

22. ʔal-walad-u   sabbaaH-un

     the-boy-Nom   swimmer-Nom

     'the boy is a swimmer'

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[96] There are two differences between [Case] and [Topic]. First, [Case] is a feature of arguments, whereas [topic] is associated with non-argumental DPs. Second, while [Case] must be valued in the narrow syntax, [Topic] enters as a valued feature; it does not have to be valued since the topic might be in Spec, TopP, Spec, IP, or even in Spec, VP (A-bar positions in SA), and so it may not be the case that Top^0, I^0, and V^0 have [Topic] features. One similarity between [Case] and [Topic] is that they make the elements that have them visible at LF for θ-role assignment.

23.

```
                              TopP
                             /    \
        the-boy   ʔal-walad-uᵢ     FinP
                                  /    \
                               Fin      TP
                                       /    \
                                      T      PredP
                                            /    \
                                         proᵢ     Pred'
                                                 /    \
                                              Pred     NP
                                            swimmer   sabbaaH-un
```
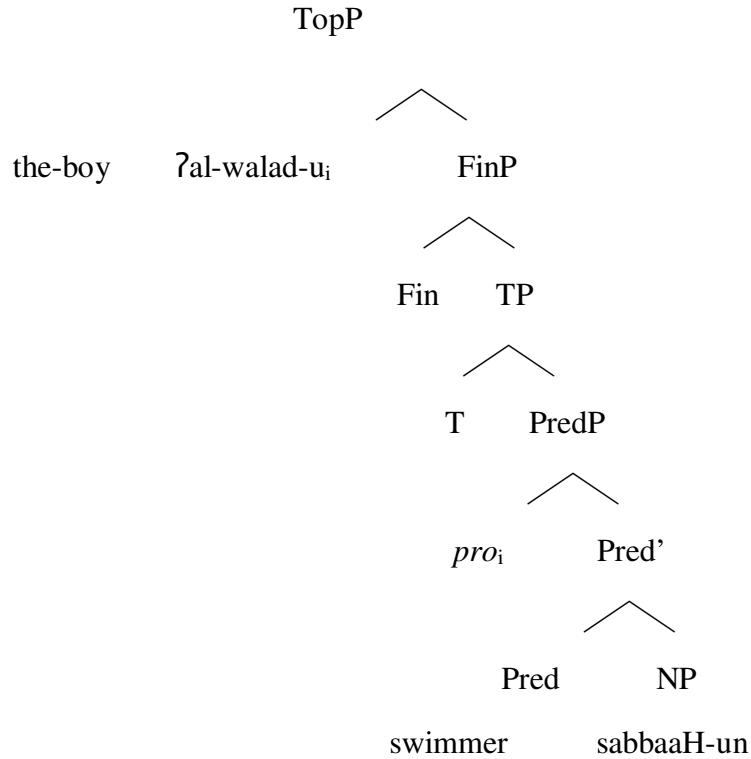
The syntactic operations proceed as follows. First, $Pred^0$ is merged with the predicate in its complement position; *pro* is merged with Pred' to form PredP. Now PredP, which has no categorial [V] feature, is selected by the version of T^0 that has no categorial [V] feature, which is also the version that has no [VC] feature, forming the TP. Next, not having a categorial [V] feature, the TP is selected by a Fin^0 that has neither a categorial [V] feature nor a valued [VC] feature. Finally, FinP merges with Top^0 to form TopP, which is where the topic is merged. Not having [VC] features, the Agree relation between T^0 and Fin^0 will only result in valuing [T] on Fin^0, with no abstract Case-related operations; thus structural Case is not licensed in verbless sentences, as previously assumed.

However, if verbless sentences do not witness the licensing of structural Case due to the absence of [VC], how can the relevant nominals satisfy the Case Filter? Here the default case mechanism applies whereby the topic and the predicate receive default Nom case at PF (as shown in sections 3.3.1 and 3.3.2). That Nom is the default case specification in SA has been shown in Mohammad (1990 and 2000), Ouhalla (1994), and Soltan (2007).

Given this state of affairs, the topic is licensed into the derivation through co-indexation with *pro* in Spec, PredP, and is made visible at LF by [Topic]. As for the predicate, which can be either nominal or adjectival (or even a PP), it is licensed by [Pred], an assumption that I already made with respect to copular sentence predicates. Having [Topic] and [Pred] crucially means that the topic and the predicate, respectively, do not require structural [Case]. In other words, [Topic], [Pred], and [Case] are in complementary distribution, and are essentially equal in terms of licensing nominal (and quasi-nominal) elements into the derivation.

The assumption (confirmed by the proposed system) that the Fin^0 head of verbless sentences has no [VC] feature is supported by the fact that verbless sentences do not co-occur with VC-assigning particles, as (24-25) show.

24. *lan   l-walad-u   sabbaaH-un

    Neg.Fut   the-boy-Nom   swimmer-Nom

25. *lam   l-walad-u   mariiD-un

    Neg.Pst   the-boy-Nom   sick-Nom

In other words, the fact that verbless sentences cannot be preceded by VC assigning particles correlates with my assumption that their Fin^0 has no [VC] feature, which correlates with the finding that they do not witness the licensing of structural Case, a state of affairs accounted for only if we assume that structural Case is licensed by [VC].

4.2.2.4. Case in Verbless Sentences with 'ʔinna'

SA has another type of verbless sentences, those which start with the Comp element 'ʔinna', which assigns Acc to the topic, as (26) shows.

26. ʔinna   l-walad-**a**   mariiD-**un**

Comp   the-boy-**Acc**   sick-**Nom**

'certainly, the boy is sick'

Assuming that these verbless sentences (as in (26)) have a TopP (where the topic is merged) and also co-occur with 'ʔinna, which is merged in Force^0 (the highest component of the Comp domain, Rizzi (1997)),[97] as (27) shows, such sentences have a CP layer, hence a FinP. However, given the fact that these sentences have no verb, the selected XP has no categorial [V] feature. This means that the selecting I^0 and later Fin^0 are the ones with no [VC] features. Therefore, we need to account for the case values realized by the nominals in these sentences. The relevant syntactic operations follow. Assuming that the main I-finiteness feature in (26) is [T], the selected XP is TP.

---

[97] My claim that 'ʔinna' is merged in Force^0 is supported by the fact that it is related to the (declarative) clause type marker usually encoded in the Comp domain (Chomsky 1995), and specifically in Force^0 (of Rizzi 1997). Also the fact that 'ʔinna' is in complementary distribution with yes-no question particles, like 'hal', which is a clause-type marker most probably merged in Force^0, indicates that 'ʔinna', too, merges in Force^0. This is shown by (i-iv).

i. ʔinna   l-walad-a   mariiD-un
   Comp   the-boy-Acc   sick-Nom
   'certainly, the boy is sick'

ii. hal   l-walad-u   mariiD-un
    Interro   the-boy-Nom   sick-Nom
    'is the boy sick?'

iii. *ʔinna   hal l-walad-a   mariiD-un
     Comp   Q   the-boy-Acc   sick-Nom

iv. *hal   ʔinna   l-walad-a   mariiD-un
    Interro   Comp   the-boy-Acc   sick-Nom

27.   ForceP
                              ╱   ╲
                  ʔinna   Force   TopP
                                     ╱   ╲
              the-boy   l-walad-a   FinP
                                          ╱   ╲
                                    Fin   TP
                                              ╱   ╲
                                        T   PredP
                                                   ╱   ╲
                                             Pred   AP
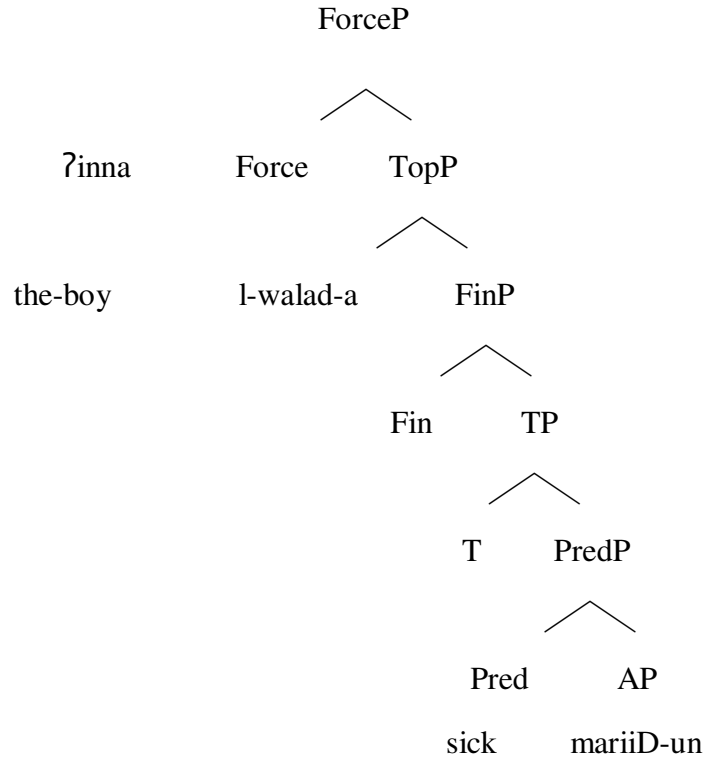
                                             sick   mariiD-un

First, $Pred^0$ is merged with the predicate in its complement position; *pro* is merged with Pred' to form PredP. Now PredP, with no categorial [V] feature, is selected by the version of T^0 that has no categorial [V] feature (which happens to be the version that has no [VC] feature), forming TP. Next, not having a categorial [V] feature (projected from T^0), the TP is selected by a Fin^0 that has neither a categorial [V] feature nor a [VC] feature. Then FinP merges with Top^0 to form TopP, where the topic is merged. Finally, 'ʔinna' is merged with FinP in $Force^0$, forming ForceP. Not having [VC] features, the Agree relation between T^0 and Fin^0 will only value [T] on Fin^0, with no abstract Case valuation; thus structural Case is not licensed in verbless sentences with 'ʔinna'. Therefore, we need to account for the case values realized by the topic and predicate in (26).

Given the discussion in the previous section on the Nom case realized by the predicate of verbless sentences without 'ʔinna', I propose that the predicate in (26) also receives default Nom at PF (due to the absence of the copula, which assigns lexical Acc to the predicate). The question then is what about the Acc case realized by the topic, effected by the presence of 'ʔinna'.

Although 'ʔinna' is sometimes associated with focus since it contributes emphasis and reinforcement to the topic or even the whole sentence, I am not going to dwell on this observation.[98] One reason not to associate the Acc case on the topic in (26) with focus is the fact that there are another five particles that behave like 'ʔinna' in terms of assigning Acc case to the topic of verbless sentences, but which do *not* convey focus.[99] These are refereed to in the traditional Arabic grammar literature as 'the sisters of ʔinna'; (28-32) provide examples with the particles underlined.

28. ʔi-ʕlam-Ø   <u>ʔanna</u>   Allah-a   kariim-un

     Impr-know.sm-Juss   that   God-Acc   generous-Nom

     'know (and be certain) that God is generous'

29. <u>kaʔanna</u>   ʕaliyy-an   Aasad-un

     like   Ali-Acc   lion-Nom

     'Ali is like a lion (brave)'

30. Ahmad-u$_i$ THakiyy-un   <u>laakinna</u>-hu   baxiil-un

     Ahmad-Nom   smart-Nom   but-he   stingy-Nom

     'Ahmad is smart but he is stingy'

31. <u>layta</u>   l-jaww-a   jamiil-un

     wishing   the-weather-Acc   beautiful-Nom

---

[98] Peter Hallman (p.c.) points out to me that "whatever use of 'focus' is found in descriptions of 'ʔinna' is not a formally rigorous notion".

[99] I here do not exclude the possibility that these six particles might turn out to convey some semantic/pragmatic function that might effect Acc case on the topic DP, but that this requires a thorough investigation that is beyond the scope of this thesis.

'I wish that the weather is nice/may the weather be nice'

32. <u>laʕalla</u>   Allah-a   ya-Hmii-naa

    hoping   God-Acc   Impf-protect.3sm-us

    'I hope that God protects us/may God protect us'

To deal with this situation, I propose that 'ʔinna' and its five sister particles are (idiosyncratic) lexical case assigners which assign the feature [case$_{L(exical)}$]. Thus the case value realized by the topic is (26) is lexical Acc. This finding (if on the right track) establishes one non-structural distinction between Nom and Acc cases in SA, basically that while <u>Nom is *also* the default case specification</u> in the language, <u>Acc is *also* the lexical case specification</u>.

It is, however, important to establish that this lexical case feature, [case$_L$] (like the one assigned by the copula 'kaana' to copular sentence predicates),[100] is distinct from the structural Case feature [Case] (which is the focus of this thesis). This difference is illustrated by two facts. First, unlike [Case], [case$_L$] is not obligatory, since a sentence without 'ʔinna' and without a 'copula' is perfectly grammatical (as is the case of verbless sentences as shown in the previous section). That is, a topic is licensed through co-indexation with *pro* in Spec, PredP by [Topic] and a predicate is licensed by [Pred], not by [case$_L$]. Thus [case$_L$] is obtained by elements that are not licensed by [Case], but rather by [Topic] or [Pred]. Second, [case$_L$] is not assigned to elements that are licensed by structural abstract [Case], like subjects and objects, as (33-34) show respectively, as compared to (35).

33. *ʔakala-Ø   ʔinna   l-walad-a/-u   t-tuffaaHa-t-a

---

[100] As it turns out, the copula 'kaana' also has its own sisters which also assign lexical Acc to the predicate; these are 'ʔaSbaHa', 'ʔamsaa', 'ʔaDHaa', 'baata', and 'Saara', which all roughly mean 'became', and 'Zalla', which means 'remained', as well as 'laysa', which is composed of the negative particle 'laa' and an archaic copula 'ʔays', according to Wright (1967).

Pst.eat.3sm-Ind   certainly   the-boy-Acc/-Nom   the-apple-f-Acc

34. *ʔal-walad-u   ʔakala-Ø   ʔinna   t-tuffaaHa-t-a

    the-boy-Nom   Pst.eat.3sm-Ind   certainly   the-apple-f-Acc

35. ʔinna   l-walad-a   ʔakala-Ø   t-tuffaaHa-t-a

    certainly   the-boy-Acc   Pst.eat.3sm-Ind   the-apple-f-Acc

    'certainly the boy ate the apple'

The sentence (35) is grammatical because [case$_L$] can be assigned to an element that is already licensed (by [Topic]). On the other hand, the ungrammaticality of (33-34) shows that [case$_L$] cannot appear on elements that require [Case] to be licensed. Thus [Case] and [case$_L$] are in complementary distribution, since [case$_L$] co-exists only with [Topic] and [Pred] which are in complementary distribution with [Case]. Thus 'ʔinna' is not a licenser, which is why it is not necessary with topics (as revealed by its optionality in verbless sentences).

4.2.3. The Claims

After devising a syntactic system that accounts for the Case facts in SA, this section restates the relevant claims made in the previous section, in (36-47).

36. SA has two versions of I^0, one with a [VC] feature and one without a [VC] feature; the version of I^0 that has a [VC] feature also has a categorial [V] feature, thus it selects a v*P or a VP (as in verbal and copular sentences); the version with no [VC] feature has no categorial [V] feature, thus it selects a PredP (as in verbless sentences (with ʔinna)).

37. SA has two versions of Fin^0, one with a [VC] feature and one without a [VC] feature; the version of Fin^0 that has a [VC] feature also has a categorial [V] feature, thus it selects

an IP with a categorial [V] feature (as in verbal and copular sentences); the version of Fin^0 with no [VC] feature has no categorial [V] feature, thus it selects an IP with no [V] feature (as in verbless sentences (with ʔinna)).

38. SA has one version of v*^{0}, with a [VC] feature.

39. Fin^0 has (at least) an unvalued tense feature [T] in declarative clauses, and an unvalued [Mood] feature in imperative and jussive clauses as well as subjunctive embedded clauses.[101]

40. I^0 has (at least) a valued tense feature [T] in declarative clauses, and a valued [Mood] feature in imperative, jussive and subjunctive clauses.

41. Formal features are checked and valued via Agree under Match.

42. A sentence has two types of finiteness, Comp-finiteness (C-finiteness), associated with VC (and structural Case), and I-finiteness, associated with tense, mood, and agreement.

43. Since SA verbs never agree with their objects and never agree with their subjects in terms of [Number], then the SA I^0 and v*^{0} are φ-incomplete, hence φ-defective, except in the SVO order where there is *no* overt subject.[102]

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[101] Rizzi (1997:283-285) as well associates finiteness in the Comp-domain with tense and mood. Though I agree with him that features of such categories are available on Fin^0, I assume that these features are unvalued on Fin^0 but valued on I^0 (or in the Infl domain, since they are usually contributed by the verb).

44. The valuation of the I-finiteness feature ([T] or [Mood]) on Fin^0 is a necessary but not a sufficient condition for the valuation of the C-finiteness feature ([VC]) on I^0 (since the C-finiteness feature does not exist in the clause in the absence of the verb).

45. Agree is feature sharing (Frampton & Gutmann 2000, Pesetsky & Torrego 2007, among others); basically, $v*^0$ enters an Agree relation with I^0 to get its unvalued [VC] feature valued, but no valuation takes place since the feature is negatively specified on both heads. However, by 'Agree as feature sharing' a link is created between the two heads, which makes the two unvalued [VC] features (on the two heads) two instances of the same feature. This has the effect of automatically valuing this [VC] feature on either I^0 or $v*^0$ once it is valued on the other head (as a result of an Agree relation with another head, Fin^0 in the proposed system).

46. Given the Case-related data examined in this thesis, I claim that there are three patterns of case realization. First, there is 'Case Checking' which is relevant for abstract structural Case (of the sort relevant for licensing and LF visibility). To illustrate, argument DPs are licensed into the A-domain by [Case] features; thus they come in with [Case] features (which is Vergnaud's (1977) insight). As far as SA is concerned, this is the case of (copular) subjects and objects which have [Case] features that are valued (as Nom and Acc, respectively) as a result of a checking relation with the relevant functional heads which necessarily have [VC] features. Second, there is 'Case Assignment' which is relevant for lexical case, but which is *not* relevant for licensing and LF visibility. As far as SA is concerned, this is the type of idiosyncratic case assigned to topics (of verbless sentences) in the presence of 'ʔinna' and to predicates (of copular sentences) in the

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[102] In chapter 5, we will see that ϕ-features take part in structural Acc Case licensing in participial sentences, which are grammatical only in the SVO order, thus the head selected by Fin^0 is ϕ-complete. The ϕ-completeness of participles, I will show, is not a result of their being verbal elements, but rather a result of their being quasi-nominal elements, thus encoding 3rd person by nature.

presence of the copula 'kaana', both 'ʔinna' and 'kanna' being lexically specified to assign lexical case, which is Acc in SA. This type of case is irrelevant for argument licensing since topics are licensed into the derivation through co-indexation with *pro* in Spec, PredP, and are made visible at LF by [Topic] (which is in complementary distribution with [Case]). Also, lexical case is irrelevant for licensing and LF visibility because it is assigned to predicates, which do not need (argument-related) licensing nor LF visibility, since they are licensed (as nominals or adjectivals) by [Pred] (which is in complementary distribution with [Case], as suggested earlier). These properties of lexical case being assigned remind us of the operation of 'VC Assignment' whereby a verbal particle assigns a VC specification to the verb, an operation with no value for the syntactic computation; that is, like lexical case assignment to nominals, VC Assignment to verbs is irrelevant for licensing and interpretation. Third, there is 'Case Specification', which is also irrelevant for licensing and LF visibility and only relevant for the morphology. This is the so-called default case, which is Nom in SA. Schütze (2001:207) argues that "the default case is never *assigned* by anything to anything"; this thus indicates that what SA topics and predicates that are not in the scope of case assigners do is 'realize', not 'get assigned', the default case specification of the language (at PF). Default case is irrelevant for licensing because topics are licensed by co-indexation with *pro* and made visible at LF by [Topic] and predicates are licensed by [Pred].[103] Thus, like lexical case (which is assigned though), default case applies to elements that are already licensed.

47. Fin^0 is the locus of structural Case, Nom and Acc. Chomsky (2005, 2006) argues that the locus of Nom Case and agreement is C^0, not I^0. Also, Tanaka (2005) proposes that C^0 is the locus of Case and agreement.

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[103] Though different from the conception of Case checking and Case assignment expressed in this thesis, Case theories which are a combination of Case checking and Case assignment have been proposed in Massam (1985) and Bejar & Massam (1999). Basically, they propose that "DPs enter the numeration with simply a [Case] feature. Relevant functional projections, however, are entered with [Case] *and* with a named feature as well, such as [acc] or [nom]. When a DP checks Case against a functional head, automatically [Case] is checked, and [nom] or [acc] is copied or assigned as a subscript on the Case feature of the DP by the functional projection" (Bejar & Massam 1999:73).

The idea that both Nom and Acc Case values are licensed by one feature ([VC] in the proposed system) is not unprecedented. Though in early GB it was assumed that Nom Case is licensed by I^0 under agreement and Acc Case by V^0 under government, in later GB research Nom was assumed to be assigned by $Agrs^0$, whereas Acc by $Agro^0$ (both under agreement); this idea persisted through the early Minimalist research on Case. It was then assumed that Nom is licensed by T^0 under agreement with the subject and Acc by $v*^0$ under agreement with the object. In recent Minimalist research, Nom is assumed to be assigned via Agree with T^0 after it inherits Case and agreement/tense properties from C^0, and Acc via Agree with V^0 after it inherits the Case and agreement properties from $v*^0$, C^0 and $v*^0$ being the phasal heads. This approach was also accompanied by another one that assumed that both Nom and Acc Cases are licensed by tense, [T]. What these views tell us is that there is agreement in the field that Acc is licensed by the same feature that licenses Nom, be it agreement or tense; for me, this element is VC. Also all these views agree that both Case values are licensed by different heads (I^0 and V^0, or $Agrs^0$ and $Agro^0$, or T^0 and $v*^0$, or T^0 and V^0); for me these two heads are I^0 (which could be either T^0 or $Mood^0$) and $v*^0$. And since both Cases are licensed by VC whose home is Fin^0, then both Cases are licensed by their respective functional heads via Agree with Fin^0.

In chapter 5, I will apply this proposal of structural Case checking to a variety of clauses in SA, including control, raising, ECM, passive, imperative, unergative, and unaccusative clauses, as well as participial sentences. Now, let us dig into the literature for evidence for the claims and assumptions that the present theory is based on.

4.3. Evidence for the New Account of Verbal Case

The new account of [VC] as the structural Case licensing feature (in SA) is based on a number of claims (listed in the previous section), important among which are the following:

48. Fin^0 (a component of the Split-Comp system) has a valued [VC], which is the feature that licenses structural Case to the Infl domain.

49. The Case checking heads have a dedicated [Case] feature, called [VC].

Given the fact that VC has not been posited in generative syntax in the proposed conception, the title of this section seems optimistic. Nonetheless, there are some occasions in the history of syntactic theory where the idea that C^0 can have a 'Case checking/assigning property' was in fact suggested. In addition, the idea that the Case licensing heads have a dedicated [Case] feature was also proposed. This section will highlight those occasions, and discuss their relevance to the proposed conception of Case checking. In other words, those ideas made reference to notions similar to the suggestion that Fin^0, I^0, and $v*^0$ have a feature that has the same potential of [VC]. It is, however, worth mentioning that none of these analyses has proposed that the Acc Case on the object is licensed by the Comp domain, Fin^0, since they were only concerned about the Case realized by the (embedded) subject. The following sections will review research where notions similar to (48) or (49) or to both have been proposed.[104]

4.3.1. Fabb (1984)

Fabb (1984) extended Case theory as well as the Visibility Condition to account for the distribution of modifiers and predicates (APs, PPs) as well as verbs. This section will be concerned with Fabb's verbal Case proposal. Fabb (1984:69) observes that verb stems heading VPs are "adjacent to and governed by just the categories which are nominal Case assigners"; this observation led him to reason that, like nouns, verbs must be visible, since they assign θ-roles to NPs. Thus he claims that "verbs which assign theta-roles must be visible (i.e. need Case) and Case is assigned exactly as in the nominal Case system; a verb must be governed either syntactically or by affixation, by a node carrying a matching Case feature" (p. 65). This way, the Visibility Condition is extended to cover not only the θ-role assignees (DPs), but also the θ-role assigners (verbs/predicates). To formalize this extension, Fabb proposes a 'Visibility

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[104] This is by no means a complete review of the proposals laid out in these works. The interested reader is urged to consult the relevant works. For purposes of neutral commentary/review, I will follow the different authors in using the terms 'Case checking' and 'Case assignment' interchangeably.

Requirement on Theta-Assignment', which states that "[e]very node in a theta-indexed path must be visible" (p. 77), where 'path' refers to the two nodes that form the θ-chain (assignee and assigner) as well as all the intervening nodes.

Fabb's account of verbal Case is based on the distribution of verbs with different verbal suffixes. These verbal forms are: verb-*en*, verb-*ing*, verb-*ed*, verb-*s*, and verb, which he calls 'stem' (which is 'freely suffixable'). These being the different verbal Case forms, the verbal Case assigners (or governors) include "specific auxiliaries or causative/perception verbs" for perfective passive, perfective active, and progressive forms, and "AGR" for verbs carrying inflectional affixes, '-ed' and '-s' (p. 68). Stems, on the other hand, appear when governed by and adjacent to AGR (except when AGR is +past, or 3rd person singular indicative present), 'to', 'but', 'except', 'rather-than', certain verbs, and in imperatives (p. 68), with *do* and *modals* being manifestations of AGR. Stem verbal Case assigners also include perception verbs, like 'see' and 'hear', and causative or permission verbs, like 'help', 'make', 'have', and 'let', as well as '-ing' and '-en'.

Fabb argues that "certain verbs, prepositions, and AGR would be marked to assign 'verbal Case' to a verb stem (by assigning Case to the VP, which then percolates down to the head); and that a verb needs verbal Case (marked with a Cv feature)" (p. 69); thus these verbal Case assigners are lexically assigned (or specified for) a verbal Case (Cv) feature, which, when assigned to verbs, makes them visible. Thus, an infinitival verb, for example, receives verbal Case from its governor, which is infinitival *to*, which "carries a Cv feature which is matched with the Cv feature freely associated with the VP", which then percolates from the VP to the infinitival verb, allowing it to be visible, since it must assign its θ-role to its argument which will be visible by virtue of having a nominal Case feature (Cn) (p. 71).

Although Fabb (1984) formalized an elegant system of verbal Case assignment (various elements assigning various Case values to verbs), this system does not make the slightest suggestion that verbal Case is related to nominal Case or DP licensing. This is obvious in his assumption that

many of the elements that assign nominal Case also assign verbal Case (p. 73) (as opposed to suggesting that certain elements assign VC, which then makes verbs able to assign nominal Case). Fabb's proposal differs from the one presented in this thesis in that while it is concerned with visibility, the present one is concerned only with abstract Case. In other words, while Fabb argues that verbs need Case in order to be visible so as to be able to assign the necessary θ-roles to their respective arguments, the present account of verbal Case argues that verbs need Case (VC) in order to be licensed, in which case they can license DPs through structural Case checking. Apart from this difference, which is by no means trivial, Fabb's proposal is actually a good step towards uncovering the morphosyntactic relations between verbs and nouns.[105] I now move on to discussing some of the ideas and notions that Fabb's proposal is based on, showing how untenable they are given standard assumptions and how inapplicable they are given some SA facts.

First, given Fabb's claim that verbs need Case in order to be visible for θ-role assignment purposes, and the assumption that auxiliaries like 'be' and 'have' do not assign θ-roles, but crucially realize verbal Case (in his system), his claim is weakened; thus he refers to Fabb & Roberts (forthcoming) where it is suggested "that auxiliaries do assign theta-roles of a special kind" (p. 70). Despite their proposal, I choose to adopt the standard assumption that copular verbs do *not* assign θ-roles (e.g. Chomsky 1995:135, Crystal 1985, Quirk et al. 1985). As the SA data show, the copula 'kaana', meaning 'to be' (which does not assign θ-roles), can realize all the three VC forms, morphologically ('ya-kuun-**u**', 'ya-kuun-**a**', and 'ya-kun-**Ø**', indicative, subjunctive, and jussive, respectively), and also have the syntactic reflex of VC, which is licensing structural Nom Case to the copular clause subject (via VC). This thus indicates that perhaps verbs/predicates need not be subject to the Visibility Condition.[106] In section 4.2.2.2, we

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[105] In chapter 6 I will present and discuss the various verbal Case assigners/assignees in Fabb's system for the purpose of showing that the VC-Case connection proposed in this thesis might be extended to English.

[106] Assuming that the case value that verbs receive allows them to be visible at LF, the question arises as to why they need to be visible. In other words, are they visible because they need to assign θ-roles to their respective arguments, or are they visible because they were assigned case by their respective case assigners? Under such a

saw that predicates in SA do not receive structural (Acc) Case, which is relevant for licensing and visibility, but rather lexical Acc, thus indicating that the Visibility Condition does not extend to them.

In addition, Fabb suggests that the verbal Case assigning elements are the same as those that assign nominal Case to nouns, like AGR (including *do* and *modals*), verbs, prepositions, 'to', 'but', 'except', and 'rather-than'. This state of affairs is perhaps what allows those elements to endow the element that they Case-mark, noun or verb, with visibility. However, the standard (Aoun 1979, Chomsky 1981) approach to visibility (where only DPs need to be visible) better explains the situation in SA. To illustrate, out of the 28 SA VC assigners, only one can co-occur with nouns, to which it assigns lexical Acc case (in a highly literary construction). This indicates that each category (verbs and nouns) should have its own Case assigners. Also, though both are relevant for licensing (given the SA facts), VC cannot be obtained by DPs, nor could abstract Case be licensed to verbs. This perhaps speaks for a distinction between the two similar elements (VC and Case), one that might be related to visibility. In other words, structural Case, but *not* VC, must be licensed to elements that are subject to the Visibility Condition. Thus VC must be licensed to elements that are not subject to the Visibility Condition.

Second, in his account of VC assignment and visibility in an infinitival clause, Fabb (1984:70-71) states that infinitival *to* "carries a Cv feature which is matched with the Cv feature freely associated with the VP; the VP now has Case" and so the infinitival verb has Case (by percolation). In addition, the infinitival verb, suggests Fabb, "carries a Cn [nominal Case] feature which governs and is matched with the Cn feature" on the DP object, thus allowing the object to carry a θ-role. Despite the neatness of the system, it seems redundant to assume that the verb has a [VC] feature as well as a [Case] feature (his Cv and Cn, respectively). By contrast, I propose

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view, auxiliaries, like 'be' and 'have', would need to be visible because they receive/realize VC, but at the same time should not be visible because they do not assign θ-roles.

that the verb (or rather its functional heads, I^0 and v^{*0}) has a [VC] feature, which (being of the same nature, licensing, as [Case]) first gets valued via Agree with Fin^0, and then values [Case] on the relevant DP(s).

Third, while I think that it might be plausible to assume that modals, *do*, infinitival *to*, and some perception and causative verbs, like *see* and *make*, are possible VC assigners in English (and perhaps other languages as well), as I will argue in chapter 6, I believe that Fabb's assumption that AGR suffixes like '-ed' and '-s', and inflectional suffixes like '-ing' and '-en' are also VC assigners is implausible given the fact that these suffixes are not separate from the verb, and so cannot c-command (or govern) it, a state of affairs that precludes VC assignment. Also, these suffixes cannot be VC assigners since the verb is ungrammatical without them.[107] As I will show, these verbal suffixes are the morphological evidence that VC assignment has taken place.

4.3.2. Levin & Massam (1985)

Levin & Massam (1985) propose that Case assignment involves 'linking' between potential Case assigners, which enter the derivation with a Case feature [+CA] (CA = Case Assigner), and governed NPs, where the two elements become co-indexed (under a government relation). In particular, Levin & Massam (1985:288) propose the following:

50. Z^0 a governor, then Z^0 has associated with it C_z, where C=Abstract Case.

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[107] In fact, Fabb's assumption (that suffixes can assign verbal Case) is reminiscent of that of some of the Kufan grammarians who argue that the indicative VC in SA is assigned to the verb by its person prefixes, a position rejected by Ibn Al-Anbari (1961), who argues that it is implausible given the fact that the presumed governors (person prefixes) are inseparable from the verb (Owens 1988). I agree with Ibn Al-Anbari's reasoning, and so reject Fabb's position. However, it is noteworthy that SA has five prefixal VC assigners to which this rejection does not extend. This is because they are not agreement affixes. Rather, they are modal elements, like 'li- of denial', 'li- of command', 'li- of optative', 'fa- of optative', and 'ʔV- of imperative'. These prefixal elements are better understood as licensing particles rather than agreement affixes, since the verb is meaningful and grammatical without them.

The notion of Case assignment as linking is implemented as follows. The verb enters the syntax with an associated Case, that is, it is [+CA]. This Case (C_v) is de-linked from the verb, projected to Infl, and then linked to Infl, in which case it become $C_{I(NFL)}$, a property of Infl, that can then be assigned to the NP governed by Infl.

Though their Case theory assumes government, while mine does not, it is clear that there is some similarity between this theory of Case and the one proposed in this thesis. To illustrate, the two conceptions of Case checking/assignment assume that the verb enters the derivation with a [Case] feature. In Levin & Massam (1985), this assumption is based on the observation that some verbs do not have the [+CA] feature, while others do, where this Case feature spreads to Infl, and then to the NP (governed by Infl). In the proposed system, this assumption is based on the observation that verbs in SA receive what I call 'Verbal Case' from certain particles, an observation formalized in the sense where the functional heads associated with the verb (I^0 and $v*^0$) enter the derivation with unvalued [VC] features, where Fin^0 values the unvalued [VC] features of the Infl-domain functional heads; this results in Case 'spreading' from the verb to the functional heads, and then to the relevant DPs. Perhaps one difference between the two conceptions of Case checking/assignment is that the present one is based on the claim that licensing for both the verb and the DPs comes from the Comp domain in that Fin^0's ability to have a valued [VC] feature co-exists with the verb, and that its ability to value the unvalued [VC] features of the Infl-associated functional heads licenses (Case to) DPs.

4.3.3. Massam (1985)

In her discussion of some cases of Case assignment to the specifier of IP in a number of Romance languages, Massam (1985:71) proposes that, in some cases, Case is not assigned by the matrix verb, "but rather by an element (either an auxiliary verb, or an index) in COMP"; in other words, "an element in a head [Comp] assigns Case to the specifier of its complement [IP]", a process that has the same effect as ECM. She reviews a number of facts from Italian, French, and European Portuguese, for which she discusses the proposed analyses. She finally proposes an analysis where C^0 has a Case Assigner feature [+CA]. Here, I will summarize her analysis of the

relevant European Portuguese facts, and state how it is similar to my proposal regarding the licensing of structural Case.

Massam (1985:74) states that "the so called "inflected infinitival" [in European Portuguese] may appear embedded under certain epistemic verbs […] if the clause contains an auxiliary verb in initial (as opposed to the normal preverbal) position". Massam (1985:80) proposes that these facts can be accounted for if we adopted (51).

51. α can assign Case if and only if:

i. α has a Case associated with it (for INFL, via AGR)

ii. α contains the feature [+CA] (for INFL, via Tense)

Given the fact that the European Portuguese inflected infinitive has AGR (or φ-features), but not tense, it is not expected to assign Case; that is, it is capable of achieving (51.i) but not (51.ii). But where does the embedded subject (in Spec, IP) get its Nom Case from? Massam argues that the embedded subject receives Nom Case "if we assume that the COMP position of complements embedded under certain verbs contains a Case assigning potential, that is a feature [+CA], then, when AGR, and its associated Case, move to COMP, with its [+CA] feature, the result is an element fully able to assign this Case to the subject position of the embedded infinitival complement" (p. 80).

This reasoning is similar to mine in two respects. First, I argue that C^0/Fin^0 has a valued [VC] feature (which is the Case licensing feature in my analysis), and she proposes that C^0 has a [+CA] feature (which licenses Nom to the subject). Second, I assume that for C^0/Fin^0 to license structural Case, an I-finiteness feature on Fin^0, which is unvalued [T], must be valued (via Agree with a valued counterpart on I^0, or perhaps by the movement of [T] to Fin^0), and she suggests that C^0 can license Case to the subject if [Agr] (or φ-features) move to C^0. This difference could in fact reflect nothing more than parameterization. In other words, for C^0 to license structural Case, some languages might require I^0 to value [T] on Fin^0, while others might require I^0 to value

[φ] on Fin^0. Thus the locus of Case is C^0, not I^0. Despite this, the two analyses differ in one crucial respect. To illustrate, while I argue that the embedded subject receives its Case from the embedded I^0 (after it gets its unvalued [VC] valued via Agree with Fin^0), she argues that it receives Case directly from C^0 (or Fin^0).

4.3.4. Haegeman (1986)

The goal of Haegeman (1986) was to account for the fact that certain West-Flemish infinitival complement clauses license a Nom-marked lexical subject. Haegeman suggests that since finite clauses are [+T, +Agr] and typical infinitival clauses are [-T, -Agr], then the *te*-infinitives in West-Flemish, being uninflected, are [+T, -Agr]. She shows that these infinitival clauses are indeed [+tense] by showing that they can have a temporal specification (past, present, future) that is independent of the main verb/clause tense.

Assuming Chomsky (1981) who proposes that Nom Case is assigned by a [+Agr] Infl, and to account for the Nom Case on the embedded subject, Haegeman advocates the following analysis. First, she observes that the Nom-marked subjects appear with the *te*-infinitives when preceded by certain prepositions, like 'mee', 'voor', and 'deur', and so proposes a relation between the preposition and the Nom-assigning infinitival Infl. The schematic representation that she proposes for a *te*-infinitive is as in (52).

52. [$_{PP}$ mee   [$_{S'}$ COMP   [$_S$ NP$_{+Nom}$ *te*-VP$_{Inf}$]]]

Second, she proposes that *te*-infinitivals are finite clauses since they occur with Focus elements that finite clauses co-occur with; PRO-infinitives do not co-occur with those elements. Thus she assumes that *te*-infinitives have a finite Comp position. Based on cliticization and focus data, she proposes that Comp in finite clauses has the properties in (53):

53. INFL [+Tense, +Agr]

    [+Nom] clitics

Focus marker (tet)

[-Nom] clitics

Given this proposal, she argues that the Comp position in a *te*-infinitive has the properties in (54).

54. INFL [+Tense, -Agr]

Focus

[-Nom] clitics

Thus "the mee-NCI [or *te*-infinitival] clauses can be seen to have the properties of finite clauses as far as temporal and modal interpretations are concerned" (p. 131). She assumes that the Comp node in *te*-infinitives "contains an INFL-position specified for [±Tense], but with no selection of [±Past]" (p. 132); this [±Tense] corresponds to an abstract tense property. Given these observations, assumptions, and proposals, Haegeman argues that the Nom Case on the embedded subject obtains as a result of the following procedure. Given the assumption that the preposition 'mee', which is an Acc Case assigner, subcategorizes for a finite ([+T]) Comp, she argues that 'mee' transmits its Case-assigning properties to Comp. This way, "the assignment of case properties of *mee* to COMP results in activating the potential of Case assignment of [+Tns] in COMP. But, as in main clauses, COMP assigns NOM" (p. 133). In other words, Haegeman proposes that the preposition assigns Case to Comp, which, in turn, acquires the ability to assign Nom Case to the subject through its [+T] Infl position.

This proposal is similar to mine in two ways. First, it assumes that there are inflectional features on Comp, the difference being that while I assume that Comp has an unvalued [T] feature, she assumes that it has [+T] (which amounts to valued [T]). Second, it assumes that the Comp position is involved in creating the Nom Case eventually assigned to the embedded subject. However, it differs from mine in that while I assume that the Nom Case on the embedded subject

originates from Comp, and then gets transmitted to Infl (then to the subject), she proposes that it originates from a preposition and then gets transmitted to Comp, and then to the subject, without the involvement of the embedded Infl.[108]

4.3.5. Raposo (1987)

Raposo's (1987) goal was to account for the European Portuguese (EP) inflectival infinitival complement clauses' ability to license lexical Nom-marked DP subjects. As the label suggests, EP inflected infinitives carry subject agreement morphology. In spite of this, Raposo (1987:92-93) proposes that EP inflected infinitives are non-finite because they are [-tense] since they do not realize tense (morphologically). Thus being [+Agr] is not sufficient for assigning Nom Case. Therefore, Raposo adopts Chomsky's (1982) insight that the I^0 of null-subject languages may be specified for Case, and proposes that in null-subject languages "the Infl node must be Case-marked, if it is to assign nominative Case to the subject of its clause" (p. 85); that is, the embedded Infl (or the Agr category in it) must receive Case from some Case assigner in order to license a DP subject. He states, "[i]n order for Agr to receive Case […], there must be a sufficiently local Case assigner external to Infl that is accessible to Agr. In other words, Agr must be governed and Case-marked from outside the Infl node" (p. 94). Thus Raposo's task becomes to find out what might assign such a Case to the embedded Infl in exactly those contexts where it can assign Nom Case.

Without getting into much detail, Raposo suggests two scenarios for the embedded Infl/Agr to receive Case in the complement clauses of different verb types (epistemic, declarative, and factive). First, assuming that the embedded Agr feature is a nominal property, the embedded clause becomes non-distinct from an NP. This way the matrix Infl assigns Case to this nominal

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[108] Another reason why Haegeman's analysis looks complicated (and perhaps implausible) is that the embedded clause for her looks like a PP (given her assumption that C^0 is preceded by a preposition). I think it would be more reasonable to treat these prepositions like the English 'for', that is, as both prepositions and complementizers. This way, the prepositional complementizer will transmit its Case-assigning ability to the embedded Infl, which will then be able to assign Nom to the embedded subject. This is not to say that 'for' as a Comp should receive the same treatment, since it assigns Acc, not Nom, to the embedded subject.

(embedded) IP, which allows this Case (from the matrix Infl) to percolate to the embedded Infl, which, in turn, enables the latter to assign Nom to the embedded subject. Second, the embedded Infl raises to the embedded C^0 position, which makes it governed and so Case-marked by the matrix verb. Basically, he argues that the embedded Infl cannot license Case unless it is assigned Case by some mechanism.

Given this summary, my proposal is similar to Raposo's in that I, too, argue that for Infl (in general, matrix and embedded) to assign Nom Case, it must receive Case, that is, its unvalued [VC] feature must be valued via Agree with the valued [VC] feature on C^0/Fin^0. In other words, the idea that for a functional head to license Case it must have a Case feature/property was suggested in Raposo (1987). As Cowper (2002:20) observes, "[u]nder the minimalist program, this [Raposo's proposal] amounts to saying that in null-subject languages, INFL can bear the sort of uninterpretable case feature normally borne by nominals". In fact the current proposal bears a lot of resemblance to Cowper's observation. Basically, Case on nominals is valued under match with a [Case] feature on the relevant functional heads, which I call [VC], since it is present only when verbs are present.

However, my account differs from Raposo's in that while I suggest that the embedded Infl (or embedded functional heads, in general) receives the Case-assigning capability from the embedded clause (Fin^0), Raposo argues that these capabilities come from outside the embedded clause. This difference proves very crucial when we consider Case checking in matrix clauses. To illustrate, assuming Raposo's account, Case for both matrix and embedded arguments comes from the matrix clause, whereas in my system, each clause might be able to provide Case for its arguments, which is a uniform treatment (in the sense of eliminating ECM configurations).[109] In

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[109] We will see in chapter 5 that there is one situation where the DP is introduced in the embedded clause but receives Case from the matrix clause, but this is because this DP is merged in the embedded Spec, TopP, where it should either receive default Nom or lexical Acc by 'ʔinna'. In the absence of 'ʔinna', and the intuition that default Nom is blocked by the matrix Case assigner, this DP becomes in a situation where it must realize lexical, not structural, case from the matrix verb.

other words, if we assumed Raposo's account that the embedded arguments are licensed from outside, then the matrix arguments might also have to be licensed from outside the matrix clause.

4.3.6. Watanabe (1993)

The goal of Watanabe (1993) was to account for Case assignment in the Balkan subjunctive complement clauses. Watanabe adopts Terzi's (1992) 'convincing' proposal that the subject in these complement clauses is sometimes PRO. Since the GB PRO theory is based on (the English) infinitival complement clauses, the question becomes whether this theory can account for PRO subjects in subjunctive complement clauses, given the fact that subjunctives, unlike infinitives, realize subject ϕ-agreement morphology. This is because the GB PRO theory accounts for the distribution of PRO by assuming that the infinitival Infl is not a governor (unlike its finite counterpart), since it lacks ϕ-agreement morphology, and so it "does not have Case-assigning Agr" (p.282). However, since the Balkan embedded Infl is [+Agr], the puzzle becomes why PRO is licensed when Infl can be a governor. Watanabe states that Chomsky & Lasnik's (1993) Null Case innovation is not sufficient since Null Case is available only in infinitival Infl, not elsewhere. As Watanabe states, assuming that the Balkan subjunctive Infl is not a governor would lead to stipulating more exceptions to the notion of government (which is undesirable since infinitives and subjunctives do not form a natural class, the latter being finite).

Adopting Stowell's (1982) insight that the Infl of control infinitival complements has an unrealized tense (hence PRO is allowed), whereas the ECM and raising complements are tenseless (hence PRO is not allowed), Martin (1992) suggests that the Infl of Balkan subjunctive clauses is similar to that of the English control ones, but different from the English ECM and raising ones. Thus the Balkan subjunctive complement Infl allows PRO because its tense specification (unrealized) licenses Null Case only. However, the fact that some Balkan languages allow lexical subjects (and *pro*) in subjunctive complement clauses requires an explanation. Watanabe shows that this is allowed only in the Balkan languages, Albanian and Romanian, which allow a subjunctive lexical complementizer, but not in Greek, which has no subjunctive complementizers. Thus one approach is that the Balkan embedded Infl is specified for Nom and

Null Cases. However, another approach is that there is some correlation between the shape of the complementizer (null vs. overt) and the Case assigned to the embedded subject (Null vs. Nom). Watanabe pursues the second approach.

To capture this correlation, suggests Watanabe (1993:292), "let us suppose that some feature is created through Case checking and that Agr-s has to move to C^0 eventually to check off the feature that arises from Case checking at Agr-sP. If different features are created depending on which Case is checked, we can account for why different complementizers show up depending on the Case of the embedded subject". As far as I can tell, Watanabe proposes that regardless of what Case is assigned (Null or Nom), there is a Case-related feature that must be created (in some way) in order for Case to be licensed, and that this feature must be checked by movement of Agrs to C^0; if C^0 is null, Null Case is licensed, but if C^0 is overt, Nom Case is licensed.

Watanabe's proposal is similar to the present account in that it is based on positing a 'special' Case feature responsible for licensing Case to DPs (that could be equivalent to [VC]). It is also similar to my proposal in that C^0 is involved in Case checking. However, while he argues that Agrs must move to C^0 for the licensing of Case to take place, I think that, with Agree, no movement might be necessary; that is, I think that whatever I-finiteness feature there might be on the embedded Infl ([Agr] or [T]), this feature values a similar albeit unvalued one on C^0, and so C^0 values the Case-assigning feature (that Watanabe proposes 'created') on Infl, which results in Nom Case being assigned to the lexical DP/*pro*.

4.3.7. Carstens (2001)

Carstens's (2001) presents some arguments to argue against Chomsky's (2001) proposal that a Goal's Case feature can be checked by a φ-complete Probe (which associates the valuation of the Goal's Case with the valuation of all the φ-features of the Probe). Crucial to Chomsky's conception of Case checking (in terms of Agree) is the assumption that Case on the DP cannot be checked by a φ-incomplete functional head (2001:8, 18); this is how she accounts for the

observation that adjectives and participles, which lack a [Person] feature, cannot value Case on a DP Goal.

However, Carstens reviews some data where Case on the DP can be valued even though the probe is ϕ-incomplete. First, the French sentence in (55) shows that while the subject's Case feature is not checked by the ϕ-incomplete participle 'morte', having only [Number] and [Gender] features (in line with Chomsky's proposal), it is checked by the ϕ-incomplete auxiliary 'est' (or rather by its structural position, I^0), which has [Person] and [Number], but no [Gender], contrary to Chomsky's proposal.

      55. Elle est morte

Carstens (2001:148) states that "[g]ender is systematically excluded from the features of subject agreement in Indo-European languages with gender systems. Hence the facts are not plausibly attributed to an accidental gap in subject-agreement paradigms, any more than is the omission of person in agreement on the past participle".[110] Given the possible observation that it might be [Person] that is crucial for Case checking, Carstens states that Chomsky in fact assumes that the availability of only [Person] morphology on probes makes them defective, and so unable to value Case. This is how Chomsky (2001:7-8) accounts for movement of the subject in raising constructions, since its Case feature cannot be valued by a [Person]-realizing ϕ-defective infinitival T^0.

Moreover, given the other possible observation that it might be [Person] and [Number] that are responsible for Case valuation, Carstens provides data from Bantu where such a scenario would still not work. To illustrate, Swahili Compound Tense constructions (CTs), as in (56-57), show that both the main verb and (the dummy) 'be' carry subject agreement morphology.

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[110] This situation is similar to what we find in SA. To illustrate, SA is a morphologically rich language, with number morphology realized everywhere in the language, yet verbs are *not* allowed to realize number agreement with the subject.

56. Juma   a-li-kuwa   a-me-pika   chakula

    Juma   3s-Pst-be   3s-Perf-cook   7food

    'Juma had cooked food'

57. (Mimi)   ni-li-kuwa   ni-ngali   ni-ki-fanya   kazi

    (1s-Pron)   1s-Pst-be   1s-still   1s-Perf-do   9work

    'I was still working'

Note that both verbal elements, the main verb and 'be', realize the same agreement features, namely [Person] and [Number]. Also, Carstens (2001) follows Carstens & Kinyalolo (1989) who analyzed CTs in terms of a failure of the main/aspect-realizing verb to undergo raising to T^0, where the subject, originating in the thematic VP domain, raises from Spec, VP to Spec, AspP, and finally to Spec, TP to receive Case; Carstens & Kinyalolo support this 'raising' account by "demonstrating that CTs are raising constructions, placing no thematic restrictions on their subjects" (Carstens 2001:150). As such, Carstens raises the question of why the subject's Case feature cannot be checked when it is in Spec, AspP, since the ϕ-features on Asp^0 are the same as those on T^0. Moreover, following Carstens (1991, 1997) where Bantu noun class is analyzed as [Number] and [Gender], and given the fact that verbs agree with the subject in terms of [Person] and [Number] as well as noun class, then, argues Carstens, "each agreeing head in a CT inflects for all available person, number, and gender features of the surface subject; each agreeing head is ϕ-complete" (p.151), but the Asp^0 head still cannot value Case on the subject. This state of affairs, argues Carstens, indicates that ϕ-feature valuation on the head is irrelevant for Case valuation on the DP.[111]

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[111] I think this objection of Carstens' can be dealt with given the assumption that Nom Case is licensed by T^0, not Asp^0, the latter being relevant to Acc Case.

Therefore, Carstens (2001:147) argues for "a return to the traditional view that certain categories are Case "assigners", such that Agree deletes the goal's Case only if the probe has an intrinsic structural Case value". As such this proposal is similar to the present one in that it suggests that Case-checking (functional) heads must have a dedicated [Case] feature valued on them in order to be able to check/value the [Case] feature on the DP; that is, Case is valued under Match. I call this [Case] feature (on the relevant heads) [VC]; this is because it (as the Case licenser) co-exists with verbs. In addition, this proposal, like the present one, dispenses with ϕ-features as the Case-valuing feature; that is, it argues that ϕ-feature valuation is irrelevant for Case checking.

