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The 'believe'-construction in Standard Arabic[1]

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This paper presents an analysis for the 'believe'-construction in Standard Arabic (SA). The analysis proposed here assumes the VISIBILITY CONDITION, whereby structural Case is necessary to render arguments visible at LF for θ-role assignment (Aoun 1979, Chomsky 1981). The earlier approaches are untenable because they do not make proper provision for the Case-visibility requirements of the complement clause of 'believe'. Thus, they are not extendable to SA since they ignore the Case-visibility requirements of the CP complement of *ðanna* 'believe', assuming that CPs require Case for visibility (Uriagereka 2006, 2008). These requirements can be satisfied if we assume the distinction between structural Case and lexical case established in Al-Balushi (2011: 126–157) based on SA data, where structural Case is licensed on arguments and lexical case is assigned to non-arguments, nominals merged in A-bar positions. I thus propose that the Acc-marked DP (embedded subject/matrix object) does not receive structural Acc Case from the matrix v^{*0}, but rather lexical Acc case from the matrix predicate *ðanna*, as a lexical element, reserving the structural Acc Case for the CP argument. I also argue that this DP is an A-bar element, co-indexed with an empty category argument *pro* in the embedded clause.

1. INTRODUCTION

The relevant literature has two main approaches to accounting for the morphosyntax of the English construction in (1).

(1) John believes Mary/her to be smart.

These approaches are based on one of two main ideas, either Case assignment across the boundary of the complement clause, termed EXCEPTIONAL CASE MARKING (ECM), or movement to the matrix clause for Case assignment, termed RAISING-TO-OBJECT (R-to-O). A standard assumption for both approaches is that the Acc-marked DP in (1) is an argument of the embedded predicate and bears no thematic relationship with the matrix predicate.

[1] For my mother (1954–2015).

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I use the following abbreviations: 1, 2, 3 = first, second, third person; ACC = accusative; AUX = auxiliary; CL = object pronominal clitic; COMP = complementizer; D = dual; DOM = differential object marker; ec = empty category; ENER = energetic; F = feminine; FUT = future; GEN = genitive; IMPF = imperfective; IMPR = imperative; IND = indicative; INTERRO = interrogative; JUSS = jussive; M = masculine; NEG = negative; NOM = nominative; P = plural; PASS = passive; PRS = present; PST = past; S = singular; SUB = subjunctive.

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Exceptional Case Marking (Rosenbaum 1967; Chomsky 1973, 1981; Bach 1974) assumes that the DP *Mary* in (1) occupies the embedded Spec,TP position and receives its θ-role from the embedded predicate, but that it is governed and assigned structural Acc Case by the matrix V^0, which is the Government-Binding (GB) Acc Case assigner (Chomsky 1981). Assuming the Visibility Condition, this analysis is untenable since the clausal