4.3.8. Cowper (2002)

After reviewing the relevant literature on personal and inflected infinitives, Cowper (2002:19) proposes that these infinitives (as opposed to English-type ones) exhibit Case and agreement because of two properties that they have, "a) a relation they bear to a higher case-assigning element and b) some property that characterizes INFL only in null-subject languages". She states that the 'higher Case-assigning element' could be a verb, a preposition, or a matrix Infl. The reason why the embedded/infinitival Infl is accessible to the 'higher Case-assigning element' is that "either it heads a projection in the search space of the case-marker, or it has moved to the head of such a projection" (p. 20). In one instance (Cowper's 17.b.), she suggests that Infl has moved to the embedded C^0 position (which allowed it to assign Nom Case). The relevant point here is that Cowper links the ability of the infinitival Infl to assign Nom Case to the embedded subject to the presence of a higher element, which could be said to assign a Case value to Infl, making it capable of assigning Nom Case.

Attempting a Minimalist (Agree-based) treatment, Cowper suggests that the relation between the 'higher Case-assigning element' and the infinitival IP/Infl could be stated as follows. "On standard assumptions, the case-assigner bears uninterpretable ϕ-features, and will match a goal with uninterpretable Case and interpretable ϕ-features" (p. 20). In other words, Cowper proposes that the infinitival Infl head has an unvalued [Case] feature (or specified for Case, in Raposo's terms) similar to the one DPs have. This thus leads to an Agree relation between "the case-

assigning head" (the probe which has uninterpretable ϕ-features) and "the constituent headed by INFL", which results in valuing the [Case] feature on Infl (the Goal). An analysis along these lines, argues Cowper, enables the infinitival Infl to acquire the ability to value the [Case] feature of the embedded subject as Nom. Cowper coins the term Pseudofiniteness to describe the situation where a "non-finite INFL […] acquires the properties associated with the FINITE node during the syntactic computation" (p. 21).[112]

As such, Cowper's analysis bears a lot of resemblance to the account proposed in this thesis. First, as I do, Cowper suggests that the embedded/infinitival Case assigner has a unique Case feature (similar to that of DPs); I call this feature [VC], but I stress that VC and nominal Case are of the same species. Second, as I do, Cowper argues that this [Case] feature on the infinitival Infl must be valued/checked by a higher Case-assigning element; for me, this element is always a [VC] feature on Fin^0. Third, as I do, Cowper assumes that Agree could handle all head-head and head-XP operations. Fourth, assuming Rizzi's (1997:284) suggestion that finiteness is related to agreement (as well as tense and mood), Cowper and I agree that C^0 or the 'higher Case-assigning element' has some I-finiteness feature; for her it is uninterpretable ϕ-features, and for SA it is unvalued [T] or unvalued [Mood]. However, unlike Cowper, I propose that the higher-than-Infl element has an intrinsic Case feature, a valued [VC] feature. Since we agree that the embedded Infl (or DP Case-assigner) has a [Case] feature, then, I think, we might agree that the embedded Comp (Infl Case-assigner) has a [Case] feature. Also, unlike her, I think that what the relevant infinitival complements (as well as their SA embedded subjunctive counterparts) exhibit is true finiteness, not a weaker version thereof, since the embedded Infl/verb realizes agreement (following Rizzi 1997).

Along the same lines, Cowper (2002) reanalyzes the South Calabrian modo construction (originally investigated in Ledgeway 1998). The modo construction is an embedded clause

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[112] Since the SA data I work with have no nonfinite verbs, I will not adopt the concept of 'pseudofiniteness'. This is because SA verbs either realize tense and mood or just mood; that is, they always exhibit some I-finiteness feature. Participles in SA lack tense and mood, but exhibit agreement; more on this is in chapter 5.

where the embedded verb realizes both present tense morphology and agreement. With regard to the present tense morphology, Ledgeway proposes that it is not tense. (Cowper suggests that the tense morphology is the default interpretation of the unmarked tense; thus it is not genuine tense, since it does not exhibit tense distinctions, past vs. non-past, Cowper (2005).) Thus Ledgeway argues that the modo construction is identical to inflected infinitives, that is, its Infl is [–Tense], but [+Agr].

In this construction, the verb is preceded by the modo particle, which, argues Ledgeway, is not a complementizer (since it co-occurs with complementizers and wh-phrases, and appears to the right of the subject as well as the negative markers). Observing that the modo construction has no Case-assigning element governing it, and adopting her analysis of inflected infinitives (as pseudofinite clauses), Cowper argues that "it is entirely possible that the *modo* element itself provides a case specification for the INFL in the *modo* clause" (p. 36). This way, the embedded subject receives Nom Case from the infinitival Infl, which has a [Case] feature, after the latter has entered an Agree relation with the modo particle, which values the [Case] feature on Infl.

Though I am going to show that, unlike the modo particle, the SA 'ʔan' subjunctive particle is a complementizer, I am going to argue that it has the same effect as does the modo particle, in SA embedded subjunctive clauses with regard to the licensing of structural Case.[113]

4.3.9. Tanaka (2005)

Tanaka (2005) argues against Chomsky's (2000, 2001) proposal that Nom Case is checked on the subject by a ϕ-complete T^0, as a reflex of the subject's valuing the T^0's unvalued ϕ-features. Tanaka proposes that C^0 is the locus of Case and agreement, and that a ϕ-complete T^0 is both insufficient and unnecessary for Nom Case assignment. Specifically, he argues that "the C-T configuration is responsible for Case/agreement licensing of subjects in both finite and nonfinite

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[113] Cowper (2002:35) also states that the Old Neapolitan inflected infinitive always occurs governed by a Case-assigning element, which she suggests, assigns Case to the embedded Infl, according to the aforementioned procedure, which results in the Infl category being able to assign Nom Case to the embedded subject.

clauses" (p. 103); T^0, though, does not have to be ϕ-complete, as suggested in Chomsky (2001). Despite this, Tanaka states that "agreement with T is a necessary step for nominative Case assignment" (p. 94).

To show that a ϕ-complete T^0 is insufficient for Nom Case assignment, Tanaka shows that a T^0 with a full set of ϕ-features does not license Nom Case in "English finite clauses with "null" subjects" (p. 99). Moreover, to show that a ϕ-complete T^0 is unnecessary for Nom Case assignment, he provides data from "a limited range of infinitives in Middle and Modern English" (p. 99). However, he acknowledges that the presence of a T^0 is important for Nom Case assignment; evidence for this comes from gapping constructions as well as from *for to* infinitives in English. To argue for the involvement of C^0 in Nom Case assignment, he provides arguments from complementizer agreement in West Flemish and Welsh infinitival clauses; the presence of agreement morphology on C^0 is taken as evidence that it has ϕ-features. As such, Tanaka argues that Nom Case is assigned in the presence of a T^0 as well as a finite C^0, that is, a C-T configuration. Basically, the subject (in English) enters an Agree relation with T^0 and values its ϕ-features, but does not get its Case feature valued, though it moves to Spec, TP for EPP. It then enters another Agree relation with C^0, where it values the ϕ-features on C^0, and as a result, C^0 values Case on the subject as Nom. This, argues Tanaka, is because "all operations including feature deletion/valuation on DP can only be effected by a phase head, i.e. by C under the C-T configuration in this case" (p. 91).

As such, this analysis is similar to the present one in three respects. First, like my account, it advocates a major role for C^0 in (Nom) Case checking. Second, like mine, it assumes that ϕ-features on T^0 are not involved in (Nom) Case checking. Third, like mine, it proposes a system that accounts for (Nom) Case checking in both finite and nonfinite clauses. However, it differs from the present analysis in other respects. First, while Tanaka argues that Nom is assigned to the subject as a result of the latter valuing the ϕ-features on C^0, I argue that Nom Case checking obtains as a result of a [VC] feature on C^0/Fin^0 and T^0. Second, unlike Tanaka's system, I argue that C^0 does not assign Case to the subject, but rather it values the [VC] feature on T^0, which

results in the latter valuing [Case] on the subject as Nom. Third, while he assumes that C^0 has unvalued ϕ-features, I assume that it has an unvalued [T] (or even [Mood]) feature.[114]

4.3.10. Lee (2005)

Lee (2005) provides an account of the distribution of the English null complementizer (corresponding to the declarative Comp 'that') in terms of Case. The English null Comp received a number of accounts. First, Stowell (1981) accounts for the ungrammaticality of (58) in terms of the Empty Category Principle (ECP); basically, (58) is ungrammatical because the null Comp is not properly governed by the matrix verb. Unlike the null Comp, 'that' requires no governor, as (59) shows.

58. *[$_{CP}$ C [$_{IP}$ He liked syntax]] was widely believed.

59. [$_{CP}$ That [$_{IP}$ he liked syntax]] was widely believed.

In addition, Pesetsky (1992:35-36) suggests that the null Comp is an affix that must be attached to a lexical head, namely matrix V^0. Thus, for him, (58) is ungrammatical because it is not possible to head-move a null C out of subject island, an account that still appeals to the ECP.

Adopting Pesetsky's (1992) insight that the null Comp is an affix, Boskovic & Lasnik (2003) propose that the null Comp *that* in English, being a PF verbal affix, undergoes PF merger with a [+V] head (under adjacency at PF). In other words, the null Comp must be adjacent to the matrix V to allow for PF merger to take place. This is why (60) is grammatical (just like (61)), whereas (62), where the null Comp is not adjacent to the matrix V, is ungrammatical; that is, where PF merger is not allowed, the overt Comp 'that' must be there, as (63) shows.

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[114] Regardless of whether or not Tanaka's analysis works for English (and other languages), it does not account for Case facts in SA. To illustrate, verbless sentences, which do not witness structural Case checking, have a C^0 category/CP layer, as well as a T^0 category/TP; they thus constitute an instance where both elements that Tanaka's system requires for Case checking are present, and yet Case checking does not obtain.

60. I believe [$_{CP}$ C [$_{IP}$ he is smart].

61. I believe [$_{CP}$ that [$_{IP}$ he is smart].

62. *I believed at that time [$_{CP}$ C [$_{IP}$ he was smart].

63. I believed at that time [$_{CP}$ that [$_{IP}$ he was smart].

Lee (2005) suggests that an account based on the idea that phonologically null elements require a PF host is not plausible given the very nature of such elements. In other words, null elements/affixes should not require a host, since they never surface. I will not dwell on the merits of the previous proposals; instead, I will review Lee's proposal and discuss its relevance to the topic of this thesis.

Lee responds to Boskovic & Lasnik's (2003) account by suggesting a Case-based analysis for the distribution of the null Comp in English. Lee proposes that "the Comp *that* is a reflection of Case on the CP that is assigned by the matrix Case-head, and that the null Comp arises when the Comp *that* drops under adjacency exactly in the same manner as a Case marker drops in Case marker drop languages like Korean (and Japanese)" (p. 251). Thus Lee suggests that the Comp 'that' is Case-related. In other words, Lee assumes that Case on 'that' (by the matrix verb) translates into Case on the embedded CP.

Lee argues that contrasting (60) with (62) shows that the null Comp (unlike its overt counterpart) must be adjacent to the matrix verb, to receive Case from it. This is similar to (64) where the embedded ECM-ed subject must be adjacent to the matrix verb to receive (Acc) Case from it. That this is on the right track is supported by (65) where the embedded subject cannot receive Case from the matrix verb without adjacency, a situation similar to (62).

64. I believe [$_{IP}$ him to be smart].

65. *I believed at that time [$_{IP}$ him to be smart].

Lee states that the "null C and the ECMed subject are subject to the adjacency requirement with respect to the matrix verb in the same pattern. This fact thus indicates that Case is relevant for the contrast in [(60) and (62)], as in the Case adjacency fact in [(64) and (65)]" (p. 252). Lee compares these facts with the fact that in Korean the Acc Case marker may drop only under adjacency with the verb, just like the English 'that', as (66-69), Lee's (4.a and b), show.

66. John-un   enehak(-ul)   cohaha-n-ta

    John-Top   linguistics(-Acc)   like-Pres-Dec

    'John likes linguistics'

67. enehak?*(-ul)   John-un   cohaha-n-ta

    linguistics(-Acc)   John-Top   like-Pres-Dec

    'linguistics, John likes'

68. *[$_{CP}$ C [$_{IP}$ He liked syntax]] was widely believed.

69. [$_{CP}$ That [$_{IP}$ he liked syntax]] was widely believed.

Lee also argues that the distribution of the Comp 'that' in English is similar to that of the Comp '-ko' in Korean. Also, Lee shows that "the Comp -*ko* drops in the same way as the Accusative Case marker -*ul* in Korean" (p. 252), which indicates that the Comp 'ko' is an Acc Case marker. All these facts and patterns lead Lee to argue that "the Comp *that* can be taken to be a morphological manifestation of clausal Case on the CP, which obviously originates from the matrix verb that selects this CP as a complement in examples like [(70)]" (p. 253).

70. I believe [(that) [John likes syntax]].

Regardless of the particulars of Lee's analysis, the relevant point is that Lee argues that 'that' carries Case, which is similar to the current proposal that C^0 has a valued [VC] feature. Nonetheless, Lee's account seems to me to be lacking. To illustrate, though I might agree with

Lee that the 'null that', like the ECM-ed subject, must be adjacent to the matrix verb to receive Case from it, I think it is implausible to suggest that 'overt that' (if this analysis is on the right track) receives Case from the matrix verb, since 'overt that', unlike its null counterpart, does not have to be adjacent to the matrix verb, as (63) shows.[115] Thus, I think that if we are to maintain Lee's analysis, it must be assumed that 'overt that', like the SA 'ʔan' (which is the VC assigner/Case provider in the complement clause in SA), brings Case with it; that is, 'overt that' is perhaps a VC assigner. This is supported by the data in (71-72), Lee's (6.a and b).

71. it is widely believed [that [Peter is smart].

72. (?) it is widely believed [C [Peter is smart].

Given the fact that passive verbs do not assign (Acc) Case to a complement (being unaccusative), the contrast between (71) and (72) shows that (71) is grammatical because, given my approach, 'overt that' is a VC assigner (which checks [VC] on the embedded functional heads, which then check [Case] on the embedded arguments). This way, the degraded nature of (72) follows from the fact that the null Comp has/receives no Case. Lee accounts for the observation that (71-72) are both somewhat equally acceptable by suggesting that passive verbs assign inherent Case (extending an insight from Boskovic (2002), where he proposed that transitive verbs can have either a structural Case or an inherent Case). However, data like (73) show that ungrammaticality arises when 'null that' is not adjacent to the matrix Case licenser (thus unlike 'overt that' which is an independent Case licenser).

73. * I believed at that time [Peter was smart].[116]

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[115] Also, Howard Lasnik (p.c.) points out "that we get 'that' even on the complement of non-Case Assigners like nouns and adjectives". This could indicate that 'overt that', unlike its null counterpart, is an independent Case licenser.

[116] It is noteworthy that younger speakers might accept (73) as grammatical. Others speakers, however, rate it as (?) if there is a pause after 'believed', but ungrammatical without a pause.

4.4. Feature Inheritance: Chomsky (2005, 2006)

Chomsky (2005, 2006) proposes that T^0 and V^0 can only value Nom and Acc, respectively, if they inherit the relevant Case and agreement (valuation) properties from the respective phasal heads, C^0 and $v*^0$, respectively. He thus argues that the locus of determination of structural Case and agreement is C^0 and $v*^0$, not T^0 and V^0, respectively, a notion that he calls 'feature inheritance'. For example, T^0 inherits the ability of Nom Case and ϕ-feature valuation from C^0, because, argues Chomsky (2005:10), "for T, ϕ-features and Tense appear to be derivative, not inherent". Chomsky states that T^0 lacks ϕ-features and tense in the lexicon, and is able to manifest such features only if selected by C^0; the absence of C^0 (as the source of such features) results in a raising or an ECM construction. Thus, he argues, it is plausible to assume that such features (and abilities) are inherited from the phase head, C^0. In other words, "[i]f C-T agrees with the goal DP, the latter can remain in-situ under long-distance Agree, with all uninterpretable features valued; or it can raise as far as SPEC-T, at which point it is inactivated, with all features valued, and cannot raise further to SPEC-C" (Chomsky 2005:10).

Since the notion of 'feature inheritance', as suggested and implemented in Chomsky (2005, 2006), might in fact be indispensable as far as the data that he surveyed are concerned, I will not argue against its crosslinguistic applicability potential. I, instead, would like to question the feasibility of the notion of 'feature inheritance' given the examined SA facts, specifically the requirement that [VC] be present in order for DPs (hence Case) to be licensed. Thus I argue that what Chomsky achieves through 'feature inheritance' can be achieved in SA by an operation that is indispensable (in the Minimalist Program), namely Agree.

First, Chomsky's claim that T^0 inherits tense and agreement features from C^0 cannot be extended to SA, for two reasons. The first is that tense is never morphologically realized on C^0 in SA, and always realized on T^0.[117] This is because none of the SA VC-assigning particles that are merged

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[117] I, again, take morphology to reflect the featural structure of functional categories (especially in a language known for its rich morphology). In section 4.2, I made the claim that SA C^0/Fin^0 encodes some specification of tense

in C^0/Fin^0 (Comp elements) realizes tense; as far as the tensed negative particles, 'lan', 'lam', and 'lamma', are concerned, it is clear that these are merged in Neg^0 (and later moved to Fin^0). The second is that agreement is never realized on the SA Comp elements that co-occur with verbs; it is only realized on the ones that co-occur with nouns (like 'ʔinna' and its sisters, discussed in section 4.2.2.4), where agreement is considered pronominal and so is in complementary distribution with the DP. However, there are some VC assigning particles that are (arguably) merged in C^0/Fin^0 that manifest mood distinctions, like the subjunctive particle 'ʔan', and the optative particles 'kay' and 'Hattaa'. These facts thus indicate that T^0 is not featureless in the lexicon as suggested in Chomsky (2005:10). As pointed out in Chomsky (2006:14), an approach where tense is a property of T^0 is advantageous in the sense that "T will then have at least some feature in the lexicon, and it is not clear what would be the status of an LI [lexical item] with no features". Another advantage, he states, is that it will explain "why C never manifests Tense in the manner of ϕ-features (if that is correct)". Therefore, the assumption that T^0 in SA inherits tense and agreement features from C^0 is untenable since it will result in T^0 inheriting no such features from C^0 since the latter has none (and so T^0 would be unable to license Case, contrary to fact). Thus the problem with 'feature inheritance' is that it assumes that features usually seen manifested on the verb (hence related to T^0 and $v*^0$) are derivative on verb-related functional heads and inherent on C^0. The expectation then is that such features could be seen manifested on C^0 elements, but this expectation is not borne out in SA. Thus it seems more plausible to assume that such features are related to T^0 (since they are usually manifested on the verb) and that C^0 has the same features but unvalued, along the lines proposed in this thesis. In addition, given the arguments presented in chapter 2 that ϕ-feature valuation and tense license neither Nom nor Acc in SA, we still need to posit the existence of [VC] as the Case licensing feature/property. Thus adopting Chomsky's proposal that T^0 and V^0 can license Nom and Acc, respectively, if they inherited the tense and agreement properties from C^0 and $v*^0$, respectively, would not be enough since structural Case in SA is licensed by [VC]. Thus even if we adopted

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(or mood), which I call an unvalued [T] (or [Mood]) feature; thus tense (or mood) is inherent on T^0. This approach is different from Chomsky's since he assumes that tense and agreement are inherent on C^0 and derivative on T^0.

the 'feature inheritance' approach, we would still have to argue that T^0 and V^0 inherit [VC] from C^0 and $v*^0$, respectively; therefore, 'feature inheritance' as it is (of tense and agreement) will not be sufficient.

Second, assuming with Chomsky (2005) that T^0 can license Nom Case if it inherits the Case and agreement properties from C^0, and given the observation that verbless sentences have a TP projection as well as a C^0 layer, hence a FinP projection (as shown in sections 2.3.3 and 2.3.4), nothing could prevent T^0 from assigning structural Nom Case to the topic of verbless sentences. However, given the finding that the topic of verbless sentences receives default, *not* structural, Nom (since it receives lexical Acc in the presence of 'ʔinna', indicating that it is *not* in the scope of a Case licenser in the absence of 'ʔinna', as shown in section 3.3, assuming the CFC), this proposal proves untenable. This scenario (predicted by Chomsky's approach) might in fact take place unless we restrict structural Case checking to the presence of [VC], which would, again, make the 'feature inheritance' mechanism look redundant (given the proposed syntactic system, in section 4.2). Thus the fact that the topic of verbless sentences receives default Nom at PF indicates that no 'feature inheritance' applies, nor does any other Case-related operation, due to the absence of [VC]. This thus shows that the ability to license Nom Case is not effected by C^0 per se (nor by phasal heads) but rather by the presence of the [VC] feature on C^0 as well as on (verbal and copular) T^0. T^0 and $v*^0$ obtain this feature as a result of their being associated with a verb that must be licensed by some C^0 element.

Third, Chomsky (2006:13) cites Marc Richards (p.c.) as suggesting that "the uninterpretable features of C must be "inherited" by T. If they remain at C, the derivation will crash at the next phase". In addition to the assumption that a derivation crashes if some (uninterpretable) feature is not valued/licensed, this reasoning adds another reason that derivations crash, namely that T^0 does not inherit the features of C^0. However, I think that the second scenario can be reduced to the first one. To illustrate, given the proposed system where Fin^0 has the same I-finiteness features that T^0 has, but unvalued, and the assumption that T^0 values those I-finiteness features on Fin^0 via Agree, we now have a justification for why a derivation would crash if 'T^0 does not inherit C^0's features'. Basically, the derivation would crash because Agree (rather than

inheritance) did not apply between T^0 and C^0, which results in not valuing the I-finiteness features on C^0, and also not licensing the C-finiteness feature on C^0 by valuing the [VC] feature on T^0. Thus what feature inheritance accounts for can be accounted for by an independently motivated operation, namely Agree. Moreover, participial sentences in SA provide a relevant argument against the mechanism of 'feature inheritance'. To illustrate, first, participial sentences have a CP layer (given the fact that they exhibit wh-movement and have a TopP projection, which is where the topic is merged in SVO structures, which are grammatical with participles). Second, these sentences have no IP projection (since they do not license Nom Case as evidenced by their ungrammaticality in the VSO order, and also because they lack a genuine tense feature, since (unlike their English counterparts) SA participles do not exhibit the past vs. non-past distinction that other verbs show, which indicates the absence of [Precedence] (Cowper 2005). Given Chomsky's proposal, the derivation of these sentences is expected to crash (since no inheritance from C^0 will take place since I^0 is absent), contrary to fact. Thus these facts argue against the relevance of feature inheritance for SA Case facts.

Fourth, assuming with Chomsky (2005) that T^0 can (or must) inherit features from C^0 indicates that the former can, as well, inherit from the latter the EPP feature. The difference between the two categories, T^0 and C^0, is that while the former is relevant for A-movement, the latter is relevant for A-bar movement. However, given Soltan's (2007) original insight that SA exhibits *no* A-movement (to Spec, positions), SA subjects remain in the thematic domain, Spec, v*P, and never move to Spec, TP. Besides, given standard assumptions about SA (as shown in chapter 3), it turns out that SA allows A-bar movement (as witnessed in wh-questions). This thus would result in T^0 inheriting an EPP feature (from C^0), thus having to have its Spec, position filled by a DP, contrary to fact. Basically, despite the fact that there are systems which claim that the SA T^0 has an EPP requirement that is satisfied by V-to-T movement (as in Alexiadou & Anagnostopoulou 1998, and Benmamoun 2000), it could be argued that SA has *no* EPP features on T^0 and V^0/v^{*0}, (since it exhibits no A-movement). In other words, Alexiadou & Anagnostopoulou's (1998) and Benmamoun's (2000) proposals might be no more than just descriptions of the fact that in VSO languages the verb usually moves to T^0 (and perhaps higher, to $Mood^0$) to realize inflectional features and achieve the right word order. Therefore, adopting Chomsky's (2005:23) logic where he suggests that T^0 must inherit features from C^0 (the phase

head) will allow T^0 to inherit EPP from C^0, which would result in A-movement in a language that does not allow A-movement. On the other hand, adopting a pure Agree-based approach to formal feature valuation and licensing, one could assume that SA T^0 and $v*^0/V^0$ have no EPP features. This situation is contrasted with the fact that SA exhibits A-bar movement, where C^0 seems to have an EPP feature that requires wh-elements to move to Spec, CP in questions.

Fifth, as stated in Chomsky (2005:10) the 'feature inheritance' mechanism constitutes a 'narrow' violation of the No Tampering Condition (NTC), which states that "Merge of X and Y leaves the two SOs [syntactic objects] unchanged" (p. 5). Feature inheritance violates the NTC since, according to Chomsky (2005:10), T^0 lacks features in the lexicon, and so allowing it to inherit features from C^0 in the course of the derivation changes its initial state (which is considered tampering). By contrast, assuming that T^0 comes to the numeration with (at least) [T] and [VC], and enters an Agree relation with Fin^0 whereby its [VC] is valued by that of Fin^0, the NTC is not violated, since feature valuation is not considered violation (since elements do not gain/inherit features), rather it is the desired course of action. In addition**,** Chomsky (2006:13, fn. 28) states that "[i]t is sometimes felt intuitively that "inheritance" is counter-cyclic, but technically that is not the case, any more than the (somewhat similar) probe-goal relation that determines structural Case in situ". Given Chomsky's recognition that 'feature inheritance' is as counter-cyclic as Agree, one, at least by economy and elegance, would be tempted to adopt only one of the two operations, namely Agree. Finally, with 'feature inheritance', now Nom is licensed by a functional head, T^0, whereas Acc is licensed by a lexical head, V^0 (a situation reminiscent of GB syntax). Besides, adopting 'feature inheritance' brings with it the question of how it applies. As Chomsky (2006:14) states "the precise mechanism does not matter here". Thus we still need to figure out how to implement 'feature inheritance'. By contrast, we already know how Agree works. Therefore, given the assumption that Agree can take place between functional heads and substantive categories, as well as between functional heads and other functional heads (Chomsky 2001, and Baker & Willie 2008), I propose that Agree can replace 'feature inheritance'.

Differently put, given the observation that T^0 encodes [T] (given the examined SA facts, and also as proposed by Pesetsky & Torrego (2001), and Rizzi (1997), among others) and [VC] (given the

surveyed SA data), a Rizzi-like approach (or at least an extension thereof) to the Comp-domain would posit that Fin^0 has the same set of features (that T^0 has), namely [T] and [VC]. Thus given the fact that the licensing/computational system already has Agree, one would be tempted to take the economical approach whereby the unvalued features would be valued via Agree with their valued counterparts, in which case the valued [T] on T^0 values the unvalued [T] on Fin^0, and the valued [VC] on Fin^0 values the unvalued [VC] on T^0 and $v*^0$. This situation renders the 'feature inheritance' mechanism superfluous (since the introduction of [VC] is inevitable). If this reasoning is on the right track, then T^0 operates as an independent probe, not just derivatively according to the relation (with C^0) assumed in Chomsky (2005:21). Given this approach, then eliminating 'feature inheritance' would result in theoretical simplicity as well as computational ease.

Despite these differences between the proposal made in this thesis and 'feature inheritance', the two approaches have something in common. To illustrate, Chomsky assumes that the ability of T^0 to license Nom Case is inherited from C^0, and my proposal assumes that for Nom Case to be licensed by T^0, T^0 itself must be licensed by valuing its [VC] feature via Agree with the valued [VC] feature on Fin^0/C^0; this procedure formalizes the traditional view of Comp particles licensing verbs, thus allowing them to license arguments. Thus I, too, assume that the ability to license Nom Case is actually provided by Fin^0/C^0. However, the other issue on which I disagree with Chomsky (to be discussed in section 5.5) is the observation that both Nom and Acc Cases might actually be licensed as a result of T^0 and $v*^0$, respectively, entering an Agree relation with Fin^0; that is, Fin^0 is the locus of both Nom and Acc Cases, thus licensing in general.

5. Case Checking in Various SA Clauses

This chapter attempts to promote the Case theory laid out in chapter 4 by showing that it has the potential of accounting for structural Case checking in a variety of SA clauses, comprising embedded clauses, imperatives, passives, unaccusatives and unergatives, as well as participial sentences (sentences with participles). Given the syntactic system proposed in section 4.2, I am going to show that the Fin^0 head in these clauses has a valued [VC] feature (that can value the unvalued [VC] features on the relevant Case-checking heads, which can then value the [Case] features on the relevant DPs, or rather XPs) since the XP it selects has at least one valued I-finiteness feature ([T], [Mood], or [φ]) and a valued categorial [V] feature. Also, going back to the issue (raised in section 2.1.2) of whether argumental non-DPs can receive structural Case, I will argue that the SA embedded argumental CPs as well as argumental PPs in the Prepositional Passives (P-passives) receive structural Case, licensed by the relevant functional head, in consonance with a visibility approach to structural Case (Aoun 1979, Chomsky 1981). The chapter closes with a proposal for the structure of *pro* as well as its Case requirements, an issue relevant for verbal, verbless, and participial sentences.

5.1. Case Checking in Embedded Clauses

This section shows how the theory of Case proposed in this thesis fares in the face of some embedded clause data in SA; (1-3) provide examples of control, ECM, and (non-)raising constructions, respectively.

1. Haawala-Ø   r-rajul-u$_i$ [ʔan   ya-naam-a   *pro*$_i$]

   Pst.try.3sm-Ind   the-man-Nom   Comp   Impf-sleep.3sm-Sub   ec

   'the man tried to sleep'

2. Zanna-Ø   ʕaliyy-un   [T-Tullaab-a$_i$ naam-uu-Ø   *pro*$_i$][118]

Pst.believe.3sm-Ind   Ali-Nom   the-students-Acc   Pst.slept.3-pm-Ind   ec

'Ali believed that the students slept'

3. yabduu   [ʔanna   l-ʔawlaad-a$_i$ naam-uu-Ø   *pro*$_i$]

seem.3**s**m   Comp   the-boys-Acc   Pst.sleep.3-pm-Ind   ec

'it seems that the boys slept'

The reason I call the construction in (3) (non-)raising is that it does *not* witness A-movement (of the sort seen in English raising constructions), in line with Soltan's (2007) insight that SA does not exhibit A-movement. Also, I am going to assume that SA does not have PRO, and that the empty category in Obligatory Control (OC) contexts is *pro*.[119]

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[118] In (2-3) the relevant θ-role is assigned to the subject, *pro*, and transmitted at LF to the (non-argument) preverbal DP topic through co-indexation.

[119] Since this thesis is not on the empty categories in SA or on the nature of the subject in the SA embedded clauses, I will not get into two debates. The first debate is related to whether the embedded subject in obligatory control contexts is a base-generated empty category or a silent copy of the matrix subject. The first view is the standard GB one of Chomsky (1981). The second view, which is based on the copy theory of movement (Chomsky 1993), argues that the subject starts in the embedded clause and then moves to the matrix subject position (Hornstein's (1999) movement theory of control) leaving a copy in the embedded subject position. I will just assume that it is an empty category. The second debate is about the identity of this empty category in the various embedded clauses, raising, ECM, and obligatory control. As far as raising and ECM embedded clauses are concerned, the embedded subject/empty category is *pro*, one reason being the fact that it can alternate with a lexical DP (since these embedded clauses are finite, as we will see soon). As for the Obligatory Control embedded clauses in the language, and since nothing in the theory presented in this thesis is contingent on the type of the empty category in control clauses, I will not take a position on this issue and so will just assume that this empty category is *pro*, rather than PRO (which is the standard GB view). One reason for this is the recent approach to control (Hornstein 1999) which eliminates PRO from UG. Another reason is the fact that SA is a pro-drop language. Also, given the GB assumption that PRO is merged in positions where Case is not licensed (since PRO cannot satisfy the Case Filter), it becomes clear that PRO is *pro* plus anaphoricity, where the latter could be argued to result from non-licensing. Thus I will assume that SA has no PRO. If, in a thorough investigation of the nature of the empty category involved in these clauses, it turns out that this empty category is PRO rather than *pro*, then we could assume that it receives Nom Case from the relevant functional head. That PRO receives structural (rather than Null) Case has been argued in Chomsky & Lasnik (1993), Landau (2004, 2006), Sigurdsson (1991, 2008), and San Martin (2003, 2004).

5.1.1. Case in Control Constructions

This section will handle the Case checking issues in some SA control data. The control embedded clauses in SA are different from their English counterparts in that the former have finite verbs (whereas the latter have infinitives). Finiteness on the embedded verbs will be identified with (subjunctive) mood, rather than with agreement or tense, but we first need to provide evidence for the absence of both full [φ] and genuine [T] in such clauses; this task as well as arguing for the involvement of [Mood] is taken up in the next section.

5.1.1.1. Finiteness on the Control Embedded Verbs

Given the Case theory proposed in chapter 4, structural Case will be licensed in the embedded clause if the Fin^0 head has a valued [VC] feature, which is dependent on whether or not the XP that it selects has a categorial [V] feature as well as an I-finiteness feature (tense, mood, or agreement). Also, given the fact that the embedded clause in (1), for example, has a verb, then the selected XP will have a categorial [V] feature. However, we need to find out whether the embedded verb/clause has an I-finiteness feature, as well as which one of the three ([T], [φ], [Mood]) it is. Anticipating the discussion and evidence provided in the next sections, I will argue that the embedded verb encodes an I-finiteness feature (hence structural Case is expected), and also that this feature is neither [φ] nor [T], but [Mood].[120]

5.1.1.1.1. Against [Agr] and [T]

The I-finiteness feature in SA control embedded clauses is not [φ] since, as is the case with SA main clauses (as shown in section 2.2.1), subject verb agreement in SA is impoverished because verbs actually are *not* allowed to fully agree with their subjects (and are not allowed to agree

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[120] In chapter 4, where declarative/main clauses were discussed, we saw that this I-finiteness feature is [T]; in this chapter we will see that it is [Mood] in subjunctive and imperative clauses. In section 5.5, we will see that this I-finiteness feature is [φ], but in a conception of agreement that is distinct from what Schütze (1997) and Chomsky (2001), for example, propose for English main clauses.

even partially with their objects). Establishing the argument for embedded clauses, (4) shows that the embedded verb cannot agree with the subject in terms of [Number].[121]

4. qarrara-Ø   l-mudiir-u   ʔan

Pst.decide.3sm-Ind   the-manager-Nom   Comp

ta-ʔxuTH-a/*ta-ʔxuTH-**na**   l-muwaZZaf-aa-t-u   ʔajaaza-t-an

f-take.3**s**-Sub/f-take.3-**p**f   the-employee-**p**-f-Nom   vacation-f-Acc

'the manager decided that the female employees (should) take vacation'

I take the fact that the verb is not allowed to fully agree with the subject, especially in a language where verbs can in principle carry full (or number) agreement, as in the SVO order,[122] as evidence that [φ] is *not* involved in the licensing of structural Case in SA embedded clauses, since the φ-features on the embedded I^0 are always incomplete, giving rise to φ-defectivity (assuming Chomsky's (2001) claim that a φ-defective probe cannot value [Case] on the goal, hence inert as far as syntactic operations are concerned).

Moving on to [T], there seems to be some evidence that this could be the I-finiteness feature in SA control embedded clauses. To illustrate, examining data like (5) shows that the embedded clause/verb has its own tense operator since it can be modified with a temporal adverb distinct from the one that modifies the matrix clause.

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[121] The goal behind using this non-Obligatory Control sentence is to see how the embedded verb behaves (in terms of agreement) in the presence of a subject. Thus since SA does not exhibit backward control, this is expected to be a non-OC sentence. This is because in sentences with OC verbs (which do not show backward control) the embedded subject can never be spelled out.

[122] As I have argued previously, a φ-complete I^0 in the SVO order (as well as in Topic-Predicate structures, as in verbless sentences discussed in chapter 3) does not license Case without [VC], but rather licenses *pro* (by recovering its φ-content) whose job is to license the topic through co-indexation. One reason that this φ-complete I^0 does not license Case is that it appears in the context where there is *no* overt subject to receive the Case, which is the SVO structure.

5. qarrara-Ø   r-rajul-u$_i$ l-yawm-a

 Pst.decide.3sm-Ind the-man-Nom the-day-Acc

 [ʔan ya-rHal-a   *pro*$_i$ Gadan]

 Comp Impf-travel.3sm-Sub ec tomorrow.Acc

 'the man decided today to travel tomorrow'

Despite this appealing finding, this is not enough. Though the embedded clause can have its own independent temporal reference, this temporal reference must be interpreted *in relation* to that of the matrix clause. Basically, the event denoted by the embedded clause must be interpreted as occurring after and never before the one denoted by the matrix clause, as (6) shows.

6. qarrara-Ø   r-rajul-u$_i$ l-yawm-a

 Pst.decide.3sm-Ind the-man-Nom the-day-Acc

 [ʔan ya-rHal-a   *pro*$_i$ Gadan/*bi-l-ʔams-i]

 Comp Impf-travel.3sm-Sub ec tomorrow.Acc/in-the-yesterday-Gen

 'the man decided today to travel tomorrow/*yesterday'[123]

Even more, there are control data in SA where the embedded clause cannot have a temporal reference distinct from that of the matrix clause, as (7) shows.

7. Haawala-Ø   r-rajul-u$_i$ ʔams

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[123] This sentence is ungrammatical with 'yesterday' because the embedded clause of verbs like 'decide' does not have an independent tense operator [T], which is perhaps why it is semantically bizarre. The point is to show that subjunctive verbs do not encode tense (past vs. non-past).

Pst.try.3sm-Ind   the-man-Nom   yesterday

[ʔan   ya-naam-a   *pro*$_i$ bi-l-ʔams-i/*l-yawm-a]

Comp   Impf-sleep.3sm-Sub   ec   in-the-yesterday-Gen/*the-day-Acc

'the man tried yesterday to sleep yesterday/*today'

As (7) shows, the embedded clause must be interpreted as occurring at the same time (frame) as does the event denoted by the matrix clause. The sentences (5-7) show that SA control embedded clauses have a 'defective' value of tense, since the embedded subjunctive clauses have to be interpreted as occurring at the same time or after the time, but never before the time, when the event denoted by the matrix verb takes place.[124]

Assuming Cowper (2005), I^0 has (at least) one main component that is missing in the SA subjunctives. This is the feature of [Precedence], whose presence indicates that the verb is specified for [±Past]. In other words, with [Precedence], the verb can realize the past vs. non-past distinction; only in this case does I^0 have a [T] feature. Thus since the embedded (control) subjunctive in SA cannot be interpreted as occurring before the event denoted by the matrix verb, it does *not* encode tense.[125] This, therefore, provides evidence for the position that the I-finiteness feature in control embedded clauses in SA is not [T].

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[124] In the words of Cowper (2002:27-31), these clauses with 'temporally relative' and 'temporally transparent' reference "have no temporal index, and are thus completely dependent on their governing clauses for temporal reference" (p. 29). This indicates that the respective embedded verbs lack [deixis].

[125] In this regard, SA embedded subjunctives differ from their indicative counterparts, which can exhibit the past vs. non-past distinction, as (i-ii) show.

    i. zaʕama-Ø   r-rajul-u   l-yawm-a   [ʔanna-hu

      Pst.claim.3sm-Ind   the-man-Nom   the-day-Acc   Comp-he

      kataba-Ø   l-waajib-a   bi-l-ʔams-i/*Gadan]

      Pst-write.3sm-**Ind**   the-homework-Acc   with-the-yesterday-Gen/tomorrow

     'the man claimed today that he wrote the homework yesterday/*tomorrow'

Despite the observation that [φ] and [T] are defective in SA control embedded clauses, the assumption that SA subjunctive verbs are finite receives support from Cowper's (2002, 2005) feature geometry proposal of the inflectional features of Infl.[126] To illustrate, Cowper argues that subjunctive verbs are finite since they encode the feature [Finite]. The fact that they cannot be interpreted in relation to the moment of speech (as do indicatives), and so can only be interpreted in relation to their matrix clauses follows from her 'Geometry of Infl Features', since subjunctives, unlike indicative, lack the feature [deixis]. Though lacking [deixis], SA

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ii. zaʕama-Ø r-rajul-u l-yawm-a [ʔanna-hu sawfa

 Pst.claim.3sm-**Ind** the-man-Nom the-day-Acc Comp-he **will**

 ya-ktub-u   l-waajib-a   Gadan/*bi-l-ʔams-i]

 Impf-write.3sm-Ind the-homework-Acc tomorrow/with-the-yesterday-Gen

 'the man claimed today that he will write the homework tomorrow/*yesterday'

[126] Cowper (2005:14) argues that the feature geometry she proposes for Infl (reproduced below) indicates that subjunctive verb forms encode the features [Proposition] and [Finite]. This way, clauses with subjunctive verbs witness agreement and structural Case licensing. Crucially, the finite status of subjunctives is not undermined by the fact that they are not linked to the temporal discourse anchor/moment of speech, which refers to the feature [Deixis], which is a property of indicative verbs.
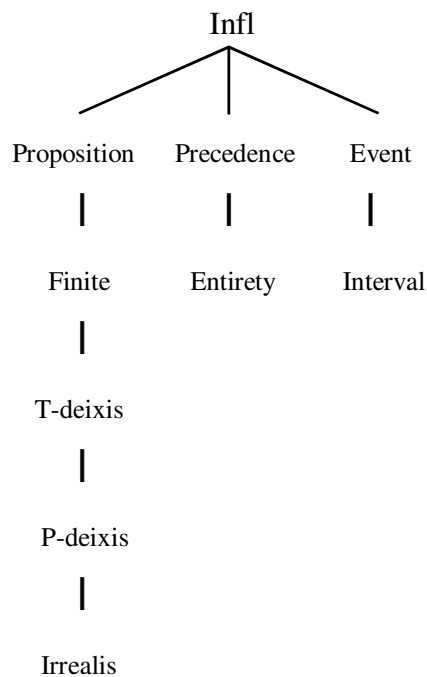
subjunctives must be viewed as different from non-finite embedded clauses (e.g. English infinitivals). This intuition is explored in the next section.

5.1.1.1.2. For [Mood]

In this section I propose that the SA control embedded verbs have a [Mood] feature as the I-finiteness feature, whose presence together with that of the categorial [V] feature on the selected XP prompts the introduction of the version of Fin^0 that has a valued [VC] feature, thereby introducing structural Case into the clause. This proposal is based on two insights, one from Rizzi (1997) and the other based on findings from Landau (2004). First, Rizzi (1997:284) argues that finite verbal forms manifest mood distinctions, as well as tense and agreement; he also assumes that the Comp domain has finiteness properties that are similar to the ones in the Infl domain. Thus given Cowper's (2002, 2005) proposal that subjunctives are finite verbal forms, I argue that the subjunctive verbal form in SA control embedded clauses conveys 'subjunctive mood', thus has a [Mood] feature,[127] which is what makes it finite. Subjunctive mood in these clauses is assigned by the particle 'ʔan', which is merged in Fin^0 as a subjunctive VC and a subjunctive mood assigning particle;[128] 'ʔan' denotes 'futurity', which is argued to make reference to mood, rather than tense (Cowper & Hall 2007).

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[127] This is one situation where we see subjunctive VC and subjunctive mood realized on the verb form. The verb in sentences like (i) realizes only subjunctive VC.

     i. lan   ya-ktub-**a**   l-mudarris-u   d-dars-a

       Neg-Fut   Impf-write.3sm-**Sub**   the-teacher-Nom   the-lesson-Acc

       'the teacher will not write the lesson'

[128] This assumption has some crosslinguistic support. To illustrate, Paoli (2007) provides evidence from Turinese and Ligurian (northwestern Italian varieties) for some connection between the subjunctive mood and a Comp particle. These varieties have a construction where two instances of the finite complementiser *che* are allowed in the same clause, as in (i-ii); Paoli argues that this is not mere repetition. She refers to the first (boldfaced) as *che1* and to the second (underlined) as *che2*; here she discusses *che2*.

     i. Gioanin   a   spera   **che** Ghitin <u>ch'</u>   as   ne�; vada   to`st

      John   SCL hope.pr.3s that Margaret that SCL+rfl part go.S.3s soon

      'John hopes that Margaret leaves soon'

     ii. A Teeja   a   credda   **che** a   Maria <u>ch'</u> a   parta

Second, in an analysis of Obligatory Control (OC) facts in Hebrew and the Balkan languages, Landau (2004) argues that these languages display what he calls 'finite control', that is, control into finite clauses. This is because the OC embedded verbs in these languages are finite (unlike their English counterparts). Basically, they are in the subjunctive mood,[129] as (8-11) show, from Greek, Romanian, Bulgarian, and Albanian, respectively, from Landau (2004:826-827).[130]

8. I   Maria$_1$ prospathise   PRO$_{1/*2}$ na   divasi

   the   Mary   tried.3s   ec   PRT   read.3s.**Sub**

   'Mary tried to read'   (Greek)

9. L$_1$-am   indenamt   ca   de   miine

   him-I.have   urged   that   from   tomorrow

   PRO$_{1/*2}$ sa   mearga   la   scoala   cu   bicicleta

---

the Teresa SCL believe.pr.3s that the Mary that SCL leave.S.3s

'Teresa believes that Mary is leaving'

Paoli (2007:1060-1064) provides arguments for "a strong link between *che2* and the subjunctive mood"; that is, *che2* is only licensed when the embedded verb is in the subjunctive mood. She proposes that "*che2* serves as a suppletive morphological subjunctive marker, expressing overtly those features that remain morphologically underspecified on the verb". She thus claims that *che2* is a subjunctive particle. Also, adopting Rizzi's (1997) suggestion that Fin^0 encodes modality, Paoli shows that "*che2* in both Tur[inese] and Lig[urian] lexicalizes a head within the left periphery". Further evidence for the Comp status of *che2* comes from its position with regard to negative markers/particles. Therefore, given Rizzi's (1997:284) assumption that Fin^0 encodes "core IP-related characteristics", Paoli concludes that "*che2* lexicalizes Fin^0, morphologically expressing those mood features that are left opaque on the embedded verb". The author concludes by stating that "[i]f finiteness and mood are indeed two sides of the same coin, the idea that Fin^0 hosts expressions of both is perfectly plausible". As far as the present account is concerned, Paoli's analysis provides evidence for my assumption that Fin^0 has an unvalued [Mood] feature.

[129] Finiteness for Landau is related to tense and agreement. He develops a feature analysis of clause types based on the specifications of [T] and [Agr] on I^0 and C^0; based on a certain rule that he proposes, the type of embedded subject can be predicted, whether lexical DP/*pro* or PRO. I refer the interested reader to his work.

[130] It is noteworthy that the empty category in these examples in Landau (2004:826-827) is 'Pro', which he (coins and) uses just to be neutral on its nature, PRO or *pro*; but he later argues that it is PRO, which is why I have it as such.

ec   PRT go.3s.**Sub**   to   school   with   the.bike

'I urged him to ride his bike to school from tomorrow on'   (Romanian)

10. Ivan₁   uspja   PRO₁/*₂   da   ostane   pri   nego

Ivan   managed.3s   ec   PRT   stay.3s.**Sub**   with   him

'Ivan managed to stay with him'   (Bulgarian)

11. I₁   kerkova   PRO₁/*₂   te   recitoje   nje   poezi

him   asked.1s   ec   PRT   recite.3s.**Sub**   a   poem

'I asked him to recite a poem'   (Albanian)

There are (at least) two observations to make from the data in (8-11). First, the embedded verbs are in the subjunctive mood, as stressed by Landau (and shown by the gloss). Second, this mood specification is marked by a specific particle, which is assumed to be 'a mood marker'; he adds that "Romanian and Albanian further employ a subjunctive complementizer, which is obligatory in the presence of embedded topic or focus" (p. 826). As is clear from (12-13), the same two observations also hold of the SA counterparts.

12. Haawala-Ø   r-rajul-uᵢ   [ʔan   ya-naam-**a**   *pro*ᵢ]

Pst.try.3sm-Ind   the-man-Nom   Comp   Impf-sleep.3sm-**Sub**   ec

'the man tried to sleep'

13. qarrara-Ø   r-rajul-uᵢ   [ʔan   ya-rHal-**a**   *pro*ᵢ]

Pst.decide.3sm-Ind   the-man-Nom   Comp   Impf-travel.3sm-**Sub**   ec

'the man decided to travel'

First, the embedded verbs are in the subjunctive mood, as shown by the boldfaced morphology (as well as the gloss). Second, this mood is effected on/assigned to the embedded verb by a subjunctive mood (as well as VC) complementizer, which is the underlined particle. Thus I argue that what we see in SA is another instance of 'finite control', where finiteness is effected by a [Mood] feature (on the verb) which instantiates a $Mood^0$, which, in turn, projects a MoodP. The next section will show how Case checking is accounted for in these and other OC sentences.

5.1.1.2. Case in Control Embedded Clauses

Given the fact that the embedded XP (MoodP) has both a valued categorial [V] feature (since there is a verb) and a [Mood] feature, the embedded Fin^0 is expected to have a valued [VC] feature. Thus structural Case is expected to be licensed in the clause. Let us see how this system handles Case checking in (14), which has the clause structure in (15).

14. Haawala-Ø   r-rajul-u$_i$ [ʔan   ya-ktub-a   *pro*$_i$ r-risaala-t-a]

Pst.try.3sm-Ind   the-man-Nom   Comp   Impf-write.3sm-Sub   ec   the-letter-f-Acc

'the man tried to write the letter'

15.   FinP
                                          /\
                                     Fin   TP
                                              /\
                    tried   Haawala-Ø   T   v*P
                                                   /\
                         the-man   r-rajul-uᵢ   v*'
                                                        /\
                              tried   ~~Haawala-Ø~~   v*   VP
                                                                /\
                                   tried   ~~Haawala-Ø~~   V   FinP
                                                                     /\
                                        ʔan   Fin   MoodP
                                                          /\
                                   write   ya-ktub-a   Mood   v*P
.   /\
                                             proᵢ   v*'
                                                               /\
                                        write   ~~ya-ktub-a~~   v*   VP
                                                                            /\
                                        write   ~~ya-ktub-a~~   V   DP
                                                                            /\
                                                            the-letter   r-risaala-t-a
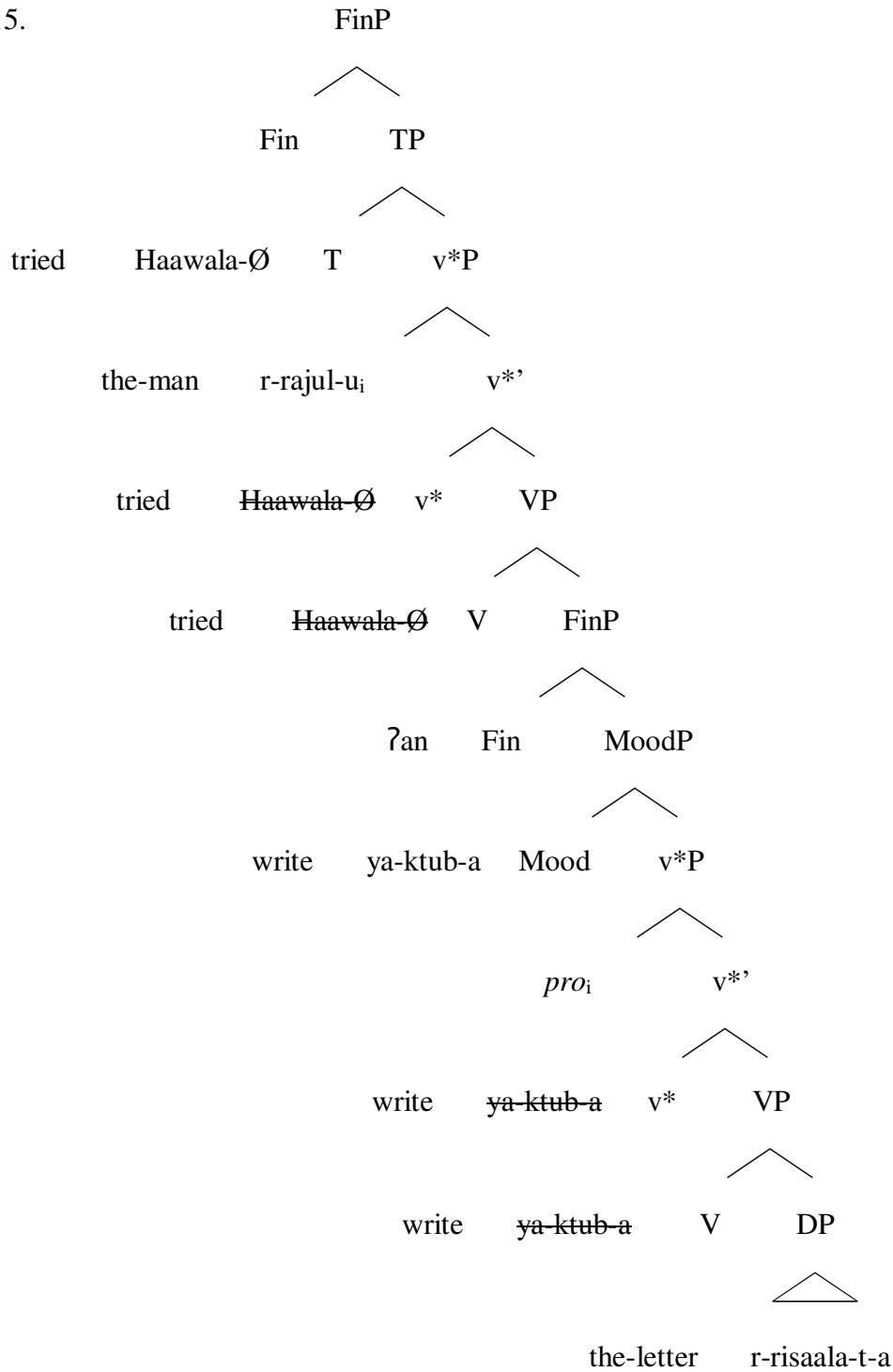
Merge and Case checking in the embedded clause proceed as follows. The embedded verb is merged in V⁰ with a valued categorial [V] feature, with the object (which has an unvalued [Case] feature) in its complement position; v*⁰ is merged with an unvalued [VC] feature, with the VP, forming the v*P projection. The external argument, *pro*, is merged in Spec, v*P. The valued

categorial [V] feature on the verb gets 'projected' to the highest verbal projection in the clause, v*P. Having a valued categorial [V] feature, v*P gets selected by a $Mood^0$ with an unvalued categorial [V] feature, a valued [Mood] feature, and an unvalued [VC] feature. Match between the two [V] features, valued on v*P and unvalued on $Mood^0$, takes place, resulting in valuing [V] on $Mood^0$, via Agree. Now, $v*^0$ enters an Agree relation with $Mood^0$ to get its unvalued [VC] feature valued, but no valuation takes place, rather 'Agree as feature sharing' is established.[131] With a now valued categorial [V] feature as well as a valued [Mood] feature, the MoodP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [Mood] features, and a valued [VC] feature. Agree between Fin^0 and $Mood^0$ takes place, resulting in valuing [V] and [Mood] on Fin^0, and [VC] on $Mood^0$, and automatically on $v*^0$. Now the embedded subject (*pro*, co-referential with the matrix subject) and the object enter Agree relations with $Mood^0$ and $v*^0$, respectively, and get their [Case] features valued as Nom and Acc, respectively. Now the verb, being in the scope of '$Ɂan_{Sub(junctive)}$', gets assigned the subjunctive m-vc specification, which it will realize at Spell-Out.

As far as Case checking is concerned, the same procedure takes place in the matrix clause, except for some differences. First, since the matrix verb is deictic (being indicative), it has a [T] feature (as the I-finiteness feature), which, in turn instantiates a T^0. Second, T^0 values [Case] as Nom on a lexical DP subject, rather than on an empty category, *pro*. Third, and more important, $v*^0$ licenses its Acc Case to the clausal complement CP (represented by FinP in (15)), rather than to a DP object, since it is the CP that receives the relevant θ-role from the matrix verb. Thus argumental CPs in SA control embedded clauses receive structural Case. This approach receives support from systems where argumental clauses can receive Case, like Uriagereka's (2006, 2008) where it is assumed that they receive 'Null' Case.[132] Finally, in the absence of a verbal particle, the matrix verb, at Spell-Out, realizes indicative m-vc (which is the default m-vc specification).

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[131] The 'Agree as feature sharing' mechanism is discussed in section 4.2.3.

[132] As for the type of Case that argumental CPs (or rather XPs) can realize, I will just assume that they receive whatever structural Case value that is provided by the Case checking category that they are in the scope of (especially given the challenges posed against the 'Null Case' theory; for discussion of the relevant issues and evidence, see Baltin & Barrett 2002 and Cecchetto & Oniga 2004, among others). This approach to the Case value

In addition to OC, shown by (16), where the embedded subject *pro* must be co-referential with the matrix subject, SA also exhibits non-OC, as (17) shows, where the embedded subject must be a (referentially independent) lexical DP. In this case, it receives Nom Case from the embedded Mood^0.

16. Haawala-Ø r-rajul-u$_i$ [ʔan ya-ktub-a *pro*$_{i/*j}$ r-risaala-t-a]

    Pst.try.3sm-Ind the-man-Nom Comp Impf-write.3sm-Sub ec the-letter-f-Acc

    'the man tried to write the letter'

17. qarrara-Ø r-rajul-u

    Pst.decide.3sm-Ind the-man-Nom

    [ʔan ya-ktub-a ʔax-uu-hu r-risaala-t-a]

    Comp Impf-write.3sm-Sub brother-Nom-his the-letter-f-Acc

    'the man decided that his brother writes the letter'

5.1.2. Case in ECM Constructions

Throughout this thesis, I adopt Soltan's (2007) proposal that SA does not exhibit A-movement. To a large extent, I also assume the clause structure analysis that he provides for the two verb/sentence types to be examined in this section. With respect to Case, the relevant DP will be shown to receive Case in its base-generated/surface position.

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that an argumental CP (or rather XP) might receive is in line with the adopted conception of Case, that is, Case for LF visibility (as well as morphosyntactic licensing). This is because I assume that any structural Case value can make any argumental XP visible at LF for purposes of θ-role assignment.

5.1.2.1. Want-type Verbs

In this section, I will discuss the morphosyntax of the 'ʔaraada' (meaning 'want') construction. I will start by stating Soltan's view of the construction, especially the Case checking aspects, and then present my own perspective on the construction as well as on Case. The sentence (18) is an example.

18. ʔaraada-Ø   l-mudarris-u   T-Tullaab-**a**

     Pst.want.3s-Ind   the-teacher-Nom   the-students-**Acc**

     ʔan   ya-ktub-uu-Ø   r-risaala-t-a

     Comp   Impf-write.3-p-Sub   the-letter-f-Acc

     'the teacher wanted the students to write the letter'

Soltan argues that though the embedded subjunctive I^0 is tense-deficient, it is φ-complete, and so it is expected to license Nom Case. The non-ECM counterpart of (18), in (19), shows that the embedded subjunctive I^0 can in fact license Nom Case to a post-verbal subject. This thus indicates that (18) has a post-verbal *pro* subject to which the Nom Case on the embedded I^0 is licensed.

19. ʔaraada-Ø   l-mudarris-u

     Pst.want.3s-Ind   the-teacher-Nom

     ʔan   ya-ktub-a   T-Tullaab-**u**   r-risaala-t-a

     Comp   Impf-write.3sm-Sub   the-students-**Nom**   the-letter-f-Acc

     'the teacher wanted the students to write the letter'

This state of affairs, argues Soltan, provides evidence against a raising-to-object analysis (of the sort proposed for English-type languages). In other words, the hypothesis that the Acc-marked DP in (18) 'the students' has moved to its surface position for Case purposes is *not* motivated since structural Case can be provided in the embedded clause, given the finite I^0. To further argue for his analysis, Soltan (2007:139-142) provides a number of arguments for a base-generation analysis of the Acc-marked DP in (18), thus for excluding movement from the embedded clause. These arguments come from idiom chunk interpretations, resumptive pronouns, overt resumption in P-passive embedded clauses, and the fact that the Acc-marked "DP can be associated with non-subjects as well as subjects in the embedded clause" (p. 141). Given this evidence, Soltan concludes that the Acc-marked DP neither originates in nor raises from the embedded IP, rather it originates in its surface position, which, claims Soltan, is the thematic object position of the matrix clause.

To support this claim, Soltan argues that there is a difference in the interpretation of the embedded clauses in (18) and (19). Basically, while the theme of the matrix verb in (19) is a state of affairs (the embedded CP), the matrix verb in (18) has two themes, a state of affairs (the embedded CP), and the Acc-marked DP. In addition, the fact that the Acc-marked DP can precede an adverbial that modifies the matrix clause suggests that it is in the matrix clause. Moreover, the lack of a definiteness requirement on the Acc-marked DP (that is, the fact that it can be indefinite non-specific, a property of nominals in the A-domain) as well as the fact that this DP does not "give rise to a minimality violation if wh-extraction of an object wh-phrase takes place" (p. 147) points out that the Acc-marked DP is in the matrix clause, that is, not in the left periphery of the embedded clause. Finally, this Acc-marked DP can have a matrix (Goal) PP counterpart, as (20) shows.

20. ʔaraada-Ø   l-mudarris-u

    Pst.want.3s-Ind   the-teacher-Nom

    min   T-Tullaab-i   ʔan   ya-drus-uu-Ø

    from   the-students-Gen   Comp   Impf-study.3-p-Sub

        'the teacher wanted (from) the students to study'

All this evidence, states Soltan, indicates that the Acc-marked DP is in the thematic object position of the matrix clause, and also argues against a typical raising analysis. (The Acc-marked DP also 'controls', via co-indexation, the *pro* subject in the post-verbal position in the embedded clause.) In conclusion, Soltan argues that the Acc-marked DP is base-generated in the matrix Spec, VP position, where it receives structural Acc Case via Agree with the matrix $v*^0$. This, argues Soltan, thus speaks against 'exceptional' Case marking, since the relevant DP can now receive Acc Case via Agree with the matrix $v*^0$ while being (or rather base-generated) in the matrix clause. Soltan also shows that the Acc-marked DP receives Acc in Spec, VP, without having to move to Spec, v*P, since object shift (which he characterizes as an instance of A-bar movement) is not possible in raising-to-object constructions, though possible in simple clauses with direct objects.

As far as the Case theory developed in this thesis is concerned, the ability of the embedded I^0 to license structural Nom Case to the embedded subject, lexical DP or *pro* (as well as the ability of the embedded $v*^0$ to license structural Acc Case to the embedded object) stems from the availability of a Fin^0 with a [VC] feature. This claim is supported by the fact that the XP that Fin^0 selects has both a valued categorial [V] feature (given the availability of the verb) and an I-finiteness feature, which is (subjunctive) [Mood] (rather than [ϕ] as Soltan suggests), given the future-oriented interpretation of the embedded clause in relation to the matrix clause (Cowper 2005, Cowper & Hall 2007), as well as the fact that the verb receives subjunctive mood from 'ʔan', which is the embedded clause introducer in SA. Thus (as in control embedded clauses) I argue that the I-finiteness feature in the 'ʔaraada' embedded clause is [Mood], rather than [ϕ]. This is because Soltan's proposal that Nom Case is licensed in the embedded clause by the ϕ-features on $Mood^0$ (T^0 for him) is challenged by the very fact that when there is an overt subject in the embedded clause, $Mood^0$ is ϕ-defective (lacking [Number] hence unable to value [Case], as argued in Chomsky 2001), as revealed by verbal morphology, as (21) shows.

    21. ʔaraada-Ø   l-mudarris-u

Pst.want.3s-Ind   the-teacher-Nom

ʔan   ya-ktub-a   T-Tullaab-u   r-risaala-t-a

Comp   Impf-write.3**s**m-Sub   the-students-Nom   the-letter-f-Acc

'the teacher wanted the students to write the letter'

The fact that Mood^0 is φ-complete in (18), repeated in (22), is explained by the necessity to reveal the φ-content of the post-verbal *pro*, that is, to license it, which is supported by the fact that when *pro* is absent, as in (21), Mood^0 is φ-defective.

22. ʔaraada-Ø   l-mudarris-u   T-Tullaab-a

Pst.want.3s-Ind   the-teacher-Nom   the-students-Acc

ʔan   ya-ktub-uu-Ø   *pro*   r-risaala-t-a

Comp   Impf-write.3-**p**m-Sub   ec   the-letter-f-Acc

'the teacher wanted the students to write the letter'

Therefore, I argue that this Mood^0 is φ-defective since the embedded verb realizes only [Person] and [Gender], but not [Number], in exactly the same context when it licenses Nom Case to the (post-verbal) overt subject (in the VS order), as (21) shows. I now move on to the particulars of Case checking (and assignment); (22) receives the clause structure in (23).[133] I will first discuss Case checking in the embedded clause, and then handle the matrix clause.

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[133] It is noteworthy that this clause structure is what Soltan proposes for this structure, the only difference being that I use FinP instead of CP.

23.

```
                              FinP
                             /    \
                          Fin      TP
                         /  \      /  \
                  wanted   Ɂaraada-Ø  T    v*P
                                         /   \
                             the-teacher      v*'
                             l-mudarris-u    /    \
                                  wanted    v*     VP
                                  Ɂaraada-Ø       /   \
                                  the-students   T-Tullaab-aᵢ    V'
                                                             /    \
                                                     wanted   V      FinP
                                                     Ɂaraada-Ø      /    \
                                                                Ɂan   Fin    MoodP
                                                                      /  \    /    \
                                                               write  ya-ktub-uu  Mood   v*P
                                                                                        /   \
                                                                                     proᵢ    v*'
                                                                                            /   \
                                                                                   write    v*    VP
                                                                                   ya-ktub-uu    /   \
                                                                                        write   V    DP
                                                                                        ya-ktub-uu  /  \
                                                                                              the-letter
                                                                                              r-risaala-t-a
```

The embedded verb is merged in V^0 with a valued categorial [V] feature, with the object (which has an unvalued [Case] feature) in its complement position; $v*^0$ is merged with an unvalued [VC] feature. The external argument, *pro*, is merged in Spec, v*P. The categorial [V] feature on the verb gets 'projected' to the v*P projection. Having a valued categorial [V] feature, v*P gets selected by a $Mood^0$ with an unvalued categorial [V] feature, a valued [Mood] feature, and an unvalued [VC] feature. Match between the two [V] features, valued on v*P and unvalued on $Mood^0$, takes place, resulting in valuing [V] on $Mood^0$, via Agree. Now, $v*^0$ enters an Agree relation with $Mood^0$ to value its unvalued [VC] feature, but no valuation takes place, rather 'Agree as feature sharing' is established. With a now valued categorial [V] feature and a valued [Mood] feature, the MoodP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [Mood] feature, and a valued [VC] feature. Agree between Fin^0 and $Mood^0$ takes place, resulting in valuing [V] and [Mood] on Fin^0, and [VC] on $Mood^0$, and automatically on $v*^0$. Now the embedded subject (*pro*) and object enter Agree relations with $Mood^0$ and $v*^0$, respectively, where *pro* and the object get their [Case] features valued as Nom and Acc, respectively. Being in the scope of '$\mathit{\text{ʔan}}_{Sub}$', the verb receives the subjunctive m-vc specification to be realized at Spell-Out.

As far as the matrix clause is concerned, the same procedure takes place, but with some differences. First, since the matrix verb is indicative (hence deictic), the I-finiteness feature is [T], valued on T^0 and unvalued on Fin^0. Second, Nom Case is licensed to a lexical subject. Third, the verb, not being in the scope of a verbal particle, is not assigned an m-vc specification in the syntax, and so it realizes the default indicative m-vc at Spell-Out. Fourth, and more important, while Soltan argues that the structural Acc Case on the matrix $v*^0$ in (22), repeated as (24), is licensed to the Acc-marked DP 'the students' in Spec, VP, I argue that it is licensed to the argumental CP. This is because this Acc Case is also licensed to this complement CP in (19), repeated as (25), where there is no DP.

24. ʔaraada-Ø   l-mudarris-u   <u>T-Tullaab-a</u>

  Pst.want.3s-Ind the-teacher-Nom the-students-**Acc**

[ʔan   ya-ktub-uu-Ø   *pro*   r-risaala-t-a]

Comp   Impf-write.3-pm-Sub   ec   the-letter-f-Acc

'the teacher wanted the students to write the letter'

25. ʔaraada-Ø   l-mudarris-u

Pst.want.3s-Ind   the-teacher-Nom

[ʔan   ya-ktub-a   T-Tullaab-u   r-risaala-t-a]

Comp   Impf-write.3sm-Sub   the-students-**Nom**   the-letter-f-Acc

'the teacher wanted the students to write the letter'

In other words, if the matrix $v*^0$ assigned its structural Acc Case to the Acc-marked DP in (24), then the argumental CP in (24) would receive no Case, which is implausible. Even worse, the assumption that argumental CPs receive no structural Case indicates that (25) should crash, since the structural Acc Case on the matrix $v*^0$ will not be licensed (due to the absence of the DP), contrary to fact. In other words, with Soltan's Case analysis, argumental CPs, unlike argumental DPs, receive structural Case only sometimes, that is, when Case is available.[134] However, given a visibility approach to Case, I think that they should always receive structural Case (to avoid a rather non-uniform conception of argumental CPs). Thus the proposed system claims that argumental CP complements must receive structural Case.

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[134] This state of affairs is only apparently similar to the assumption (to be elaborated on in section 5.6) that *pro* can receive Case only when Case is available; that is, *pro* receives Nom in SVO sentences, but no Case in verbless and participial sentences. This is because while argumental CPs require Case in order to be visible at LF for θ-role assignment, *pro* does not require Case since it is phonetically null (Case Filter), and also because *pro* is co-indexed with an element (the topic) which has the feature [Topic] that, I assume, has the same potential as [Case] and so can make it visible at LF for θ-role assignment purposes (Visibility Condition), which is the case in verbless and participial sentences.

However, the question arises as to the source of the Acc Case realized by the underlined DP in (24). To address this question, and in line with the conception of Case suggested in chapter 4 (where structural Case is licensed to arguments in the A-domain, whereas lexical case is licensed to non-arguments in the A-bar domain), I argue that the underlined DP in (24) is (contrary to what Soltan 2007 suggests) *not* an argument of the matrix verb, and thus it receives lexical Acc case from the matrix verb since it is merged in Spec, VP, which I assume is an A-bar position.[135] This way, the Acc-marked DP in (24) can be licensed by co-indexation with an argument in the A-domain, *pro*.[136] Basically, unlike the GB conception of the θ-positions in the clause, the MP assumes that the external argument is merged in Spec, v*P whereas the internal argument is merged in the complement to V^0 position. Thus Spec, VP is not a θ-position, hence an A-bar position, since it is not a potential θ-position (Chomsky 1981:47); I will assume this to be the

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[135] My assumption that Spec, VP is an A-bar position in SA seems to be problematic for the analysis of double object constructions (DOC) in the language, expressed by data like (i-ii), where, according to Larson's (1988) verbal shells, the lower Spec, VP can be occupied by an argument object, with the other object being merged in the complement to V^0 position.

i. ʔaʕTaa-Ø   Ali-un   l-walad-a   kitaab-an
   Pst.give.2sm-Ind   Ali-Nom   the-boy-Acc   book-Acc
   'Ali gave the boy a book'

ii. ʔaʕTaa-Ø   Ali-un   kitaab-an   li-l-walad-i
    Pst.give.2sm-Ind   Ali-Nom   book-Acc   to-the-boy-Gen
    'Ali gave a book to the boy'

However, assuming an approach to the DOC like the one outlined in Fournier (2010), there is at least suggestive evidence that Spec, VP is not an A-position. To illustrate, Fournier argues that French possesses the DOC and presents "an applicative Case-driven analysis of the DOC" (p. 1) that accounts for differences between French and English in this construction in terms of word order and Case facts. Following Pylkkanen (2002), he argues that the 'transfer of possession' relation between the two objects (recipient and theme) can be expressed by an Applicative Phrase (ApplP) complement to V^0. This way, the ApplP "denotes and facilitates an asymmetrical possessive relationship between the DO and the applied argument (the IO)" (p. 3). Having a Spec, position as well as a complement position, $Appl^0$ can now host the two (object) arguments of the verb, rendering Spec, VP irrelevant for arguments. Since this thesis is neither on the DOC in SA nor on clause structure per se, I will just assume that Fournier's analysis of the DOC in French might be extended to the DOC in SA. This way, and given my system, the object (DO or IO) which occupies the Spec, ApplP position will receive structural Acc Case from the v^{*0} head. As for the object that occupies the complement to $Appl^0$ position, I will assume that it receives structural Acc from $Appl^0$, which, being a functional head in the extended projection of a verb with more than one object argument, has an unvalued [VC] feature, which becomes valued via Agree with Fin^0 (or even with v^{*0} or T^0, by 'Agree as feature sharing'). In this regard, the analysis of the DOC in SA might differ from that of French in Fournier (2010) since he assumes that $Appl^0$ checks inherent Dative Case on the recipient. Therefore, Spec, VP is not an A-position.

[136] Thus this DP can be viewed as a topic merged in a non-canonical topic position.

case in SA, at least. One argument for the claim that the Acc-marked DP in (24) is not an argument of the matrix verb comes from the fact that it does not always show up, as (25) shows. This way, the PP counterpart to the Acc-marked DP in (20), repeated as (26), can be analyzed as a non-argument, where the Gen-marked DP receives its θ-role (Goal) from the preposition that assigns it (oblique or inherent) Case.

26. ʔaraada-Ø   l-mudarris-u

    Pst.want.3s-Ind   the-teacher-Nom

    min   T-Tullaab-i   ʔan   ya-drus-uu-Ø

    from   the-students-Gen   Comp   Impf-study.3-p-Sub

    'the teacher wanted (from) the students to study'

As we will see in the next section, this view of structural Case being licensed to arguments in the A-domain and lexical case to elements in the A-bar domain is tenable.

5.1.2.2. Believe-type Verbs

In this section, I review the morphosyntactic analysis of the verb 'Zanna' (meaning 'believe') as presented in Soltan (2007). I then present another view, in line with the proposed theory of Case. (27) is an example.

27. Zanna-Ø   ʕaliyy-un   T-Tullaab-**a**   raHal-uu-Ø

    Pst.believe.3sm-Ind   Ali-Nom   the-students-Acc   Pst.left.3-pm-Ind

    'Ali believed (that) the students left'

Soltan makes two claims about the Acc-marked DP in (27). First, he argues that the Acc-marked DP belongs in the embedded clause, not in the matrix clause, a position for which he presents a number of arguments. For example, there is no thematic or semantic difference between the construction in (27) and the one in (28) where the embedded clause is a full CP.

28. Zanna-Ø   ʕaliyy-un   ʔanna T-Tullaab-a   raHal-uu-Ø

    Pst.believe.3sm-Ind   Ali-Nom   Comp   the-students-Acc   Pst.left.3-pm-Ind

    'Ali believed (that) the students left'

This thus indicates that the Acc-marked DP 'T-Tullaab-a' is in the embedded clause (in both sentences), rather than being an argument of the matrix verb. In addition, an adverbial following the Acc-marked DP in the 'Zanna' construction can only modify the embedded clause, signaling that the Acc-marked DP belongs in the embedded clause. Furthermore, Soltan provides more evidence from adverbial interaction and wh-extraction to show that this DP is located in the embedded clause.

The second claim that Soltan makes is that the embedded clause in (27) is not a CP, but rather a TP, and that the Acc-marked DP is both base-generated and Case-marked in the embedded Spec, TP position.[137] Thus he is arguing against raising from the embedded Spec, v*P position, a stance for which he provides a number of arguments. For example, the fact that the 'Zanna' construction does not preserve idiomatic readings argues against raising. Furthermore, the fact that the Acc-marked DP may be associated with subjects, as well as non-subjects, as (29) shows, which is a property of left-dislocated elements, indicates that it is not raised from Spec,v*P.

29. Zanna-Ø   ʕaliyy-un   T-Tullaab-a

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[137] For Soltan, Spec, TP is an A-bar position. A similar claim was made in Borer (1995) for Modern Hebrew, Mahajan (1990) for Hindi, and Diesing (1990) for Yiddish.

Pst.believe.3sm-Ind   Ali-Nom   the-students-Acc

sa-yu-ʕaaqib-u-hum   ʔab-uu-hum

Fut-Impf-punish.3sm-Ind-them   father-Nom-their

'Ali believed about the students that their father will punish them'

Moreover, the Acc-marked DP "is resumed by an overt pronoun when the embedded clause has a P-passive or a post-verbal conjoined subject" (p. 160). These facts, argues Soltan, suggest that the Acc-marked DP did not raise to its surface position, rather it was base-generated where it is spelled out. Given this evidence and the fact that the sentence in (27) has no overt complementizer, thus indicating the absence of a CP layer/phase boundary, Soltan suggests that the Acc-marked DP is in the embedded Spec, TP position, where it is accessible for structural Acc Case checking by the matrix $v*^0$, via Agree.

While I agree with Soltan that the Acc-marked DP in (27) does not belong in the matrix clause, and that it is Case-assigned in its base-generated position, I disagree with him that it is in the embedded Spec, TP position. Thus I will argue that the embedded clause, despite appearances, has a CP layer, and that this DP is actually merged in the embedded Spec, TopP position, which makes it accessible for case assignment (a property of non-arguments), rather than Case checking (a property of arguments), from the matrix clause.

My position that the embedded clause in (27), repeated as (30), is a full CP is based on three arguments.

30. Zanna-Ø   ʕaliyy-un   T-Tullaab-a   raHal-uu-Ø

Pst.believe.3sm-Ind   Ali-Nom   the-students-Acc   Pst.left.3-pm-Ind

'Ali believed (that) the students left'

First, given Soltan's observation that the embedded verb is tensed, it is obvious that the complement clause in (30) is a tensed CP, a claim supported by the fact that the embedded verb can realize the past vs. non-past distinction (thus encoding [Precedence], Cowper 2005), as (31-33) show.

31. Zanna-Ø ʕaliyy-un T-Tullaab-a

    Pst.believe.3sm-Ind Ali-Nom the-students-Acc

    laʕib-uu-Ø bi-l-ʔams-i

    Pst.play.3-pm-Ind in-the-yesterday-Gen

    'Ali believed (that) the students played yesterday'

32. Zanna-Ø ʕaliyy-un T-Tullaab-a

    Pst.believe.3sm-Ind Ali-Nom the-students-Acc

    ya-lʕab-uu-n l-ʔaana

    Impf-**Prs**.play.3-pm-Ind the-now

    'Ali believed (that) the students are playing now'

33. Zanna-Ø ʕaliyy-un T-Tullaab-a

    Pst.believe.3sm-Ind Ali-Nom the-students-Acc

    sa-ya-lʕab-uu-n Gadan

    Fut-Impf-play.3-pm-Ind tomorrow

    'Ali believed (that) the students will play tomorrow'

Basically, the embedded verb can have a tense specification independent from that of the matrix clause. Also, the assumption that the embedded I^0 is φ-complete is shown by the morphology of the verb in (31-33). In addition, following Rizzi's (1997) proposal that Fin^0 encodes the same inflectional properties available in the Infl domain points out that Fin^0 most probably exists (to anchor the tense specification on I^0), thus indicating the existence of the CP layer.

Second, there are Holy Qur'aan data where the embedded Fin^0 is occupied by a verbal case assigning particle, as (34) shows, thus indicating the presence of the CP layer.

34. "bal   Zanan-tum   [**ʔan**   lan   ya-nQalib-a

     so   Pst.believe.3-pm   Comp   Neg.Fut   Impf-return.3sm-Sub

     r-rasuul-u   wa   l-muʔmin-uun

     the-messenger-Nom   and   the-believer-p.Nom

     ʔilaa   ʔahlii-him   ʔabadaa]"   (p.512)

     to   families.Gen-their   never.Acc

   'So, you thought that the messenger and the believers would never return to

   their families'

This indicates that the embedded clause has a CP domain. Third, given the grammaticality of sentences like (35-36), where the Acc-marked DP, which belongs in the embedded clauses, appears to the left of negative particles (where Neg^0 is higher than T^0 according to Soltan 2007:185), it is clear that the DP 'T-Tullaab-a' is not in the embedded Spec, TP position (as Soltan suggests), but rather in the embedded Spec, TopP, which indicates that the embedded clause is a CP.

35. Zanna-Ø   ʕaliyy-un   T-Tullaab-a   lan   ya-rHal-uu-Ø

Pst.believe.3sm-Ind Ali-Nom   the-students-Acc Neg.Fut Impf-left.3-pm-Sub

'Ali believed that the students will not leave'

36. Zanna-Ø   ʕaliyy-un   <u>T-Tullaab-a</u>   lam   ya-rHal-uu-Ø

    Pst.believe.3sm-Ind Ali-Nom   the-students-Acc Neg.Pst Impf-left.3-pm-Juss

    'Ali believed that the students did not leave'

Now, given the observation that the embedded clause is a CP, Fin^0 is present. Also, given the fact that there is a verb in the embedded clause, then the XP that Fin^0 is going to select has a categorial [V] feature. Moreover, since the embedded verb has a [T] feature, then the selected XP is a TP. All this thus indicates that structural Case checking is expected in the embedded clause. Let us see how this system handles (37), which has the clause structure in (38).

37. Zanna-Ø   ʕaliyy-un   [T-Tullaab-a

    Pst.believe.3sm-Ind   Ali-Nom   the-students-Acc

    katab-uu-Ø   *pro*   r-risaala-t-a

    Pst.write.3m-p-Ind   ec   the-letter-Acc

    'Ali believed (that) the students wrote the letter'

38.

```
                              FinP
                             /    \
                           Fin     TP
                            |      / \
                        believed  Zanna-Ø  T    v*P
                                            |    / \
                                           Ali  ʕaliyy-un   v*'
                                                  |         / \
                                              believed  Zanna-Ø  v*   VP
                                                                  |   / \
                                                             believed  Zanna-Ø  V   TopP
                                                                               |   / \
                                                                        the-students  T-Tullaab-aᵢ   FinP
                                                                                                      / \
                                                                                                    Fin   TP
                                                                                                     |    / \
                                                                                                   write  katab-uu-Ø  T   v*P
                                                                                                                       |   / \
                                                                                                                     proᵢ    v*'
                                                                                                                              / \
                                                                                                                          write  katab-uu-Ø  v*   VP
                                                                                                                                              |   / \
                                                                                                                                          write  katab-uu-Ø  V   DP
                                                                                                                                                            |   /\
                                                                                                                                                     the-letter  r-risaala-t-a
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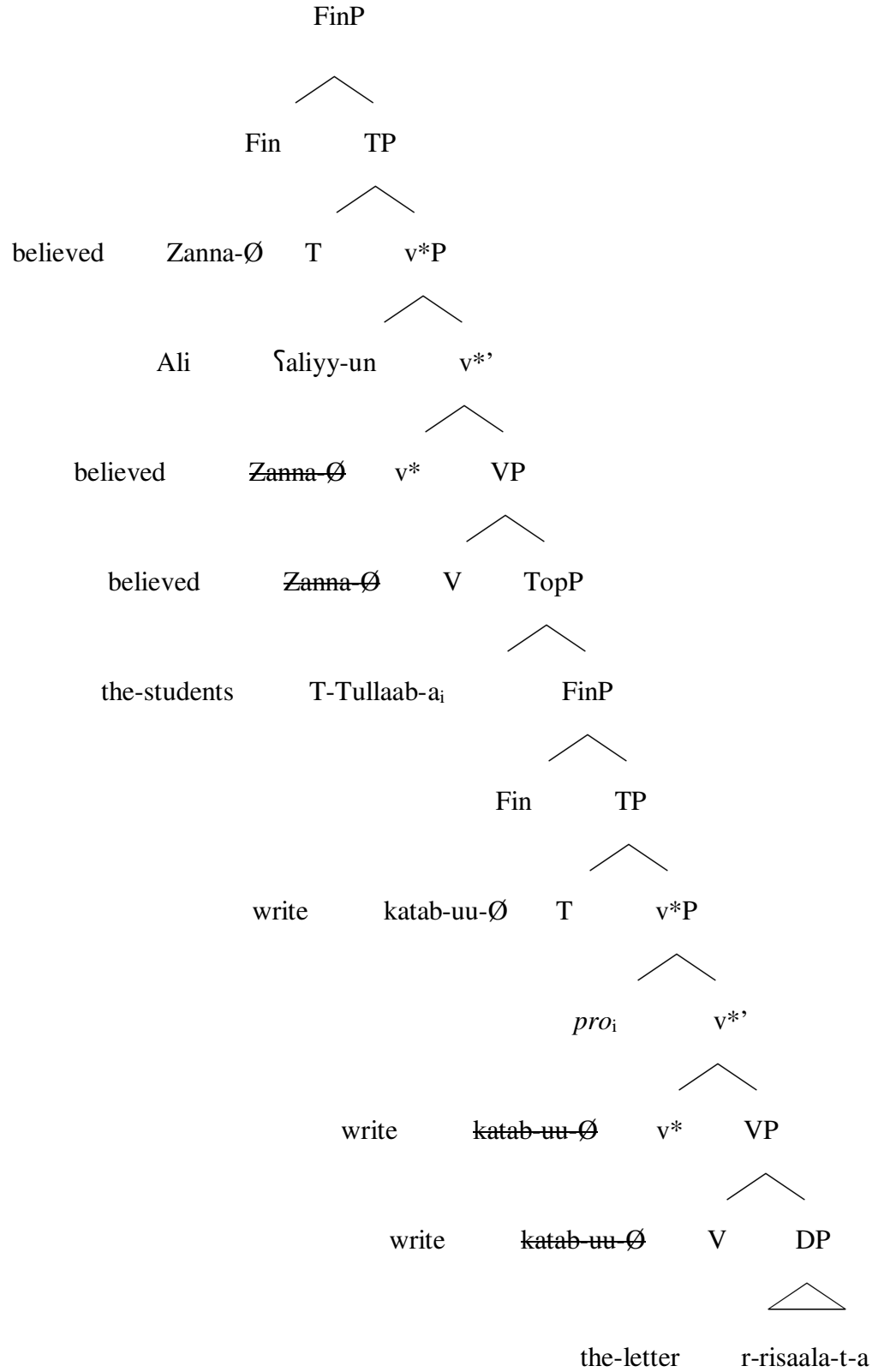
The Case checking operations in the embedded clause proceed as follows. The embedded verb is merged in V^0 with a valued categorial [V] feature, with the object (which has an unvalued [Case] feature) in its complement position; $v*^0$ is merged with an unvalued [VC] feature. The external argument, *pro*, is merged in Spec, v*P. The categorial [V] feature on the verb gets 'projected' to the highest verbal projection in the clause, v*P. Having a valued categorial [V] feature, v*P gets selected by a T^0 with an unvalued categorial [V] feature, a valued [T] feature, and an unvalued [VC] feature. Match between the two [V] features, on v*P and on T^0, takes place, resulting in valuing [V] on T^0, via Agree. Now, $v*^0$ enters an Agree relation with T^0 to get its unvalued [VC] feature valued, but no valuation takes place, rather 'Agree as feature sharing' is established. With a now valued categorial [V] feature and a valued [T] feature, the TP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [T] feature, and a valued [VC] feature. Agree between Fin^0 and T^0 takes place, resulting in valuing [V] and [T] on Fin^0, and [VC] on T^0, and automatically on $v*^0$. Now the embedded subject *pro* (co-referential with the topic in embedded Spec, TopP) and the object enter Agree relations with T^0 and $v*^0$, respectively, and get their [Case] features valued as Nom and Acc, respectively. The topic 'T-Tullaab-a' is merged in Spec, TopP, with no Case source in the embedded clause. Thus it receives case from the matrix clause; I will get back to the type of case that it receives. Finally, the verb, not being in the scope of a verbal particle, realizes the default indicative m-vc morphology at Spell-Out.

Case checking in the matrix clause proceeds in the same fashion, with some differences. First, Nom Case is licensed to a lexical DP subject, not a *pro*. The topic, 'T-Tullaab-a', meaning 'the students', merged in the embedded Spec, TopP, which is an A-bar position, has no [Case] feature, since it is licensed into the derivation through co-indexation with *pro*, and made visible at LF by [Topic]. This way, it receives lexical Acc case from the matrix verb. This position contrasts with Soltan's which assumes that this DP receives structural Acc Case from the matrix $v*^0$. Soltan's (2007) position is untenable since it leaves no structural Case to be licensed to the argumental CP. Thus I argue that the structural Acc Case that the matrix $v*^0$ has is licensed to

the CP complement (for purposes of LF visibility), since it, unlike the Acc-marked DP, is an argument of the matrix verb.[138]

As a matter of fact, it seems that this topic/DP always receives lexical Acc, whether preceded by the matrix verb, as in (37), or by 'ʔanna', as (28), repeated in (39), shows, indicating that it always occupies an A-bar position, thus receiving no structural Case, given the proposed system which reserves structural Case to arguments and lexical case to non-arguments.

39. Zanna-Ø   ʕaliyy-un   ʔanna   T-Tullaab-**a**   raHal-uu-Ø

Pst.believe.3sm-Ind   Ali-Nom   Comp   the-students-**Acc**   Pst.left.3-mp-Ind

'Ali believed (that) the students left'

This way, argumental CPs always have an unvalued [Case] feature which is valued via Agree with the relevant functional head ($v*^0$ so far), thus always receive a structural Case that is necessary for visibility at LF.

5.1.3. Case in Raising Constructions

Before I start discussing the structural Case issues related to raising constructions in SA, I would like to restate that I am adopting Soltan's (2007) original insight that SA is a non-A-movement

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[138] This position contrasts with Uriagereka's (2006:268) position where it is proposed that "the complex *v*-believe somehow also assigns null Case and clauses can take this Case to satisfy visibility demands. If so, null Case goes with person-less elements: PRO, (some?) clauses, …". This position is in line with Uriagereka's analysis of 'him' in (i) as an argument.

      i. I believe [him to be smart].

Uriagerek's analysis, however, assumes that $v*^0$ can license two structural Case values, one to 'him' and the other to the CP. In contrast, an extension of my SA-based analysis to (i) would assume that 'him' is not an argument of 'believe', and so receives lexical Acc case from 'believe', rather than structural Acc Case from $v*^0$, the latter being reserved for the argumental CP. This way, 'him' is visible at LF by [Topic], and licensed through co-indexation with the empty category subject element in the embedded clause. The relevant point for my purposes here is that the argumental CP should receive structural Acc Case, rather than null Case.

language. Soltan observes that raising predicates in SA select a tensed CP. Thus given the fact that the embedded clause has an I^0 head that can value Nom Case on the (embedded) subject, argues Soltan, then raising is expected *not* to take place. Thus SA has no typical raising constructions. Also, Mohammad (2000) argues that SA has no subject-to-subject raising structures. Nonetheless, raising sentences in English, for example, have SA translations with 'yabduu', meaning 'seem', as the (non-)raising predicate, as in (40-41).

40. yabduu   [ʔanna   l-ʔawlaad-a   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

    seem.3**s**m   Comp   the-boys-Acc   Pst.eat-3pm-Ind   ec   the-food-Acc

    'it seems that the boys ate the food'

41. ʔal-ʔawlaad-u   yabduu   [ʔanna-hum   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

    the-boys-Nom   seem.3**s**m   Comp-they   Pst.eat-3pm-Ind   ec   the-food-Acc

    'the boys, it seems that they ate the food'

In addition to this theoretical motivation (blocking raising of the embedded subject), Soltan (2007:103-105) provides different arguments that show that the DP 'the boys' in (40) and (41) are not related by A-movement; that is, the preverbal DP in (41) is base-generated in an A-bar position (not moved from the embedded clause). Therefore, SA does not exhibit raising constructions of the type one sees in languages like English.[139]

Nonetheless, given the theory of Case developed in this thesis, we need to account for Soltan's finding that the embedded verb can license structural Case (to the embedded clause arguments). Basically, the proposed theory claims that the embedded Fin^0 is expected to license structural Case (to the Infl domain) if the XP that it selects has a categorial [V] feature and at least one I-finiteness feature. Given the fact that the embedded clause in (40) has a verb, the selected XP

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[139] These arguments come from the different diagnostics that Soltan (2007) uses to show that the preverbal DP and the post-verbal one are not related by A-movement; these tests and their findings are reproduced in section 3.3.1 in this thesis for SA main clauses.

must have a valued categorial [V] feature. Also, given the fact that the embedded verb in (40) can exhibit the past vs. non-past distinction, as (42-44) show, there must also be a [T] feature.

42. yabduu   [ʔanna   l-ʔawlaad-a   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

      seem.3sm   Comp   the-boys-Acc   **Pst**.eat-3pm-Ind   ec   the-food-Acc

      'it seems that the boys ate the food'

43. yabduu   [ʔanna   l-ʔawlaad-a   ya-ʔkul-uu-n   *pro*   T-Taʕaam-a]

      seem.3sm   Comp   the-boys-Acc   Impf-**Prs**.eat-3pm-Ind   ec   the-food-Acc

      'it seems that the boys are eating the food'

44. yabduu   [ʔanna   l-ʔawlaad-a   sa-ya-ʔkul-uu-n   *pro*   T-Taʕaam-a]

      seem.3sm   Comp   the-boys-Acc   **Fut**-Impf-eat-3pm-Ind   ec   the-food-Acc

      'it seems that the boys will eat the food'

In other words, assuming Cowper's (2005) proposal that verbs that exhibit the [±Past] distinction encode the feature [Precedence] and thus have [T], I argue that this [T] instantiates a T^0 head which projects a TP in the embedded clause. Therefore, structural Case is expected to be licensed in the embedded clause. To test this expectation, I will discuss the sentence in (40), repeated in (45), with the clause structure in (46). I will first discuss Case in the embedded clause, and then the matrix clause; thus the tree will just show the structure proposed for the embedded clause.

45. yabduu   [ʔanna   l-ʔawlaad-a   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

      seem.3**s**m   Comp   the-boys-Acc   Pst.eat-3pm-Ind   ec   the-food-Acc

      'it seems that the boys ate the food'

46.
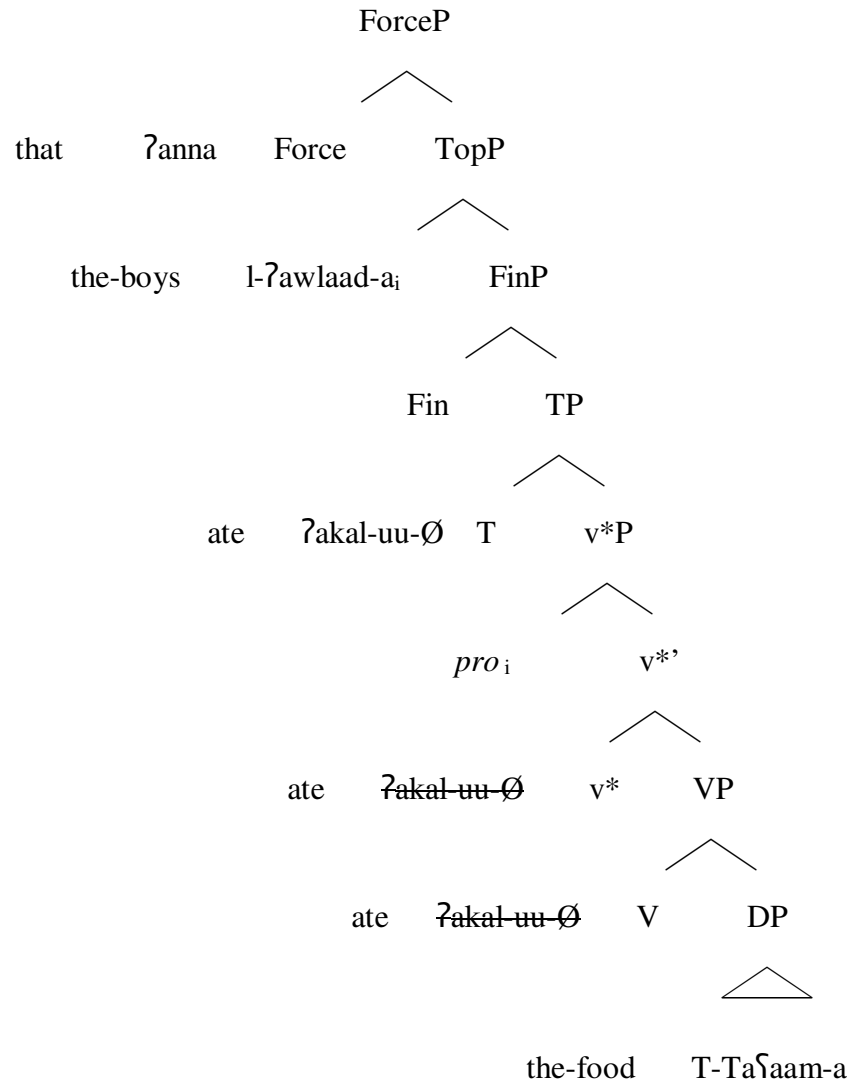
```
                              ForceP
                           ╱         ╲
          that    ʔanna  Force        TopP
                                  ╱         ╲
                  the-boys  l-ʔawlaad-aᵢ      FinP
                                           ╱        ╲
                                      Fin            TP
                                                  ╱       ╲
                          ate    ʔakal-uu-Ø   T          v*P
                                                       ╱       ╲
                                                  proᵢ          v*'
                                                             ╱       ╲
                                  ate    ̶ʔ̶a̶k̶a̶l̶-̶u̶u̶-̶Ø̶     v*        VP
                                                                    ╱      ╲
                               ate    ̶ʔ̶a̶k̶a̶l̶-̶u̶u̶-̶Ø̶    V         DP
                                                                  ╱    ╲
                                                         the-food    T-Taʕaam-a
```

The embedded verb is merged in V^0 with a valued categorial [V] feature, with the object (which has an unvalued [Case] feature) in its complement position; $v*^0$ is merged with an unvalued [VC] feature. The external argument, *pro*, co-indexed with the preverbal DP, is merged in Spec, $v*P$.[140] The categorial [V] feature on the verb is 'projected' to the $v*P$ projection. Having a valued categorial [V] feature, $v*P$ gets selected by a T^0 with an unvalued categorial [V] feature, a valued [T] feature, and an unvalued [VC] feature. Match between the two [V] features, on $v*P$ and on T^0, takes place, resulting in valuing [V] on T^0, via Agree. Now, $v*^0$ enters an Agree

---

[140] I have been assuming that *pro* enters the derivation with an unvalued [Case] feature, which is valued by the Nom Case feature on the embedded I^0. This assumption will be qualified in section 5.6.

relation with T^0 to get its unvalued [VC] feature valued, but no valuation takes place, rather 'Agree as feature sharing' is established. Now, with a valued categorial [V] feature and a valued [T] feature, the TP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [T] features, and a valued [VC] feature. Agree between Fin^0 and T^0 takes place, resulting in valuing [V] and [T] on Fin^0 and [VC] on T^0, and automatically on $v*^0$. Now the embedded subject, *pro*, and the object enter Agree relations with T^0 and $v*^0$, respectively, and get their [Case] features valued as Nom and Acc, respectively. The topic is merged in embedded Spec, TopP, where it receives lexical Acc case from 'ʔanna', which is merged in $Force^0$ (being a clause type marker). Finally, not being in the scope of a verbal particle, the embedded verb will realize the default (indicative) m-vc morphology at Spell-Out.

Moving on to the matrix verb, as Soltan observes, 'yabduu' does not show full agreement with the preverbal DP, as (41) shows, repeated as (47). This is unexpected given the fact that verbs in SA fully agree with the preverbal DP, as (48) shows, and only partially with post-verbal DPs, as (49) shows.

47. ʔal-ʔawlaad-u   yabduu   [ʔanna-hum   ʔakal-uu-Ø   *pro* T-Taʕaam-a]

    the-boys-Nom   seem.3**s**m   Comp-they   Pst.eat-3pm-Ind   ec   the-food-Acc

    'the boys, it seems that they ate the food'

48. l-baaʔiʕ-uun   kallama-uu-Ø   *pro*   r-rajul-a

    the-seller-**p**.Nom   Pst.talk.**3m-p**-Ind   ec   the- man-Acc

    'the sellers talked to the man'

49. kallama-Ø   l-baaʔiʕ-uun   r-rajul-a

    Pst.talk.**3sm**-Ind   the-seller-**p**.Nom   the- man-Acc

    'the sellers talked to the man'

Basically, 'yabduu' in (47), as well as in (45), appears with the default agreement specification, 3^{rd} person singular masculine, that is, as if the matrix I^0 does not enter in an Agree relation with the embedded plural subject. Soltan explains this fact by arguing that, in fact, the matrix I^0 does not agree with any of the embedded arguments. To account for this observation, he appeals to Chomsky's (2000:22) Phase Impenetrability Condition (PIC), which states that "[i]n phase α with head H, the domain of H is not accessible to operations outside α, but only H and its edge", where phases are assumed to be CPs and v*Ps. And since the embedded clause is a tensed CP, then the matrix I^0 is not allowed to enter an Agree relation with the embedded subject (since the latter is lower than C^0). This, argues Soltan, explains why the matrix verb cannot agree with the embedded subject.

However, states Soltan, the question remains as to "why *yabduu* and similar verbs cannot appear with full agreement, even in the presence of a preverbal DP [as in (47)]" (p. 113). The answer Soltan provides is that "*yabduu* does not select an external argument, hence the possibility of merging a *pro* in Spec v*P does not arise, and full agreement is in turn impossible to obtain" (p. 113). As far as Soltan's (2007) analysis is on the right track, this means that 'yabduu' does not have a post-verbal *pro* subject with which it can check Case. Thus, given the 'Case as a reflex of agreement' approach, one would not expect 'yabduu' to license Case.

While I agree with Soltan (2007) that 'yabduu' does not select an external argument, I will argue that 'yabduu' licenses structural Case. Given the proposed theory of Case, structural Case is expected to be licensed in a clause if Fin^0 selects an XP that has a categorial [V] feature as well as an I-finiteness feature. Given the fact that (47) is grammatical with a pre-verbal DP that is merged in Spec, TopP, then the 'yabduu' matrix clause has a CP layer, hence a FinP projection. Also, given the fact that 'yabduu' is a verb, then the selected XP has a valued categorial [V] feature. The selected XP also has an I-finiteness feature, which is [T], instantiating a TP. This claim is supported by (50) which shows that 'yabduu' can inflect for past tense (as shown by the morphology).

50. badaa   [ʔanna l-ʔawlaad-a   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

Pst.seem.3sm   Comp   the-boys-Acc   Pst.eat-3pm-Ind   ec   the-food-Acc

'the boys seemed that they ate the food'

Realizing [±Past], 'yabduu' proves to have [Precedence], and so has a [T] feature (Cowper 2005). Thus 'yabduu' can license structural Nom Case. However, this situation contradicts Soltan's observation that 'yabduu' does not select an external argument. This observation is supported by (51) which shows that an overt DP is not allowed in the matrix post-verbal position of the 'yabduu' construction. This means that there is no *pro* in the matrix Spec v*P since *pro* alternates with overt noun phrases (Polinsky & Potsdam 2002).

51. *yabduu   l-ʔawlaad-u   [ʔanna-hum   ʔakal-uu-Ø   *pro*   T-Taʕaam-a]

    seem.3sm   the-boys-Nom   Comp-they   Pst.eat-3pm-Ind   ec   the-food-Acc

Also, the claim that there is no post-verbal empty category (subject) in the matrix clause is supported by the absence of the φ-content of this empty category on the verb, since the verb does not agree with the preverbal DP. In other words, the absence of the external argument *pro* is indicated by the fact that 'yabduu' cannot license it since it cannot realize its φ-content.

Thus the question is what element receives the Nom Case on the matrix T^0. I will argue that the Nom Case feature on the matrix T^0 is licensed to the CP, which functions as the internal argument of 'yabduu' since it is merged in the complement to V^0 position. This way, the complement CP behaves like unaccusative subjects, which are merged as internal arguments, but end up with Nom Case (like passive subjects). This approach to the Case feature licensed by the matrix T^0 was also suggested to me by Soltan (p.c.). This construction, though, illustrates an instance of Case licensing in the absence of agreement on the Case-checking head. These characteristics of 'yabduu' being able to license Nom Case though realizing the default agreement specification in the language and having a non-DP argument will prove available elsewhere in SA, namely in the P-passive construction (to be discussed in section 5.3).

As far as Case is concerned, one question remains, about whether 'yabduu' also licenses structural Acc Case. My answer to this question is negative. This answer is in line with Burzio's Generalization (Burzio 1986), which states that "all and only the verbs that can assign θ-role to the subject can assign (accusative) Case to an object" (p. 178). Thus, since 'yabduu' does not license an external θ-role/argument, the matrix clause has no v*P projection, which precludes the introduction of structural Acc Case, since it is licensed by $v*^{0}$. This way, the matrix clause of 'yabduu' has a CP layer as well as TP and VP projections. Thus this verb behaves like unaccusative verbs in that it does not license Acc Case, and licenses Nom to its internal argument.

5.2. Case Checking in Imperative Clauses

This section has two goals. It first establishes that the SA imperative clauses are finite; that is, they have one of the I-finiteness features stated in Rizzi (1997). It then shows that the Case theory proposed in chapter 4 can account for Case checking in imperative clauses.

5.2.1. SA Imperatives are Finite Clauses

In this section, I will show that SA imperative clauses are finite though they lack tense, and so have no TP, as I argued in chapter 2. I will also argue that they have a MoodP. The claim that imperatives crosslinguistically have no tense projection was made by several authors (Jakab 2002, Henry 1995, Han 1998, among many others). However, the proposal that SA imperative clauses have a MoodP seems to be at odds with Platzack & Rosengren (1998) who argue that imperative clauses in German, English, and Mainland Scandinavian lack both TP and MoodP, and so they lack the Finiteness Phrase (FinP, of Rizzi 1997), since Finiteness is related to tense and mood. Though the authors do not state that their findings are universal, they actually suggest that they in fact might be. Thus I will first respond to their proposal and show that the SA imperative clauses have a MoodP, and so a FinP (both necessary for structural Case checking).

To argue for their position (that imperatives lack TP, MoodP, and so FinP), Platzack & Rosengern (1998:178) propose that Germanic imperative clauses have the general properties in (52-54). I will present the three properties and respond to them with SA facts to show that they cannot be extended to SA imperatives.

52. The imperative form of the verb is usually morphologically meager: in many languages (see Sadock & Zwicky 1985; Zhang 1990) the bare verb stem is used; in other languages there are stem alternations, clitic-like endings, and certain imperative particles.[141]

53. Imperative clauses cannot be syntactically embedded.

54. An overt subject, expressing the addressee(s), never seems to be obligatory in imperative clauses; in languages where a subject-like pronoun or quantifier may be used optionally, this element has specific properties which distinguish it from a subject in ordinary finite clauses.

As far as (52) is concerned, Platzack & Rosengern argue that while imperative verbs might have agreement and aspect morphology, they actually lack tense distinctions and mood morphology. While I agree with them that SA imperative verbs lack tense distinctions/morphology, I believe that they encode imperative mood (morphology). Table 1 illustrates this observation.

Table 1

Jussive	Positive Imperative	Negative Imperative	3rd Positive imperative
ta-ktub-uu-Ø 2-write-pm-Juss	ʔu-ktub-uu-Ø **Impr**.2-write-pm-Juss	laa ta-ktub-uu-Ø Neg.**Impr** 2-write-pm-Juss	li-ta-ktub-uu-Ø **Impr**-2-write-pm-Juss

---

[141] Jespersen (1924), however, maintains that the imperative verb (in English) is finite, and that it should be characterized as a mood.

Table 1 shows that the SA imperative verb carries agreement morphology but lacks tense morphology. It also shows that the imperative verb is derived from the jussive form, thus it realizes the jussive VC. More important, it shows that the imperative verb morphologically realizes *imperative mood* since either the verb or the negative particle carries the imperative mood morpheme, [Impr], which indicates that the verb is not morphologically meager. Thus the first criterion of Platzack & Rosengren (1998) does not extend to SA imperatives.

The second criterion states that imperative clauses cannot be embedded. Platzack & Rosengren (1998:195), following Rothstein (1983), assume that embedded clauses are referring expressions, and propose that the presence of FinP in a structure is a necessary requirement for the structure to be a referring expression. They thus argue that "the absence of FinP in the imperative clause prevents it from being capable of embedding" since embedding is a property of referring expressions, hence (55-56), from Platzack & Rosengren, are ungrammatical.

55. *I ask you that sit quiet on the chair.

56. *Ich bitte dich, daß sitz still auf dem Stuhl.

     I   ask   you   sit.IMP quiet on   the   chair

However, SA imperatives once again prove that they are different from their Germanic counterparts. Basically, SA imperatives can be syntactically embedded in control constructions, as (57-58) show.

57. "fa-ʔawHay-naa   ʔilay-hi_i

    so-Pst.reveal-1p   to-him

    [ʔan   ħ-Snaʕ-Ø   pro_i   l-fulk-a]…"   p.343

    Comp Impr.2-make.3sm-Juss   ec   the-ark-Acc

    'so we revealed to/inspired him [Noah], (to) make the ark!'

58. ʔawHaa   Allah-u   ʔilaa   Musaa$_i$

Pst.reveal.3sm   God-Nom   to   Moses

[ʔ̲a̲n̲   "*ʔ̱-THhab-Ø*   *pro*$_i$ ʔilaa   Firʕawn"]

Comp   Impr.2-go-Juss   ec   to   Pharaoh

'God ordered Moses, (to) go to Pharaoh!'

The claim that the bracketed clauses in (57-58) are embedded imperatives is supported by the observations in (59-62).

59. The bracketed clauses start with 'ʔan' (underlined), which is the Comp element that introduces embedded clauses in SA.

60. The embedded verbs in (57-58) (italicized) exhibit imperative mood morphology (boldfaced), thus encoding the [Impr] feature.

61. The assumption that the imperative clauses in (57-58) are embedded in control constructions is shown by the co-indexation between a matrix argument and an embedded one.

62. There is no pause between the two clauses, matrix and embedded, in (57-58) which is evidence that the imperative clauses are, in fact, embedded under their respective main clauses. A pause could be a sign that the imperative clauses are not embedded.

Thus SA imperative constructions have a FinP, as a consequence of being referring expressions (since they can be embedded).

The third criterion states that imperative clauses do not require the kind of subject one sees in declarative and interrogative (finite) clauses. To illustrate, Platzack & Rosengren argue that imperative clauses never require an overt subject (which they term ImpNP, following Potsdam (1996)); they state that "imperative clauses can only be used to talk TO the addressee, not ABOUT him or her" (p. 177). They thus assume that the imperative subject is different from finite clause subjects as a result of the absence of FinP, which means that EPP is not available. The optionality of the imperative subject results from their assumption that Spec, VP and Spec, AgrsP are both weak.

However, once again, SA imperatives prove to be different from their Germanic counterparts. To illustrate, though it is the case that the 2nd person subject is optional, as (63-65) show, the 3rd person imperative subject is never optional, as (66-68) show. Thus similar to tensed/finite clauses, SA imperatives have an obligatorily overt subject.

63. ʔu-ktub-Ø   (ʔanta)   l-waajib-**a**

Impr.2-write.sm-Juss   you.sm.**Nom**   the-homework-**Acc**

'(you) write the homework!'

64. laa   ta-ktub-Ø   (ʔanta)   l-waajib-**a**

Neg.Impr   2-write.sm-Juss   you.sm.**Nom**   the-homework-**Acc**

'(you) don't write the homework!'

65. li-ta-ktub-Ø   (ʔanta)   l-waajib-**a**

Impr-2-write.sm-Juss   you.sm.**Nom**   the-homework-**Acc**

'(you) write the homework'

66. li-ya-ktub-Ø   ʔax-**uu**-ka   l-waajib-**a**

Impr-Impf-write.sm-Juss   brother-**Nom**-your   the-homework-**Acc**

'let/make your brother write the homework'

67. li-ya-ktub-Ø   l-walad-**u**   l-waajib-**a**

Impr-Impf-write.sm-Juss   the-boy-**Nom**   the-homework-**Acc**

'let/make the boy write the homework'

68. li-ya-ktub-Ø   Ahmad-**u**   l-waajib-**a**

Impr-Impf-write.sm-Juss   Ahmad-**Nom**   the-homework-**Acc**

'let/make Ahmad write the homework'

The assumption that the subject in (66-68) is obligatory compared to that in (63-65) is based on the fact that while the subject in (63-65) is the addressee, who is obligatorily available in the dialogue situation, the subject in (66-68) is absent from the scene, and so it is obligatory to specify it, hence the subject is obligatorily overt.

In addition, Platzack & Rosengren (1998:197-198) provide data and discussion to the effect that the imperative subject is similar to its tensed-clause counterpart in terms of three criteria. To illustrate, the imperative subject can bind an anaphor within VP, it can control PRO in the complement of the verb, and it agrees with predicate adjectives in terms of φ-features. Moreover, following Rooryck (1991), den Dikken (1991) Beukema (1992), and Potsdam (1996), they state that the imperative subject is an empty category, identified as *pro*. I agree with these authors in that the non-overt imperative subject in SA is *pro*, since it alternates with both an overt pronoun and an overt DP subject, as in the 3rd imperative pattern. This assumption is supported by the observation that SA is a pro-drop language. Moreover, they argue that the imperative subject is different from its tensed-clause counterpart in that it is enumerated without the feature [finite], which is in line with their assumption that imperative clauses lack FinP. One argument for this position is the fact that "[s]ome languages have a particular pronominal form used as ImpNP

[imperative subject] but not as a pronominal (finite) subject" (p. 199). As for SA, imperative clauses, both 2nd and 3rd person patterns, use the same pronouns used in tensed clauses. Besides, since finiteness in my system correlates with VC and structural Case, I assume that imperative clauses are finite, by mood (at least since they can be embedded), and so have a FinP. Thus I will argue that imperative subjects in SA are enumerated with the feature [finite] (which might refer to structural Case). Furthermore, another difference they posit between imperative subjects and their tensed-clause counterparts is that while the former are used to talk TO the addressee, the latter are used to talk ABOUT the addressee. However, since SA exhibits a 3rd person imperative pattern, it is difficult to argue that imperatives are used only to talk TO the imperative subject, since the 3rd person is absent when the command is uttered; thus this could qualify as talking ABOUT the subject.

I have proposed that while SA imperative clauses lack a TP, they actually have a MoodP, and so have a FinP. Evidence for this architectural difference comes from the fact that SA imperatives are structurally different from their Germanic counterparts. I agree with Potsdam (1996) who argues that the English imperative constructions are not different from their declarative and interrogative counterparts, and thus can be analyzed with the same theoretical/standard machinery usually used to analyze regular tensed clauses in English. I also adopt his claim (1996:110) that imperative subjects are in fact not different from their tensed-clause counterparts. However, as far as SA imperatives are concerned, I argue that imperatives have no [T] feature, and hence no TP projection. They instead have a [Mood] feature, and so a MoodP.

5.2.2. Case in Imperative Clauses

Given the finding from chapter 2 that SA imperative clauses have a MoodP and the finding from section 5.2.1 that they are different from their Germanic counterparts in that they have a FinP, this section will show how the Case checking facts are accounted for using the Case theory developed in chapter 4. The sentence in (69) has the clause structure in (70).

69. ʔu-ktub-Ø   (ʔanta)   l-waajib-**a**

Impr.2-write.sm-Juss   you.sm.**Nom**   the-homework-**Acc**

'(you) write the homework!'

70.   FinP

```
                        FinP
                       /    \
                     Fin    MoodP
                            /    \
           write ʔu-ktub-Ø  Mood  v*P
                                  /   \
                            ʔanta/pro  v*'
                                      /   \
                          write ʔu-ktub-Ø  v*    VP
                                              /   \
                                write ʔu-ktub-Ø  V    DP
                                                      /  \
                                            the-homework  l-waajib-a
```
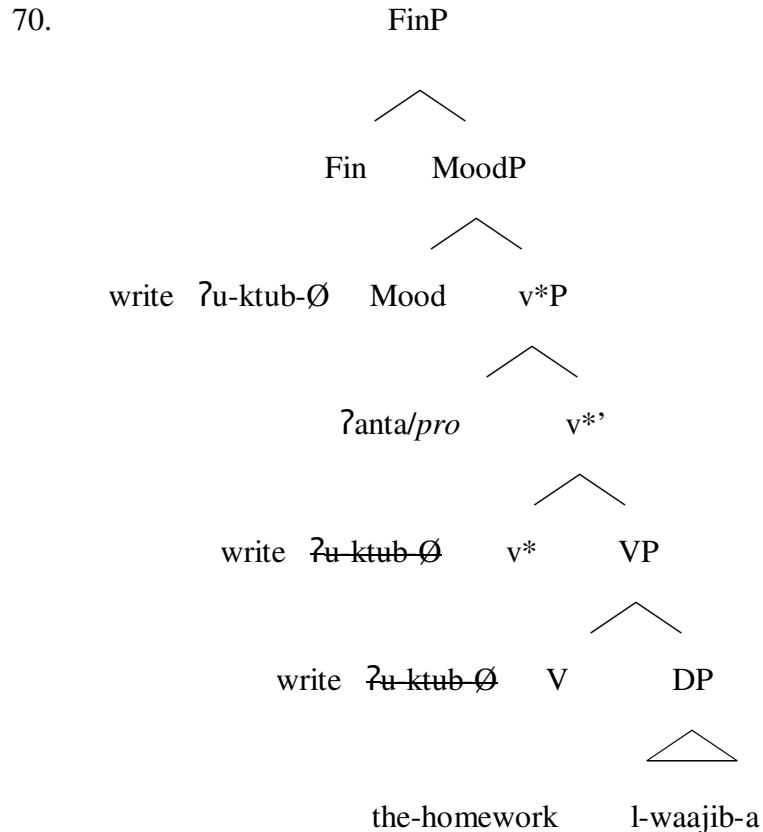
Case checking proceeds as follows. The verb is merged in V^0 with a valued categorial [V] feature, with the object (which has an unvalued [Case] feature) in its complement position; v^{*0} is merged with an unvalued [VC] feature. The categorial [V] feature on the verb gets 'projected' to the highest verbal projection in the clause, v*P. Having a valued categorial [V] feature, v*P gets selected by a $Mood^0$ which has an unvalued categorial [V] feature, a valued [Mood] feature, and an unvalued [VC] feature. Match between the two [V] features, on v*P and on $Mood^0$, takes place, resulting in valuing [V] on $Mood^0$, via Agree. Now, v^{*0} enters an Agree relation with $Mood^0$ to get its unvalued [VC] feature valued, but no valuation takes place, rather 'Agree as feature sharing' is established. With a now valued categorial [V] feature and a valued [Mood] feature, the MoodP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [Mood] features, and a valued [VC] feature. Agree between Fin^0 and $Mood^0$ takes place, resulting in valuing [V] and [Mood] on Fin^0, and [VC] on $Mood^0$, and automatically on v^{*0}. Now

the subject (empty category *pro* or overt pronoun) and the object enter Agree relations with Mood^0 and v*^{0}, respectively, and get their [Case] features valued as Nom and Acc, respectively. Since the imperative verb form is derived from the jussive VC (by prefixing the Impr morpheme 'ʔu', which is merged in Mood^0), the verb realizes the jussive m-vc morphology at Spell-Out.[142]

In addition, the negative imperative sentence (71) receives the clause structure in (72).

71. laa   tu-hmil-Ø   (ʔanta)   duruus-a-ka

     Neg.**Impr**   2-neglect.sm-Juss   you.sm.Nom   lessons-Acc-your

---

[142] Benmamoun (2000), operating in a categorial feature system, claims that the positive imperative verb form lacks 2nd person agreement because T^0 lacks a [+D] feature. In addition, Soltan (2007), operating in an Agree-based system, argues that the positive imperative form lacks 2nd person agreement because the latter is absorbed by imperative Comp. However, with regard to the featural composition of the imperative verb, I will argue that the 'ʔV-' prefix of the positive imperative verb form encodes both an [Impr] feature and a 2nd [person] feature (since this is the only context in which it appears in SA), whereas the negative 'laa' (traditionally called 'prohibitive laa') encodes a [Neg] feature and an [Impr] feature (since it is used only in imperatives), which results in the negative imperative verb form appearing with 2nd person morphology. One piece of evidence for my claim that the positive imperative form prefix 'ʔV-' encodes a 2nd person feature (contra Benmamoun 2000 and Soltan 2007) comes from the structure of the negative imperative construction. To illustrate, comparing the two forms in (i-ii) shows that a canonical imperative construction must have a 2nd person feature.

     i. ʔu-ktub

       Impr.**2**-write

     ii. laa   ta-ktub

       Neg.Impr   **2**-write

In other words, the presence of a 2nd person feature in the negative imperative construction indicates the presence of a 2nd person feature in the positive imperative one (the difference being limited to negation). Also, SA has another positive imperative construction where the verb form has 'li-' prefixed to it, as in 'li-ta-ktub', meaning 'write!'. Here I will assume that the modal-like prefix 'li-' encodes the [Impr] feature, while the 2nd [person] feature is realized on the verb stem, by '-ta-', as (iii) shows.

     iii. li-ta-ktub

       Impr-**2**-write

Since this pattern can also be used with 3rd person subjects, the verb, as shown in (iv), uses the imperfective (Impf) aspect morpheme 'ya' in place of the person morpheme since 3rd person is not marked.

     iv. li-ya-ktub

       Impr-<u>Impf</u>-write

This thus indicates that imperative verbs always encode a person feature/affix.

'(you) don't neglect your lessons!'

72.

```
                                    FinP
                                   /    \
                                Fin      NegP
                                        /    \
                           don't    laa      MoodP
                                            /      \
                        neglect   tu-hmil  Mood     v*P
                                                   /    \
                                           you   ʔanta   v*'
                                                        /    \
                                      neglect   t̶u̶-̶h̶m̶il   v*     VP
                                                                  /    \
                                                 neglect   t̶u̶-̶h̶m̶i̶l̶   V      DP
                                                                            /‾‾\
                                                               your.lessons    duruus-a-ka
```
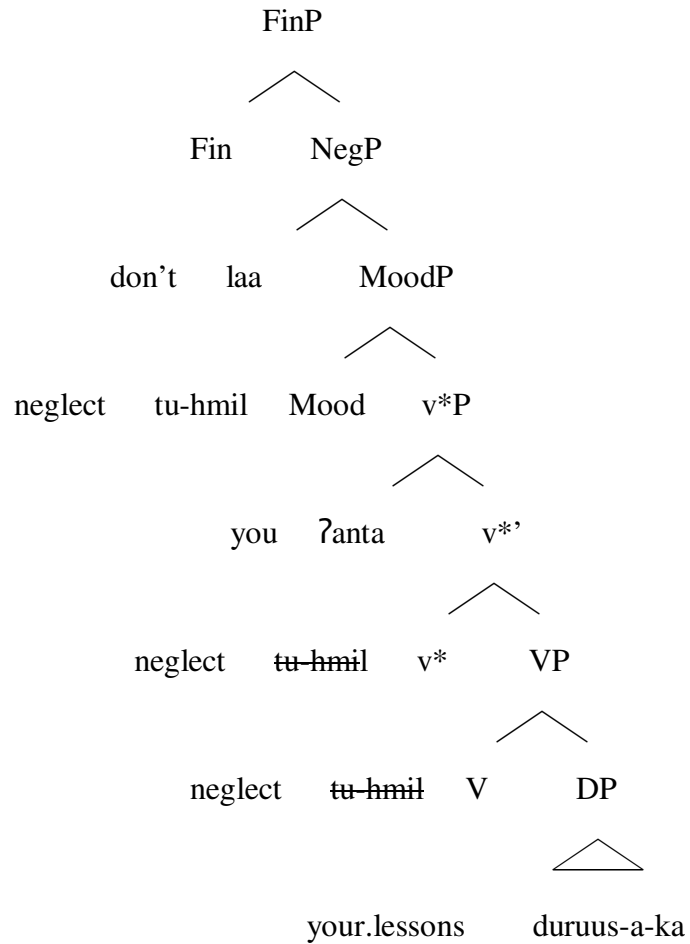
Finally, the sentence (73) illustrates the SA 3rd person imperative construction; (74) is the proposed clause structure for (73).

73. li-ya-ktub-Ø   ʔax-**uu**-ka   waajib-a-hu

Impr-Impf-write.sm-Juss   brother-**Nom**-your   homework-Acc-his

'let your brother write his homework'

74.

```
                        FinP
                       /    \
                    Fin      MoodP
                            /      \
                        Mood        v*P
                       /    \      /    \
                    li-   ya-ktub-Ø  ʔax-uu-ka   v*'
                                               /      \
                                      ~~ya-ktub-Ø~~  v*      VP
                                                          /      \
                                                 ~~ya-ktub-Ø~~  V      DP
                                                                      /\
                                                                 waajib-a-hu
```
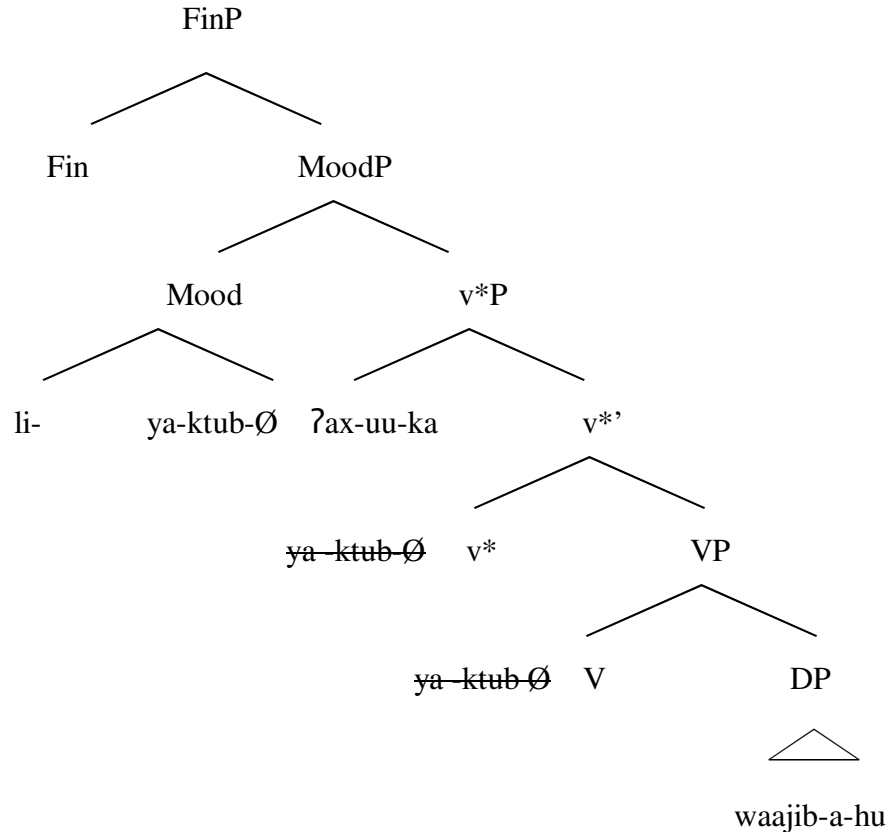
The Case checking operations in (71) and (73) proceeds as in (69), with differences limited to the type of the subject that receives the Nom Case licensed by $Mood^0$. Also, while the [Mood] feature is on the verb in (69), it is on the negative particle in (71) and on the modal prefix in (73). The fact that the imperative verb in (73) appears with a modal prefix that encodes 'imperative' mood is shown to take place via head movement. As I said in chapter 1, I take no position on the debate of when head movement takes place, in narrow syntax or at PF.

5.3. Case Checking in Passives

This section discusses Case checking in the passive construction in SA. I adopt the Minimalist account of the clause structure of SA passives laid out in Soltan (2007). As with other languages, the passive form of the verb in SA has a 'passive morpheme' whose task is to take away the verb's ability to license an external θ-role as well as its ability to license Acc Case (thus realizing Burzio's Generalization). Since the voice category is represented by vocalic melody in

SA, this morpheme has a different melody from the active one; for example, while 'qaraʔa', meaning 'read', is the active voice form of the verb, 'quriʔa' is the passive form. The sentence (75) is the active form of (76), which represents the SA passive construction.

75. qaraʔa-Ø   l-walad-u   S-SaHiifa-t-a

  Pst.read.3sm-Ind the-boy-Nom the-newspaper-f-Acc

  'the boy read the newspaper'

76. quriʔa-t-Ø   S-SaHiifa-t-u

  Pst.Pass.read.3s-f-Ind the-newspaper-f-Nom

  'the newspaper was read'

Given Soltan's (2007) proposal that SA does not make use of A-movement operations, one should expect the internal argument *not* to move (unlike what happens in languages like English), which, suggests Soltan, is the case since VS is the unmarked order for passives in SA; we have seen that VSO is the unmarked order for active voice sentences in the language. Therefore, argues Soltan, "[t]here is no required displacement of the internal argument in passive structures in SA" (p. 96). Thus the internal argument will remain in complement to V^0 position, and would receive Nom Case via Agree with I^0. Another observation that Soltan makes is that the verb in (76) agrees in [Person] and [Gender] (but crucially not in [Number]) with the internal argument (or passive subject), as (77) shows, which is the expected state of affairs if VS(O) is the unmarked word order in SA where the verb does not fully agree with the subject.

77. *quriʔ-na-Ø/   quriʔa-t-Ø   S-SuHuf-u

  Pst.Pass.read.3-**p**f-Ind/ Pst.Pass.read.3-**s**f-Ind the-newspaper.**p**f-Nom

  'the newspapers were read'

The assumption that the internal argument enters an Agree relation with I^0 where it values the φ-features of I^0 and receives Nom Case as a result (given Soltan's conception of Case checking) is, argues Soltan, supported given the observation that the passive morpheme drops the $v*^0$ (projection) from the extended projection of the verb. Soltan states that this should be expected since, unlike English, "SA does not allow the external argument to be lexicalized, even as an adjunct" (Soltan 2007:97 fn. 1), as (78) shows.

78 *quriʔa-t-Ø   S-SaHiifa-t-u   bi-waasiTat-i   l-walad-i

     Pst.Pass.read.3s-f-Ind   the-newspaper-f-Nom   by-mediation-Gen   the-boy-Gen

To sum up, SA does not exhibit A-movement in the passive construction. However, the sentence (76) can have the SV alternant in (79).

79. ʔaS-SaHiifa-t-u   quriʔa-t-Ø

     the-newspaper-f-Nom   Pst.Pass.read.3s-f-Ind

     'the newspaper was read'

Despite this possibility (which is also attested in active voice sentences in SA), Soltan applies his arsenal of tests, and, once again, shows that the VS and SV orders of passive sentences are not related by A-movement. In other words, 'S' in the SV order is a left-dislocated element (having the syntactic and semantic properties associated with left-dislocated elements). In this case, 'S' in the SV order receives default Nom at PF, where the structural Nom Case provided by I^0 is licensed to a post-verbal *pro* in complement to V^0 position. As far as the VS order is concerned, Soltan argues that the fact that the verb agrees with the subject suggests that Nom Case is licensed to the internal argument as a reflex of valuing the φ-features of I^0.

However, since I am arguing that structural Case is not licensed as a reflex of φ-feature valuation on the relevant functional head, I will first show how Case checking happens in the passive

construction, and then present a sample derivation. As with active VS(O) order sentences, the verb is *not allowed* to fully agree with the subject, given the fact that it lacks the [Number] morphology, as (77) shows, thus I^0 is ϕ-defective, hence unable to value [Case] on the goal (Chomsky 2001). This thus indicates that ϕ-features cannot be responsible for the Nom Case realized by the passive subject in (76).

Given the proposed theory of Case, structural Case is expected to be licensed in the passive clause if the XP selected by Fin^0 has both a categorial [V] feature and an I-finiteness feature. The fact that the clause has a verb indicates that the selected XP has a categorial [V[feature. Also, the fact that the verb can realize the past vs. non-past distinction, as (80-82) show, indicates that I^0 of the passive construction has a [T] feature, which instantiates a T^0, which projects a TP.

80. quriʔa-t-Ø   S-SaHiifa-t-u

    Pst.Pass.read.3s-f-Ind   the-newspaper-f-Nom

    'the newspaper was read'

81. tu-qraʔ-u   S-SaHiifa-t-u

    f.Pass-read.3s-Ind   the-newspaper-f-Nom

    'the newspaper is (being) read'

82. sa-tu-qraʔ-u   S-SaHiifa-t-u

    Fut-f.Pass-read.3s-Ind   the-newspaper-f-Nom

    'the newspaper will be read'

In addition, the fact that the passive verb can co-occur with tense-inflecting negative particles, as (83-84) show, indicates that it has a [T] feature since these particles have an unvalued [T] feature that must be valued by that on the verb/T^0.

83. lan   tu-qraʔ-a   S-SaHiifa-t-u

     Neg.**Fut**   f-Pass.read.3s-Sub   the-newspaper-f-Nom

     'the newspaper will not be read'

84. lam   tu-qraʔ-Ø   S-SaHiifa-t-u

     Neg.**Pst**   f-Pass.read.3s-Juss   the-newspaper-f-Nom

     'the newspaper was not read'

Thus it seems that the selected XP has the two features necessary for the introduction of the version of Fin^0 that has a valued [VC] feature, which is responsible for Case checking. Let us see how structural Case is licensed in (76), repeated in (85), which has the clause structure in (86).

85. quriʔa-t-Ø   S-SaHiifa-t-u

     Pst.Pass.read.3s-f-Ind   the-newspaper-f-Nom

     'the newspaper was read'

86.

```
                                    FinP
                                  /\
                              Fin      TP
                                      /\
                  read   quriʔa-t-Ø   T      VP
                                            /\
                            read   q̶u̶r̶i̶ʔ̶a̶-̶t̶-̶Ø̶   V       DP
                                                          /\
                                              the-newspaper   S-SaHiifa-t-u
```
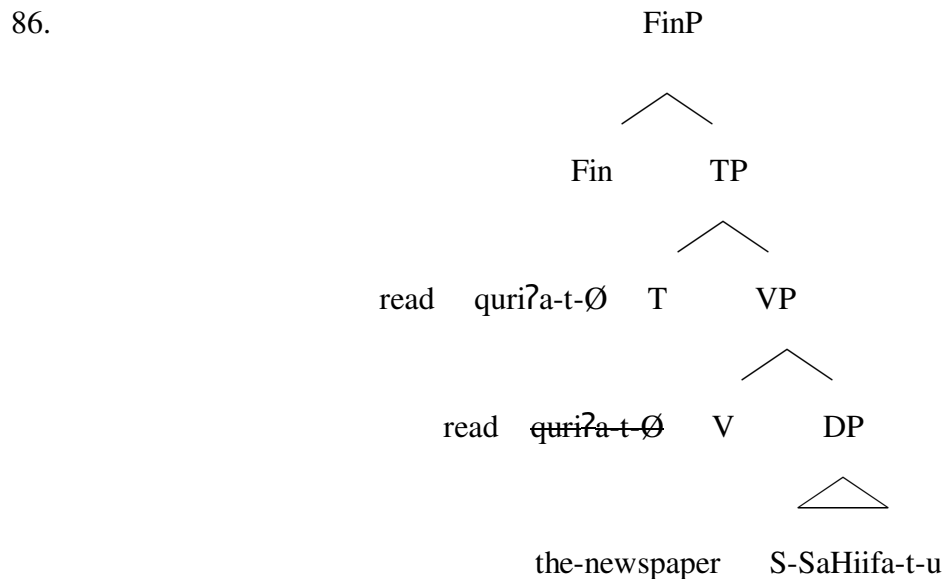
Case checking proceeds as follows. The verb is merged in V^0, with the internal argument in its complement position, entering with an unvalued [Case] feature. The verb is merged with a valued categorial [V] feature. The categorial [V] feature gets 'projected' to the VP projection. Having a valued categorial [V] feature, VP gets selected by a T^0 with an unvalued categorial [V] feature, a valued [T] feature, and an unvalued [VC] feature. Match between the two [V] features, on VP and on T^0, takes place, resulting in valuing [V] on T^0, via Agree. With a now valued categorial [V] feature and a valued [T] feature, the TP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [T] feature, and a valued [VC] feature. Agree between Fin^0 and T^0 takes place, resulting in valuing [V] and [T] on Fin^0, and [VC] on T^0. Now the subject in complement to V^0 enters an Agree relation with T^0. Match between the now valued [VC] feature on T^0 and the unvalued [Case] feature on the subject results in valuing the latter as Nom. Not being in the scope of a VC-assigning particle, the verb is not assigned a VC specification, and so it will realize the default indicative m-vc morphology at Spell-Out.

In addition to this 'typical' passive construction, Soltan discusses a similar construction where the verb is followed by a preposition, in which case the internal argument appears with Genitive (or Oblique), instead of Nom, Case, as (87) shows, from Soltan (2007:100).[143]

87. qubiDa-Ø   ʕalaa   l-luSuuS-i

     Pst.Pass.arrest.3sm-Ind   on   the-thieves-Gen

     'the thieves were arrested'

Soltan assigns the same treatment as above to these Prepositional Passives (P-passives). To explain why the theme argument surfaces with Gen Case, he shows that the internal argument is not a complement to V^0, but rather a complement to the preposition inside a PP base-generated in complement to V^0 position. This analysis renders it closer to P^0, hence Gen Case assignment

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[143] Soltan assumes that the internal argument in this construction appears with Dative Case. I will not get into such details. What is important here is that it does not receive Nom Case, and so my task becomes accounting for that.

obtains, which makes the DP inaccessible by T^0 (for purposes of Nom Case checking), since the DP is now 'inactive'. Thus no probing is allowed into the PP.

However, one major issue remains, with implications for the theory of Case developed in this thesis. To illustrate, the sentence (88) shows that the verb in a P-passive does not agree with the subject. In fact, the verb carries the default agreement specification (in SA), which is 3rd person singular masculine.

    88. qubiDa-Ø   ʕalaa   l-liSS-aa-t-i

       Pst.Pass.arrest.**3sm**-Ind   on   the-thief-**p**-**f**-Gen

       'the female thieves were arrested'

Even more, in the SV order, where verbs usually fully agree with the preceding DP (in order to reveal the ɸ-content of the post-verbal *pro*), the verb still realizes the default agreement specification, as (89) shows.

    89. ʔal-liSS-aa-t-u   qubiDa-Ø   ʕalay-hinna

       the-thief-**p**-**f**-Nom   Pst.Pass.arrest.**3sm**-Ind   on-them.f

       'the female thieves, they were arrested'

This state of affairs supports Soltan's account of why the internal argument realizes Gen Case. Basically, since the verb does *not* agree (in terms of ɸ-features) with the internal argument, T^0 is *not* expected to license Nom Case to it, an expectation that is borne out. Soltan (2007:107) states that since "there is no other potential target in the structure, the only agreement that the verb can show in these cases has to be the last-resort default agreement".

However, this state of affairs has undesirable consequences for my theory of Case. To illustrate, the fact that the verb in a P-passive does not agree with the subject/internal argument and the fact that the internal argument is not assigned Nom Case suggest that Case and agreement go hand in hand, specifically that Case is an effect of agreement, which is Soltan's (as well as Schütze's 1997 and Chomsky's 2001) theory of Case. Also, my assumption that T^0 has a [VC] feature that has to be licensed (to a subject) is weakened given the fact that the derivation does not crash when T^0 does not license Nom Case. To solve this problem, I will first explain why the verb realizes no agreement (other than the default specification), and given the observation that the passive verb/T^0 has a [VC] feature (given the proposed system), I will then explain to which element this Nom Case is licensed.

Since in SV(O) structures in SA, the verb realizes full agreement in order to reveal the ɸ-content of the post-verbal *pro* (as I have been claiming), the fact that the verb (or T^0) does not carry the ɸ-features of the internal argument in P-passives follows if we assume that in P-passives there is *no* post-verbal *pro* (to license the Nom Case on T^0 in the presence of a preverbal DP/topic). This contrast in illustrated in (90-91).

90. ʔal-liSS-aa-t-u   Durib-na-Ø   *pro*

     the-thief-**p**-f-Nom   Pst.Pass.hit.3**p**f-Ind   ec

     'the female thieves were hit'

91. ʔal-liSS-aa-t-u   qubiDa-Ø/*qubiD-na-Ø   ʕalay-hinna

     the-thief-**p**-f-Nom   Pst.Pass.arrest.3**sm**-Ind/ Pst.Pass.arrest.3**pf**-Ind   on-them.f

     'the female thieves were arrested'

Thus the fact that the verb in (91) does not carry agreement morphology (with the internal argument, or with the preverbal DP) is a consequence of the absence of *pro*, rather than a consequence of the assumption that it does not license Nom Case. This is supported by the fact

that neither an overt DP nor an overt pronoun can show up in the same post-verbal position (since *pro* can alternate with overt DPs), as shown by the ungrammaticality of (92-93), respectively.

92. *qubiDa-Ø   <u>l-liSS-aa-t-u</u>   ʕalay-hinna

      Pst.Pass.arrest.**3sm**-Ind   the-thief-**p**-**f**-Nom   on-them.f

93. *qubiDa-Ø   <u>hunna</u>   ʕalaa   l-liSS-aa-t-u

      Pst.Pass.arrest.**3sm**-Ind   they.f   on   the-thief-**p**-**f**-Nom

Therefore, I conclude that even though the verb does not agree with the subject/internal argument, passive T^0 still licenses Nom Case given the assumption that it has a [VC] feature. Now the question becomes, what does this Nom Case get to be licensed to?

I will argue that the Nom Case licensed by passive T^0 is received by the PP element, which is the same element that receives the relevant θ-role (from the verb). The assumption that XPs other than DPs can receive Case has been entertained in the literature (though see Stowell 1981). For example, Uriagereka (2006, 2008:108-109) argues that (PRO and some) clauses must be assigned null Case if they are to be visible at LF for θ-role assignment (Visibility Condition). Thus the assumption that PPs receive Case can (at least) be an extension of Uriagereka's proposal, since argumental PPs of the sort discussed here must be visible at LF for purposes of θ-role assignment. Also, Boskovic (1995) suggests that if Case assigners must check their [Case] features (given the Inverse Case Filter, Fukui & Speas 1986), then clauses must be assigned Case; in fact, he argues that clauses come in two forms, Cased and Caseless. In addition, the assumption that clauses might be able to receive Case was made in Chomsky (1986b). This state of affairs points to the possibility that 'subject clauses' exist. Indeed, this is the conclusion of Boskovic (1995) and Delahunty (1983). Moreover, Kempchinsky (1991:237) argues based on data from Spanish that "the PP [which also receives the GOAL thematic role] will receive

accusative Case, violating the Case Resistance Principle (Stowell 1981)". She argues that there is no way for the PP to avoid being Acc Case-marked, if (following GB theoretic syntax), Case must be assigned at Surface Structure.

One last comment is due. This situation of the passive verb (or rather its T^0) in P-passives being able to license Nom Case to the PP (since it has a [VC] feature) though it does not agree with the subject/internal argument reminds us of the situation of the '(non-)raising' verb 'yabduu' which also licenses Nom Case to the complement CP (since it has a [VC] feature) but does not agree with the (embedded) subject. Thus the two verbs are similar in an intriguing way. To address this issue, I will assume that the fact that the two verbs realize the default agreement specification in SA might follow from the fact that they license (Nom) Case to what might be called person-less categories, following Uriagereka (2006, 2008). If this reasoning is on the right track, I will assume that the person-less elements are PPs and CPs. However, though T^0 agrees with the CP in the (non-)raising construction and with the PP in the P-passive construction, the licensing of Nom Case to these two categories (for visibility) cannot be viewed as an effect of agreement. One reason for this is that CPs and PPs are person-less, thus lack [Person], which renders them unable to value [Person] on T^0.

To sum up, my assumption that the Nom Case provided by the T^0 head is licensed to the PP for visibility considerations is in line with the finding that P-passives have no post-verbal *pro* (that checks Nom on T^0 in SV structures). A similar discovery was also made with respect to the 'yabduu' matrix clause, where *pro* is not licensed. To conclude, I take the syntactic and semantic properties of P-passives to support my theory of Case, though on the face of it P-passives seem to be a threat. The fact that the verb realizes default agreement follows from my assumption that it enters an Agree relation with the PP, which not being a nominal/DP element, may not have (complete) ϕ-features. This explains why even in the V-PP order (which is schematically similar to VS(O)) the verb does not agree with the subject/internal argument.[144] Finally, this crucially

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[144] TAGs referred to PPs as quasi-sentences, and maintained that sentences and quasi-sentences receive Case.

shows that Case checking by T^0 to the PP does not involve ϕ-feature valuation, which argues against the Case-as-a-reflex-of-agreement position.

5.4. Case Checking in Unaccusatives and Unergatives

Verbs (in English) used to be classified into three categories in terms of transitivity, ditransitive, transitive, and intransitive. With the advent of Perlmutter's (1978) Unaccusativity Hypothesis (UH), intransitive verbs were classified into two groups, unaccusatives and unergatives. The UH states that the subject of unaccusative verbs (like die, fall, arrive, break, and melt) is not a true agent and so originates in the complement to V^0 position, instead of Spec, VP (or Spec, v*P). By contrast, the subject of unergative verbs (like run, jump, talk, and laugh) starts/is merged in the canonical subject position, namely Spec, VP/v*P (Kitagawa 1986, among many others).

Based on Larson's (1988) verbal shells as well as findings and proposals in Hale & Keyser (1993), Chomsky (1995) proposed that the upper verbal shell is headed by a light verb, $v*^0$, and that it is the Spec, position of this light verb where the subject of unergative (as well as transitive) verbs is merged. In contrast, the surface subject of unaccusative verbs is merged in the complement to V^0 position, since unaccusatives do not instantiate a light verb (v*P) projection. This assumption is based on a genuine difference between unergative and unaccusative verbs. To illustrate, while unergative verbs can have a cognate internal argument, as (94) shows, unaccusative verbs cannot have such an argument, as (95) shows.

    94. Mary smiled a beautiful smile.

    95. *Mary arrived an unexpected arrival.

This is because the complement position of unaccusative verbs is already occupied. This observation about unaccusative verbs further indicates that their subject is similar (both semantically and structurally) to the internal argument of transitive verbs. By contrast, the subject of unergative verbs is similar to the subject of transitive verbs. To represent this

difference structurally, Chomsky (1995) proposes the clause structure in (96) for unergative verbs, and the one in (97) for unaccusative verbs.

96.

```
                                    v*P
                                   /    \
                              Subject    v*'
                                        /   \
                                      v*      VP
                                             /  \
                                            V    DP
                                                 /\
```

97.

```
                                    VP
                                   /  \
                                  V    DP
                                       /\
                                     Subject
```
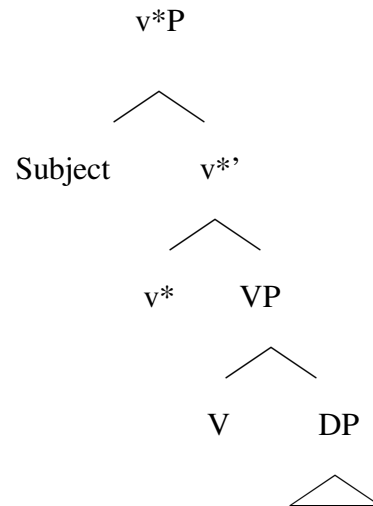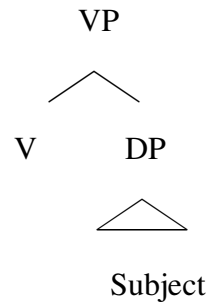
Since this thesis is not on the (syntactic structure of) intransitive verbs in SA, I will not get into the debate of whether unaccusative verbs instantiate a light verb projection, v*P, as argued in Harley (1995, 2005), or not as proposed in Chomsky (1995). I will just assume Chomsky's (standard) treatment.[145]

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[145] It is noteworthy that the discussion in this section ignores many of the issues relevant to unaccusatives and unergatives (and whether unaccusative verbs in some languages are also unaccusative in other languages); but these issues are not really relevant to the topic of the thesis. See Levin & Rappaport (1995) for a discussion of the relevant issues.

5.4.1. Unaccusatives

There are a number of verbs that are almost crosslinguistically recognized as unaccusative; these are in (98).

98. maata   die

     saqaTa   fall

     THaaba   melt

     jaaʔa   come

     ʔinkasara   break

However, these verbs pattern in SA with unaccusative verbs with regard to some diagnostics, and with unergative verbs with respect to other diagnostics. To illustrate, the verbs in (98) induce ungrammaticality when passivized, as (99-103) show.

99. *miita-t-Ø   l-miita-t-u

    Pst.Pass.die.3sm-Ind   the-death-f-Nom

    'the death was died'

100. *suqiTa-Ø   s-suquuT-u

    Pst.Pass.fall.3sm-Ind   the-falling-Nom

    'the falling was fallen'

101. *THiiba-Ø   TH-THawabaan-u

    Pst.Pass.melt.3sm-Ind   the-melting-Nom

    'the melting was melted'

102. *jiiʔa-Ø   l-majiiʔ-u

    Pst.Pass.come.3sm-Ind   the-coming-Nom

    'the coming was come'

103. *ʔinkasara-Ø   l-ʔinkisaar-u

    Pst.Pass.break.3sm-Ind   the-breaking-Nom

    'the breaking was broken'

The data (99-103) show that these verbs are unaccusative since they are ungrammatical in the passive construction. This is because, as unaccusatives, they should have no internal argument, and so are ungrammatical since in the passive it is the internal argument that becomes the subject. However, these same verbs can have cognate objects, as in (104-108).

104. maata-Ø   l-mujrim-u   miita-t-an   shaniiʕa-t-an

    Pst.die.3sm-Ind   the-criminal-Nom   death-f-Acc   very.bad-f-Acc

    'the criminal died in a very bad way/had a very bad end'

105. saqaTa-Ø   r-rajul-u   suquuT-an   mutawaqqaʕ-an

    Pst.fall.3sm-Ind   the-man-Nom   falling-Acc   expected-Acc

    'the man fell an expected falling'

106. THaaba-Ø   th-thalj-u   THawabaan-an   sariiʕ-an

    Pst.melt.3sm-Ind   the-ice-Nom   melting-Acc   quick-Acc

    'the ice melted quickly'

107. jaaʔa-Ø   l-maTar-u   majiiʔ-an   muxiif-an

      Pst.come.3sm-Ind   the-rain-Nom   coming-Acc   terrifying-Acc

      'the rain came a terrifying coming/in a bad way'

108. ʔinkasara-Ø   l-baab-u   ʔinkisaar-an   malHuuZ-an

      Pst.break.3sm-Ind   the-door-Nom   breaking-Acc   noticeable-Acc

      'the door broke a noticeable breaking'

The data (104-108) show that these verbs pattern with unergatives (and transitives, in general) since they are grammatical with cognate objects, which indicates that, perhaps, their surface subjects do not originate as objects/complements to V^0. Another diagnostic of unaccusative verbs is that they are grammatical in sentences like (109-110), where the surface subject is a typical object as shown by (111-112) respectively, where the subject is the agent.

109. the ice melted.

110. the window broke.

111. the sun melted the ice.

112. the boy broke the window.

However, for the SA verbs in (98) to be grammatical in this alternation (surface subject appearing in object position), the morphological structure of the verb has to be changed; basically, it acquires a causative structure, as (113-122) show.

113. maata-Ø   l-mujrim-u

      Pst.die.3sm-Ind   the-criminal-Nom

      'the criminal died'

114. **ʔa**-maata-Ø   Allah-u   l-mujrim-a

      Caus-Pst.die.3sm-Ind   God-Nom   the-criminal-Acc

      'God made the criminal die'

115. saqaTa-Ø   r-rajul-u

      Pst.fall.3sm-Ind   the-man-Nom

      'the man fell'

116. **ʔa**-sqaTa-Ø   l-qadar-u   r-rajul-a

      Caus-Pst.fall.3sm-Ind   the-fate-Nom   the-man-Acc

      'the man's destiny took him down'

117. THaaba-Ø   th-thalj-u

      Pst.melt.3sm-Ind   the-ice-Nom

      'the ice melted'

118. **ʔa**-THaaba-t-Ø   sh-shams-u   th-thalj-a

      Caus-Pst.melt.3sm-f-Ind   the-sun-Nom   the-ice-Acc

      'the sun melted the ice'

119. jaaʔa-Ø   l-maTar-u

      Pst.come.3sm-Ind   the-rain-Nom

      'the rain came'

120. jaaʔa-Ø   Allah-u   bi-l-maTar-i

Caus.Pst.come.3sm-Ind   God-Nom   with-the-rain-Gen

'God brought the rain'

121. ʔinkasara-Ø   l-baab-u

Pst.break.3sm-Ind   the-door-Nom

'the door broke'

122. kasara-Ø   l-walad-u   l-baab-a

Tran.Pst.break.3sm-Ind   the-boy-Nom   the-door-Nom

'the boy broke the door'

Unlike their English counterparts (which do not undergo morphological changes, as shown by (109-112)), this morphological change in the structure of the verb, which indicates the introduction of a light $v*^0$ category (responsible for the Acc Case on the object), suggests that these verbs are perhaps not unaccusative. However, I will not dwell on the observation that these SA verbs are not truly unaccusative, since this is not relevant to my present goals. Nonetheless, since this thesis is on Case checking, I will explicitly state that if SA proves to have truly unaccusative verbs, the proposed Case theory can account for their Case checking facts. To take an example, let us see how the proposed theory handles (123).

123. maata-Ø   l-mujrim-u

Pst.die.3sm-Ind   the-criminal-Nom

'the criminal died'

The data in (123-125) show that the verb 'maata' encodes a [T] feature, since the verb can realize the past vs. non-past distinction (Cowper 2005). This [T] feature indicates the presence of a TP projection.

124. ya-muut-u   l-mujrim-u

     Impf-**Prs**.die.3sm-Ind   the-criminal-Nom

     'the criminal is dying'

125. sa-ya-muut-u   l-mujrim-u

     Fut-Impf-die.3sm-Ind   the-criminal-Nom

     'the criminal will die'

The sentence (123) receives the clause structure in (126); since SA does not exhibit A-movement, the internal argument is merged in complement to V^0 position and receives Case in-situ. Case checking proceeds as follows.

126.

```
                                    FinP
                                   /    \
                                 Fin     TP
                                        /   \
                                       T     VP
                                     died  maata-Ø
                                           /    \
                                          V      DP
                                        died  maata-Ø
                                            the-criminal   l-mujrim-u
```
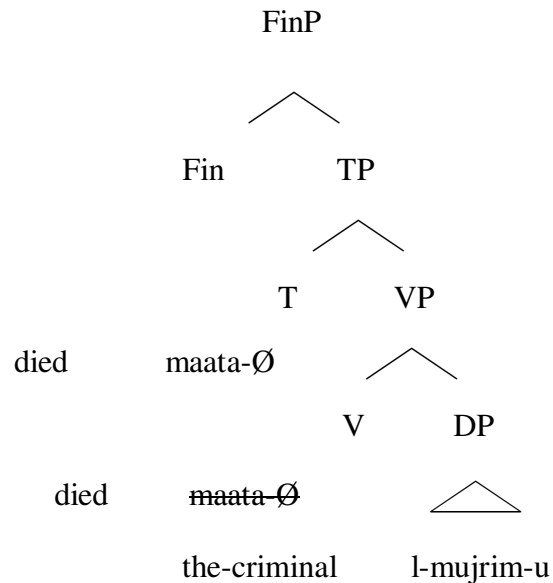
The verb is merged in V^0 with the internal argument/subject in its complement position; the subject has an unvalued [Case] feature. The verb has a valued categorial [V] feature. The categorial [V] feature gets 'projected' to the highest verbal projection in the clause, VP. Having a valued categorial [V] feature, the VP gets selected by a T^0 which has an unvalued categorial [V] feature, a valued [T] feature, and an unvalued [VC] feature. Match between the two [V] features,

on VP and on T^0, takes place, resulting in valuing [V] on T^0, via Agree. With a now valued categorial [V] feature and a valued [T] feature, the TP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [T] features, and a valued [VC] feature. Agree between Fin^0 and T^0 takes place, resulting in valuing [V] and [T] on Fin^0, and [VC] on T^0. Now the subject (in complement to V^0 position) enters an Agree relation with T^0, and gets its [Case] feature valued as Nom. Not being in the scope of a verbal case assigning particle, the verb will realize indicative m-vc at Spell-Out. Thus the proposed Case theory can account for the Nom Case on the subject in (123).

5.4.2. Unergatives

This section discusses the SA unergative verbs and their Case checking properties. The data (127-129) provide some examples of such verbs in sentences.

127. qafaza-Ø   l-walad-u   (qafza-t-an   Tawiil-at-an)

     Pst.jump.3sm-Ind   the-boy-Nom   jump-f-Acc   long-f-Acc

     'the boy jumped (a long jump)'

128. takallama-Ø   l-walad-u   (kalaam-an   jamiil-an)

     Pst.talk.3sm-Ind   the-boy-Nom   speech-Acc   nice-Acc

     'the boy gave a good speech'

129. DaHika-Ø   l-walad-u   (DiHka-t-an)

     Pst.laugh.3sm-Ind   the-boy-Nom   laugh-f-Acc

     'the boy laughed (a laugh)'

The assumption that I^0 has a [T] feature is supported by the fact that these verbs realize the past vs. non-past distinction (Cowper 2005); the data in (130-132) illustrate this fact about 'qafaza', meaning 'jump'. Thus these clauses have a TP projection.

130. qafaza-Ø   l-walad-u

Pst.jump.3sm-Ind   the-boy-Nom

'the boy jumped'

131. ya-qfiz-u   l-walad-u   min   fawqi   l-jidaar-i

Impf-**Prs**.jump.3sm-Ind   the-boy-Nom   from   above the-wall-Gen

'the boy jumps/is jumping from above the wall'

132. sa-ya-qfiz-u   l-walad-u   min   fawqi   l-jidaar-i

Fut-Impf-jump.3sm-Ind   the-boy-Nom   from   above the-wall-Gen

'the boy will jump from above the wall'

Assuming with Chomsky (1995) that such verbs instantiate a light verb projection, v*P, the sentence (133) receives the clause structure in (134).

133. DaHika-Ø   l-walad-u   (DiHka-t-an)

Pst.laugh.3sm-Ind   the-boy-Nom   laugh-f-Acc

'the boy laughed (a laugh)'

134.   FinP
                        /\
                    Fin   TP
                            /\
                  laugh DaHika T   v*P
                                      /\
                         the-boy l-walad-u   v*'
                                              /\
                                laugh ~~DaHika~~ v*   VP
                                                        /\
                                        laugh ~~DaHika~~   V   DP
                                                      a-laugh   (DiHka-t-an)
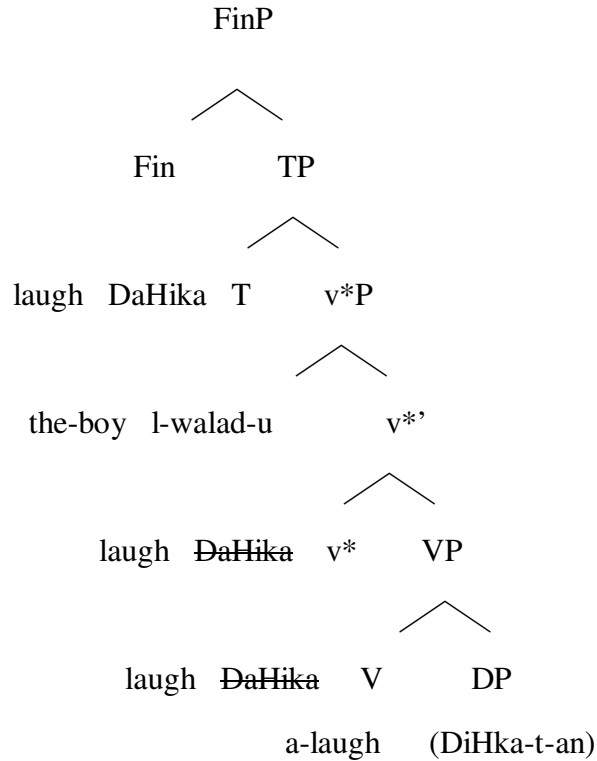
Case checking goes as follows. The verb is merged in V^0 with a valued categorial [V] feature; $v*^0$ is merged with an unvalued [VC] feature. The categorial [V] feature gets 'projected' to the v*P projection. Having a valued categorial [V] feature, v*P gets selected by a T^0 with an unvalued categorial [V] feature, a valued [T] feature, and an unvalued [VC] feature. Match between the two [V] features, on v*P and on T^0, takes place, resulting in valuing [V] on T^0, via Agree. Now, $v*^0$ enters an Agree relation with T^0 to value its unvalued [VC] feature, but no valuation takes place, rather 'Agree as feature sharing' is established. With a now valued categorial [V] feature and a valued [T] feature, the TP gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [T] feature, and a valued [VC] feature. Agree between Fin^0 and T^0 takes place, resulting in valuing [V] and [T] on Fin^0, and [VC] on T^0, and automatically on $v*^0$. Now the subject and the object enter Agree relations with T^0 and $v*^0$, respectively, where they get their [Case] features valued as Nom and Acc, respectively. Not being in the scope of a verbal particle, the verb will realize indicative m-vc at Spell-Out.

Given the fact that sentences with unergative verbs do not always have overt objects (to license the Acc Case feature on $v*^0$), and the claim that the $v*^0$ always has a [VC] feature, we need a

mechanism whereby this [VC] is always licensed, thus avoiding derivation crashes. Therefore, I will assume that the [VC] feature on $v*^0$ is always licensed. I follow Hale & Keyser (2000:1) who state: "for example, the verb *laugh*, we contend, is fundamentally transitive". Thus, when the cognate object is spelled-out, the [VC] on $v*^0$ is licensed to it, as revealed by the Acc m-case that the object carries. When the cognate object is not spelled out, I will assume that the complement to V^0 position is filled with N^0, which is the element that merges with V^0. Since it is not spelled out, this N^0 conflates into the empty V^0, which amounts to licensing the Acc Case on $v*^0$. This is because as a lexical element (with no D^0), the complement to V^0 cannot receive the Acc Case that $v*^0$ has conventionally, hence the resort to the notion/procedure of conflation. This situation of conflating an empty N^0 is similar to licensing an overt bare noun through incorporation (Hale & Keyser 2000:28).

5.5. Case in Participial Sentences

So far in this thesis, we have seen two main types of sentences in SA, verbal and verbless. The main characteristics of the former are that they have a verb (main or copular) and also license structural Case, while the main characteristics of the latter are that they do *not* have a verb and do *not* license structural Case. In this section, we are going to see a third type of sentences in SA, so-called participial sentences, where the main verbal element is a participle, a quasi-verbal/quasi-nominal element that licenses Acc Case but not Nom Case. I will first address the question of why participles do not license Nom Case, and then turn to the question of why they license structural Acc Case. Basically, participial sentences do not license Nom Case because they are ungrammatical in the VSO order, as (135) shows, where 'S' (like post-verbal DPs) is a subject that requires *structural* Nom Case. They are grammatical in the SVO order, as (136) shows, where 'S' (like preverbal DPs) is a topic that receives *default* Nom case at PF.

135. *ʕaarif-aa-t-un   l-mudarris-aa-t-u   l-xabar-a

       knowing-p-f-Nom   the-teacher-p-f-Nom   the-news-Acc

136. l-mudarris-aa-t-u   ʕaarif-aa-t-un   l-xabar-a

the-teacher-p-f-Nom   knowing-p-f-Nom   the-news-Acc

'the female teachers know (are knowing) the news'

I will finally show that the mechanism of Acc Case checking witnessed in participial sentences as well as the morphology of SA participles provides a Case-related argument against the notion that a clause is composed of two phases as far as Case checking is concerned. In particular, I will show that Acc Case is licensed via Agree between $v*^0$ and Fin^0 (as opposed to systems, like Chomsky (2001, 2005, and 2006) where Acc Case is assumed to be licensed to the object as a result of V^0 inheriting agreement and Case features from the lower phase head, $v*^0$).

5.5.1. Why Participles do not License Structural Nom Case

To answer the question implicit in the title of this section, and given the proposed theory of Case (where Nom Case is argued to be licensed as a result of valuing a [VC] feature on I^0 by Fin^0), there seem to be three hypotheses to be tested. Basically, participial sentences do not license Nom Case because they lack either Fin^0, or I^0, or [VC], or a combination thereof.

The first hypothesis is that participial sentences do not have the Fin^0 node. However, this hypothesis is untenable given the fact that such sentences have a CP layer, hence a FinP, as shown by (137-139).

137. ʔal-walad-u   ʕaarif-un   l-xabar-a

the-boy-Nom   knowing-Nom   the-news-Acc

'the boy knows (is knowing) the news'

138. ʔinna   ʔal-mudarris-aa-t-i   ʕaarif-aa-t-un   l-xabar-a

Comp   the-teacher-p-f-Acc   knowing-p-f-Nom   the-news-Acc

'certainly the female teachers know the news'

139. <u>man</u>   ʕaarif-un   l-xabar-a

    who   knowing-Nom   the-news-Acc

    'who knows the news?'

First, the fact that participial sentences are grammatical in the SVO order, as (137) shows, where 'S' is a topic, which occupies the Spec, TopP position (in the split Comp domain of Rizzi 1997) indicates that C^0/Fin^0 is available in these sentences.[146] Second, given the fact that participial sentences can (co-occur with or) be preceded by the Comp element 'ʔinna', as (138) shows, which I assume is merged in $Force^0$, indicates that such sentences are CPs. Third, the fact that participial sentences can form wh-questions, as (139) shows, indicates that the wh-moved element moves to Spec, CP (or to a Spec, position of a Comp-domain head). These facts thus show that participial sentences have the Fin^0 head. Thus the first hypothesis cannot be maintained.

The second hypothesis is that participial sentences do not have the I^0 node, where I^0 could be T^0, or $Mood^0$, or Agr^0, all associated with licensing structural Nom Case (in different clause types). Let us see if participles instantiate any of these three I-finiteness categories. First, examination of participial sentences like (140-141) reveals that they do not encode a [T] feature, and so do not instantiate a T^0 category. To illustrate, with a state-denoting participle, (140) can be interpreted

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[146] Here my analysis differs from Soltan's (2007) who suggests that the topic is in Spec, TP, which is an A-bar position for him. In fact, I do not disagree with the assumption that Spec, TP might be an A-bar position, but I disagree that the topic is always there. There are some data that suggest that the topic is higher than Spec, TP, like (i).

    i. ʔal-mudarris-uun   laa   yu-kallim-uun   *pro*   T-Taalibaat-i
       the-teacher-p.Nom   Neg   Impf-talk.m-p.Ind   ec   the-student.pf-Acc
       'the teachers do not talk to the female students'

Assuming that NegP is higher than TP (as argued in Soltan 2007), then the topic must be in Spec, TopP.

to denote present tense, and marginally refer to the future, but not past tense. Moreover, (141), with an event-denoting participle, can be interpreted to have future reference or even, though marginally, present tense, but crucially not past tense.

140. ʔal-mudarris-aa-t-u   ʕaarif-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'

141. ʔal-malik-u   ʕaazil-un   ʔibn-**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'

In other words, participial sentences can only have the default temporal interpretation, which is non-past. To establish that such sentences do not instantiate a tense category (T^0), I adopt Cowper's (2005) proposal of Infl features. Basically, Cowper proposes that Infl must have a number of interpretable features, among which [Precedence], which "establishes a marked relation (precedence rather than simultaneity or inclusion) between the clause and its temporal anchor" (p. 15). The absence of [Precedence] results in the unmarked relation of 'simultaneity', which basically denotes 'non-past'. As far as the temporal denotation of participles in SA is concerned, which is always 'non-past', this indicates that the functional head instantiated by participles does not include the marked feature [Precedence], which, as argues Cowper (2005:15) "is at the heart of what can be called the narrow tense system". This thus results in this functional head lacking (marked) tense interpretation, which correlates with the fact that participles, unlike

'regular' SA verbs, do not exhibit the full array of tense distinctions, namely, past and non-past. In other words, the absence of [Precedence], and hence of [T], is shown by the fact that the events or states denoted by participial sentences are anchored to the deictic center, which is the moment of speech, thus having only the unmarked interpretation, that is, having no independent temporal denotation of their own, and so no T^0. This reasoning is also in line with Cowper & Hall (2007:2), who assume that "[a] deictic clause without PRECEDENCE has non-past tense (present or future time reference)". Thus sentences which cannot exhibit the (past vs. non-past) tense distinctions have no [Precedence] feature, which indicates that they lack a TP.

Second, the fact that these sentences do not exclusively refer to the future, as do imperatives, indicates that they do not have a MoodP, since mood makes reference to futurity (Cowper 2005, Cowper & Hall 2007). In other words, referring to non-past means that such sentences refer to both present and future, which is the default temporal reference. Also, the fact that SA participles are ungrammatical in embedded clauses, as (142) shows, where subjunctive mood is assigned, as well as with optative mood particles, as (143) shows, indicates that participles do not instantiate a $Mood^0$ category.

142. *yu-riid-u   l-walad-u   [ʔan   laaʕib-un   bi-l-kurat-i]

    Impf-want-Ind   the-boy-Nom   Comp   playing-Nom   with-the-ball-Gen

143. *ya-drus-u   l-walad-u   likay   naajiH-un

    Impf-study-Ind   the-boy-Nom   so.that   succeeding-Nom

Third, examination of the data in (144-149) indicates that, unlike fully verbal elements which inflect for person, 1st, 2nd, and 3rd, as (144-146) respectively show, participles do *not* inflect for person, as (147-149) show; they only realize 3rd person morphology.

144. naHnu   **na-ʕrif-u**   l-xabar-a

    we   1p-know-Ind   the-news-Acc

'we know the news'

145. ?antum   **ta**-ʕrif-uun   l-xabar-a

    you.p   2-know-pm.Ind   the-news-Acc

    'you (p) know the news'

146. hunna   ya-ʕrif-na-Ø   l-xabar-a

    they.f   knowing-pf-Nom   the-news-Acc

    'they know the news'

147. naHnu   ʕaarif-aa-t-un   l-xabar-a

    we   knowing-p-f-Nom   the-news-Acc

    'we know the news'

148. ?antunna   ʕaarif-aa-t-un   l-xabar-a

    you.pf   knowing-p-f-Nom   the-news-Acc

    'you (pf) know the news'

149. hunna   ʕaarif-aa-t-un   l-xabar-a

    they.f   knowing-p-f-Nom   the-news-Acc

    'they (f) know the news'

I take the data (147-149) to indicate that participles cannot instantiate an Agr^0 category since they do not have a full set of unvalued (or uninterpretable) ϕ-features as a verbal category, of the sort Schütze (1997) and Chomsky (2001) argue available in English main clauses. The preceding discussion thus indicates that participles do not instantiate any of the categories involved in

licensing Nom Case crosslinguistically. Therefore, I take this conclusion as well as the temporal reference of SA participles, which is non-past, as evidence that participial sentences encode an [Asp] feature (which denotes imperfective aspect) on an Asp^0 head. This means that participles instantiate an AspP projection (in place of the TP/MoodP/AgrP projections instantiated by fully verbal elements).

The third hypothesis is that participial sentences do not have the [VC] feature. As far as Nom Case is concerned, and in light of the Case theory developed in chapter 4, I would like to argue that Asp^0 does *not* encode a [VC] feature (whereas $v*^0$ has one, hence Acc Case is licensed to the object). The assumption that Asp^0 does not have a [VC] feature is supported by the widely held assumption that 'aspect' is relevant for Acc rather than Nom Case. The proposal that aspect licenses Acc Case was made in Richardson (2007) for Belarusian, Russian, Ukrainian, Czech, Slovak, Polish, and Bosnian/Croatian/Serbian, and in Svenonius (2002a) for Icelandic. This way, if Asp^0 in SA participial sentences has a [VC] feature, Acc Case would be licensed to a post-participle nominal element, but this is *not* the case since the only post-participle nominal element in the sentence is the object, which receives structural Acc Case via Agree with $v*^0$. This state of affairs leads to the expectation that Nom Case is *not* licensed in participial sentences. Therefore, the fact that participial sentences are ungrammatical in the VSO order, as shown in (150), where 'S' is a subject, is accounted for.

150. *ʕaarif-aa-t-un   l-mudarris-aa-t-**u**   l-xabar-a

     knowing-p-f-Nom   the-teacher-p-f-**Nom**   the-news-Acc

The fact that they are grammatical in the SVO order, as in (151), where 'S' is a topic that receives default Nom case at PF, is also accounted for given the default case allowance that SA has.

151. ʔal-mudarris-aa-t-**u**   ʕaarif-aa-t-un   l-xabar-a

     the-teacher-p-f-**Nom**   knowing-p-f-Nom   the-news-Acc

   'the female teachers know the news'

Therefore, I argue that (150) is ungrammatical because the post-participle DP, 'l-mudarris-aa-t-u', meaning 'the female teachers', does not receive structural Nom Case in the post-participle position due to the absence of an I^0 node, which is responsible for checking Nom Case.[147] As for the [VC] feature, I propose that this feature is not available on the Asp^0 node; that is, it can only be seen on T^0, $Mood^0$, and $v*^0$ (as well as on Agr^0, but not in SA), and so the absence of I^0 indicates the absence of [VC] and hence Nom Case. Thus far, we have discovered that participial sentences have a FinP projection and an AspP projection, and lack an IP projection.

5.5.2. Why Participles License Structural Acc Case

To answer the question implicit in the title of this section, I will adopt an insight from traditional Arabic grammarians (Siibawayhi 8th century, and subsequent work) which amounts to the assumption that participles (both active and passive) are derived from present and past tense indicative VC verb forms. This thus indicates that these quasi-verbal elements start their life as category-less roots (as is the case with verbs), but then merge with a v^0 head, which turns them into verbs (in the indicative VC form). However, instead of merging with an I-finiteness head (T^0 or $Mood^0$) and instantiating an IP, as what happens in clauses with main verbs in SA, these verbs merge with a nominalizing head, which turns them into quasi-nominal elements, hence the absence of an IP (and Nom Case) and the presence of an AspP whose job is to convey the 'imperfective/incomplete action' denotation of the participle (as shown in the previous section).

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[147] The DP 'l-mudarris-aa-t-u' cannot receive default Nom in the VSO order since, being in the post-verbal Spec, v*P position, it counts as an argument (in the A-domain), where default case in SA applies to elements introduced in A-bar positions, like topics and predicates.

Thus the fact that participles do not co-occur with subjunctive and jussive VC-assigning particles, as (152-155) show, does *not* count as evidence that they do not receive VC or license structural Case.[148]

152. * **lan**   ʕaarif-un   l-walad-u   l-xabar-a

     Neg.Fut   knowing-Nom   the-boy-Nom   the-news-Acc

153. *ʔal-walad-u   **lan**   ʕaarif-un   l-xabar-a

     the-boy-Nom   Neg.Fut   knowing-Nom   the-news-Acc

154. * **lam**   ʕaarif-un   l-walad-u   l-xabar-a

     Neg.Pst   knowing-Nom   the-boy-Nom   the-news-Acc

155. *ʔal-walad-u   **lam**   ʕaarif-un   l-xabar-a

     the-boy-Nom   Neg.Pst   knowing-Nom   the-news-Acc

This is because indicative VC verb forms (which are considered the ancestors of participles) also do *not* co-occur with subjunctive and jussive VC-assigning particles, as (156-157) show.

156. ***lan**   ya-ktub-**u**   l-mudarris-u   d-dars-a

     Neg-Fut   Impf-write.sm-**Ind**   the-teacher-Nom   the-lesson-Acc

157. ***lam**   ya-ktub-**u**   l-mudarris-u   d-dars-a

     Neg-Pst   Impf-write.sm-**Ind**   the-teacher-Nom   the-lesson-Acc

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[148] These data indicate that participles do not encode a tense category (as argued in the previous section), since they are ungrammatical with tense-inflecting particles, which have an unvalued [T] feature that must be valued by a valued one in the Infl domain.

Thus, given TAG's insight that participles are derived from indicative verb forms, it is reasonable to assume that participles are also licensed structurally in the same manner indicative VC verb forms are. This reasoning predicts that, like indicative VC forms, participles are capable of licensing structural Case. Therefore, I claim that participles license structural, rather than lexical, Acc Case to the object, as shown in (158).

158. ʔal-mudarris-u ya-ktub-u   d-dars-**a**

  the-teacher-Nom Impf-write.sm-Ind the-lesson-**Acc**

  'the teacher writes the lesson'

Given the Case theory presented in chapter 4, Acc Case can be licensed to the object if the Fin^0 head has a [VC] feature, which is only possible iff the XP selected by Fin^0 has a categorial [V] feature as well as an I-finiteness feature ([T], [Mood], [φ]). Given the observation that participles are *quasi-verbal elements*, the selected XP (which is AspP) has a categorial [V] feature. The remainder of this section will be devoted to showing that the proposed theory of Case can account for the Acc Case on the object in (158). Before that, however, I will discuss another aspect of the morphosyntax of SA participles.

The previous section established that participles lack tense, mood, and agreement, and so do not project an IP, hence the absence of Nom Case. More specifically, the data (144-149) established that, unlike main verbs, participles do not encode agreement as a verbal feature; that is, they do not have a full <u>set of unvalued φ-features</u> that might be valued by those of a DP goal. In other words, as verbal elements, participles do not have [φ]. Despite this finding, I would like to argue that participles encode [φ], but as a nominal feature, being also *quasi-nominal elements*. In other words, I would like to argue that, despite appearances, SA participles encode agreement features, and that they in fact are φ-complete. This claim is based on the observation that participles are *also* nominal elements, which indicates that they are like nouns in that they have a full <u>set of valued φ-features</u>, encoding 3rd person. If this observation is on the right track, then SA participles do not lack [Person], unlike their English counterparts (Chomsky 2001:8). But do SA

participles show any signs of 'nominal' behavior? In fact they do. The assumption that SA participles are nominal elements is supported by the fact that they can realize nominal case marking morphologically, as (159-160) show.

159. ʔal-walad-u   ʕaarif-**un**   l-xabar-a

     the-boy-Nom   knowing-**Nom**   the-news-Acc

     'the boy knows the news'

160. <u>kaana-Ø</u>   l-walad-u   ʕaarif-**an**   l-xabar-a

     Pst.be.3sm-Ind   the-boy-Nom   knowing-**Acc**   the-news-Acc

     'the boy knew the news'

The sentence (159) shows that the participle realizes default Nom case (being preceded by *no* case assigner), whereas (160) shows that it realizes lexical Acc case assigned by the copular verb.[149]

It is noteworthy that this view of participles as encoding a complete set of valued ϕ-features contrasts with Chomsky's (2004:113) view where he argues that "[p]articiples are not complete (lacking person) and do not check Case. T may be complete or defective; if the latter it does not check Case". However, comparison between the English participles and the SA ones reveals that while the former can co-exist with auxiliary verbs which occupy T^0 and encode agreement (and

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[149] Amritavalli & Jayaseelan (2005) state that "[gerunds in Kannada] can be case-marked and the case marker in each case is that of the grammatical relation of the gerundive phrase to the rest of the sentence" (p. 183). They also state that "the same, standard dialect of Kannada allows the "unrealized" infinitive to carry an overt dative case, especially in the spoken language" (p. 188). They also observe that "[in Malayalam] the gerund is marked with the case appropriate to its position in the sentence" (p. 197). Likewise, George & Kornfilt (1981:109) state that "a gerund in a given context is assigned just the Case that a lexical NP would have in the same context". I understand that gerunds and infinitives are not fully verbal elements, and so this will not be brought up except with reference to participles in SA.

tense), the latter do not co-exist with auxiliaries (hence the absence of T^0) and realize agreement themselves when they move to the Asp^0 head. In fact, the claim that SA has an Asp^0 head that is ϕ-active/-complete is made in Soltan (2007:194-195) as he accounts for multiple agreement structures in the language. Therefore, I will argue that SA participles are ϕ-complete, or at least as ϕ-complete as any other noun (encoding 3rd person, by nature); this approach to participles as nominal elements is reminiscent to that assumed by TAGs, who called them 'agentive nouns', since they denote the 'doer' of the action expressed by the verb.[150] This way, Asp^0 has a valued set of ϕ-features since the participle is nominal; that is, Asp^0 does not have to enter an Agree relation with a DP to get its ϕ-features valued.

However, though complete, the ϕ-features on the participle do *not* instantiate an AgrP, which could license Nom Case, for two reasons. First, ϕ-features are always defective in SA, unless *pro* must be licensed, which is the case of SVO and verbless sentences. Thus in normal circumstances, ϕ-features have no role in licensing structural Case in the language, except in the

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[150] Being nominal elements, participles can be viewed as ϕ-complete as nominal predicates in verbless sentences, which can be argued to come from the lexicon with a full set of valued ϕ-features since mismatch in terms of ϕ-features between the topic and the predicate does not result in ungrammaticality/crash, as (i-ii) show, thus suggesting that no ϕ-feature valuation takes place between the topic and the predicate.

    i. ʔal-mudarris-uun   majmuuʕa-t-un   mujtahida-t-un

      the-teaxher.**m**-**p**.Nom   group.**s**-**f**-Nom   hard.working-f-Nom

      'the male teachers are a hard-working group'

    ii. ʔal-mudarris-aa-t-u   fariiq-un   mariH-un

      the-teaxher-**p**-**f**-Nom   team.**sm**-Nom   interesting-Nom

      'the female teachers are an interesting team'

If this similarity between verbless sentence predicates and participles is on the right track, sentences like (iii-iv) are expected. Thus the participle in (iv) is as ϕ-complete as the nominal predicate in (iii).

    iii. ʔar-rajul-u   <u>mutarjim-un</u>

      the-man-Nom   translator-Nom

      'the man is a translator'

    iv. ʔar-rajul-u   <u>mutarjim-un</u>   l-qiSSa-t-a

      the-man-Nom   translating-Nom   the-story-f-Acc

      'the man is a translating/is going to translate the story'

case of participles, by virtue of also being nominal elements; that is, [φ] on participles is a nominal not a verbal feature. Second, as we will see in section 5.6, unlike φ-complete T^0 (in SVO and verbless sentences), the φ-complete Asp^0 (in participial sentences) does *not* license the *pro* in the Spec, v*P position (by recovering its φ-content), since the two elements, participle and *pro*, might have different sets of φ-features; more on this in section 5.6. Nonetheless, the post-participle *pro* is merged in Spec, v*P (to license the topic merged in Spec, TopP) where it receives the external θ-role from the participle.

Moreover, following Rizzi's (1997) assumption that the Comp domain encodes the same inflectional properties found in the Infl domain, I assume that Fin^0 has an unvalued set of φ-features. By the same token, and given the observation that Asp^0 encodes a valued (imperfective) [Asp] feature, then Fin^0 has an unvalued [Asp] feature. However, as argued in the previous section, Asp^0 has *no* [VC]; this reasoning is supported by the widely held assumption that it is I^0, not Asp^0, which is relevant for Nom Case checking. Thus, the proposed theory of Case expects Nom Case *not* to be licensed in participial sentences due to the absence of the IP projection and, as a result, the [VC] feature.

Now, let us see how the proposed system as well as the preceding discussion can account for Case checking in participial sentences. The sentence (161) receives the clause structure in (162).

161. ʔal-mudarris-aa-t-u   ʕaarif-aa-t-un   l-xabar-**a**

     the-teacher-p-f-Nom   knowing-p-f-Nom   the-news-**Acc**

     'the female teachers know the news'

162.

$$TopP$$

the-teachers ʔal-mudarris-aa-t-u$_i$ AspP

know ʕaarif-aa-t-un   Asp   v*P

pro$_i$ v*'

know ~~ʕaarif-aa-t-un~~ v*   VP

know ~~ʕaarif-aa-t-un~~ V   DP

the-news   l-xabar-a

Merge and Case checking proceed as follows. The participle is merged in V^0 with a valued categorial [V] feature (being a quasi-verbal element), with the object (which has an unvalued [Case] feature) in its complement position; v^{*0} is merged with an unvalued [VC] feature, with the VP, forming the v*P projection; *pro* is merged in Spec, v*P as the external argument that licenses the pre-participle DP topic through co-indexation. The valued categorial [V] feature on the participle gets 'projected' to the highest verbal projection in the clause, v*P. Having a valued categorial [V] feature, v*P gets selected by an Asp^0 with an unvalued categorial [V] feature, a valued [Asp] feature, and a set of valued [ɸ] features. Match between the two [V] features, valued on v*P and unvalued on Asp^0, takes place, resulting in valuing [V] on Asp^0, via Agree. With a now valued categorial [V] feature (the participle being quasi-verbal) and a valued set of ɸ-features (the participle being quasi-nominal), the AspP (instantiated by the participle) gets selected by a Fin^0 with an unvalued categorial [V] feature, an unvalued [Asp] feature, an unvalued set of [ɸ] features, and a valued [VC] feature. Agree between Fin^0 and Asp^0 takes place, resulting in valuing [V], [Asp], and [ɸ] on Fin^0. Now, v^{*0} enters an Agree relation with Fin^0, which results in valuing the [VC] feature on v^{*0}. Then, the object enters an Agree relation

with v^{*0}, which results in valuing the [Case] feature on the object as [Acc]. Given the absence of I^0, 'Agree as feature sharing' does not take place, thus prompting Agree between v^{*0} and Fin^0. Now, the topic is merged in Spec, TopP, and receives default Nom at PF. Thus the Acc Case licensed by v^{*0} to the object results from an Agree relation between v^{*0} and Fin^0; the next section capitalizes on this observation. Note that the external argument *pro* in participial sentences (like the one in verbless sentences) does not receive a Nom Case value, unlike the one in SVO verbal sentences. This issue is taken up in section 5.6.

5.5.3. Structural Case in SA and Phases

Given the proposal of structural Acc Case licensing in section 5.5.2, it seems that the clause has no lower phasal head; that is, the sentence is one phase as far as Case checking is concerned. In this section, I will provide a morphological argument for the assumption that Acc Case in participial sentences is licensed by Fin^0, as is proposed for sentences with 'regular' verbs, thus against extending Chomsky's (2005, 2006) proposal that Acc Case is licensed when V^0 inherits the Case and agreement features from v^{*0} (the lower phase head) to SA. Before I do so, I think it will be more meaningful if I first restated the main proposal and the arguments for it.

In this thesis, I have argued that Nom and Acc Cases are licensed to the subject and object, respectively, by unvalued [VC] features on I^0 and v^{*0}, respectively, which become valued via Agree with a valued [VC] feature on Fin^0. Thus DP licensing is provided by the Comp domain. I arrived at this conclusion through two observations. First, verbs in SA receive a form of Case, VC, which is morphologically realized. Second, structural Case is not licensed if verbs are not licensed through VC checking, with m-vc being the visible sign of verbal licensing (in the same way m-case is a sign of Case/DP licensing, Vergnaud 1977, Chomsky 1980). The relevant point here is that m-vc indicates abstract verbal licensing from the Comp domain.

Though I do not deny the feasibility of Chomsky's (2005, 2006) notion of 'feature inheritance' and his proposal that Case is licensed by the phase heads, C^0 and v^{*0} after T^0 and V^0, respectively, inherit the agreement and Case checking properties from them (given the

assumption that a sentence has two phases) for other languages, I will present an argument to the effect that even Acc Case is licensed as a result of an Agree relation between v^{*0} and Fin^0. The advantage of this proposal (over Chomsky's) is that now both Case values, Nom and Acc, are licensed by functional heads, I^0 and v^{*0}. I will basically show that, like 'regular' verbs, participles realize VC morphologically. Therefore, if the VC morphology is effected by Comp elements (particles), then whatever structural Case value participles come to license must be considered the result of licensing from the Comp domain through VC checking (as evidenced by VC assignment, shown by the morphology). Thus participles start from category-less roots, and before becoming nominal elements, they take on some verbal nature.

To illustrate, in the previous section, we saw that participles realize nominal Case morphologically; since they are very relevant, the data are repeated in (163-164). The participle in (163) realizes default Nom, as does the topic, 'the boy', and lexical Acc by 'kaana' in (164).

163. ʔal-walad-u   ʕaarif-**un**   l-xabar-a

the-boy-Nom   knowing-**Nom**   the-news-Acc

'the boy knows the news'

164. kaana   ʔal-walad-u   ʕaarif-**an**   l-xabar-a

Pst.be.3sm   the-boy-Nom   knowing-**Acc**   the-news-Acc

'the boy knew the news'

I now move on to the VC morphology. The sentence (163), now with a more detailed gloss of the suffix on the participle, as in (165), shows that the participle carries both m-case (boldfaced) and m-vc (underlined). It is noteworthy that (up to my knowledge) this is the first time that this property of participles is pointed out.

165. ʔal-walad-u   ʕaarif-**u-**n̲   l-xabar-**a**

the-boy-Nom   knowing-**Nom**-<u>Ind</u>   the-news-**Acc**

'the boy knows the news'

The fact that the suffix '-n' on the participle (in (165)) is m-vc similar to that seen on indicative verbs (but not subjunctive and jussive ones, since participles are derived from indicative VC forms, TAGs) is supported by the data in table 2.[151]

Table 2

		Indicative-marked Forms	**Participle Forms**
1.	1s	ʔa-drus-u 1-study-Ind	daaris-u-**n** studying-Nom-Ind
2.	1p	na-drus-u 1p-study-Ind	daaris-uu-**n** studying-p.Nom-Ind
3.	2sm	ta-drus-u 2-study-Ind	daaris-u-**n** studying-Nom-Ind
4.	2sf	ta-drus-ii-**n** 2-study-f-Ind	daaris-at-u-**n** studying-f-Nom-Ind
5.	2dm	ta-drus-aa-**n** 2-study-d-Ind	daaris-aa-**n** studying-d.Nom-Ind
6.	2df	ta-drus-aa-**n** 2-study-d-Ind	daaris-at-aa-**n** studying-f-d.Nom-Ind

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[151] One observation about the data in this table is that '-aa-' and '-uu-' refer to [Number] when on verbs, but to [Number] and m-case when on participles. While this gloss is right (given certain diagnostics), it is not clear to me why the same morpheme has different denotations when on different lexical categories. When on participles, these suffixes behave in the same way they do when on nouns.

7.	2pm	ta-drus-uu-**n**	daaris-uu-**n**
		2-study-p-Ind	studying-p.Nom-Ind
8.	2pf	ta-drus-na-Ø	daaris-aa-t-u-**n**
		2-study-pf-Ind	studying-p-f-Nom-Ind
9.	3sm	ya-drus-u	daaris-u-**n**
		Impf-study-Ind	studying-Nom-Ind
10.	3sf	ta-drus-u	daaris-at-u-**n**
		f-study-Ind	studying-f-Nom-Ind
11.	3dm	ya-drus-aa-**n**	daaris-aa-**n**
		Impf-study-d-Ind	studying-d.Nom-Ind
12.	3df	ta-drus-aa-**n**	daaris-at-aa-**n**
		f-study-d-Ind	studying-f-d.Nom-Ind
13.	3pm	ya-drus-uu-**n**	daaris-uu-**n**
		Impf-study-p-Ind	studying-p.Nom-Ind
14.	3pf	ya-drus-na-Ø	daaris-aa-t-u-**n**
		Impf-study-pf-Ind	studying-p-f-Nom-Ind

As table 2 shows, the indicative m-vc suffix is '-u' when preceded by a consonant, and '-n' when preceded by a vowel. Similarly, given the observation that participles are nominal elements that must appear with the default Nom case specification/suffix when in isolation, which is a vowel, it is now clear that the m-vc suffix on those elements must be '-n', which is confirmed by the facts in table 2.[152] In other words, if we accept the proposal that in verbal sentences (ones with

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[152] One possible problem with this view is that if participles become verbs before they become nouns (as proposed in this thesis), then the indicative VC morphology should be closer to the root than the Nom case morphology, unless we can argue that the participle receives verbal licensing (signaled by m-vc) after it becomes a quasi-nominal element (having received default Nom or lexical Acc), that is, after it moves from $v*^0$ to Asp^0; this is because one

regular verbs) DPs are licensed through the licensing of verbs by Fin^0 (through valuing [VC] on I^0 and $v*^0$ by Fin^0), seen as m-vc, then we must accept the intuitive extension that the object DP in a sentence with a participle is licensed (with Acc Case) through the licensing of the (verbal element in the) participle by Fin^0.[153]

This state of affairs thus indicates that participles, like fully verbal elements, can receive a VC. As far as my proposal is concerned, this means that the Case-related functional head instantiated by the participle, which is $v*^0$, receives the ability to license Acc Case by getting its unvalued [VC] valued via Agree with Fin^0, which appears as the m-vc suffix, '-n'. That this reasoning is on the right track is shown by the fact that when this m-vc suffix disappears (which indicates that $v*^0$ does *not* enter an Agree relation with Fin^0 to get its unvalued [VC] feature valued), Acc Case is *no* longer licensed to the object. This situation is illustrated by (166).

166. ʔal-walad-u   ʕaarif-**u**   l-xabar-**i**   jaaʔa-Ø

the-boy-Nom   knowing-**Nom**   the-news-**Gen**   Pst.come.3sm-Ind

'the boy knowing the news came'

The participle in (166) does not show any indicative m-vc morphology, which indicates that it has no Acc Case checking abilities, a prediction that is borne out by the fact that the following nominal realizes Gen Case, not Acc. The assumption that the underlined element in (166),

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might also argue that regular verbs receive verbal licensing after they move from $v*^0$ to T^0 (which they always do in SA). I will leave this question and others related to the relation between m-case and m-vc for future investigation.

[153] One question that arises in this regard is whether the analysis proposed for the suffixes of participles can be extended to the suffix of a noun like 'kitaab-un', meaning 'a book'. Since, unlike the participle, which is a quasi-nominal quasi-verbal element (and so has both a nominal case suffix and a verbal case suffix), 'kitaab-u-n' is a fully nominal element, and so its first suffix '-u' is the case suffix (since it changes into '-a' when it realizes Acc Case), whereas the second suffix '-n' might be treated as an indefinite determiner since it disappears in the construct state construction, like 'kitaab-u l-walad-i', meaning 'the boy's book'; this is because by defining the book as being that of the boy, we are making it definite, and so the indefinite determiner drops.

compared to the one in (165), is a purely nominal element is shown by the fact that it forms a Construct State (CS) sequence with the following noun, which results in assigning Gen case to the latter. CS sentences in SA are only formed out of two nouns.

This thus shows that Acc Case is licensed by $v*^0$ via Agree with Fin^0, without the need for a lower phasal head (that might be available but with no Case utility) to pass on its Case licensing properties to $v*^0$. While it is not my intention in his thesis to argue against phase theory, I believe that these facts provide a Case-related argument against phase theory, as laid out in Chomsky's recent writings (2001 through 2006). But are there other arguments against phase theory? As it turns out, yes. However, since it is not my goal to argue against phase theory, I will just refer the interested reader to Boeckx (2008:ch. 3), where he presents the conceptual arguments for phases as well as a number of arguments raised against the very notion of 'phase' and its presumed minimalist character.[154]

5.6. The Structure of *pro* and its Case Requirements[155]

This section presents a proposal for the structure of *pro*, which has implications for its Case requirements. The question that this proposal aims to eventually address is whether or not *pro* receives structural Case. As we saw in chapters 2-5, *pro* receives Nom Case in SVO sentences, but not in verbless and participial sentences, where Nom is not licensed. To answer the Case-

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[154] Chomsky (2001:14) states: "Some phases are strong and others weak – with or without the EPP option, respectively, hence relevant or not for Spell-Out and the general principle (10) [which says] Ph_1 is interpreted/evaluated at Ph_2". This thus indicates that if a phasal head does not have the EPP requirement, the respective phase is weak and so irrelevant for Spell-Out. Given the fact that SA does not exhibit object movement to Spec, $v*P$ (except in the object shift structure (VOS), which is an instance of A-bar movement, and crucially is optional and highly literary), one could argue that $v*^0$ has no EPP requirement (where VOS results from the object having an unvalued [Focus] feature that must be valued by a valued counterpart on $v*^0$), hence $v*P$ is a weak phase, and so it does not get to be spelled out until the next phase (CP) is introduced, where Fin^0 licenses Case to both phases by valuing [VC] on I^0 and $v*^0$. This reasoning could thus mean that the SA clause is one phase (as far as Case checking is concerned).

[155] It is noteworthy that the proposal laid out in this section is similar to that of the Basran grammarians who maintained that "a (phonetically realized) bound pronoun [meaning agreement] is generated in an argument position at D-structure, and later incorporated into a governor at S-structure" (Fassi Fehri 1993:96).

related question, let us first address the structure one. The question about the structure of *pro* makes reference to the nature of the subject in the SVO structure, as in (167), where it receives Case.

167. ?al-mudarris-aa-t-u   [ya-ʕrif-na-Ø   *pro*   l-xabar-a]

     the-teacher-p-f-Nom   Impf-know-pf-Ind   ec   the-news-Acc

     'the female teachers know the news'

In chapter 2, we learned that the Basran grammarians of Arabic argue that the subject in (167) is the pronominal agreement affixed on the verb, which is in line with Platzack's (2003) proposal that AGR in (167) constitutes a pronoun. In contrast, Soltan (2007) argues that the subject in (167) is *pro*. As far as this thesis is concerned, I think that the two approaches are on the right track. My view is a reconciliation of the two views. Basically, I argue that the subject in (167) is *pro* merged in Spec, v*P, but then *pro*, which is actually the agreement morphology (or morpheme), moves to I^0 to be realized by the verb.[156]

In other words, I argue that *pro* is merged with two indices, one semantic and one phonetic, both being involved in licensing the topic that *pro* is co-indexed with. The semantic index remains in its base-generated position (Spec, v*P/Spec, PredP) so as to transmit the external θ-role (received from the verb/predicate) to the topic at LF. By contrast, the phonetic index moves to I^0 in SVO sentences (where agreement constitutes a pronoun) to avoid being a stranded affix,

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[156] Soltan (2007) argues that one problem with assuming that the agreement morphology on the verb in the SVO order is argumental (which is the Basran grammarians' view) is that in the VSO order the verb still realizes gender agreement with the subject, which amounts to saying that the verb has two external arguments, the incorporated pronoun (gender affix) on the verb and the overt DP subject. This way, argues Soltan, one will have to assume that gender morphology does not constitute a pronoun, an assumption that Soltan's *pro* analysis does not require. However, given Platzack's (2003) assumption that φ-incomplete agreement does not count as a pronoun, one can argue that the gender agreement on the verb in the VSO order is not pronominal, and so the VSO sentence has one subject, which removes the rationale for Soltan's objection. This way, the assumption that the gender morphology alone does not constitute a pronoun is actually well-motivated, since a pronoun, which is technically a DP, must have all its three φ-features, [Person], [Gender], and [Number], realized.

which is how it gets to be spelled out. In this regard, Platzack (2003:335) states that "[s]ince agreement is an affix, it must be linked to a head. One possibility is that it is linked to the higher T, and that the verb subsequently has to raise to T in order to avoid a violation of the Stranded Affix filter, which says that an affix must be attached to a phonologically realized head". Thus *pro* is (spelled out) on the verb which reveals its φ-content, thus indicating that it is licensed. This way, the Basran grammarians' (traditional) view that AGR is an affixed pronoun meets Platzack's (generative) proposal that AGR in SA is pronominal.

Thus *pro* amounts/refers to the agreement morphology/morpheme on the verb (which is a unification of the Basrans' and Soltan's views on the nature of the subject in SVO structures). However, the question becomes as to how the phonetic index of *pro* is morphologically realized in verbless and participial sentences, where it does not seem to move to I^0 and Asp^0, respectively. I will respond to this question at the end of this section since the answer makes reference to issues that will be discussed soon.

Now, I move to the issue of whether or not *pro* must receive structural (Nom) Case. The relevant sentence types are presented in (168-170).

168. ʔal-mudarris-aa-t-u   sharaH-na-Ø   *pro*   d-dars-a

the-teacher-p-f-Nom   Pst.explain.3-pf-Ind   ec   the-lesson-Acc

'the female teachers explained the lesson'

169. ʔal-mudarris-aa-t-u   *pro*   Tayyib-aa-t-un

the-teacher-p-f-Nom   ec   nice-p-f-Nom

'the female teachers are nice'

170. ʔal-mudarris-aa-t-u   ʕaarif-aa-t-un   *pro*   l-xabar-a

the-teacher-p-f-Nom   knowing-p-f-Nom   ec   the-news-Acc

'the female teachers know the news'

The licensing of *pro* in these sentences is necessary for licensing the underlined DP topic (in Spec, TopP) through co-indexation, which indicates that *pro* must itself be licensed by a φ-complete X^0, which seems to be the case given the fact that the verb in (168) realizes full subject agreement, and the assumption that the I^0 in (169) is φ-complete (since verbless sentences are ungrammatical with the non-φ-inflecting negative particles) as well as the observation that participial sentences have a φ-complete Asp^0, given the fact that they are also nominal elements. However, this issue is not as straightforward as it looks. Basically, I will argue that while the φ-complete I^0 in SVO and verbless sentences can license *pro* by revealing its φ-content (which then can license the topic in the A-bar domain), Asp^0 does *not* license the *pro* argument in participial sentences, since though Asp^0 is φ-complete, encoding [Number, [Gender], and 3rd [Person], *pro* can have the same [Number] and [Gender] specification as does the participle, but may encode a 1st or a 2nd or a 3rd [Person] feature. In other words, the φ-specifications on *pro* and the participle/Asp^0 are *not* identical, which indicates that the two elements, *pro* and Asp^0, have *two* sets of φ-features.

Nonetheless, the question remains as to why *pro* receives Nom Case only in SVO sentences. The answer to this question will be provided in light of the aforementioned observation. Given the proposed system, the *pro* in (168) receives a Nom Case value from I^0, which amounts to licensing the Nom Case feature on I^0 (in the absence of an overt DP subject). In contrast, the *pro* in (169-170) does not receive a Nom Case value since Nom Case is not licensed in these two sentence types. This situation leads to a non-uniform treatment of *pro*.[157] To resolve this issue, I will present the following solution.

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[157] In fact, it could be argued that this state of affairs should not be viewed as catastrophic. To illustrate, since *pro* is phonetically null, it does not need Case for the Case Filter purposes. Also, since *pro* is co-indexed with an A-bar element, which has the feature [Topic], then, as assumed in chapter 4, this element will be visible at LF (for θ-role assignment purposes) by [Topic], since [Topic] is in complementary distribution with [Case]; thus the two Case-related conditions (Case Filter and Visibility Condition) will be satisfied even if *pro* does not receive Case. Moreover, the assumption that *pro*, unlike phonetically overt DPs merged in the A-domain, has no 'special' Case

To address this question, I will adopt the conception of conflation assumed in Hale & Keyser (2000:1), which refers "to the "fusion of syntactic nuclei" which accounts for derivations in which the phonological matrix of the head of a complement (say N) is inserted into the head, empty or affixal, which governs it, giving rise to a single word …". The notion of conflation is often used to account for the licensing of Acc Case when unergative verbs, like 'laugh', have no overt cognate objects. Basically, the movement of the lexical head N^0 from the complement position to the empty head V^0 amounts to the licensing of the Acc Case feature on $v*^0$. With this background, I would like to extend this concept of conflation to the licensing of Nom Case in the absence of an overt DP subject. Basically, I argue that the movement of *pro* (being the 'agreement morpheme', thus with a phonological matrix) to I^0 amounts to the licensing of Nom Case. In other words, I propose that by moving to I^0 and being spelled out by the verb, *pro* basically conflates into the I^0 head, which crucially amounts to licensing the Nom Case on I^0. Given this proposal, *pro* can be argued to neither require nor receive Case, since the Nom Case on I^0 is licensed simply by virtue of I^0's hosting the pronominal AGR. Given this approach, the three relevant sentence types witness the three courses of events in (171-173).

171. SVO sentences: since there is a verb, pronominal ϕ/AGR moves to I^0 (where it is spelled out) which amounts to licensing the Nom Case feature on I^0, thus the derivation crash is avoided.

172. Verbless sentences: since there is *no* verb, pronominal ϕ/AGR does *not* move to T^0, thus *no* Nom Case on I^0 is licensed (and a derivation crash is avoided), which is confirmed by the proposal that I^0 of verbless sentences licenses *no* Nom Case.

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requirements can be supported by the observation that it can be licensed by a Case checking category, like I^0 with a [VC] feature, as in SVO sentences, as well as by a non-Case checking category like I^0 with no [VC] feature, as in verbless sentences. Thus instead of positing two *pro* elements, one receives Case and the other does not, one could just assume that *pro* can, but does not have to, receive Case.

173. Participial sentences: the presence of the participle in Asp^0 indicates that pronominal ϕ/AGR should move to Asp^0 (where it can be spelled out), which amounts to licensing a Nom Case feature on Asp^0. However, since Asp^0 has *no* Nom Case feature (given the proposed system), then I claim that ϕ/AGR in participial sentences does *not* move to Asp^0. This claim is supported by the fact that Asp^0 has a full set of ϕ-features since it is occupied by a nominal element that is ϕ-sufficient. In other words, a participial sentence has two sets of ϕ-features, one represented by the *pro* merged in Spec, v*P and which is a copy of the ϕ-features on the topic (since *pro* licenses the topic), and the other is represented by the participle, which, being a nominal element, has its own ϕ-features (encoding 3rd person). This analysis is supported by the data in (174-176) which show that *pro* can be co-indexed with either a 1st or a 2nd or a 3rd person denoting topic despite the fact that the participle always realizes 3rd person morphology (being a nominal). This fact indicates that the participle does not reveal the ϕ-content of *pro*, and so Asp^0 neither hosts nor licenses *pro*.

174. naHnu$_i$ ʕaarif-aa-t-un   *pro*$_i$ l-xabar-a

    we   knowing.**3**-p-f-Nom   ec   the-news-Acc

    'we know the news'

175. ʔantunna$_i$ ʕaarif-aa-t-un   *pro*$_i$ l-xabar-a

    you.pf   knowing.**3**-p-f-Nom   ec   the-news-Acc

    'you (pf) know the news'

176. hunna$_i$ ʕaarif-aa-t-un   *pro*$_i$ l-xabar-a

    they.pf   knowing.**3**-p-f-Nom   ec   the-news-Acc

    'they.pf know the news'

Thus, while pronominal ϕ/AGR in verbless sentences does not move to I^0 (which indicates that *no* Nom Case is licensed) because of the absence of the verb/host, pronominal ϕ/AGR in participial sentences does not move to Asp^0 (which indicates that *no* Nom Case is licensed) for lack of a *vacant* host, since Asp^0 has its own independent valued set of ϕ-features. In contrast, pronominal ϕ/AGR in SVO sentences moves to I^0 since there is a *vacant* host (the verb). Assuming this approach to *pro* means that it does not receive structural Case, since Nom on I^0 in SVO sentences is not licensed to it. This approach, I think, provides a uniform treatment of *pro*.

Now my claim that (unlike AGR on I^0) AGR on Asp^0 does *not* constitute a pronoun that results from the movement of *pro* to Asp^0 (which indicates that the ϕ-content of *pro* and the ϕ-content on Asp^0 are *not* identical) receives support from the fact that while the A-domain in an SVO sentence is a grammatical clause/utterance, the A-domain in a participial sentence is not, as shown by (177-180).

177. ʔal-mudarris-aa-t-u   [ya-ʕrif-na-Ø   *pro*   l-xabar-a]

     the-teacher-p-f-Nom   Impf-know-pf-Ind   ec   the-news-Acc

     'the female teachers know the news'

178. ʔal-mudarris-aa-t-u   [ʕaarif-aa-t-un   *pro*   l-xabar-a]

     the-teacher-p-f-Nom   knowing-p-f-Nom   ec   the-news-Acc

     'the female teachers are knowing/know the news'

179. ya-ʕrif-na-Ø   *pro*   l-xabar-a

     Impf-know-pf-Ind   ec   the-news-Acc

     'they (female) know the news'

180. * ʕaarif-aa-t-un   *pro*   l-xabar-a

knowing-p-f-Nom   ec   the-news-Acc

The ungrammaticality of (180), compared to the grammaticality of (179), can be accounted for by the fact that while the ϕ-content of *pro* in (179) is recovered by the verb (pronominal AGR on I^0) since *pro* moves to I^0, the ϕ-content of *pro* in (180) is not recovered by any element in the clause (in the absence of the topic), since *pro* does not move to Asp^0. This is why (180) can have three interpretations, as (181-183) show.

181. hunna   [ʕaarif-aa-t-un   *pro*   l-xabar-a]

they.f   knowing-p-f-Nom   ec   the-news-Acc

'they.f are knowing/know the news'

182. ʔant-unna   [ʕaarif-aa-t-un   *pro*   l-xabar-a]

you-pf   knowing-p-f-Nom   ec   the-news-Acc

'you.pf are knowing/know the news'

183. naHnu   [ʕaarif-aa-t-un   *pro*   l-xabar-a]

we   knowing-p-f-Nom   ec   the-news-Acc

'we are knowing/know the news'

Moreover, the fact that (179) is grammatical, since the ϕ-content of *pro* is recovered, indicates that *pro* licenses a phonetically null topic (in Spec, TopP), whose ϕ-content is recovered by the verb. The presence of this phonetically null topic, which is co-indexed with *pro*, is important for making *pro* visible at LF for θ-role assignment purposes. The absence of the ϕ-content of such an element (phonetically null topic) in (180), since the participle does recover the ϕ-content of the *pro* (which, in turn, cannot recover the ϕ-content of this topic) results in *pro* not being visible

at LF for θ-role assignment, which, in turn, result in a Theta Criterion violation (Chomsky 1981).

In response to the question raised earlier in this section about how the phonetic index of *pro* gets spelled out in verbless and participial sentences, I present the following scenario. I will assume that the phonetic index of *pro* does not move from Spec, PredP. This is because there is no verb in verbless sentences. In participial sentences, the phonetic index of *pro* does not move to Asp^0, since the participial in Asp^0 (unlike the verb in I^0 in SVO sentences) has its own agreement features, thus is not a vacant host. Thus to answer the question of how the phonetic index of *pro* gets spelled out in these two sentence types, I will assume that it gets spelled out by the topic, as a last resort mechanism, since the two sets of ϕ-features on both, *pro* and the topic, are identical. Thus far, we saw that *pro* does not require structural Case, but what about its visibility at LF for θ-role assignment, being an argument. I argue that *pro* becomes visible by the feature of the element with which it is co-indexed, [Topic].

6. Conclusions and Extensions

This chapter starts with a summary of the conclusions arrived at in the previous chapters. It then attempts to promote the proposed theory of Case by attempting to apply it to some English data.

6.1. Conclusions

Given the data, discussion, analyses, and proposals in the previous chapters, we reach the conclusions in (1-12).

1. The SA verbal suffixes are not mood suffixes, but rather (verbal) Case suffixes.

2. Verbs in SA receive a form of Case, called Verbal Case (VC). The proposed system of VC effects two operations: VC checking and VC assignment. VC checking refers to the valuation of the unvalued [VC] features on I^0 and v^{*0} by the valued [VC] feature on Fin^0. VC assignment refers to the operation whereby the verb receives a morphology-relevant VC specification (m-vc) from a VC-assigning particle.

3. Agreement in terms of ϕ-features and tense do *not* license structural Case in SA.

4. Argument DPs are not licensed unless verbs are licensed through VC checking. Thus DPs are licensed by the same feature that licenses verbs, [VC], encoded on the functional heads associated with the verb, I^0 for Nom, and v^{*0} for Acc.

5. Tense, mood, and agreement, which constitute I-finiteness, do not license structural Case in SA, but rather help license VC. VC, which constitutes C-finiteness, licenses structural Case. Fin^0 has a [VC] feature iff it selects an XP that has both a categorial [V] feature and (at least) one I-finiteness feature.

6. In the presence of the structural Case checking categories, I^0 and $v*^0$ with [VC] features, structural Case checking takes place resulting in Nom and Acc being licensed to the subject and object, respectively. In the absence of structural Case checking categories, two case-related scenarios are possible. If there are lexical case assigners, like Comp-element nominal particles (and verbs), lexical case assignment takes place; otherwise, default case specification takes place. The lexical case in SA is Acc and the default case is Nom.

7. *pro* does not receive Case, but structural Nom Case is licensed on the relevant head as a result of the conflation of the phonetic index of *pro* into that head. When cliticized onto the verb, full agreement morphology ([Number], [Gender], and [Person]) qualifies as an argument pronoun.

8. Argument CPs and PPs in SA receive structural Case for LF visibility purposes.

9. As far as Case checking is concerned, the clause is one phase because, like Nom, Acc Case is licensed via Agree with Fin^0.

10. SA imperatives are finite clauses analyzable with the same theoretical machinery used for other finite clauses (in the language).

11. SA copular and verbless sentences can be analyzed in terms of two domains. The first is a thematic domain formed of a PredP. The second is an extended functional domain consisting of a TP (encoding tense, mood and agreement features) and a CP, with a VP in copular sentences.

12. Feature inheritance is at best not necessary for the account of structural Case in SA.

My goal has been to find out the features involved in the licensing of structural Case in SA. Since this thesis is on Case, one expects to find a definition of what Case is. However, I think that this definition is a more abstract and a much deeper issue that requires investigation into what licenses Case in a wide variety of languages (from different language families) as well as into precisely what Case does. Nonetheless, given the SA data that I have investigated, I think that abstract/structural Case refers to licensing and making visible (at LF) arguments in the A-domain. This definition excludes topics which are licensed in the A-bar domain through co-indexation with *pro* and made visible at LF by [Topic] (and which get default Nom case at PF for morphological reasons). It also excludes nominal and adjectival predicates of verbless and copular sentences which get default Nom in verbless sentences and lexical Acc case in copular sentences, for morphological (as opposed to semantic/LF) reasons.

Thus the two arguments that this thesis examined are the subject and the object. In addition to these two elements, there is the *pro*-licensed argument-related phonetically-overt element 'topic'. While the topic is licensed through co-indexation with *pro* and made visible at LF by [Topic], the subject and object are licensed and made visible by [Case]. This state of affairs indicates that [Case] is not the only licenser, which is true since topics, like left-dislocated elements, are *not* licensed in the scope of verbs (or rather of functional Case-checking categories). This means that topics must not receive licensing by verbs (through [VC]); this is especially obvious in the case of topics in verbless sentences.

This situation thus points to the possibility that perhaps, unlike subjects and objects, topics are so salient (syntactically, being pre-verbal/-predicate, and semantically, given the categorical interpretation) that their inherent feature, [Topic], which could be argued to be valued, licenses them into the derivation and also keeps them prominent until after Spell-Out, which is the point where they receive their θ-roles (and become fully interpreted) through co-indexation with *pro*.[158] However, since the subject and the object have no such feature, they actually need to

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[158] This type/conception of topic is different from non-θ-licensed topics, as the one underlined in (i).

obtain a feature that would license them into the derivation, and also could sustain them until after Spell-Out, by making them visible at LF; this feature is [Case]. Given the SA data examined in this thesis, this might well be the situation and so the reality of the notion of 'abstract Case'. Basically, as far as SA is concerned, abstract Case is a feature needed by the argument DPs (or rather XPs) that are introduced and spelled out in the post-verbal domain, comprising subjects and objects, as well as copular subjects. This said, I believe that more crosslinguistic work is needed to uncover the true nature of abstract Case.

6.2. Extensions

When asking whether this theory of Case is on the right track, one question that arises is whether it is extendable to other languages. Given the (Basran/Soltan) view that SA is essentially a VSO language, and Greenberg's (1966:81) universal that VSO languages have sentence-initial particles (which is true of SA), one would expect this proposal to extend to other VSO languages as well. While VSO languages (with their pre-verbal particles) make the perfect application domain for this theory of Case, I believe that if the notions of Case and licensing are universal (given the assumption that the Case Filter and the Visibility Condition are right), then this theory should be extended to any other language.

This said, I think that the acid test to this theory of Case lies in languages with verbless sentences. Basically, if it could be shown that structural Case is not licensed when the verb is not licensed, despite the presence of I-finiteness features (tense, agreement, and mood), then this constitutes the strongest support for this thesis. Though clearest in languages with verbless sentences, support for this thesis could also be found in other languages, especially ones where different accounts of structural Case have claimed that Case is licensed by different I-finiteness

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i. As for <u>cars</u>, Mercedes is better than BMW.

Thus the analysis suggested for topics in this thesis does not extend to such topics, found in Japanese, Korean, English, among many other languages.

features. One example of such a language is English. To illustrate, Chomsky (1980) and Pesetsky & Torrego (2001, 2004) have argued that (Nom) Case in English is licensed by tense. Also, Chomsky (1981, 2001) and Schütze (1997) have argued that Case in English is licensed by φ-agreement. Finally, Aygen (2002), who argues against the involvement of tense and agreement in licensing Nom Case, has argued that mood (and modality) is the Nom Case licenser in English. This thus indicates that perhaps none of these three I-finiteness features licenses structural Case unless aided by a categorial [V] feature, where both lead to the introduction of [VC], along the lines proposed in this thesis. This highly desirable picture is far from clear in English given the fact that English has no verbless sentences (similar to those of SA, consisting of a small clause plus IP and CP projections). My point with regard to English is that perhaps the appearance of different I-finiteness features in different clause types makes researchers think that that specific I-finiteness feature is responsible for (Nom) Case, when in reality that I-finiteness feature must couple with a categorial [V] feature in order for Case to be licensed by a [VC] feature on Fin^0.

Therefore, I will attempt to show that my notion of DP licensing being contingent on verbal licensing can apply to English, an SVO language. In what follows, I will present a rather sketchy account of some English facts in terms of the proposed theory of Case. The reader should thus be cautioned that the discussion does not attend to various aspects of the discussed constructions (and so is expected to raise more questions than it answers). I will start with main clauses, and then proceed to embedded clauses. Before that, I will present Fabb's (1984) list of VC forms in English as well as the VC assigners that he proposes.

Fabb (1984) develops a theory of verbal Case. Though this sounds similar to the claim that this thesis makes, Fabb's concern is only visibility (while my concern is mainly abstract Case and eventually LF visibility). Basically, he argues that verbs must receive Case, verbal Case (C_v), because they are governed and adjacent to elements that assign Case to nouns, and also because they assign θ-roles to nouns, and so, like the θ-role assignees, verbs must also be visible when they assign those θ-roles. Fabb proposes that the verbal Case forms in English are those in (13).

Also, the VC assigners that he suggests are in (14).[159] He argues that these verbal Case assigners are lexically specified as able to assign a verbal Case feature [C_v].

13. verb (stem), verb-s, verb-ed, verb-ing, verb-en

14. - auxiliaries

- permission verbs, like 'help' and 'let'

- causative verbs, like 'make' and 'have'

- perception verbs, like 'see' and 'hear'

- modals

- infinitival 'to'

- 'but', 'except', and 'rather-than'

- AGR: '-ed' and '-s'

- inflectional suffixes: '-ing' and '-en'

It should be stated at the outset that my discussion of the English data in this section is not a complete analysis of the facts, but rather an account of how I see these facts given my analysis of the SA Case data. Starting with main clauses, the data in (15-16) seem to provide a counterargument to my claim that verbs in English (like their SA counterparts) receive VC from a pre-verbal element, since there are no VC assigners.[160]

15. He played soccer.

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[159] Roberts's (1985b) also proposes that main verbs are always governed, where the governors are the auxiliary modals, causative and perception verbs, AGR, infinitival 'to', and affixes like '-en' and '-ing'.

[160] Fabb treats the suffixes '-ed' and '-s' as VC assigners, but (given my proposal for SA) I think that these suffixes are the morphological reflex of VC licensing/assignment.

16. He likes syntax.

To account for VC licensing in (15-16), I will appeal to Ross's (1970) insight that declarative sentences (crosslinguistically) have a deep structure which, in addition to the declarative sentence itself, contains a higher clause consisting of the 1st person pronoun 'I', a verb like 'say', and an indirect object 'you'. He calls this higher clause 'the performative clause', which, in addition to 'I say to you/I tell you', is followed by 'that', making the declarative sentence embedded under the higher clause. Basically, what Ross proposes is that declarative sentences (crosslinguistically) are preceded by a silent clause like 'I say that', which is there in the deep structure. Ross takes the fact that the SA verb 'ʔaquulu', meaning 'I say', is followed by the complementizer 'ʔinna' (which means 'that' when follows verbs of 'saying'), as well as the fact that 'ʔinna' also precedes declarative sentences (like verbless sentences) as evidence that the performative rule is valid and universal. The relevance of Ross's proposal to my theory of Case consists in positing a null/silent 'that', which precedes declarative sentences. If the theory of Case proposed in this thesis is on the right track, I would like to claim that this silent 'that' is the indicative VC licenser in English (and might well be in operation in SA as well). Thus Ross (1970) argues that declarative sentences are preceded by a null/silent 'I say that' clause. In other words, (15-16) basically looks like (17-18) in the deep structure.[161]

17. {I say **that**} he play<u>ed</u> soccer.

18. {I say **that**} he like<u>s</u> syntax.

Thus, the indicative VC forms in (17-18) are licensed by the phonetically null 'that', with '-ed' and '-s' being the indicative m-vc suffixes of past and present 3rd person singular, respectively. Thus, unlike Fabb (1984), who considers these suffixes as VC assigners, I believe that verbal suffixes like '-ed' and '-s' are the morphological evidence that VC licensing has taken place.

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[161] I use curly brackets throughout this chapter to indicate silence.

Given the theory advocated in this thesis, the version of Fin^0 in (17-18) has a [VC] feature, which licenses Case into the clause, since Fin^0 selects an XP (TP) that has both a categorial [V] feature and an I-finiteness feature ([T]). The [V] feature is available given the presence of the verb, and the [T] feature is there since these clauses are tensed.

Moving on to main clauses with VC assigners, the sentences (19-22) show how auxiliaries in English can license verbal forms.

19. I **have** eat<u>en</u> lunch.

20. I **was** sleep<u>ing</u>.

21. **Did** he like-Ø syntax?

22. The sandwich **was** eat<u>en</u>.

The relevant VC assigners (boldfaced) license the main verbs in their respective clauses basically because (23-26) are ungrammatical.

23. *I eaten lunch.

24. *I sleeping.

25. *He like-Ø syntax?

26. *The sandwich eaten.

In other words, each one of the main verbs in (19-22) is licensed by a certain licenser, which assigns it VC, allowing it to occupy the position it is in. With this verbal licensing, comes DP licensing, hence structural Case. Thus the version of Fin^0 in (19-22) is the one with a [VC] feature since Fin^0 selects a TP with a categorial [V] feature as well as a [T] feature. This thus accounts for structural Case in these sentences. Also, VC assignment takes place resulting in effecting the relevant morphological forms on the verbs; this way, '-en', '-ing', and '-Ø' (which

refers to the phonetically null m-vc suffix of the stem) are better viewed as morphological manifestations of VC licensing, that is, m-vc (rather than as VC assigners, as Fabb suggests).[162] Thus like their SA counterparts, licensed verbs in English gain some morphological form that indicates verbal licensing.

In addition, modals also license VC since their presence effects a certain morphological change in the structure of the verb; that is, the verbs gain some morphological form as a result of the claimed licensing; (27-31) show.[163]

     27. John **must** go-Ø.

     28. Bill **might** go-Ø.

     28. Mary **should** go-Ø.

     30. Susan **can** go-Ø.

     31. Harry **will** go-Ø.

The licensing relation between these modals and the main verbs is thus illustrated by the ungrammaticality of (32-36).

     32. *John go-Ø.

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[162] Along the same lines, the auxiliary 'do' could be argued to license a stem verbal form whose m-vc suffix is phonetically null, '-Ø' (similar to jussive m-vc suffixes in SA). This is because irrespective of the agreement morphology on the auxiliary 'do', the main verb realizes one form. Similarly, periphrastic 'do' seems to license the same VC verbal form. This is because when it is present we only see the stem VC form, as (i-iv) show.

     i. I like syntax.

     ii. I do **like** syntax.

     iii. he likes syntax.

     iv. he does **like** syntax.

[163] Thus, unlike Fabb (1984), I treat modals and 'do' as VC assigners on a par with other verbs, not as manifestations of AGR. In fact, Fabb (1984:68) states that "they [modals and do] should perhaps be classed with the verbs".

33. *Bill go-Ø.

34. *Mary go-Ø.

35. *Susan go-Ø.

36. *Harry go-Ø.

In other words, the modals license the main verb since the latter cannot occur without them (in the context of singular subjects). This verbal licensing results in VC checking, which results in the licensing of structural Case since the version of Fin^0 is the one with a [VC] feature given the presence of a categorial [V] as well as a [Mood] feature. It also results in VC assignment since the licensed verbs must have a specific verbal form (which is the stem, with the null suffix).

Now, let us see how this claim fares in the face of some main clause English data with subjunctive verbs; it is worth mentioning that the subjunctive is rarely used in English. In this regard, Cowper (2005:26) states that "the subjunctive [in English] is vestigial for conservative speakers, and virtually nonexistent for many younger speakers". Thus I will illustrate using idiomatic expressions (which though have fixed formulae, still require an account), like (37).

37. Till death do-Ø us part.

Given the proposed Case theory, (37) is grammatical because the verb (which does not agree with the subject in terms of φ-features) is licensed in the subjunctive form; but what is the licenser? I will argue that it is the particle 'till', simply because the sentence is ungrammatical without 'till'. In fact, the SA equivalent of 'till', 'Hattaa', licenses the subjunctive VC form, as (38) shows.

38. sa-ʔa-ʕbud-u   Allah-a   **Hattaa**   ʔa-muut-**a**

   Fut-1s-study-Ind   God-Acc   until   1s-die-**Sub**

'I will worship God until I die'

Thus 'till' could also be argued to license the subjunctive VC form in English. Other contexts where subjunctive verbs are licensed in English include (39-40), where the verbs ('bless' and 'forbid') could be argued to be licensed by a null version of the modal 'may', or alternatively by a modal-like 'that', on a par with Ross's 'declarative that'.

39. God bless-Ø you.

40. God forbid-Ø.

Another context where the subjunctive appears in English is in sentences like (41).

41. It is necessary **that** he like-Ø syntax.

Again, here subjunctive VC can be said to be licensed by a modal-like 'that', one that expresses 'necessity', just like the modal 'must'. The subjunctive data in (37-41) support the proposed theory of Case since structural Case can be argued to be licensed by a [VC] feature on Fin^0, given the fact that the selected XP (usually MoodP) has a [V] feature as well as a [Mood] feature. Given the aforementioned data and discussion, English seems to exhibit the same sort of verbal licensing seen in SA. Therefore, I would like to argue that for the English sentences discussed so far to be grammatical, there must be a verbal licenser/VC assigner present in the structure.

Now I discuss the licensing of VC in embedded infinitival clauses. Fabb (1984) proposes that infinitival 'to' licenses the stem in English infinitival clauses, as in (42-43).

42. I tried [to go-Ø].

43. I decided [to eat-Ø lunch].

Unlike Fabb, I think that the licensing relation does not hold between 'to' and the stems in the bracketed clauses in (42-43), but rather between the matrix verbs and the infinitives (to+stem). In other words, in (42-43) the matrix verb selects an infinitive (to+stem), compared to other matrix verbs that select only stems, as in (44).

44. I saw [him eat-Ø lunch].

Thus I will assume that infinitival 'to' is *not* the VC licenser in the embedded clauses in (42-43). I will further assume that 'to' is an aspectual marker that conveys an 'imperfective aspect' interpretation. This is supported by the observation that the writing event in (45), with 'to', has *not* been completed, compared to the intuition that the writing event in the absence of 'to', as in (46), has been completed.

45. I helped [him **to** write-Ø a letter].

46. I helped [him write-Ø a letter].

Another argument for the assumption that infinitives encode aspect comes from Fink (1952) who argues that the temporal interpretation of infinitives does not make reference to tense but rather to aspect. Likewise, Amritavalli & Jayaseelan (2005) "suggest that what Stowell [(1982)] analyzed as [unrealized] Tense in infinitives is actually Aspect", a claim that the authors make with regard to infinitives in some Dravidian languages.[164] Therefore, I will assume that English infinitives encode an aspect feature [Asp], which instantiates an AspP (similar to participles in SA).

I will also take the presence of 'to' as indication that the infinitive in (45), as well as those in (42-43), has some nominal nature since it is preceded by a preposition; thus English has one 'to' element, which has both a prepositional and an infinitival nature, preceding nominal and quasi-

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[164] On the temporal interpretation of infinitives, see Stowell (1982), Cowper (2005), and Wurmbrand (2006b, 2007), among others.

nominal elements, respectively. This intuition was explored in Roeper & Vergnaud (1980) who proposed that infinitival 'to' and prepositional 'to' in English are actually the same element and "that "to" assigned case to verbs as it did to nouns" (Roeper p.c.). Also, Fabb (1984:69, fn. 4) states that "[i]n Old English, 'to' took a nominal infinitive and assigned it Case". Thus if English infinitives (or rather stems) still retain some of the nominal nature that they possessed in previous forms of the language, then it could be argued that they are not fully verbal elements, which could be the reason why they have been taken to indicate non-finiteness, that is, lack of tense, mood, and agreement (in the same way agreement appears on fully verbal elements). Crosslinguistically speaking, infinitives in some Dravidian languages have been shown to carry nominal case suffixes. For example, "Kannada allows the 'unrealized' infinitive to carry an overt dative case, especially in the spoken language" (Amritavalli & Jyaseelan 2005:188). Now, it should be unrealistic to expect the English infinitives to carry nominal case suffixes (even if shown to be quasi-nominal in nature) since nouns in the language do not realize case morphologically. Given this prelude (where I proposed that English infinitival verbs (stems) have some nominal nature and also make aspectual reference), I would like to extend the structural Case checking account of SA participial sentences to the English infinitival clauses. To illustrate, (45), repeated as (47), receives the clause structure in (48).

47. I helped [him to write-Ø a letter].

48.

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                                      FinP
                                     /    \
                                  Fin      TP
                                          /   \
                                       I        v*P
                                               /    \
                                            I          v*'
                                                      /    \
                                               helped   v*     VP
                                                              /    \
                                                          him_i      V'
                                                                    /    \
                                                            helped    V      AspP
                                                                            /    \
                                                                         to   Asp    v*P
                                                                                    /    \
                                                                              PRO_i      v*'
                                                                                        /    \
                                                                                 write-Ø   v*      VP
                                                                                                  /    \
                                                                                          write-Ø    V     DP
                                                                                                            /\
                                                                                                        a letter
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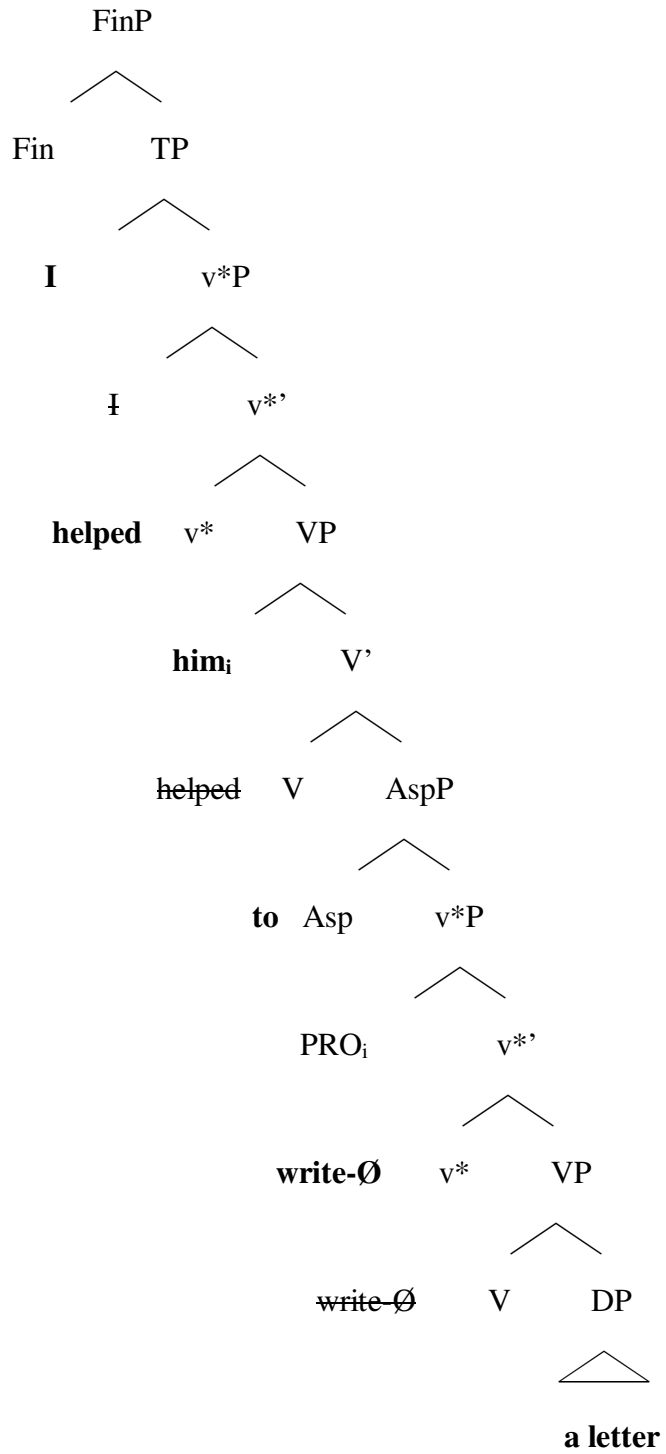
Given the assumption that the embedded clause is *not* a finite CP (headed by 'that'),[165] which means that it does not count as a phase boundary, I will assume that structural Case in the embedded clause (AspP) is licensed by the matrix Fin^0. Also, given the proposal that the infinitival verb is a quasi-verbal quasi-nominal element, it then has a categorial [V] feature and a full set of valued ϕ-features (encoding 3rd person), respectively. This way, since the highest projection in the embedded clause, AspP, has both a [V] feature and an I-finiteness feature [ϕ] (as well as an [Asp] feature), then Fin^0 must enter Agree relations with embedded functional heads that have [VC] features. It is noteworthy that Fin^0 already has a valued [VC] feature given the fact that it has to license Case in the matrix clause. Thus Agree between Fin^0 and Asp^0 takes place, resulting in valuing [V], [Asp], and [ϕ] on Fin^0. Then, $v*^0$ enters an Agree relation with Fin^0, which results in valuing the [VC] feature on $v*^0$. Now, the embedded object enters an Agree relation with $v*^0$, which results in valuing the [Case] feature on the object as [Acc].

The only difference between this account and my account of Case in SA participial sentences is that the empty category element in SA participial sentences is *pro*, which does not receive Case (as I showed in section 5.6). In contrast, the empty category in English infinitivals is PRO (which has been argued to receive Case, as in Chomsky & Lasnik 1993, Sigurdsson 2008, Bobaljik & Landau 2009, and Landau 2006), but with no Case value (since Asp^0, unlike T^0, has no [VC] feature, and is irrelevant for Nom Case). For now, I will propose that this problem could be resolved by assuming that since, unlike SA, English is not a pro-drop language, it may have PRO, rather than *pro*, in this context; this way, whether PRO receives Case or not is parameterized. I leave this issue here since a full treatment goes beyond the scope of this thesis. Now, 'him', merged in matrix Spec, VP, (or even in embedded Spec, AspP, where both can be argued to be A-bar positions) is not an argument, and so receives no structural Case. This is because the Acc Case licensed by matrix $v*^0$ is reserved for the argumental complement clause. This way, 'him' being in an A-bar position (co-indexed with PRO), qualifies for lexical Acc case assigned by the matrix verb.

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[165] Later in this section, I will argue that 'that', both phonetically overt and null, is a VC licenser that has an unvalued [T] feature, and so it makes the clause self-sufficient with regard to Case licensing.

In fact, even if we assumed that 'him' is merged in Spec, AspP, and that Asp^0 can license structural Case (which I do not assume), 'him' can still be argued *not* to receive Case from the embedded clause. This claim is supported by Hallman's (2004) proposal that 'him', or any other element in the Spec, position of a head, is *not local enough* to that head, and so cannot receive Case from that head.[166] Here, Hallman suggests that Case on 'him', for example, can be licensed by C^0, citing a similar insight from Stowell (1981), who proposes that C^0 is a Case assigner; this proposal was also made in Massam (1985). Assuming that Hallman's proposal is on the right track, and given the observation that the embedded clause in (47) lacks a C^0 node, it becomes clear that its case assigner is the matrix verb, which, given my system, licenses lexical Acc case (which is irrelevant for licensing and LF visibility). The question then becomes how the external argument of the embedded clause can be made visible at LF if PRO does not receive structural (Nom) Case in English. To resolve this issue, I will appeal to the idea that 'him', having the interpretation of a topic, has the feature [Topic], which makes it visible at LF for θ-role assignment, and that is how PRO gets its interpretation (through co-indexation).[167] That this approach is on the right track is shown by the fact that when 'him' is dropped, PRO receives the arbitrary interpretation; that is, (49) can be interpreted such that 'I helped him/her/them/etc...'.

In this case, PRO becomes visible at LF for θ-role assignment via co-indexation with a phonetically null topic (which has [Topic]) in the matrix Spec, VP or embedded Spec, AspP. This topic, which is interpreted as 'someone'/3rd person, is morphosyntactically licensed PRO, which, in turn, is licensed by the (default/quasi-nominal) ϕ-content on the infinitival verb, which, by assumption, encodes 3rd person. That this approach might well be on the right track is supported by the fact that (49) cannot be interpreted such that the 'helped' person(s) is 1st or 2nd person.

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[166] Hallman's (2004) discussion is on Nom Case, T^0, and finite C^0. As far as my system is concerned, finite C^0 ('that') licenses VC to the embedded clause functional heads with [VC] features, which then license structural Case to the relevant arguments.

[167] This way, an empty category will receive the relevant θ-role at LF by being co-indexed with an element that has [Topic], which allows it to be visible at LF, which is the case of *pro* in SA and PRO in English, or by being co-indexed with an element that has [Case], as in (i).

        i. John$_i$ tried [to leave PRO$_i$].

49. I helped [to write-Ø PRO a letter].

Also, in the absence of 'him' (which is visible by [Topic]), sentences with infinitival clauses could still be grammatical if PRO (which does not receive Case in English) is co-indexed with elements that are visible by [Case], as (50) shows.

50. John$_i$ decided [to get-Ø PRO$_i$ the job].

I think that a similar analysis could be proposed for gerunds in English. In other words, I think that there is a difference between the underlined elements in (51-52); that is, while the one in (51), gerund, is quasi-nominal, the one in (52), participle (unlike its SA counterparts) is purely verbal. This is supported by the fact that the underlined element in (51) does not realize tense or agreement as a verbal feature, whereas the one in (52) does as shown by the auxiliary 'was', which carries agreement and tense. That English has two '-ing' forms, one nominal and one verbal, has been argued in Cowper (1995).

51. I **saw** [him <u>writing</u> a letter].

52. I **was** <u>writing</u> a letter.

Facts from Dravidian languages suggest that gerunds encode the *aspect* category (Amritavali & Jayaseelan 2005:198), and also realize nominal case suffixes. In this regard, Amritavali & Jayaseelan (2005:183) state that "[in Kannada, gerunds] can be case-marked and the case marker in each case is that of the grammatical relation of the gerundive phrase to the rest of the sentence". They also state that "[in Malayalam,] the gerund is marked with the case appropriate to its position in the sentence" (p. 197). Again, one should not expect gerunds in English to carry nominal case morphology since nouns never inflect for case in English. These facts point out that perhaps these elements, in English, are quasi-verbal (having [Asp], perhaps contributed by '-ing') and quasi-nominal (having a full set of valued φ-features, encoding 3rd person). This means that the highest XP in the embedded clause, AspP, has both a categorial [V] feature and [φ] as the I-finiteness feature, which indicates that Fin^0 must enter Agree relations with embedded

functional heads with [VC] features. Thus (51), repeated as (53), receives the clause structure in (54), and Case checking proceeds in the same manner as in (47).

53. I saw [him writing a letter].

54.

```
                                    FinP
                                   /    \
                              Fin        TP
                                        /    \
                              I             v*P
                                           /    \
                                    I           v*'
                                               /    \
                                saw       v*        VP
                                                   /    \
                                          himᵢ          V'
                                                        /    \
                                            saw      V        AspP
                                                              /    \
                                                   -ing   Asp       v*P
                                                                   /    \
                                                           PROᵢ         v*'
                                                                        /    \
                                                              write   v*      VP
                                                                             /    \
                                                                    write   V       DP
                                                                                   /  \
                                                                              a letter
```
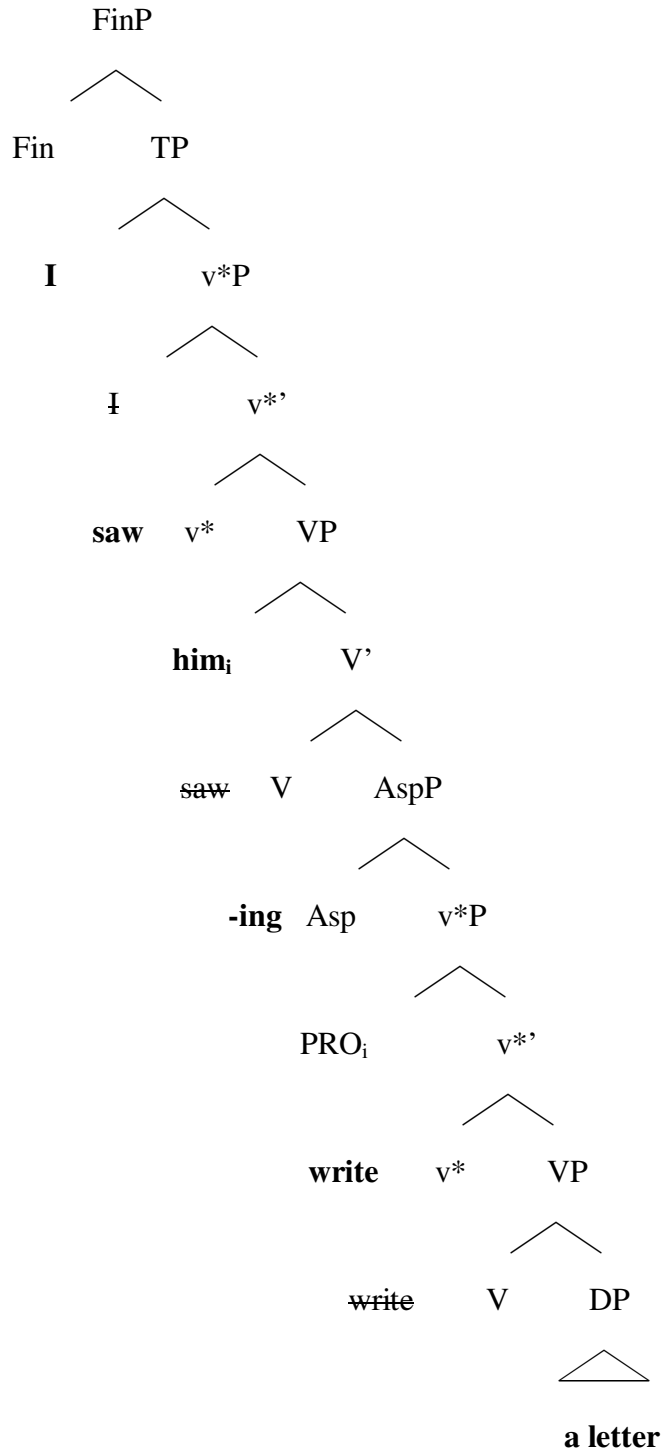
I now move on to discussing the licensing of VC in embedded clauses with 'stem' verbs. I follow Fabb (1981) is assuming that permission and causative verbs license verb stems in English; the sentences (55-58) illustrate this observation.

55. I **helped** [him write-Ø a letter].

56. I **let** [him write-Ø a letter].

57. I **made** [him write-Ø a letter].

58. I **had** [him write-Ø a letter].

The claimed VC assigners (boldfaced) license the main verbs in the bracketed clauses (perhaps through licensing the clauses in which those verbs occur). This is especially clear when we examine (59-62).

59. *I **assisted** [him write-Ø a letter].

60. *I **permitted** [him write-Ø a letter].

61. *I **caused** [him write-Ø a letter].

62. *I **asked** [him write-Ø a letter].

In other words, the boldfaced verbs in (55-58) license the main verb stems in the clauses in brackets because other verbs (even with almost the same meaning) cannot license them; thus the permission and causative verbs in (55-58) are VC licensers. The verbs in (59-62) license infinitives, as (63-66) show.

63. I **assisted** [him **to** write-Ø a letter].

64. I **permitted** [him **to** write-Ø a letter].

65. I **caused** [him **to** write-Ø a letter].

66. I **asked** [him **to** write-Ø a letter].

Thus the co-occurrence relation between the boldfaced verbs in (55-58) and the verb stems in the bracketed clauses is one of licensing through VC checking, which results in licensing the arguments in the clause (as well as VC assignment, given the resulting morphological form of the verb, 'bare stem'). Given my proposal for SA participles and English infinitives and gerunds, I will show how Case is licensed in (55), repeated as (67), with the clause structure in (68); here the embedded clause is non-finite, hence lacks IP and CP.

67. I helped [him write-Ø a letter].

68.

```
                        FinP
                       /    \
                    Fin      TP
                            /  \
                         I      v*P
                               /   \
                             I̶      v*'
                                   /   \
                              helped    v*    VP
                                             /  \
                                         himᵢ     V'
                                                 /   \
                                          h̶e̶l̶p̶e̶d̶  V    AspP
                                                        /   \
                                                     Asp      v*P
                                                             /   \
                                                        PROᵢ      v*'
                                                                 /   \
                                                          write-Ø   v*    VP
                                                                         /  \
                                                                   w̶r̶i̶t̶e̶-̶Ø̶  V    DP
                                                                                 /\
                                                                              a letter
```

.

The embedded clause is an AspP, headed by Asp^0 with 'perfective aspect' specification. This is supported by the fact that (67) is interpreted such that the writing of the letter has finished. Given the assumption that AspP does not constitute a phase boundary, the matrix Fin^0 licenses structural Case in both clauses, matrix and embedded. Necessary for Case licensing, however,

each clause must have a [V] feature and an I-finiteness feature. The matrix clause has a categorial [V] feature and a [T] feature. The embedded clause has a [V] feature, but has been argued to be non-finite, that is, lacking all I-finiteness features, [T], [Mood], and [φ]. However, I will argue that the verb stem in (67), like the ones in infinitival clauses, is quasi-nominal quasi-verbal in nature; thus it has a full set of valued φ-features (encoding 3rd person). This way, the matrix clause licenses structural Nom Case to its subject and structural Acc Case to the embedded clause (which looks very much like an argument of the matrix verb since 'I helped/I helped him' is not equal to 'I helped him write a letter' meaning-wise). The embedded clause licenses structural Acc to the object. Since the clause lacks a TP or a MoodP, Nom Case is not licensed, and PRO receives no structural Case.[168] It will, however, receive its interpretation at LF since it is co-indexed with an element 'him' which has [Topic], a feature that makes it visible at LF.

As for 'him', I will assume that it does not receive structural Case, rather lexical Acc case assigned by the matrix verb. This way, 'him' could be in an A-bar position, which could either be the matrix Spec, VP or embedded Spec, AspP. My assumption that 'him' does not receive structural Case from the matrix clause is based on the intuition that both structural Case values licensed by the matrix Case-checking categories (I^0 and $v*^0$) are reserved for the two arguments of the matrix verb, the subject and the AspP complement clause. Likewise, my assumption that it does not receive structural Case from the embedded clause is based on the facts that structural Acc is licensed to the object argument, 'a letter', and that Asp^0 does not have a [VC] feature, and so unable to license structural Case.

Similarly, perception verbs in English also license verb stems, as Fabb (1984) suggests. This is shown by (69-70).

---

[168] I think that an agreement phrase (AgrsP), which *can* license Nom Case to PRO, is *not* possible here since the full agreement on the stem is not an effect of its being a verbal element, but rather by its nominal nature, and it is widely held that nouns do not license Nom, but rather Gen (by D^0). Besides, the verb/stem realizes only 3rd person; so it will not exhibit full agreement with 1st and 2nd person subjects.

69. I **saw** [him eat-Ø a bagel].

70. I **heard** [him cry-Ø].

The licensing relation between the perception verbs in (69-70) and the verb stems in the bracketed clauses is especially clear given the fact that ungrammaticality arises when the stems are replaced by infinitives, as (71-72) show, or tensed verbs, as (73-74) show.

71. *I **saw** [him to eat-Ø a bagel].

72. *I **heard** [him to cry-Ø].

73. *I **saw** [him ate a bagel].

74. *I **heard** [him cries].

Thus certain verbs license certain verbal forms, but not others. This verbal licensing results in the licensing of structural Case, since the highest XP in the embedded clause, AspP, has both a [V] feature and a full set of φ-features (being a quasi-nominal element). Also, since the AspP does not constitute a phase boundary, the matrix Fin^0, which has a valued [VC] feature, will enter an Agree relation with the embedded $v*^0$, which will then license structural Acc to the embedded object. Thus Case licensing in (69-70) proceeds in the same manner as in (67).

The ungrammaticality of (71-72) can be accounted for if we assumed (as I have already done) that, unlike verbs like 'try' and 'decide', which select infinitives (to+stem) which convey imperfective aspect, perception (as well as permission and causation) verbs selects stems, specified for perfective aspect. The verbal forms that convey imperfective aspect and that are selected by perception verbs are the gerunds, as (75) shows.

75. I **saw** [him eat<u>ing</u> a bagel].

The ungrammaticality of (73-74) can be accounted for since the embedded verbs are tensed, which means that their subjects should realize Nom Case, 'he', in the presence of an independent VC assigner in the embedded clause, like 'that', as (76) shows.

76. I saw [that he ate a bagel].

This way, 'that' should have an unvalued [T] feature, which is valued by the valued [T] on the embedded I^0. That this approach is on the right track is supported by the fact that with 'that' the embedded clause can have its own tense anchor in C^0/Fin^0, as shown by (77-78)).

77. I knew [that he is sick/dead].

78. I know [that he left].

The treatment that I suggest for 'him' in the previous sentences is similar to what I proposed for the boldfaced DP in (79-81) which receives lexical Acc case either from the matrix verb, or from 'ʔanna'.

79. ʔaraada-Ø   l-mudarris-u   **T-Tullaab-a_i**   ʔan   ya-rHal-uu-Ø   *pro*_i

   Pst.want.3s-Ind the-teacher-Nom the-students-**Acc** Comp Impf-leave.3-pm-Sub   ec

   'the teacher wanted that the student leave'

80. Zanna-Ø   ʕaliyy-un   **T-Tullaab-a_i**   raHal-uu-Ø   *pro*_i

   Pst.believe.3sm-Ind   Ali-Nom   the-students-**Acc** Pst.left.3-pm-Ind   ec

   'Ali believed (that) the students left'

81. Zanna-Ø   ʕaliyy-un   ʔanna **T-Tullaab-a_i**   raHal-uu-Ø   *pro*_i

   Pst.believe.3sm-Ind   Ali-Nom   Comp the-students-**Acc** Pst.left.3-pm-Ind   ec

'Ali believed (that) the students left'

However, one apparent problem with my claim that infinitives in English (and participles in SA) do not license Nom Case is that it predicts that the embedded subject in European Portuguese (EP) should *not* receive Nom Case, contrary to fact. To resolve this issue, I want to argue that one crucial difference between the English infinitives, stems, and gerunds, as well as the SA participles, on the one hand, and the EP infinitives, on the other hand, is that while the former are quasi-verbal quasi-nominal elements that encode only 3rd person, the latter are fully verbal elements that can be inflected for 3rd person as well as 1st and 2nd persons. Therefore, I will argue that only the EP infinitives have a genuine [AGR] feature/category (of the same sort that Chomsky 2001 and Schütze 1997 propose for English main clauses). This [AGR] category instantiates an $Agrs^0$ that projects an AgrsP. This way, Agrs licenses Nom Case to the embedded subject in EP inflected infinitivals (along the lines proposed here). Thus the matrix Fin^0 will enter Agree relations with the embedded $Agrs^0$ and $v*^0$ heads to value their [VC] features, which will result in Nom and Acc being licensed to the subject and object, respectively. The assumption that the EP infinitivals have a genuine AGR category that can realize 3rd person agreement as well as 1st person and 2nd person inflection is supported by the data in (82-84), respectively.

82. Será difícil [**eles** aprovar**em** a proposta]   (from Raposo 1987:86)

'it will be difficult they to-approve-3p the proposal'

83. Será difícil [**nós** aprovar**mos** a proposta

'it will be difficult we to-approve-1p the proposal'

84. Será difícil [**vós** aprovar**des** a proposta]

'it will be difficult you.p to-approve-2p the proposal'

I now move on to discussing some English data, like (85-87), with the goal of showing that the Comp element 'that', both the phonetically overt and the phonetically null versions, is a VC

licenser, the difference being that 'overt that' is an independent VC licenser, whereas 'null that' receives Case/licensing from the matrix verb; both though come with an unvalued [T] feature.[169]

85. Bill believes [that John **ate** the sandwich].

86. Bill$_i$ believes [that he$_j$ **ate** the sandwich].

87. Bill$_i$ believes [{that} he$_j$ **ate** the sandwich].

Examining the embedded clauses in (85-87) shows that the presence of 'that', overt or null, indicates a tensed clause, which has a T^0 head with a valued [T] feature that can value the unvalued [T] feature on 'that'. This way, the presence of 'that' indicates the presence of a TP projection, where T^0 licenses Nom to the subject. Thus 'that' (like 'ʔan in SA embedded clauses) licenses [VC] to the Infl domain, which results in structural Nom and Acc Cases being licensed. This is supported by the fact that the absence of 'that', overt or null, results in the absence of Nom Case (but not Acc), as (88) shows.

88. *Bill believes [she **to like-Ø** syntax]. (there is no null 'that' in this sentence)

Also, this assumption about the nature of 'that' is supported by the fact that ungrammaticality arises when the tensed verb (which values [T] on 'that') is replaced with an untensed verb (which is otherwise finite, having a full set of ϕ-features), as (89-91) show.

89. *Bill believes [that John to eat-Ø the sandwich].

---

[169] Both versions of 'that' could also have an unvalued [Mood] feature, which is valued via Agree with a valued [Mood] feature on T^0/$Mood^0$. This is illustrated by (i-iii).

i. Bill believes [that John **must** eat the sandwich].
ii. Bill$_i$ believes [that he$_j$ **can** eat the sandwich].
iii. Bill$_i$ believes [{that} he$_j$ **should** eat the sandwich].

I am not sure whether 'that' could come with an unvalued set of ϕ-features in English (though Chomsky 2001, and subsequent work assumes so), perhaps because ϕ-features, though could be fully realized on verbs, and license Case, as we saw with EP inflected infinitives, are essentially nominal features (thus unlike [T] and [Mood] in this regard).

90. *Bill$_i$ believes [that he$_i$ to eat-Ø the sandwich].

91. *Bill$_i$ believes [{that} he$_i$ to eat-Ø the sandwich].

The absence of [T] from infinitival verbs leads to the (absence of a T^0 head, and so to the) impossibility of co-occurrence with 'that' (which requires some head to value its unvalued [T] feature). The absence of T^0 also results in the absence of Nom Case, a state of affairs which led to the long-held assumption that tense license Nom Case (Chomsky 1980, Pesetsky & Torrego 2001, among others). Thus the absence of 'that' as the VC licenser in the English embedded clauses results in the absence of Nom Case and the observation (given the proposed theory of Case) that Acc Case in the embedded clause is licensed via Agree with the matrix Fin^0, since the absence of tense in the embedded clause leads to the absence of 'that', which, in turn, leads to the absence of the phase boundary, as (92) shows.

92. Bill believes [Mary to have-Ø eaten the sandwich]. (there is no null 'that' here)

Thus given the absence of 'that', the embedded verb is the untensed infinitive, which can only license Acc Case to the argument object (through Agree with the matrix Fin^0), but not Nom Case (due to the absence of T^0). This way, the post-verbal argumental PRO receives no Nom Case, but receives its interpretation at LF since it is co-indexed with 'Mary', which has [Topic], being merged in the embedded Spec, AspP, and open to lexical Acc case assignment by the matrix verb, as (93) shows.

93. Bill believes [**her** to have-Ø eaten the sandwich].

Unlike 'that', which licenses [VC] and has a [T] feature (called 'finite complementizer' in Hallman 2004), 'for' (which he calls 'non-finite complementizer') is neither a [VC] licenser nor does it have a [T] feature. This is supported by the fact that 'for' is allowed in non-tensed clauses, as (94) shows, where Nom Case is not licensed, and where the licensing of structural Acc Case is carried out via Agree with the matrix Fin^0. The sentence (95) shows that 'Mary' realizes Acc case.

94. John planned [for Mary to get-Ø the job].

95. John planned [for her/*she to get-Ø the job].

Given the proposed theory of Case, 'Mary' receives lexical Acc case from the matrix verb. Now the licensing of the structural Acc Case to the embedded object crosses the C^0 boundary of the embedded clause (in the presence of 'for'). This could be accounted for by assuming that the CP in this case is not finite, hence lacks the Fin^0 node/projection. This proposal also responds to claims that assume that tense is encoded on C^0 (e.g. Stowell 1982, and Raposo 1987, among other) since if they were right, 'for', merged in C^0, should realize tense and be grammatical with tensed embedded clauses, but it is not, as (96) shows.

96. *Bill believes [for John **ate** the sandwich].

Also, my proposal that 'that' is a VC licenser (that eventually licenses structural Case to the arguments in the clause) is in line with Lee (2005:251) who proposes that "the Comp *that* is a reflection of Case on the CP".

The proposed system could also have consequences for the recent debate on whether or not PRO exists in natural language,[170] that is, whether natural language needs PRO, or it just needs *pro*. Let us examine the data (97-99). On standard assumptions, 'he' is grammatical in (97) because it is in a position where Nom Case is assigned by tensed I^0. Also, 'him' is grammatical in (98) since it is in a position where Acc Case is assigned by 'for'. Moreover, PRO is grammatical in (99) since there is no Case licenser.

97. I would prefer [that he/*him/*PRO leaves early].

98. I would prefer [for *he/him/*PRO to leave early].

---

[170] See Hornstein 1999, Boeckx & Hornstein 2004, Landau 2004, Bobaljik & Landau 2009, among many others, for the debate on PRO.

99. I would prefer [*he/*him/PRO to leave early].

The fact that PRO, which indicates anaphoricity, is not allowed in (97) is a result of its being in a position where a DP is licensed by [Case], a conclusion that follows if we assumed (as in GB) that PRO does not receive Case; also PRO is not licensed in (98) because it is in a position where a DP is licensed by [Topic] (since I assume that 'him' is in an A-bar position, embedded Spec, TopP/Spec, TP, licensed by [Topic] through co-indexation with a *pro* in the embedded Spec, v*P). However, PRO is allowed in (99) because it occurs in a position where no DP is licensed. This means that PRO, or rather anaphoricity, results from non-licensing. If this approach is on the right track, then PRO could just be replaced with *pro*, where the [+anaphor] feature of the empty category comes as a by-product of non-licensing.

6.3. Concluding Remarks

There are two points that I want to mention in this section. First, assuming that the proposed system can account for the structural Case facts in SA, one would want to see how it fares in the face of data from other languages. Since this is hard to do in this thesis, I would like to leave the task for future work. Second, I hope that through this thesis I have drawn attention to the grammatical tradition of Old Iraq, both Basran and Kufan schools. As we saw, three of the main insights that the syntactic analysis is based on in this thesis come from the Basran school, namely the observation that preverbal DPs are topics, not subjects (formalized in Soltan 2007), the assumption that full subject agreement on the verb in SA constitutes a pronouns (formalized in Platzack 2003), and the insight that verbs in SA receive a form of Case.

Bibliography

Agbayani, Brian, and Chandra Shekar. 2007. Restructuring and Clausal Architecture in Kannada. In *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*, edited by S. Karimi, V. Samiian, and W. Wilkins, 8-24. Benjamins.

Adger, David. 2003. *Core Syntax: A Minimalist Approach*. Oxford University Press.

Adger, David. 2007. Three Domains of Finiteness: a Minimalist Perspective. In *Finiteness: Theoretical and Empirical Foundations*, edited by Irina Nikolaeva, 23-58. Oxford University Press.

Adger, David, and Gillian Ramchand. 2003. Predication and Equation. *Linguistic Inquiry*, 34:325-360.

Al-Balushi, Rashid Ali. 2010. The Licensing of Structural Case in Standard Arabic. In *Proceeding of the 2010 Annual Conference of the Canadian Linguistic Association*, edited by Melinda Heijl.

Al-Balushi, Rashid Ali. Forthcoming. Why Verbless Sentences in Standard Arabic are Verbless.

Alboiu, Gabriela. 2006. Are we in Agreement? In *Agreement Systems*, edited by Cedric Boeckx (ed), 13-39, John Benjamins

Alexiadou, Artemis, and Elena Anagnostopoulou. 1998. Parametrizing AGR: Word Order, V-Movement and EPP Checking. *Natural Language and Linguistic Theory* 16:491-539.

Alexiadou, Artemis, and Elena Anagnostopoulou. 2006. From Hierarchies to Features: Person Splits and Direct-Inverse Alternations. In *Agreement Systems*, edited by Cedric Boeckx (ed), 41-62, John Benjamins

Amritavalli Raghavachari, and K.A. Jayaseelan. 2005. Finiteness and Negation in Dravidian. In *The Oxford Handbook of Comparative Syntax*, edited by G. Cinque and R. Kayne. Oxford University Press.

Aoun, Joseph. 1979. On government, case-marking and clitic placement. Ms. MIT. Cambridge, Mass.

Aoun, Joseph, Elabbas Benmamoun, and Dominique Sportiche. 1994. Agreement, Word Order, and Conjunction in Some varieties of Arabic. *Linguistic Inquiry* 25: 195-220.

Apollonius Dyscolus .1981. *The Syntax of Apollonius Dyscolus*. Fred W. Householder (trans.) Amsterdam: Benjamins.

Arad, Maya. 1998. *VP-Structure and the Syntax-Lexicon Interface*. Ph.D. Dissertation, University College London. Distributed by MIT Working Papers in Linguistics.

Arad, Maya. 2003. Locality Constraints on the Interpretation of Roots: The Case of Hebrew Denominal Verbs. NLLT 21:737-778.

Aygen, Nigar Gülşat. 2002. *Finiteness, Case and Clausal Architecture*. Ph.D. Dissertation, Harvard University, Cambridge, Massachusetts.

Bailyn, John. 2001. The syntax of Slavic predicate Case. *ZAS Papers in Linguistics* 22, 1-26.

Bailyn, John. 2002. Overt Predicators. *Journal of Slavic Linguistics* 10, 23-52.

Bailyn, John, and Barbara Citko. 1999. Case and agreement in Slavic predicates. In *Formal Approaches to Slavic Linguistics 7: The Seattle Meeting*, ed. by Katarzyna Dziwirek, Herbert S. Coats and Cynthia Vakareliyska, 17-37. Ann Arbor, Michigan: Michigan Slavic Publications.

Bailyn, John, and Edward J. Rubin. 1991. The unification of Instrumental case assignment in Russian. In *Cornell Working Papers in Linguistics 9*, ed. by A. Toribio and Wayne Harbert, 99-126. Ithaca, New York: Department of Modern Languages and Linguistics, Cornell University.

Baker, Mark. 2003. *Lexical Categories: Verbs, Nouns, and Adjectives*. Cambridge: Cambridge University Press.

Baker, Mark. 2007. On Parameters of Agreement in Austronesian Languages. To appear in *Papers from AFLA XIV*, edited by R. Mercado, J. Sabbagh, and L. Travis. John Benjamins Publishing Company.

Baker, Mark, and Carlos Fasola. 2007. Araucanian: Mapudungun. To appear in R. Liever and P. Stekauer (eds.) *The Oxford Handbook of Compounding,* Oxford University Press, Oxford.

Baker, Mark, and Willie Udo Willie. 2008. Agreement in Ibibio: From Every Head, To Every Head. To appear in *Syntax*.

Bakir, Murtadha. 1980. *Aspects of Clause Structure in Arabic*. Ph.D. Dissertation, Indiana University, Bloomington.

Baltin, Mark, and Leslie Barrett. 2002. The Null Content of Null Case. Ms. New York University.

Basilico, David. 1998. Object Position and Predication Forms. *Natural Language and Linguistic Theory* 16:541-595.

Bejar, Susana. 1998. Markedness and Morphosyntactic Representation: A Study of Verbal Inflection in the Imperfectiveive Conjugation of Standard Arabic. M.A. Thesis, University of Toronto.

Bejar, Susana. 2003. *Phi-syntax: a Theory of Agreement*. Ph.D. Dissertation, University of Toronto.

Bejar, Susana, and Diane Massam. 1999. Multiple Case Checking. *Syntax* 2:65-79.

Bejar, Susana, and Milan Rezac. 2003. Person Licensing and the Derivation of PCC Effects. In *Romance Linguistics: Theory and Acquisition*, edited by Ana Teresa Perez-Leroux and Yves Roberge. John Benjamins Publishing Company.

Benmamoun, Elabbas. 1992. *Functional and Inflectional Morphology: Problems of Projection, Representation, and Derivation*. Ph.D. Dissertation, USC, Los Angeles.

Benmamoun, Elabbas. 1995. The Derivation of the Imperative in Arabic. In *Perspectives on Arabic Linguistics IX*, ed. M. Eid and D. Parkinson. Philadelphia, John Benjamins Publishing Company.

Benmamoun, Elabbas. 1998. Agreement Asymmetries and the PF Interface. Ms. University of Illinois-Urbana Champaign.

Benmamoun, Elabbas. 1999. Spec-Head Agreement and Overt Case in Arabic. In *Specifiers: Minimalist Approaches.* Edited by D. Adger et al. Oxford University Press. Oxford. PP. 110-125.

Benmamoun, Elabbas. 2000. *The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects*. Oxford, Oxford University Press.

Benmamoun, Elabbas. 2008. Clause Structure and the Syntax of Verbless Sentences. In *Foundational Issues in Linguistics Theory: Essays in Honor of Jean-Roger Vergnaud*, edited by R. Freidin, C. Otero, and M.-L. Zubizarreta. MIT Press.

Bennis, Hans. 2007. Featuring the Subject in Dutch Imperatives. In *Imperative Clauses in Generative Grammar*, edited by Win van der Wurff. John Benjamins Publishing Company.

Benveniste, Emile. 1971. *Problems in General Linguistics*. Florida: University of Miami Press.

Besten, Hans den. 1978. Auxiliary Deletions and the Interplay between Logical Deletive Rule and Filters. Paper presented at the 1978 GLOW Colloquium.

Beukema, Frits. 1992. Imperatives Revisited, paper read at the XVth International Congress of Linguistics, Quebec, Canada, August 1992.

Bianchi, Valentina. 2003. On Finiteness as Logophoric Anchoring. In *Temps et Point de vue/Tense and Point of View*, edited by J. Gueron and L. Tasmovski.

Binnick, Robert. 1991. *Time and the Verb*. Oxford: Oxford University Press.

Bittner, Maria, and Kenneth Hale. 1996. The structural determination of case and agreement. LI 27:1,1-68.

Bobaljik, Jonathan. 1993. On Ergativity and Ergative Unergatives. In C. Phillips, ed., *MIT Working Papers in Linguistics vol. 19: Papers on Case and Agreement II*, pp. 45-88.

Bobaljik, Jonathan. 2006. Where is φ? Agreement as a Post-Syntactic Operation. To appear in *Phi-Theory: Phi features across interfaces and modules*, edited by D. Harbour, D. Adger, and S. Béjar. Oxford University Press, 295-328

Bobaljik, David, and Idan Landau. 2009. Icelandic control is not A-movement: The case from case. *Linguistic Inquiry* 40:113–132.

Bobaljik, Jonathan, and Susi Wurmbrand. 2007. Case in GB/Minimalism. To appear in *The Oxford Handbook of Case*, edited by Andrej Malchukov and Andrew Spencer. Oxford: Oxford University Press, 44-58.

Boeckx, Cedric. 2002. On Labels in Syntax. Ms, University of Illinois, Urbana-Champaign.

Boeckx, Cedric. 2008. *Understanding Minimalist Syntax*. Blackwell Publishing.

Boeckx, Cedric and Sandra Stjepanović. 2001. "Head-ing Toward PF." *Linguistic Inquiry* 2: 345-355.

Boeckx, Cedric, and Norbert Hornstein. 2004. Movement under control. *Linguistic Inquiry* 35:431–452.

Borer, Hagit. 1989. Anaphoric AGR. In *The Null Subject Parameter*, edited by Osvaldo Jaeggli and Kenneth J. Safir. 69-109. Dordrecht: Kluwer

Borer, Hagit. 1995. The ups and downs of Hebrew verb movement. *Natural Language and Linguistic Theory* 13: 527-606.

Boskovic, Zeljko. 1995. Case Properties of Clauses and the Greed Principle. *Studia Linguistica*, 49:32-53.

Boskovic, Zeljko, and Howard Lasnik. 2003. On the Distribution of Null Complementizers. Linguistic Inquiry, 34:527-546.

Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24, 591-656.

Bowers, John. 2001. Predication. In *The Handbook of Contemporary Syntactic Theory*, ed. by Mark Baltin and Chris Collins, 299-333. Oxford: Blackwell.

Bowers, John. 2002. Transitivity. *Linguistic Inquiry* 33, 183–224.

Branigan, Philip. 1996. Verb Second and the A-Bar Syntax of Subjects', *Studia Linguistica* 50, 50–79.

Burzio, Luigi. 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.

Carstens, Vicki. 1991. The Syntax and Morphology of Determiner Phrases in Kiswahili. Ph.D. Dissertation, UCLA, Los Angeles, California.

Carstens, Vicki. 1997. Empty Nouns in Bantu Locatives. The Linguistic Review, 14:361-410.

Carstens, Vicki. 2001. Multiple Agreement and Case Deletion: Against ϕ-(In)completeness. *Syntax* 4:3, 147-163.

Carstens, Vicki. 2003. Rethinking Complemetizer Agreement: Agree with a Case-checked Goal. Linguistic Inquiry, 34, 3:393-412.

Carstens, Vicki. 2005. Agree and EPP in Bantu. *Natural Language and Linguistic Theory,* 23:219-279.

Carstens, Vicki, and Kasangati Kinyalolo. 1989. On IP Structure: Tense, Aspect, and Agreement. Ms. Cornell University and UCLA.

Castillo, Concha. 2003. The Difference between Restrictive and Non-restrictive Relative Clauses. *Atlantis* 25.2:25-38.

Cecchetto, Carlo. 2006. Principle C as a Case of Mislabeling. *Interphases Conference*. University of Cyprus. Nicosia, May 18-20, 2006.

Cecchetto, Carlo, and Renato Oniga. 2004. A Challenge to Null Case Theory. *Linguistic Inquiry*, 141-149.

Chomsky, Noam. 1980. On Binding. *Linguistic Inquiry* 11:1-46.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, Noam. 1982. *Some Concepts and Consequences of the Theory of Government*

and Binding. Cambridge, Mass: MIT Press.

Chomsky, Noam. 1986a. *Barriers*. Cambridge, Mass: MIT Press.

Chomsky, Noam. 1986b. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.

Chomsky, Noam. 1991. Some Notes on Economy of Derivation and Representation. In *Principles and parameters in comparative grammar*, ed. Robert Freidin, 417-454. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In *The View from Building 20*, edited by K. Hale & S. Keyser, 1-52. Cambridge, Ma.: MIT Press.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.

Chomsky, Noam .2000. Minimalist Inquiries: The Framework. In: R. Martin, D. Michaels & J. Uriagereka, eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. MIT Press, Cambridge, Mass., pp. 89–156.

Chomsky, Noam. 2001. Derivation by Phase. In *Ken Hale: a life in language*, edited by M. Kenstowicz, 1-52. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 2004. Beyond Explanatory Adequacy, in A. Belletti (ed.), *Structures and Beyond. The Cartography of Syntactic Structures (vol. 3)*, Oxford (New York): Oxford University Press, 104-131.

Chomsky, Noam. 2005. On Phases, Ms., MIT.

Chomsky, Noam. 2006. Approaching UG from Below, Ms., MIT.

Chomsky, Noam, and Howard Lasnik. 1977. Filters and Control. *Linguistic Inquiry* 8: 425-504.

Chomsky, Noam, and Howard Lasnik. 1993. The Theory of Principles and Parameters. In *Syntax: An International Handbook of Contemporary Research*, edited by J. Jacobs A. von Stechow, W. Sternefeld, and T. Vennemann, 506-569. Berlin Mouton de Gruyter.

Cinque, Guglielmo. 1999. Adverbs and Functional Heads. New York and Oxford, OUP.

Citko, Barbara. 2008. Small Clauses Reconsidered: Not so Small and not all Alike. *Lingua*, 118:261-295.

Collins, Chris. 2002. Eliminating labels. In *Derivation and explanation in the minimalist program*, ed. S. D. Epstein and T. D. Seely, 42-64. Oxford: Blackwell.

Cowper, Elizabeth. 1988. What is a subject? Non-nominative subjects in Icelandic. In *Proceedings of NELS* , edited by J. Blevins & J. Carter (eds.), , GLSA, Amherst.

Cowper, Elizabeth. 1995. English Participle Constructions. Canadian Journal of Linguistics 40(1):1-38.

Cowper, Elizabeth. 2002. Finiteness. Ms. University of Toronto.

Cowper, Elizabeth. 2003. Why Dual is Less Marked than Plural. Ms. University of Toronto.

Cowper, Elizabeth. 2005. The Geometry of Interpretable Features: Infl in English and Spanish. *Language*, 81, 1:10-46.

Cowper, Elizabeth, and Daniel Currie Hall. 1999. Semantic Composition and Syntactic Structure: English Inflection. *Paper presented to the Canadian Linguistic Association, Université de Sherbrooke*

Cowper, Elizabeth, and Daniel Currie Hall. 2007. The Morphosyntactic Manifestations of Modality. *Proceedings of the annual conference of the Canadian Linguistic Association.*

Crystal, David. 1985. *A Dictionary of Linguistics and Phonetics*. 2. New York: Basil Blackwell.

Culicover, Peter. 1997. *Principles and Parameters: An Introduction to Syntactic Theory*. Oxford University Press.

Davison, Alice. 2004. Structural Case, Lexical Case, and the Verbal Projection. In V. Dayal and A. Mahajan (eds), *Clause Structure in South Asian Languages*. Dordrecht: Kluwer, pp. 199-225.

Diesing. Molly. 1990. Verb movement and the subject position in Yiddish, *Natural Language and Linguistic Theory* 8, 369-426.

Delahunty, Gerald. 1983. But sentential subjects do exist. *Linguistic Analysis* 12: 379-398.

Dikken, Marcel den. 1992. Empty Operator Movement in Dutch Imperatives, ms., University of Utrecht.

Dikken, Marcel den, and Alma Næss. 1993. Case Dependencies: The Case of Predicative Inversion. *The Linguistic Review*, 10:303-336.

Donati, Caterina. 2006. Labels and Merge. *Interphases Conference*. University of Cyprus. Nicosia, May 18-20, 2006.

Eisele, John. 1988. *The Syntax and Semantics of Tense, Aspect, and Time Reference in Cairene Arabic*. PhD. Dissertation, University of Chicago.

Embick, David, and Rolf Noyer. 2001. Movement Operations after Syntax. *Linguistic Inquiry*, 32:4, 555-595.

Enç, Mürvet. 1987. Anchoring Conditions for Tense. *Linguistic Inquiry* 18:633-657.

Fabb, Nigel. 1984. *Syntactic Affixation.* Ph.D. Dissertation, MIT, Cambridge, Mass.

Fabb, Nigel, and Ian Roberts. Forthcoming. Paper on auxiliaries, in preparation.

Farkas, Donka.1982. *Intensionality and Romance Subjunctive Relatives*. Unpublished Ph. D. Thesis, University of Chicago, distributed by the Indiana University Linguistics Club, Chicago.

Fassi Fehri, Abdelkader. 1981. *Linguistique arabe: forme et interpretation*, Publications of the Faculty of Letters, Rabat.

Fassi Fehri, Abdelkader. 1993. *Issues in the Structure of Arabic Clauses and Words*. Dordrecht: Kluwer.

Ferguson, Charles. 1959, 1997. The Arabic Koine. In *Structuralist Studies in Arabic Linguistics*, ed. R. Kirk Belnap and Niloofar Haeri. Leiden and New York: Brill.

Fink, R.O. 1952. Infinitives Don't Have Tense. *The Classical Journal*, 48.1:34-36.

Fournier, David. 2010. A Minimalist Account of the French Double Object Construction. Poster session handout at the 2010 CLA Conference, Concordia University, Montreal.

Frampton, John, and Sam Gutmann. 2000. Agreement is Feature Sharing. Ms. Northeastern University, Boston.

Fukui, Naoki, and Margaret Speas. 1986. Specifiers and projection. In *MIT working papers in linguistics 8*: Papers in theoretical linguistics, 128-172. MITWPL, Cambridge, Mass.

Ginneken, Jacobus van. 1907. Principes de linguistique psychologique. Paris.

George, Leland, and Jaklin Kornfilt 1981. Finiteness and Boundedness in Turkish. In Heny, F. (ed.) *Filtering and Binding*. Cambridge, Mass.: MIT Press. 105-127

Grasserie, Raoul de la. 1888. De la véritable nature du pronom. Etudes de grammaire comparée. Louvain.

Greenberg, Joseph. 1966. Some universals of grammar with particular reference to the order of meaningful elements. In: Greenberg, Joseph H. (ed.). *Universals of Language*. Cambridge, Mass: MIT Press, 73-113.

Guasti, Maria Teresa. 1993. *Causative and Perception Verbs: A Comparative Study*. Rosenberg and Sellier, Turin.

Haegeman, Liliane .1986. INFL, COMP and nominative Case assignment in Flemish infinitivals. In *Features and Projections*, Peter Muysken and Henk van Riemsdijk (eds.) 123-137. Dordrecht: Foris.

Haegemen, Liliane, and Jacqueline Guéron. 1999. *English Grammar: A Generative Perspective*. Oxford: Blackwell Publishers.

Haji-Abdolhosseini, Mohammad, Diane Massam, and Kenji Oda. 2002. Number and Events: Verbal Reduplication in Niuean. *Oceanic Linguistics* 41:2:475-492.

Hale, Kenneth, and Samuel Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In *The View from Building 20: Essays in Honor of Sylvain Bromberger*, edited by Hale, K. and S. J. Keyser. Cambridge, Mass.: MIT Press. 53- 110.

Hale, Kenneth, and Samuel Jay Keyser. 2000. Conflation. To appear in A. Bravo Martín, C. Luján Berenguel, and I. Pérez Jiménez eds., *Cuadernos de Lingüística VII 2000, Documentos de Trabajo. Lingüística Theórica*, pp. 39-76. Madrid: Instituto Universitario Ortega y Gasset.

Hall, Daniel Currie. 2001. The featural semantics of English modal verbs. Ms., University of Toronto.

Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the Pieces of Inflection, in K. Hale and S. Keyser, eds., *The View From Building 20*, Cambridge, MIT Press.

Halle, Morris, and Alec Marantz. 1994. Some Key Features of Distributed Morphology. *MITWPL* 21:275-288. Papers on Phonology and Morphology.

Hallman, Peter. 2002. The Formal Symmetry of Selection and Feature Checking. Ms. University of Michigan.

Hallman, Peter. 2004. Symmetry in Structure Building. *Syntax*, 1.1:79-100.

Han, Chung-hye. 1998. *The Structure and Interpretation of Imperatives: Mood and Force in Universal Grammar*. Ph.D. Dissertation, University of Pennsylvania.

Harbert, Wayne, and Maher Bahloul. 2002. Postverbal Subjects in Arabic and the Theory of Agreement. *Themes in Arabic and Hebrew Syntax*, edited by J. Ouhalla, and U. Shlonsky, 45-70. Kluwer Academic Publishers.

Harley, Heidi. 1994. Hug a Tree: Deriving the Morphosyntactic Feature Hierarchy. *MITWPL 21: Papers on Phonology and Morphology*, 289-320.

Harley, Heidi. 1995. *Subjects, Events and Licensing*. Ph.D. Dissertation, MIT.

Harley, H. (2004) "Merge, Conflation and Head Movement: The First Sister Principle revisited," in *Proceedings of NELS 34*, U. Mass Amherst: GSLA

Harley, Heidi. 2005. *One*-replacement, unaccusativity, acategorial roots and Bare Phrase Structure. *Harvard Working Papers in Linguistics*, edited by Slava Gorbachov and Andrew Nevins.

Harley, Heidi. 2006. The morphology of nominalizations and the syntax of *v*P. To appear in Giannakidou, Anastasia & Monika Rathert (eds.), Quantification, Definiteness, and Nominalization. Oxford: Oxford University Press

Harley, Heidi, and Rolf Noyer. 1998. 'Licensing in the non-lexicalist lexicon: nominalizations, vocabulary items and the Encyclopaedia. In MITWPL 32: Papers from the UPenn/MIT Roundtable on Argument Structure and Aspect, ed. Heidi Harley. MITWPL, Cambridge, 119-137.

Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78:482-526.

Harves, Stephanie. 2002. *Unaccusative Syntax in Russian*. Ph.D. Dissertation, Princeton University.

Harves, Stephanie. 2006. Non-agreement, Unaccusativity, and the External Argument constraint. In *Formal Approaches to Slavic Linguistics 14, the Princeton Meeting,* J. Lavine et al. (eds.), pp. 172-188.

Hayashi, Midori. 2007. Tense in Inuktitut and crosslinguistic implications. Ms., University of Toronto.

Henry, Alison. 1995. *Belfast English and Standard English: Dialect Variation and Parameter Setting.* Oxford: Oxford University Press.

Holes, Clive. 2004. *Modern Arabic: Structures, Functions, and Varieties.* Georgetown University Press.

Hornstein, Norbert. 1999. Movement and Control. *Linguistic Inquiry* 30:69-96.

Hornstein, Norbert, and David Lightfoot. 1987. Predication and PRO. *Language* 63:23-52.

Hornstein, Norbert, Jairo Nunes, and Kleanthes Grohmann. 2005. *Understanding Minimalism.* Cambridge University Press, UK.

Huddleston, Rodney. 1988. *English Grammar: An Outline.* Cambridge, Cambridge University Press.

Huntley, Martin. 1980. Propositions and the Imperative. *Synthese* 45, 281–310.

Ibn Al-Anbari, 'Abd al-Rahman ibn Muhammad. 1961. Al-Insaf fi masa'il al-khilaf. Alkhanji Library, Cairo.

Itkonen, T. 1976. *Eraan Sijamuodon Ongelmia.* Opusculae Instituti Linguae Fennicae: Universitas Helsinglensis.

Jakab, Edit. 2002. Two Cases of Disagreement in Russian: Contrastive Imperatives and Root Infinitives. *CLA Proceedings.*

Jelinek, Eloise. 1981. *On Defining Categories: Aux and Predicate in Colloquial Arabic.* Ph.D. Dissertation, University of Arizona, Tucson.

Jensen, Britta. 2003. Syntax and Semantics of Imperative Subjects. Proceedings of the 19th Scandinavian Conference of Linguistics, vol. 31.1:150-164.

Jespersen, Otto. 1917. *Negation in English and other languages*. Copenhagen: Host.

Jespersen, Otto .1924. *The Philosophy of Grammar*. London: Allen & Unwin. Judge, A. and F. G. Healey (1985). *A Reference Grammar of Modern French*. London: Edward Arnold.

Johns, Alana. 1992. Deriving Ergativity. *Linguistic Inquiry* 23:57-87.

Kayne, Richard. 1984. *Connectedness and Binary Branching*. Dordrecht: Foris.

Kayne, Richard .1994. *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.

Kempchinsky, Paula. 1991. On the Characterization of a Class of Ditransitive Verbs in Spanish. In *Current Studies in Spanish linguistics*, edited by Hector Campos and Fernando Martinez-Gil, 201-238.

Kenstowicz, Michael. 1994. Phonology in Generative Grammar. Cambridge MA: Blackwell.

Kiparsky, Paul. 1998. Partitive Case and Aspect. In *The Projection of Argument*, edited by M. Butt and W. Geuder: Stanford: CSLI. 265-308.

Kiparsky, Paul. 2001. Structural Case in Finnish. *Lingua*, 111:315-376.

Kitagawa, Yoshihisa. 1986. *Subjects in Japanese and English*. Ph.D. Dissertation, University of Massachusetts, Amherst.

Koopman, Hilda. 2006. Agreement Configurations: In Defense of "Spec-head". In *Agreement Systems*, edited by Cerdic Boeckx. John Benjamins.

Koopman. Hilda and Dominique Sportiche. 1988. Subjects. Ms., UCLA.

Kornfilt, Jaklin. 2007. Verbal and Nominalized Finite Clauses in Turkish. In *Finiteness: Theoretical and Empirical Foundations*. Edited by Irina Nikolaeva. Oxford University Press.

Kratzer, Angelika. 1996. Severing the external argument from its verb. In J. Rooryck and L. Zaring (eds.), *Phrase Structure and the Lexicon*. Dordrecht: Kluwer.

Kratzer, Angelika. 2004. Telicity and the Meaning of Objective Case. In *The Syntax of Time*, edited by J. Gueron and J. Lacarme. MIT Press, 389-424.

Kreps, C. 1994. Another Look at Small Clauses. In *UCL Working Papers in Linguistics*, edited by J. Harris, 149-178.

Kyriakaki, Maria. 2006. The geometry of tense, mood and aspect in Greek. M.A. thesis, University of Toronto.

Landau, Idan. 2004. The Scale of Finiteness and the Calculus of Control. *Natural Language and Linguistic Theory* 22:811-877.

Landau, Idan. 2006. Severing the Distribution of PRO from Case. *Syntax* 9:2, 153-170.

Larson, Richard.1985. Bare-NP Adverbs. *Linguistic Inquiry*, 16, 595-621.

Larson, Richard.1988. On the Double Object Construction. *Linguistic Inquiry*, 19:335-391.

Lasnik, Howard. 2008. On the Development of Case Theory: Triumphs and Challenges. In *Foundational Issues in Linguistics Theory: Essays in Honor of Jean-Roger Vergnaud*, edited by R. Freidin, C. Otero, and M.-L. Zubizarreta. MIT Press.

Lavine, James, and Robert Freiden. 2002. The Subject of Defective T(ense) in Slavic. *Journal of Slavic Linguistics* 10 (1-2):251-187.

Lebeaux, David. 1988. *Language Acquisition and the Form of the Grammar*. Ph.D. Dissertation, University of Massachusetts, Amherst.

Ledgeway, Adam .1998. Variation in the Romance infinitive: the case of the southern Calabrian inflected infinitive. *Transactions of the Philological Society* 96: 1-61.

Lee, Jeong-Shik .2005. Null Comp as Case Drop. *Studies in Generative Grammar*, 15, 2:251-264.

Legate, Julie Anne. 2008. Morphological and Abstract Case. *Linguistic Inquiry*, 39:1, 55-101.

Levin, Beth, and Malka Rappaport Hovav. 1995. Unaccusativity: At the Syntax-Lexical Semantics Interface. MIT Press, Cambridge, Massachusetts.

Levin, Juliette, and Diane Massam. 1985. Surface Ergativity: Case/Theta Relations Reexamined. In *Proceedings of the Fifteenth Meeting of the North Eastern Linguistics Society*, edited by S. Berman. 286-301. University of Massachusetts, Amherst.

Lumsden, Michael. 1990. *Existential Sentences: Their Structure and Meaning*. Routledge.

Mahajan. Anoop. 1990. *The A/A-bar Distinction and Movement Theory*. Ph.D. Dissertation, MIT.

Marantz, Alec. 1981. *On the nature of grammatical relations*, Ph.D. Dissertation, MIT, Cambridge, Mass.

Marantz, Alec. 1984. *On the nature of grammatical relations*. MIT Press, Cambridge.

Marantz, Alec. 1991. Case and Licensing, in German Westphal, Benjamin Ao & Hee-Rahk Chae (eds.), *Proceedings of ESCOL '91*, Cornell Linguistics Club, 234-253. Reprinted in Eric Reuland's (2000) *Arguments and Case*.

Martin, Roger. 1992. On the Distribution and Case Features of PRO. Ms. University of Connecticut, Storrs.

Martin, Roger. 1996. *A Minimalist Theory of PRO*. Ph.D. Dissertation, University of Connecticut, Storrs.

Martin, Roger. 2001. Null Case and the Distribution of PRO. *Linguistic Inquiry* 32:141-166.

Martineau, F and V Motapanyane. 1996. Hypothetical Infinitives and Crosslinguistic variation in Continental and Quebec French. In *Microparametric Syntax and Dialect Variation*, edited by J. R. Blake, 145-168, Amsterdam, Benjamins.

Massam, Diane. 1985. *Case Theory and the Projection Principle*. Ph.D. Dissertation, MIT.

Massam, Diane, and Carolyn Smallwood. 1996. Essential Features of Predication in English and Niuean. *NELS 27*.

Matthews, Peter. 1997. *The Concise Oxford Dictionary of Linguistics*, Oxford: Oxford University Press.

Matthewson, Lisa. 2005. Temporal semantics in a superficially tenseless language. Ms., University of British Columbia.

Matushansky, Ora. 2006. Head Movement in Linguistic Theory. *Linguistic Inquiry*, 37, 1:69-109.

Matushansky, Ora. 2008. A Case Study of Predication. To appear in *Studies in Formal Slavic Linguistics, Contributions from Formal Description of Slavic Languages*. Edited by F. Marusic, and R. Zaucer. Frankfurt am Main: Peter Lang, 213-239.

Matushansky, Ora. 2009. Some cases of Russian. In *Proceedings of FDSL*.

Mauck, Simon, Miok Pak, Paul Portner, and Raffaella Zanuttini. 2005. Imperative Subjects: A Cross-linguistic Perspective. In *Georgetown University Working Papers in Theoretical Linguistics*, edited by Brandstetter, C. and D. Rus. Georgetown. pp.135-152.

McFadden, Thomas. 2004. *The position of morphological case in the derivation: a study on the syntax-morphology interface*. Doctoral Dissertation, University of Pennsylvania.

Miller, Gary. 2002. *Nonfinite Structures in Theory and Change*. Oxford: OUP.

Mohammad, Mohammad A. 1989. *The Sentential Structure of Arabic*. Ph.D. Dissertation, University of Southern California. Los Angeles.

Mohammad, Mohammad A. 1990. The Problem of Subject-Verb Agreement in Arabic: Towards a Solution. In Eid, M. (ed.) *Perspectives in Arabic Linguistics I*. Amsterdam: Benjamins.

Mohammad, Mohammad A. 2000. *Word Order, Agreement and Pronominalization in Standard and Palestinian Arabic*. Amesterdam: Benjamins.

Mouchaweh, Lubana. 1986. De la syntaxe des petites propositions, Third Cycle Thesis, Paris VIII.

Nikolaeva, Irina. 2007a. *Finiteness: Theoretical and Empirical Foundations*. Oxford University Press.

Nikolaeva, Irina. 2007b. Introduction. In *Finiteness: Theoretical and Empirical Foundations*, edited by Irina Nikolaeva, 1-19. Oxford University Press.

Noyer, Rolf. 1997. *Features, Positions, and Affixes in Autonomous Morphological Structures*, Doctoral Dissertation, MIT, published version. Garland.

Ouhalla, Jamal. 1988. *The Syntax of Head Movement: A Study of Berber*, unpublished Ph.D. dissertation, University College London.

Ouhalla, Jamal. 1991. *Functional Categories and Parametric Variation*. London: Routledge.

Ouhalla, Jamal. 1999. *Introducing Transformational Grammar from Principles and Parameters to Minimalism*. Arnold, Oxford University Press.

Ouhalla, Jamal. 1994. Verb Movement and Word Order in Arabic. In *Verb Movement*, edited by D. Lightfoot and N. Hornstein, 41-72. Cambridge, Cambridge University Press

Ouhalla, Jamal. 2005. Agreement Features, Agreement and Antiagreement. *Natural Language and Linguistic Theory* 23, 655-686.

Owens, Jonathan. 1988. *The Foundations of Grammar. An Introduction to Medieval Arabic Grammatical Theory*. John Benjamins Publishing Company.

Pak, Miok, Paul Portner, and Raffaella Zanuttini .2006. The Syntax and Semantics of Jussive Clause Type in Korean. Submitted to *Natural Language and Linguistic Theory*.

Pak, Miok, Paul Portner, and Raffaella Zanuttini. 2007. Agreement and the Subjects of Jussive Clauses in Korean, in Efner, E. and Walkow, M. (eds.) *Proceedings of NELS 37*, GLSA, Univ. of Massachusetts

Paoli, Sandra. 2007. The Fine Structure of the Left Periphery: COMPs and Subjects Evidence from Romance. *Lingua*, 117:1057-1079.

Parrott, Jeffrey. 2001. *A morphological theory of head movement.* Ms., Georgetown University.

Partee, Barbara. 1973. Some Structural Analogies between Tenses and Pronouns in English. *The Journal of Philosophy*, 70, 601-609.

Perlmutter, David. 1978. Impersonal Passives and the Unaccusative Hypothesis. In *Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society* (BLS 4), 157-189.

Pesetsky. David. 1982. *Paths and Categories*. Ph.D. Dissertation, MIT.

Pesetsky, David. 1992. *Zero syntax*, vol. 2. Ms., MIT, Cambridge, Mass.

Pesetsky, David, and Esther Torrego. 2001. T-to-C Movement: Causes and Consequences. In *Ken Hale: A Life in Language*, edited by M. Kenstowicz, 355-426, MIT Press, Cambridge, MA.

Pesetsky, David, and Esther Torrego. 2004. Tense, Case, and the Nature of Syntactic Categories. In *The Syntax of Time*, edited by J. Guéron and J. Lecarme, MIT Press

Pesetsky, David, and Esther Torrego. 2007. The Syntax of Valuation and the Interpretability of Features. In *Phrasal and Clausal Architecture: Syntactic derivation and interpretation*, edited by S. Karimi, V. Samiian and W. Wilkins, 262–294, Amsterdam: Benjamins.

Picallo, M. Carme. 2002. Abstract Agreement and Clausal Arguments. *Syntax*, 5:2 116-147.

Plann, Susan. 1986. On Case Marking Clauses in Spanish: Evidence against the Case Resistance Principle. *Linguistic Inquiry*, 17:336-346.

Platzack, Christer. 2003. Agreement and Null Subjects. *Nordlyd*. 31.2:326-355. Proceedings of the 19th Scandinavian Conference of Linguistics, vol. 31.2.

Platzack, Christer, and Anders Holmberg. 1989. The Role of Agr and Finiteness in Germanic VO languages. Working Papers in Scandinavian Syntax 43:51-76.

Platzack, Christer, and Inger Rosengren. 1998. On the Subject of Imperatives: A Minimalist Account of the Imperative Clause. *The Journal of Comparative Linguistics* 1, 177-224. Kluwer Academic Publishers.

Poletto, Cecilia. 2000. *The Higher Functional Field*. OUP, Oxford and New York.

Polinsky, Maria and Eric Potsdam. 2002. Backward Control. *Linguistic Inquiry* 33:245-282.

Pollock, Jean-Yves. 1989. Verb Movement, Universal Grammar, and the Structure of IP. *Linguistic Inquiry* 20, 365-424.

Potsdam, Eric. 1996. *Syntactic Issues in the English Imperative*, Ph.D. Dissertation, University of California, Santa Cruz.

Preminger, Omer. 2009. Failure to *Agree* is not Failure: ɸ-agreement and (un)grammaticality, with Special Reference to Agreement-dependent Case. Talk handout.

Pylkkanen, Liina. 2002. *Introducing Arguments*. Ph.D. Dissertation, MIT, Cambridge, MA.

Quirk, R., Greenbaum S., Leech S., and Svartvik J. *A Comprehensive Grammar of the English Language*. London, Longman.

Rackowski, Andrea. 2002. *The Structure of Tagalog: Specificity, Voice, and the Distribution of Arguments*. Ph.D. Dissertation, MIT.

Ramchand, Gillian. 1997. *Aspect and Predication: The Semantics of Argument Structure*. Oxford: Clarendon Press.

Rapoport, Tova. 1987. *Copular, Nominal, and Small Clauses: A Study of Israeli Hebrew*. Ph.D. Dissertation, MIT.

Raposo, Eduardo .1987. Case Theory and Infl-to-Comp: the Inflected Infinitive in European Portuguese. *Linguistic Inquiry* 18: 85-109.

Rezac, Milan. 2004. *Elements of Cyclic Syntax: Agree & Merge*. Ph.D. Dissertation, University of Toronto.

Rice, Keren. 1989. *A Grammar of Slave*. Berlin: Mouton de Gruyter.

Rice, Keren. 1999. Featural Markedness in Phonology - Variation. Part 1. GLOT International 4.7: 3-6.

Richards, Marc. 2005. Defectiveness and Definiteness: The Role of v-Def in the Russian Genitive of Negation. Paper given at BASEES.

Richardson, Kylie. 2007. *Case and Aspect in Slavic*. Oxford University Press.

Ritter, Elizabeth. 1997. Agreement in the Arabic Prefix Conjugation: Evidence for a Non-linear Approach to Person, Number, and Gender Features. In *Proceedings of the 1997 Annual*

Conference of the Canadian Linguistics Association. University of Calgary: Department of Linguistics.

Ritter, Elizabeth, and Martina Wiltschko. 2004. The lack of tense as a syntactic category: Evidence from Blackfoot and Halkomelem. Paper presented at the 39th International conference on Salish and Neighbouring Languages, North Vancouver and the Canadian Linguistics Association Annual Meeting, University of Manitoba, Winnipeg.

Ritter, Elizabeth, and Martina Wiltschko. 2005. Anchoring Events to Utterances without Tense. *Proceedings of WCCFL 24*. Somerville, MA: Cascadilla Proceedings Project, Cascadilla Press. Pp.343-351.

Ritter, Elizabeth, and Sara Thomas Rosen. 2005. Agreement without A-positions: Another look at Algonquian. *Linguistic Inquiry* 36: 648-660.

Ritter, Elizabeth, and Martina Wiltschko. To appear. To appear in Jeroen van Craenenbroeck and Henk van Riemsdijk, eds. *Alternatives to cartography*. Berlin: Mouton de Gruyter.

Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris.

Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, Mass.: MIT Press.

Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In *Elements of Grammar*: *Handbook in Generative Syntax*, edited by L. Haegeman. Dortrecht: Kluwer.

Roberts, Ian. 1985a. *The Representation of Implicit and Dethematized Subjects*. Ph.D. Dissertation, USC, LA.

Roberts, Ian. 1985b. Agreement Parameters and the Development of English Modal Auxiliaries. *Natural Language and Linguistic Theory*, 3.1:21-58.

Roeper, Thomas, and Jean-Roger Vergnaud. 1980. The Government of Infinitives. Ms. Umass, Amherst.

Rooryck, Johan. 1991. *Relativized Minimality and Clitic Ordering in Romance Imperatives*, ms., Indiana University.

Ross, John. 1970. On Declarative Sentences. In *Readings in English Transformational Grammar*, edited by R. Jacobs, and P. Rosenbaum.

Rothstein, Susan. 1983. *The Syntactic Forms of Predication*, Ph.D. Dissertation, MIT.

Rupp, Laura. 1999. *Aspects in the syntax of English imperatives*, Ph.D. Dissertation, University of Essex.

Safir, K. 1982. *Syntactic Chains and the Definiteness Effect*. Ph.D. Disseration, MIT, Cambridge.

San Martin, Itziar. 2003. PRO receives Regular Structural Case in Basque, in Yoon Hang-Jim, *Proceedings of the 4th GLOW in Asia 2003. Generative Grammar in a Broader Perspective*.

San Martin, Itziar. 2004. *On Subordination and the Distribution of PRO*. Ph.D. Dissertation, University of Maryland, College Park.

Schütze, Carson. 1997. *INFL in child and adult language: Agreement, Case, and licensing*. Ph.D. Dissertation, MIT. Cambridge, Massachusetts

Schütze, Carson. 2001. On the Nature of Default Case. *Syntax* 4:3, 205-238.

Schwager, Magdalena. 2008. Imperatives and Tense. Workshop 'Tense across languages', DGfS Tagung Bamberg.

Seiter, William, 1980. Issues in Niuean Syntax. Garland Press: New York.

Sells, Peter. 2007. Finiteness in Non-transformational Syntactic Frameworks. In *Finiteness: Theoretical and Empirical Foundations*. Edited by Irina Nikolaeva. Oxford University Press.

Sigurdsson, Halldor Armann. 1991. Icelandic Case-marked PRO and the Licensing of Lexical Arguments. *Natural Language and Linguistic Theory* 9:327-364.

Sigurdsson, Halldor. 2008. The Case of PRO. *Natural Language and Linguistic Theory*, 26:403-450.

Siibawayhi, Abuu Bishr Q. 8th Century. Al-Kitaab, Bulaaq, Cairo, 1938.

Soltan. Usama. 2007. *On Formal Feature Licensing in Minimalism: Aspects of Standard Arabic Morphosyntax*. Ph.D. Dissertation, University of Maryland, College Park.

Sportiche, Dominique. 1990. Movement, agreement, and Case. Ms., UCLA, Los Angeles, California.

Sproat, Richard. 1985. Welsh Syntax and VSO Structure. *Natural Language and Linguistic Theory*, 3:173-216.

Sridhar. S. N. 1990. *Kannada*. Routledge, London.

Steel, S. 1981. An Encyclopedia of AUX: A Study of Crosslinguistic Equivalence. MIT Press, Cambridge.

Stowell, Timothy. 1978. What was there before there was there? In *Papers from the 14th Regional Meeting of the Chicago Linguistic Society*, ed. by Donka Farkas, Wesley M. Jacobsen and Karol W. Todrys, 458-471. Chicago: Chicago Linguistic Society.

Stowell, Timothy. 1981. *Origins of Phrase Structure*. Doctoral dissertation, MIT.

Stowell, Timothy. 1982. The Tense of Infinitives. *Linguistics Inquiry*, 13, 561-570.

Stowell, Timothy. 1983. Subjects across categories. *The Linguistic Review* 2, 285-312.

Stowell, Timothy. 1986. Null Antecedents and Proper Government. In S. Berman, J.-W. Choe and J. McDonough, eds., *Proceedings of NELS 16*, GLSA, Amherst Mass., pp. 476-493.

Svenonius, Peter. 2001. Case and Event Structure. *ZAS Papers in Linguistics 26. The syntax of Predication.*

Svenonius, Peter. 2002a. Case is Uninterpretable Aspect. *Proceedings of Perspectives on Aspect*, Utrecht. Amsterdam: Benjamins.

Svenonius, Peter. 2002b. Icelandic Case and the Structure of Events. *Journal of Comparative Germanic Linguistics* 5:197-225. Kluwer Academic Publishers.

Tanaka, Tmoyuki. 2005. C, T, and Case/Agreement: A Unified Analysis of Finite and Nonfinite Clauses. *Journal of Slavic Linguistics*, 1, 91-105.

Terzi, Arhonto. 1992. *PRO in Finite Clauses: A Study of the Inflectional Heads of the Balkan Languages*. Ph.D. Dissertation, City University of New York.

Torrego, Esther. 1998. *The Dependencies of Objects*. Cambridge, MIT Press.

Torrego, Esther. 2009. Aspects of Case and Agreement. *Ehu International Workshop on Ergativity*. Bilbao, Spain.

Tsai, Wei-Tien Dylan. 1995. Visibility, complement selection and the case requirement of CP. *Journal of East Asian Linguistics*, 4, 4:281-312.

Uchibori, Asako. 2000. *The Syntax of Subjunctive Complements: Evidence from Japanese*. University of Connecticut Ph.D. Dissertation.

Uriagereka, Juan. 1988. *On Government*. Ph.D. Dissertation, University of Connecticut, Storrs.

Uriagereka, Juan. 2006. Complete and partial Infl. In *Agreement Systems*, edited by Cedric Boeckx. John Benjamins Publishing Company.

Uriagereka, Juan. 2008. *Syntactic Anchors: On Semantic Structuring*. Cambridge University Press.

Vainikka, Anne. 1993. The Three Structural Cases in Finnish. In Anders Holmberg and Urpo Nikanne. (edd.), *Case and other functional categories in Finnish syntax.* Berlin: Mouton de Gruyter.

Verkuyl, Henk. 1993. *A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure*. Cambridge University Press.

Vergnaud, Jean-Roger. 1977. Letter to Noam Chomsky and Howard Lasnik on "Filters and Control". *Foundational Issues in Linguistic Theory*. Cambridge. MIT Press 2008.

Vergnaud, Jean-Roger. 1982. *Dependances et niveaux de representation en syntax*. These de Doctorat d'Etat, Universite de Paris VII.

Versteegh, Kees. 1997. *The Arabic Language*. Edinburgh University Press.

Vincent, Nigel. 1997. Complementation. In *The Dialects of Italy*, edited by M. Maiden and M. Parry. London: Routledge.

Vincent, Nigel. 1998. On the Grammar of Inflected Nonfinite Forms (with Special Reference to Old Neapolitan). In *Clause Combining and Clause Structure*, edited by I. Korzen and M. Herslund, Copenhagen, 135-158.

Watanabe, Akira.1993. The Notion of Finite Clauses in Agr-based Case Theory. In *Papers on Case and Agreement I: MIT Working Papers in Linguistics* 18, 281-296.

Wiltschko, Martina. 2003. On the interpretability of tense on D and its consequences for Case theory. *Lingua* 113:659-696.

Winford, Donald. 2000. Irrealis in Sranan: Mood and Modality in a Radical Creole. Journal of Pidgin and Creole Languages, 15.1:63-125.

Woolford, Ellen 1997. Four-way Case systems: ergative, nominative, objective, and accusative. *Natural Language and Linguistic Theory* 15:181-227.

Wratil, Melani. 2005. Die Syntax des Imperativus. Berlin: Akademie Verlag.

Wright, William. 1967. *A Grammar of the Arabic Language*, Volume 1. Cambridge: Cambridge University Press. (first published in 1859).

Wurmbrand, Susanne. 1998. *Infinitives: Restructuring and Clause Structure*. Unpublished Ph.D. Thesis, MIT, Cambridge, MA.

Wurmbrand, Susanne. 2006b. Tense Topics: The Future of Infinitives. Handout from a colloquium talk, MIT.

Wurmbrand, Susanne. 2007. Infinitives are Tenseless. *U.Penn Working Papers in Linguistics*, Volume 13.1.

Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and Grammatical Functions: The Icelandic Passive, *Natural Language and Linguistic Theory* 3, 441-483.

Zagona, Karen. 1982. *Government and Proper government of Verbal Projections*. Ph.D. Dissertation, University of Washington.

Zagona, Karen. 1988. *Verb Phrase Syntax: a Parametric Study of Spanish and English*. In the Series: Studies in Natural Language and Linguistic Theory. D. Reidel Publishing Co., Dordrecht (Kluwer Academic Publishing.)

Zanuttini, Raffaella. 1991. *Syntactic Properties of Sentential Negation. A Comparative Study of Romance Languages*. Ph.D, Dissertation, University of Pennsylvania.

Zhang, Shi. 1990. *The Status of Imperatives in Theories of Grammar*, Ph.D. Dissertation, University of Arizona.

WWW Sources

Approach (Arabic): http://www.almenhaj.net/makal.php?linkid=2158

Arabic (Arabic): http://www.drmosad.com/index.htm

Arabic Verbs (Arabic): http://medhatfoda.jeeran.com/naho%202th/2thn9.htm

Forum (Arabic): http://montada.arahman.net/t10197.html

Appendix

On the Similarity between Morphological Nominal Case and Morphological Verbal Case

After providing syntactic arguments for the claim that structural Case in SA is licensed by Verbal Case (VC), this appendix provides an indirect morphological argument for the proposed link between Case and VC. Basically, I propose that there is a word-formation relation between morphological nominal case (m-case) and morphological verbal case (m-vc) in SA by showing that m-case and m-vc are more similar to each other than previously noticed. This morphological similarity could receive more than one account. It could be explained by assuming that nouns are derived from verbs, which is the Kufan grammarians' approach, or that verbs are derived from nouns, which is the Basran grammarians' and Johns' (1992) approach. It could also be explained by assuming that the two lexical categories are derived from the same root, and that the similar affixes are actually the same affixes/features, but get interpreted as m-case or m-vc depending on the lexical category on which they appear (where derivation precedes inflection), which is in line with recent morphological frameworks, especially Distributed Morphology (DM).[171] This account of morphological similarity will *not* be cast in any one of these frameworks, and is not

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[171] The goal of this thesis has been to argue against the view that structural Case in SA is licensed by agreement or tense. The agreement approach to Case is usually supported by the observation that verbs carry agreement morphology. Likewise, the tense approach is supported by the observation that verbs carry tense semantics (and morphology). Soltan (2007:17) also argues that ϕ-agreement on I^0 and $v*^0$ is what licenses Case to DPs in SA since verbs carry ϕ-agreement features, which is a nominal feature, and that Case is not licensed by a [Case] feature on I^0 and $v*^0$ since verbs do *not* carry nominal Case morphology.

To respond to these views, I showed both approaches to be lacking since agreement is usually defective in SA and tense is not always present when structural Case is licensed. Thus I argued in chapters 3 and 4 that VC is what licenses structural Case in SA. To respond to Soltan's remark, I showed (in chapter 2) that verbs in SA do not carry full subject or object agreement. In this appendix, I will show, contra his remark, that verbs in SA carry nominal Case morphology by showing that their verbal Case morphology is always *identical* to nominal Case morphology (which, assuming that his reasoning is on the right track, supports my earlier claim that I^0 and $v*^0$ have dedicated Case features, [VC] features, which license [Case] to DPs). This thus means that the account to be presented in this appendix relies heavily on illustrating the assumed morphological similarity, which means that it must assume early insertion of vocabulary items. This account will *not* be cast in any theoretical framework; rather, it will be presented in purely descriptive terms, in particular, assuming early insertion of phonological features for the purpose of highlighting the assumed morphological similarity between the two sets of suffixes, m-case and m-vc. A fully theoretical treatment is obviously beyond the scope of this thesis.

intended to bear on any existing theory of word formation, or to claim any theoretical contribution.[172]

I will show that the Nom m-case suffixes are identical to the indicative m-vc suffixes (both terms called 'marfuuʕ' by traditional Arabic grammarians (TAGs)), and that the Acc m-case suffixes are identical to the subjunctive m-vc suffixes (both terms called 'manSuub' by TAGs) right after the verbal forms acquire their m-vc suffixes/features, and before they undergo two word formation operations that affect their structure, resulting in the known surface verbal forms. Regardless of how they are derived, this account could lead to explaining the Acc m-case syncretism, where the Acc m-case suffixes of non-singular nouns are phonologically identical to the Gen m-case suffixes of nouns encoding the same number and gender features.

The claimed morphological relation between indicative m-vc and Nom m-case, and subjunctive m-vc and Acc m-case, could be based on Marantz's (1991) proposal that there are three types of m-case. These are: lexical case, which is assigned by lexical items, unmarked case, which is Nom for Nom-Acc languages, and dependent case, which is Acc for Nom-Acc languages. Following Marantz (1991), I will assume that Nom is the unmarked m-case and that Acc is the dependent (or marked) m-case in SA. Relevant to this, we saw in chapters 3-4 that indicative is the unmarked m-vc in SA (since it appears on the citation form of the verb, and on verbs not in the scope of particles), and that subjunctive is a marked m-vc in SA (since it requires assignment by a particle). Thus it seems that there is some relationship between what Marantz calls

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[172] The long-standing question in this regard is whether nouns are derived from verbs (the Kufans' view) or verbs are derived from nouns (the Basrans' view) or both nouns and verbs are derived from the same root where the same inflectional features of both elements are the same at some level (DM). A problem with the view that verbs are derived from nouns is that there are 1st, 2nd, and 3rd person verbal forms, but only nouns in the 3rd person, which could mean that nouns have to have 1st and 2nd person features. A problem with the view that both elements are derived from the same root (with the same features, being realized by the same vocabulary items) is that there are forms in the language that have both verbal and nominal suffixes. As we saw in chapter 5, SA participles, like 'ʕaarif-u-n', carry both a nominal case suffix '-u' and a verbal case suffix '-n'. This fact about participles, however, also argues against the Kufan view since if nouns were derived from verbs, the m-vc suffix would have been closer to the root than the m-case suffix. Obviously, the issue is more complicated than can be dealt with here; thus I leave it for future investigation, choosing to just focus here on morphological similarity.

unmarked m-case and what I showed to be the unmarked m-vc value; similarly, the same relationship holds between what he calls dependent m-case and what I showed to be a marked m-vc value (which could also be argued to be a dependent m-vc form since its appearance on the verb is dependent on VC assignment by a particle).

This account of morphological similarity is based on a novel analysis of the SA imperfective paradigm, which will also not be cast in any theoretical framework. In what follows, I will first present the relevant paradigms, show the similarities and state why the differences obtain. Then I will present the proposed SA imperfective paradigm analysis (on a descriptive level). This analysis will help account for the differences in the indicative-nominative paradigm. Also by showing partial similarity in the subjunctive-accusative paradigm, this analysis suggests that Acc m-case syncretism is parallel to subjunctive m-vc syncretism, where the subjunctive m-vc suffixes of non-singular verb forms are identical to those of the jussive paradigm.

1. The Similarities and Differences between m-case and m-vc[173]

1.1. The Indicative-Nominative Paradigm

This section presents the two sets of suffixes (m-vc and m-case), and highlights the similarity between them, as well as showing how the apparent differences obtain. I will eventually argue that all the six verbal forms in table 1 have overt indicative m-vc marking. The relevant suffixes are boldfaced.[174]

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[173] I assume that the person and gender morphemes/features are base-generated in the prefix and that the number morpheme/feature is base-generated in the suffix of the verbal forms. In section 2, we will see that this assumption is supported by the structure of the majority of the verbal forms in the imperfective paradigm.

[174] I am going to propose a phonological rule that regulates the behavior of the two indicative suffixes, '-u' and '-n'. Basically, I am going to assume that the two affixes are allomorphs of the indicative morpheme; the two allomorphs behave according to the rules in (i-ii).

      i. $\emptyset \rightarrow u / C$ --- #

      ii. $\emptyset \rightarrow n / V$ --- #

Table 1

		Ind-marked Verbs	**Nom-marked DPs**
1.	3sm	yu-darris-**u** 3-teach-Ind	ʔal-mudarris-**u** the-teacher-Nom
2.	3sf	tu-darris-**u** f-teach-Ind	ʔal-mudarris-at-**u** the-teacher-f-Nom
3.	3dm	yu-darris-**aa-n** 3-teach-d-Ind	ʔal-mudarris-**aan** the-teacher-d.Nom
4.	3df	tu-darris-**aa-n** f-teach-d-Ind	ʔal-mudarris-at-**aan** the-teacher-f-d.Nom
5.	3pm	yu-darris-**uu-n** 3-teach-p-Ind	ʔal-mudarris-**uun** the-teacher-p.Nom
6.	3pf	yu-darris-na-**Ø** 3-teach-pf-Ind	ʔal-mudarris-aa-t-**u** the-teacher-p-f-Nom

It is clear that the Nom m-case and indicative m-vc suffixes are identical, except for the plural feminine forms; that is, the plural feminine noun has an overt m-case suffix, whereas the

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In other words, the allomorph '-u' is used if the last sound in the verbal complex, root+agreement, is a consonant; the allomorph '-n' is used if the last sound in the verbal complex is a vowel. This rule applies to verb roots that have consonantal radicals; that is, the verbs whose roots are formed exclusively out of consonants. Verb stems whose roots have glides behave somewhat differently, but these details are not really important for the argument here.

Moreover, such a consonant cluster as 'sn' in the coda is not licit in SA; Wright (1967:26) states that "[a] syllable cannot end in two consonants, which are not either separated or followed by a vowel (except in pause)".

corresponding verb has a null m-vc suffix.[175] I will argue that at some point in the derivation of the verb, it had an overt m-vc morpheme that is identical to the Nom m-case morpheme of the corresponding noun, and that this m-vc suffix is deleted as a result of the application of verb formation operations. And so the question becomes: <u>why is the indicative m-vc suffix deleted from the 3pf verb form (and not from other forms)?</u> In section 2, I will provide the answer to this question. For now, I will assume that the plural feminine verb form looked as in (1) at some stage in its derivation.

1. yu-ta-darris-uu-**u**

   3-f-teach-p-Ind

In other words, the form had an overt indicative m-vc morpheme when it had the gender morpheme in the prefix. These issues will be clarified by the imperfective paradigm analysis in section 2.

1.2. The Subjunctive-Accusative Paradigm

This section shows that the Acc m-case suffixes are identical to the subjunctive m-vc suffixes when both are marked, as table 2 shows. In other words, when the subjunctive m-vc suffixes are not overtly marked, the Acc m-case suffixes are identical to the Gen m-case suffixes, as (2-9) show.

Table 2

		Sub-marked Verbs	**Acc-marked DPs**
1.	3sm	lan yu-darris-**a** Neg-Fut 3-teach-**Sub**	ʔal-mudarris-**a** the-teacher-Acc

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[175] I use the term 'corresponding' to remain neutral on the nature and direction of derivation, verb-to-noun, noun-to-verb, root-to-verb and -noun.

2.	3sf	lan Neg-Fut	tu-darris-**a** f-teach-Sub	ʔal-mudarris-at-**a** the-teacher-f-Acc
3.	3dm	lan Neg-Fut	yu-darris-aa-**Ø** 3-teach-d-Sub	ʔal-mudarris-**ayn** the-teacher-d.Acc
4.	3df	lan Neg-Fut	tu-darris-aa-**Ø** f-teach-d-Sub	ʔal-mudarris-at-**ayn** the-teacher-f-d.Acc
5.	3pm	lan Neg-Fut	yu-darris-uu-**Ø** 3-teach-p-Sub	ʔal-mudarris-**iin** the-teacher-p.Acc
6.	3pf	lan Neg-Fut	yu-darris-na-**Ø** 3-teach-pf-Sub	ʔal-mudarris-aa-t-**i** the-teacher-p-f-Acc

2. kallam-tu   l-mudarris-**ayn**

Pst.talk-1sm   the-teacher-d.**Acc**

'I talked to the two male teachers'

3. THahab-tu   maʕa   l-mudarris-**ayn**

Pst.go-1sm   with   the-teacher-d.**Gen**

'I went with the two male teachers'

4. kallam-tu   l-mudarris-at-**ayn**

Pst.talk-1sm   the-teacher-f-d.**Acc**

'I talked to the two female teachers'

5. THahab-tu   maʕa   l-mudarris-at-**ayn**

Pst.go-1sm   with   the-teacher-f-d.**Gen**

'I went with the two female teachers'

6. kallam-tu   l-mudarris-**iin**

Pst.talk-1sm   the-teacher-p.**Acc**

'I talked to the teachers'

7. THahab-tu   maʕa   l-mudarris-**iin**

Pst.go-1sm   with   the-teacher-p.**Gen**

'I went with the teachers'

8. kallam-tu   l-mudarris-aa-t-**i**

Pst.talk-1sm   the-teacher-p-f-**Acc**

'I talked to the female teachers'

9. THahab-tu   maʕa   l-mudarris-aa-t-**i**

Pst.go-1sm   with   the-teacher-p-f-**Gen**

'I went with the female teachers'

The 3dm, 3df, 3pm, and 3pf verb forms have null subjunctive m-vc suffixes but the corresponding nouns have overt Acc m-case suffixes. Given (2-9), it is clear that the corresponding nouns are Acc-marked with what is phonologically identical to the Gen case morphology on nouns bearing the same number and gender features. Thus I will assume that

the Gen m-case suffixes are the default/unmarked Acc m-case suffixes.[176] The data in (2-9) show that the non-singular nouns do not have marked Acc m-case suffixes, which is the same observation about the non-singular subjunctive verbal forms, which do not have marked m-vc suffixes. This points to a connection between the two sets of suffixes that could (in a theory-based account) explain the m-case syncretism in the Acc paradigm.[177] This observation further supports the assumption that there is a link between m-case and m-vc in SA (and so between Case and VC).[178]

2. The Imperfective Paradigm and the Anomalous Cases[179]

In this section, I propose a novel analysis of the SA imperfective paradigm, where I highlight the various word formation operations that imperfective verb forms undergo. This analysis aims to account for why the 3pf indicative verb form has a null m-vc suffix when the corresponding noun has a marked Nom m-case suffix. Also, while it supports the claimed link between Case and VC (which is the goal of this thesis), this analysis also answers some questions related to the imperfective paradigm itself, among which how the surface verbal forms obtain, and why gender is not marked in the 2nd person dual paradigm. The following sections present the proposed analysis and defend it, as well as showing how it supports the proposed link between m-case and m-vc.

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[176] This assumption could be supported by the fact that Gen is the only one of the SA three Case values (Nom, Acc, and Gen) that is not licensed by verbs. As a matter of fact, the term traditional Arabic grammarians had for Gen case is 'majruur'; I think a better equivalent for this term is 'Oblique'.

[177] This indicates that there are two ways to mark Acc in SA, suffixing '-a', which applies to singular nouns, and using what is phonologically identical to the (corresponding) Gen m-case suffixes, which applies to non-singular nouns.

[178] I think that the fact that non-singular subjunctive-marked verb forms have null subjunctive m-vc suffixes might have to do with the fact that [Number] is marked on those forms, compared to the singular forms where [Number] is unmarked and where the subjunctive m-vc suffix is overt ('-a').

[179] I would like to thank Daniel Hall for some illuminating comments on an earlier draft of this section.

2.1. The Proposed Imperfective Paradigm Analysis

The SA imperfective paradigm was the topic of many thorough examinations in the generative literature, as in Noyer (1997), Harley (1994), Ritter (1997), and Bejar (1998). Noyer's, Harley's and Ritter's analyses are based on rule-ordered vocabulary insertion, where lexical insertion is determined by Paninian principles and a feature hierarchy. While Noyer's analysis assumes a universal feature hierarchy, Harley's, Ritter's, and Bejar's assume feature geometry.

The proposed analysis resembles these analyses in some respects and differs from them with regard to others. This analysis differs from Harley's, Ritter's, and Bejar's analyses in not assuming feature geometry. However, it is similar to these analyses in regarding 3rd person, singular, and masculine as the unmarked features in the paradigm. Moreover, it differs from Noyer's, Harley's, and Ritter's analyses in not assuming rule ordered vocabulary insertion. It is though similar to Noyer's analysis in assuming a universal feature hierarchy. In addition, my analysis differs from these analyses in how it glosses the 2sf form suffix 'iina'. While Noyer (1997), Harley (1994), and Bejar (1998) gloss it as encoding 2nd Person Feminine, and Ritter (1997) glosses it as encoding Feminine Singular, I gloss it as encoding Feminine and indicative m-vc. Thus I assume that it is composed of two affixes, '-ii-' marking Feminine only, and '-n' marking indicative.[180] The assumption that '-ii-' marks feminine is revealed by comparing the negative imperative forms in (10-11).

10. laa   ta-ktub-ø   ʕala   l-jidaar-i

    Neg.Impr   2-write-Juss   on   the-wall-Gen

    'Don't write on the wall!'   [addressed to a boy]

11. laa   ta-ktub-**ii**-ø   ʕala   l-jidaar-i

---

[180] I ignore the final '-a' in '-iina' because I am not sure (nor is it highly important) whether it is part of the suffix or epenthetic since it appears only in connected speech.

Neg.Impr 2-write-**f**-Juss on the-wall-Gen

'Don't write on the wall!' [addressed to a girl]

The assumption that '-n' marks indicative is shown by comparing the data in (12-14).

12. ta-ktub-ii-**n** Indicative

2-write-f-Ind

13. ta-ktub-ii-Ø Subjunctive

2-write-f-Sub

14. ta-ktub-ii-Ø Jussive

2-write-f-Juss

Basically, '-n' marks indicative because it does not show up in the non-indicative forms. Furthermore, given the VC morphology that the m-case‑m-vc proposal is based on, I differ from Noyer's, Harley's, and Ritter's analyses which assume that '-u' is the elsewhere suffix. Rather, I argue that '-u', like '-n', marks indicative VC. This is shown by the fact that it does not show up in the non-indicative forms, as (15-17) show.

15. ta-ktub-**u** Indicative

2-write-Ind

16. ta-ktub-a Subjunctive

2-write-Sub

17. ta-ktub-**Ø** Jussive

2-write-Juss

In addition, I differ from Noyer's, Harley's, and Ritter's analyses who assume that the prefix 'y-' is the elsewhere prefix and follow traditional Arabic grammarians (e.g. Al-Sayyid & Al-Najjar 1996:116) in assuming that it encodes imperfective (Impf) aspect.[181] Finally, like Bejar's analysis, this one aims to account for positional paradoxes (which she takes to refer to the fact that some grammatical features show up in the prefix in some forms, but in the suffix in others) and occurrence inconsistencies (which she takes to refer to the fact that morphosyntactic features bundle together in some forms, but are separate in others). Unlike Bejar, however, I treat these two problems as one issue; basically, I think that the main question is: why do some morphosyntactic features appear where they are not expected (given the general pattern)?

Thus the proposed analysis is based on the assumptions that the SA imperfective paradigm has a general pattern or a default template, and that all verb forms are expected to obey this template. Where this expectation is not met, this analysis provides a description of the deviation in terms of 'feature movement'.[182] And so the goal of this section is to show where and how these feature movement operations occur.

The assumption that the SA imperfective paradigm (in table 3) has a default template is supported by the observations in (18).

Table 3

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[181] This prefix looks as 'ya-', or 'yu-', but this issue is not relevant here. Traditional Arabic grammarians call it 'the 'ya' of the Imperfective'. This seems to go along with the assumption that 3rd person is not marked, since it only appears with 3rd person forms. Evidence for its marking Imperfective comes from the fact that it does not appear in the perfective paradigm, which is exclusively suffixal.

[182] I do not think that the notion of feature movement/attraction in this account is similar to feature movement/attraction in narrow syntax since in the latter case it is driven by the need to check/satisfy some features. At this point, the rationale behind the 'feature movement' operation is not clear to me.

		Ind-marked Verbs
1.	1s	ʔu-darris-u
		1-teach-Ind
2.	1p	nu-darris-u
		1p-teach-Ind
3.	2sm	tu-darris-u
		2-teach-Ind
4.	2sf	tu-darris-ii-n
		2-teach-f-Ind
5.	2dm	tu-darris-aa-n
		2-teach-d-Ind
6.	2df	tu-darris-aa-n
		2-teach-d-Ind
7.	2pm	tu-darris-uu-n
		2-teach-p-Ind
8.	2pf	tu-darris-na-Ø
		2-teach-pf-Ind
9.	3sm	yu-darris-u
		Impf-teach-Ind
10.	3sf	tu-darris-u
		f-teach-Ind
11.	3dm	yu-darris-aa-n
		Impf-teach-d-Ind
12.	3df	tu-darris-aa-n
		f-teach-d-Ind

13.	3pm	yu-darris-uu-n
		Impf-teach-p-Ind
14.	3pf	yu-darris-na-Ø
		Impf-teach-pf-Ind

18 - The person morphemes appear in the prefix in 8 out of 8 forms; and so <u>the position</u> of the **person** affix is the **prefix**.

- The number morphemes appear in the suffix in 8 out of 9 forms: and so <u>the position</u> of the **number** affix is the **suffix**.

- The gender morphemes appear in the prefix in 2 out of 5 forms; <u>the position of the</u> **gender** affix is the **prefix**.

The claim that the position of the gender morpheme is the prefix is somewhat less plausible given the fact that it appears more often in the suffix. However, I will continue to make this assumption since the proposed system accounts for why the gender feature moves to the suffix in the other three forms, 2sf, 2pf, and 3pf; these three forms constitute 75% of what the proposed system attempts to explain.

Therefore, these observations give rise to the template in (19). In fact, this template was also proposed in Bejar (1998:26).

19. Person-STEM-Number

Gender

The data in table 3 show that the observations in (18) are supported by 10 out of the 14 forms in the paradigm. In what follows, I will attempt to account for why the remaining 4 forms do not behave as expected; that is, I will attempt to describe what makes the concerned morphosyntactic features not show up where they are expected (but will leave, for now, the more abstract/deeper question of why this happens in the first place).

In addition to the template in (19), I assume Noyer's (1997) Universal Feature Hierarchy (UFH) which puts "… person above number above gender …" (1997:xxii), and which could be represented as in (20).

20. Person >> Number >> Gender[183]

I take this hierarchy to indicate that Person takes precedence over Number and Gender, and that Number takes precedence over Gender.

In addition to Noyer's UFH (which assumes features as natural classes), I propose a relation between individual features across the natural classes, that is, between 1st person, Plural, and Feminine. Basically, I propose that 1st person is more primary than Plural, and that Plural is more primary than Feminine, with the more primary feature attracting the less primary one when they occur in the same form. This primacy relation, whose task is to account for feature movement in the paradigm, looks as in (21)

21. 1st person > Plural > Feminine

This way, 2nd person and Dual are not part of this relation (with 3rd person, singular, and masculine being unmarked). Basically, the exclusion of 2nd person and Dual is based on the

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[183] Since they are irrelevant to my purposes, I ignore Class features, which are the lowest on Noyer's hierarchy.

assumption that they are more marked than 1st person and Plural, respectively. Section 2.4 will provide some support for this relation.

This primacy relation is in line with Noyer's UFH since it places a Person feature above a Number feature above a Gender feature, but it differs from it in stressing the feature movement/attraction role assigned to 1st person and Plural. I will define this relation of primacy in terms of the ability to effect feature movement (from suffix to prefix, or from prefix to suffix). The two relations (UFH and primacy) will attempt to explain why the 1p, 2pf, 3pf, and 2sf verb forms are not in accordance with the template in (19). This account will ultimately show that the 3pf indicative verbal form m-vc suffix is similar to the Nom m-case suffix of the plural feminine noun.

Before showing how this system solves the problem raised by these four forms, I will state two conditions that regulate the feature movement operations; these are listed in (22-23).

> 22. if two features co-occur in one form, and if they are related by the primacy hierarchy, the one lower on this hierarchy (21) will move to where the higher one is expected (given the template in (19)).

> 23. if two features co-occur in one form and are both instantiated in the same position of exponence (prefix or suffix), the one lower on Noyer's UFH (20) loses to the higher one with respect to that position of exponence. The loser feature voluntarily moves (not attracted) to the suffix *iff* there is a vacant slot for it.

It is important that feature movement according to the language-specific primacy relation in (21) apply before feature movement according to the UFH in (20), to avoid generating unattested forms. In the next section, I will show how this system accounts for why certain features in the 1p and 2sf forms do not show up where they are expected given the suggested template. In section 2.3, I will track the derivation path suggested for the 2pf and 3pf indicative verbal forms,

where I highlight the morphosyntactic similarity between the 3pf verbal form m-vc suffix and the m-case suffix of the plural feminine noun.

2.2. Handling the Anomalous Cases: 1p and 2sf

The goal of this section is to use the system developed in the previous section to account for why the 1p and 2sf verb forms do not conform to the general pattern shown in the template in (19). I will show that these two verbal forms were in accordance with the template in (19) at some stage in their derivation, after which they underwent the feature movement operation discussed in the previous section. The application of this operation results in the 2 anomalous forms. That is, we will see that the plural number feature of the 1p verb form was in the suffix, and that the feminine gender feature of the 2sf verb form was in the prefix. Table 4 presents the verbal forms that do not obey the general template in (19), both indicative and subjunctive forms.

Table 4

	Ind-marked Verbs	**Sub-marked Verbs**
1p	nu-darris-**u**	lan nu-darris-**a**
	1p**-**teach**-**Ind	Neg.Fut 1p**-**teach-Sub
2sf	tu-darris-ii-**n**	lan tu-darris-ii-**Ø**
	2-teach-f-Ind	Neg.Fut 2-teach-f**-**Sub

The observed anomalies in table 4 (given the template) are explained by a morphological rule which applies at some stage of the derivation of the verb and moves the plural morpheme of the 1p verb to the prefix position, and the feminine morpheme of the 2sf verb to the suffix position. This rule is based on the system developed in the previous section; (24-25) show what happens and why.

24. <u>1p verb form</u>: the Plural number feature is realized in the prefix (when it is supposed to show up in the suffix) because Plural co-occurs with 1st Person, which is higher than

Plural on the primacy hierarchy, and so the Plural feature is attracted to where 1st Person is expected, that is, the prefix.

25. <u>2sf verb form</u>: the Feminine feature is realized in the suffix (when it is supposed to show up in the prefix) because it co-occurs with a Person feature (2nd person), and since Person is higher than Gender on Noyer's UFH, the Person feature wins the competition for the prefix position, and so the Feminine feature is realized in the suffix.

Based on the answer provided by the proposed system to the problems raised by the data in table 4, I will now show how those data look before feature movement takes place. Tables 5 and 6, respectively, present those data. The features in italics have moved in the surface forms (from suffix to prefix, or from prefix to suffix) as a result of the primacy relation which causes feature movement as well as a result of Noyer's UHF.

Table 5

	Indicative <u>before</u> feature movement	Indicative <u>after</u> feature movement	Nom-marked corresponding noun
1p	ʔu-darris-**uu**-**n** 1-teach-*p*-Ind	nu-darris-**u** 1*p*-teach-**Ind**	mudarris-**uun** teacher-p.Nom
2sf	tu-ii-darris-**u** 2-*f*-teach-Ind	tu-darris-ii-**n** 2-teach-*f*-Ind	mudarrisa-t-**u** teacher-f-Acc

Table 6

	Subjunctive <u>before</u> feature movement	Subjunctive <u>after</u> feature movement	Acc-marked corresponding noun
1p	lan ʔu-darris-**uu**-**Ø** Neg.Fut 1-teach-*p*-Sub	lan nu-darris-**a** Neg.Fut 1*p*-teach-Sub	mudarris-**iin** teacher-p.Acc

2sf	lan	tu-ii-darris-**a**	lan	tu-darris-ii-**Ø**	mudarrisa-t-**a**
	Neg.Fut	2-*f*-teach-**Sub**	Neg.Fut	2-teach-*f*-Sub	teacher-f-Acc

Given the data in tables 5 and 6, it is clear that feature movement accounts for the surface forms of the relevant verbs, assuming that they were in accordance with the template before it applied. Now I will turn to the 2pf and 3pf verb forms which involve feature movement (according to the proposed primacy relation) as well as feature deletion (as briefly mentioned in this section) to account for why they do not surface with an overt indicative m-vc suffix.

2.3. Handling the Anomalous Cases: 2pf and 3pf

2.3.1. Deriving the 2pf and 3pf Verb Forms

In this section, I will show that the (surface) indicative forms of the 2pf and 3pf verbs in (26-27) have overt m-vc suffixes before the feature movement and feature deletion operations apply, which result in deleting these m-vc suffixes at PF. We will see that the gender morpheme is in the prefix before these operations apply.

26. tu-darris-na-**Ø**   2pf

    2-teach-pf-Ind

27. yu-darris-na-**Ø**   3pf

    Impf-teach-pf-Ind

Like the (anomalous) verb forms discussed in the previous section, these two verb forms require a morphological operation of feature movement, given the reasoning in (28).

28. <u>2pf and 3pf verb forms</u>: the Feminine gender feature is realized in the suffix (when it is supposed to show up in the prefix) because Feminine co-occurs with Plural (in the

same form), which is higher than Feminine on the primacy hierarchy, and so the Feminine feature is attracted to where Plural is expected, that is, the suffix.[184]

In this section, I will show that these two verb forms require another operation, one of feature deletion. The effects of these two operations shape the surface forms of these two verbs. In what follows, I will show how these two verb forms undergo the full derivation process. The forms in (26-27) start the derivation as (29-30), respectively; that is, with the Feminine gender feature in the prefix (according to the suggested default template).[185]

     29. tu-ii-darris-uu

        2-**f**-teach-p

     30. yu-ta-darris-uu

        Impf-**f**-teach-p

The first operation they undergo is receiving the indicative VC morphemes. Thus (29-30) look as in (31-32), respectively.

     31. tu-ii-darris-uu-**u**

        2-f-teach-p-Ind

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[184] It is noteworthy that the 2pf form 'ta-ktub-na' can be generated by either relation, primacy or UFH. To illustrate, glossed as '2-write-pf', the feature that moves is Feminine. Thus Feminine could have moved to the suffix position because it co-occurred with a feature higher on the primacy relation, Plural, or because it co-occurred with a feature higher on Noyer's UFH, Person. However, since the application of the primacy relation must precede the application of the UFH to generate the other three forms, 1p, 2sf, and 3pf, I will assume that the 2pf form is generated by the proposed primacy relation.

[185] I assume that Feminine is marked by '-ii-' in the 2nd person paradigm and by '-ta-' in the 3rd person paradigm only because the former marks Feminine in the 2sf form and the latter marks it in the 3sf and 3df forms.

32. yu-ta-darris-uu-**u**[186]

    Impf-f-teach-p-Ind

This is the stage in the derivation of the 3pf verbal form when its m-vc suffix is identical to the m-case of the corresponding plural feminine noun, as (33) shows. This invokes the three derivational approaches mentioned at the beginning of this appendix regarding the relation between the verbal and nominal forms in (33).

33. yu-ta-darris-uu-**u**   ʔal-mudarris-aa-t-**u**

    Impf-f-teach-p-Ind   the-teacher-p-f-Nom

This thus makes the similarity between the Nom m-case suffixes and indicative m-vc suffixes complete. Now it is time for the feature movement operation to take place, resulting in (31-32) looking as in (34-35), respectively.

34. tu-darris-na-u

     2-teach-p**f**-Ind

35. yu-darris-na-u

    Impf-teach-p**f**-Ind

After the feature movement operation applies, according to which the gender feminine feature is attracted to the suffix by the Plural feature (given the primacy relation), the feature deletion operation applies and results in the indicative VC suffixes being phonologically deleted from the two verb forms. Thus (34-35) will look as in (36-37), respectively.

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[186] The indicative m-vc allomorph I am using here is '-u', contra the allomorphy rule I suggested previously. I use '-u' to just highlight the morphological similarity, since this suffix will eventually be deleted.

36. tu-darris-na-**Ø**

   2-teach-pf-Ind

37. yu-darris-na-**Ø**

   Impf-teach-pf-Ind

The fact that these two verb forms do not surface with overt indicative m-vc suffixes indicates that they are deleted, but why? A careful examination of the imperfective paradigm reveals that neither of the fourteen forms has more than three verbal features. I use the term 'verbal features' to refer to φ-features, aspect features, and VC features. Therefore, I will assume that there is a grammatical constraint that bans the phonological realization of more than three verbal features with the root of the verb, and that this constraint results in the deletion of the VC suffixes from these two verb forms after the nouns are derived from them. This constraint is in (38).

> 38. Feature Deletion Constraint: no verbal form in SA may phonologically realize more than three verbal features with the Root.

But is this constraint a convenient and cheep solution to the problem, or there is support for its existence? As it turns out, there are two pieces of evidence for this constraint.

2.3.2. Supporting the Feature Deletion Constraint

The first piece of evidence for this constraint comes from the perfective paradigm. To illustrate, the structure of the fourteen verb forms in the perfective paradigm shows that neither one of them phonologically realizes more than three verbal features, which are exclusively φ-features, as table 7 shows. Thus this constraint has applications outside the imperfective paradigm.

Table 7

		Perfective Verb Form	**Number of phonologically realized features**
1.	1s	daras-tu-Ø study-1	1
2.	1p	daras-naa-Ø study-1p	2
3.	2sm	daras-ta-Ø study-2	1
4.	2sf	daras-t-i-Ø study-2-f	2
5.	2dm	daras-t-um-aa-Ø study-2-p-d	2^{187}
6.	2df	daras-t-um-aa-Ø study-2-p-d	2
7.	2pm	daras-t-um-Ø study-2-p	2
8.	2pf	daras-t-unna-Ø study-2-pf	3
9.	3sm	darasa-Ø study	none
10.	3sf	darasa-t-Ø study-f	1

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[187] I assume that a form like the 2dm/f 'daras-t-um-aa' phonologically realizes 2 features, Person, '-t-', and Number, realized by two number affixes, '-um-', for Plural, and '-aa-' for Dual.

11.	3dm	daras-aa-Ø study-d	1
12.	3df	darasa-t-aa-Ø study-f-d	2
13.	3pm	daras-uu-Ø study-p	1
14.	3pf	daras-na-Ø study-pf	2

The second piece of evidence for this constraint comes from the imperfective paradigm. To illustrate, this constraint explains why there is no gender distinction in the 2nd person dual forms, as (39) and (40) show.

      39. tu-darris-aa-n   2d**m**

           2-teach-d-Ind

      40. tu-darris-aa-n   2d**f**

           2-teach-d-Ind

As far as the proposed system is concerned, the feminine feature is deleted from the 2df form in (40) because it would have been a fourth verbal feature. Moreover, the fact that the corresponding 3rd person forms in (41-42), respectively, show the gender distinction, where 3rd person is not marked, indicates that feminine was deleted in the form in (40). In other words, the 3rd person dual forms took advantage of the fact that 3rd person is not marked, and so had the gender distinction established (escaping the feature deletion constraint).

      41. yu-darris-aa-n   3d**m**

           Impf-Root-d-Ind

42. tu-darris-aa-n   3d**f**

   f-Root-d-Ind

However, when it comes to feature deletion, three questions arise: <u>why the VC feature is deleted in the 2pf and 3pf verb forms</u>; <u>why the Feminine feature is deleted in the 2df form</u> in (40) (and not another feature); and <u>why the Feminine feature is *not* deleted in the 2sf verb form?</u>. These questions can be answered by the proposed system.

First, the VC feature is deleted in the 2pf and 3pf verb forms because the Feminine feature is <u>attracted</u> to the suffix by the Plural feature (according to the primacy relation). This state of affairs creates a situation where there are 2 ϕ-features in the suffix, and so when the feature deletion operation applies, the VC suffix is sacrificed (since it is of a grammatical/morphosyntactic not a semantic value, that is, meaning-related features take priority over morphosyntactic ones). This is because the maximum number of features in the suffix is two.

Second, in the 2df verb form, the Feminine feature is NOT attracted by the Dual feature since the latter does not take part in the primacy relation, and so the post-root domain has a Dual number feature and a VC suffix, whereas the pre-root domain has a (2nd) Person and a Feminine gender features, with room for only one feature (since the maximum number of features in the prefix is one, unless the second is attracted, as is the situation in the 1p verb form). And since the person feature is higher than the gender feature (according to Noyer's UFH), the Feminine feature is deleted as a result of the feature deletion operation. In other words, the Feminine feature in the 2df form vanishes in the prefix since these forms cannot have more than one morpheme in the prefix.

Third, the Feminine feature is not deleted in the 2sf verb form (on a par with its counterpart in the 2df form) because at the point where the feature movement operation applies, the post-

root domain has one verbal feature, that is, the VC feature, and so there is room for the Feminine feature. In this case, the Person feature, which is higher than the gender feature on Noyer's UFH, manages to push the Gender feature to the post-root domain. In other words, feature movement according to Noyer's UFH seems to be contingent on space availability; that is why it is allowed in the 2sf form but not in the 2df form (since Dual is marked but Singular is not). Also, though Number is marked in the 2df form, Dual does not take part in the primacy relation, and so it cannot attract Feminine.[188]

2.4. Motivating the Primacy Relation

The proposed language-specific primacy relation, which includes 1st person and Plural (as well as Feminine) is based on the assumption that 1st person and Plural are less marked than 2nd person and Dual, respectively, and so are argued to be active in effecting feature movement. This section will provide some evidence from SA for this assumption. First, the assumption that 1st person is less marked than 2nd person receives support from the fact that the representation of 1st person (participant) is included in the representation of the 2nd person (participant+addressee) in the pronominal system in SA. Basically, the 2nd person pronouns seem to be instantiations of the 1st person singular pronoun 'ʔanaa', meaning 'I', plus a 2nd person suffix, plus number and gender suffixes, as table 8 illustrates.[189]

Table 8

		2nd Person Pronouns
1.	2sm	ʔan-ta **I**-2

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[188] I have also assumed that the subjunctive forms of the 2pf and 3pf verbs have *no* overt subjunctive VC suffixes. This assumption is based on the observation that the noun corresponding to the 3pf subjunctive verbal form has default Acc m-case. In other words, I assume that the 2pf and 3pf verb forms have no overt subjunctive VC suffixes on a par with the other non-singular subjunctive verb forms where the corresponding nouns have default/Gen-like Acc m-case suffixes.

[189] This idea is credited to Al-Farraaʔ, the second most prominent Kufan grammarian.

2.	2sf	ʔan-t-i
		I-2-f
3.	2dm	ʔan-t-um-aa
		I-2-p-d
4.	2df	ʔan-t-um-aa
		I-2-p-d
5.	2pm	ʔan-t-um
		I-2-p
6.	2pf	ʔan-t-unna
		I-2-pf

Second, Noyer (1997) states that "[t]he interpretation of person features must recognize certain discourse roles as primitive: these roles are among the deictic markers of a speech-act, situating the speech-act with respect to its place, time and, in the case of person features, its participants. The primary distinction is between participants in the speech-act and non-participants" (cited in Harley & Ritter 2002:488 fn. 6). While I agree with Noyer that the participants in the speech act are primitive compared to 3rd person, it is important to recognize some kind of primacy for the speech-act initiator; that is, the speaker/1st person, but not the addressee, should take part in the primacy relation. Benveniste (1971:221) suggests that "[c]ertain languages show that "third person" is indeed literally a "non-person"". One interpretation of this statement is that natural language has 1st and 2nd persons only. If this is the case, then 1st and 2nd persons cannot be equally marked or primary; that is, again, the dialogue initiator must be privileged over the addressee.

The assumption that Plural is less marked than Dual in SA receives support from the perfective paradigm as well as from the pronominal system. First, the fact that the representation of Plural

is included in the representation of Dual in the perfective paradigm suggests that Dual is more marked than Plural. This is shown by (43-44).

43. katab-t-um

   write-2-**p**

   'you.**p** wrote'

44. katab-t-um-aa

   write-2-**p**-**d**

   'you.**d** wrote'

Noyer (1997) describes this relation as one of enhancement; he states that Plural enhances Dual. I take this relation, irrespective of labels, to indicate that Plural, but not Dual, should take part in effecting feature movement.

Second, this assumption is also supported by the fact that the representation of Plural (group) is included in the representation of Dual (group+minimal) in the SA pronominal system, as table 9 illustrates.

Table 9

	Plural	**Dual**
2nd Person	ʔant-um you-**p**	ʔant-um-aa you-**p**-**d**
3rd Person	h-um he-**p**	h-um-aa he-**p**-**d**

To sum up, the primacy relation I propose (1st person > Plural > Feminine) is better thought of as a language-specific activeness hierarchy which applies before Noyer's UFH (Person >> Number >> Gender). Basically, the language-specific hierarchy tackles the 1p, 2pf, and 3pf verb forms, while the UFH one handles the 2sf verb form.

2.5. The Crosslinguistic Data

This section examines whether or not the proposed primacy relation, repeated in (46), has empirical support.

45. 1st person > Plural > Feminine

It should be noted that this primacy relation is composed of two sub-relations: the first is between 1st person and Plural [1st person > Plural], and the second is between Plural and Feminine [Plural > Feminine]. Basically, 1st person attracts Plural, and Plural attracts Feminine. Table 10 shows that these two sub-relations are attested in other languages. It also shows how the proposed relation fares with respect to the languages/paradigms examined in Noyer (1997).

Table 10

	Language	1st person > Plural	Plural > Feminine	Feminine marked in the plural paradigm
1.	Egyptian Arabic	yes	**no**	**no**
2.	Beja	yes	**no**	**no**
3.	Saho (present tense)	yes	**no**	**no**
4.	Saho (past tense)	yes	**no**	**no**

5.	Mehri prefix conjugation	yes	yes	yes
6.	Hebrew	yes	yes	yes
7.	šxrawi	yes	yes	yes
8.	Tigre	yes	yes	yes
9.	Ugaritic	yes	**no**	**no**
10.	Babylonian	yes	**no**	**no**
11.	Tunisian Jewish Arabic	both 1st singular and 1st plural have a 1st+Plural prefix, and 1st plural has a Plural suffix.	**no**	**no**
12.	Tamazight Berber	1st singular has a suffix, but 1st plural has a prefix.	yes	yes
13.	Mehri suffix conjugation	1st and Plural both seem to be suffixes.	unclear	unclear
14.	Soqotri	no plural data.	no plural data	no plural data

It should also be noted that the realization of each one of the two sub-relations is contingent on the co-occurrence of the relevant features. In other words, if Plural is not marked in the 1st person paradigm, 1st person is not expected to attract Plural. Nonetheless, I do not think that any of the examined 14 paradigms does not distinguish between 1st singular and 1st plural verb forms. Likewise, if Feminine is not marked in the plural paradigm, Plural is not expected to attract Feminine, which is what seems to be happening in Egyptian Arabic, Beja, Saho, Ugaritic, Babylonian, and Tunisian Jewish Arabic. This said, I believe more needs to be said about whether these paradigms support, or otherwise, the proposed primacy relation.

2.6. The Full Derivation of the m-vc and m-case suffixes

Table 11 illustrates the word formation operations undergone by the 14 indicative verbal forms, as well as the similarity between the m-vc suffixes of the 3rd person indicative verbal forms and the Nom m-case suffixes of the corresponding nominal forms.

Table 11

		Indicative Form with φ-features	(1) VC feature Acquired	m-vc similar to m-case	(2) Feature Movement	(3) Feature Deletion
1.	1s	ʔa-drus 1-study	ʔa-drus-**u** 1-study-Ind		ʔa-drus-**u** 1-study-Ind	ʔa-drus-**u** 1-study-Ind
2.	1p	ʔa-drus-uu 1-study-p	ʔa-drus-**uu-n** 1-study-p-Ind		na-drus-**u** 1p-study-Ind	na-drus-**u** 1p-study-Ind
3.	2sm	ta-drus 2-study	ta-drus-**u** 2-study-Ind		ta-drus-**u** 2-study-Ind	ta-drus-**u** 2-study-Ind
4.	2sf	ta-ii-drus 2-f-study	ta-ii-drus-**u** 2-f-study-Ind		ta-drus-ii-**n** 2-study-f-Ind	ta-drus-ii-**n** 2-study-f-Ind
5.	2dm	ta-drus-aa 2-study-d	ta-drus-**aa-n** 2-study-d-Ind		ta-drus-aa-**n** 2-study-d-Ind	ta-drus-aa-**n** 2-study-d-Ind
6.	2df	ta-ii-drus-aa 2-f-study-d	ta-ii-drus-**aa-n** 2-f-study-d-Ind		ta-ii-drus-aa-**n** 2-f-study-d-Ind	ta-drus-aa-**n** 2-study-d-Ind
7.	2pm	ta-drus-uu 2-study-p	ta-drus-**uu-n** 2-study-p-Ind		ta-drus-uu-**n** 2-study-p-Ind	ta-drus-uu-**n** 2-study-p-Ind
8.	2pf	ta-ii-drus-uu 2-f-study-p	ta-ii-drus-uu-**u** 2-f-study-p-Ind		ta-drus-na-**u** 2-study-pf-Ind	ta-drus-na-**Ø** 2-study-pf-Ind

9.	3sm	ya-drus Impf-study	ya-drus-**u** Impf-study-Ind	ʔad-daaris-**u**	ya-drus-**u** Impf-study-Ind	ya-drus-**u** Impf-study-Ind
10.	3sf	ta-drus f-study	ta-drus-**u** f-study-Ind	ʔad-daaris-at-**u**	ta-drus-**u** f-study-Ind	ta-drus-**u** f-study-Ind
11.	3dm	ya-drus-aa Impf-study-d	ya-drus-**aa-n** Impf-study-d-Ind	ʔad-daaris-**aan**	ya-drus-aa-**n** Impf-study-d-Ind	ya-drus-aa-**n** Impf-study-d-Ind
12.	3df	ta-drus-aa f-study-d	ta-drus-**aa-n** f-study-d-Ind	ʔad-daaris-at-**aan**	ta-drus-aa-**n** f-study-d-Ind	ta-drus-aa-**n** f-study-d-Ind
13.	3pm	ya-drus-uu Impf-study-p	ya-drus-**uu-n** Impf-study-p-Ind	ʔad-daaris-**uun**	ya-drus-uu-**n** Impf-study-p-Ind	ya-drus-uu-**n** Impf-study-p-Ind
14.	3pf	ya-ta-drus-uu Impf-f-study-p	ya-ta-drus-uu-**u** Impf-f-study-p-Ind	ʔad-daaris-aa-t-**u**	ya-drus-na-**u** Impf-study-pf-Ind	ya-drus-na-**Ø** Impf-study-pf-Ind

Likewise, table 12 shows the derivation path of the 14 subjunctive verbal forms, and also the similarity between the Acc m-case suffixes and the m-vc suffixes of the 3rd person subjunctive verbal forms, when both forms have marked suffixes. When they do not have marked suffixes, the Acc-marked nouns realize Gen-like m-case suffixes, as shown in (2-9), and the subjunctive verbs forms realize jussive-like m-vc suffixes, as table (13) shows.

Table 12

		Subjunctive Deep Form with φ-features	**(1) VC feature Added**	**m-vc similar to m-case**	**(2) Feature Movement**	**(3) Feature Deletion**
1.	1s	ʔa-drus 1-study	ʔa-drus-**a** 1-study-Sub		ʔa-drus-**a** 1-study-Sub	ʔa-drus-**a** 1-study-Sub

2.	1p	ʔa-drus-uu 1-study-p	ʔa-drus-uu-**Ø** 1-study-p-Sub		na-drus-**a** 1p-study-Sub	na-drus-**a** 1p-study-Sub
3.	2sm	ta-drus 2-study	ta-drus-**a** 2-study-Sub		ta-drus-**a** 2-study-Sub	ta-drus-**a** 2-study-Sub
4.	2sf	ta-ii-drus 2-f-study	ta-ii-drus-**a** 2-f-study-Sub		ta-drus-ii-**Ø** 2-study-f-Sub	ta-drus-ii-**Ø** 2-study-f-Sub
5.	2dm	ta-drus-aa 2-study-d	ta-drus-aa-**Ø** 2-study-d-Sub		ta-drus-aa-**Ø** 2-study-d-Sub	ta-drus-aa-**Ø** 2-study-d-Sub
6.	2df	ta-ii-drus-aa 2-f-study-d	ta-ii-drus-aa-**Ø** 2-f-study-d-Sub		ta-ii-drus-aa-**Ø** 2-f-study-d-Sub	ta-drus-aa-**Ø** 2-study-d-Sub
7.	2pm	ta-drus-uu 2-study-p	ta-drus-uu-**Ø** 2-study-p-Sub		ta-drus-uu-**Ø** 2-study-p-Sub	ta-drus-uu-**Ø** 2-study-p-Sub
8.	2pf	ta-ii-drus-uu 2-f-study-p	ta-ii-drus-uu-**Ø** 2-f-study-p-Sub		ta-drus-na-**Ø** 2-study-pf-Sub	ta-drus-na-**Ø** 2-study-pf-Sub
9.	3sm	ya-drus Impf-study	ya-drus-**a** Impf-study-Sub	ʔad-daaris-**a**	ya-drus-**a** Impf-study-Sub	ya-drus-**a** Impf-study-Sub
10.	3sf	ta-drus f-study	ta-drus-**a** f-study-Sub	ʔad-daaris-at-**a**	ta-drus-**a** f-study-Sub	ta-drus-**a** f-study-Sub
11.	3dm	ya-drus-aa Impf-study-d	ya-drus-aa-**Ø** Impf-study-d-Sub	ʔad-daaris-**ayn**	ya-drus-aa-**Ø** Impf-study-d-Sub	ya-drus-aa-**Ø** Impf-study-d-Sub
12.	3df	ta-drus-aa f-study-d	ta-drus-aa-**Ø** f-study-d-Sub	ʔad-daaris-at-**ayn**	ta-drus-aa-**Ø** f-study-d-Sub	ta-drus-aa-**Ø** f-study-d-Sub
13.	3pm	ya-drus-uu Impf-study-p	ya-drus-uu-**Ø** Impf-study-p-Sub	ʔad-daaris-**iin**	ya-drus-uu-**Ø** Impf-study-p-Sub	ya-drus-uu-**Ø** Impf-study-p-Sub
14.	3pf	ya-ta-drus-uu	ya-ta-drus-uu-**Ø**	ʔad-daaris-aa-t-**i**	ya-drus-na-**Ø**	ya-drus-na-**Ø**

		Impf-f-study-p	Impf-f-study-p-Sub		Impf-study-pf-Sub	Impf-study-pf-Sub

Table 13

		Subjunctive assigned by 'lan'	**Jussive assigned by** 'lam'
1.	1s	ʔa-drus-**a** 1-study-Sub	ʔa-drus-Ø 1-study-Juss
2.	1p	na-drus-**a** 1p-study-Sub	na-drus-Ø 1p-study-Juss
3.	2sm	ta-drus-**a** 2-study-Sub	ta-drus-Ø 2-study-Juss
4.	2sf	ta-drus-ii-Ø 2-study-f-Sub	ta-drus-ii-Ø 2-study-f-Juss
5.	2dm	ta-drus-aa-Ø 2-study-d-Sub	ta-drus-aa-Ø 2-study-d-Juss
6.	2df	ta-drus-aa-Ø 2-study-d-Sub	ta-drus-aa-Ø 2-study-d-Juss
7.	2pm	ta-drus-uu-Ø 2-study-p-Sub	ta-drus-uu-Ø 2-study-p-Juss
8.	2pf	ta-drus-na-Ø 2-study-pf-Sub	ta-drus-na-Ø 2-study-pf-Juss
9.	3sm	ya-drus-**a** 3-study-Sub	ya-drus-Ø 3-study-Juss
10.	3sf	ta-drus-**a** f-study-Sub	ta-drus-Ø f-study-Juss
11.	3dm	ya-drus-aa-Ø 3-study-d-Sub	ya-drus-aa-Ø 3-study-d-Juss

12.	3df	ta-drus-aa-Ø	ta-drus-aa-Ø
		f-study-d-Sub	f-study-d-Juss
13.	3pm	ya-drus-uu-Ø	ya-drus-uu-Ø
		3-study-p-Sub	3-study-p-Juss
14.	3pf	ya-drus-na-Ø	ya-drus-na-Ø
		3-study-pf-Sub	3-study-pf-Juss

Now the m-case syncretism in the Acc m-case paradigm can be partly explained if we assumed that this Acc-Gen syncretism in the non-singular nouns is similar to the subjunctive-jussive syncretism in the non-singular verbs. This is not accounted for here, and requires more work.[190]

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[190] The following question will be dealt with in future research:

i. why does the 1p verb form have to have the overt/singular subjunctive m-vc suffix '-a'?

Copyright Acknowledgements (if any)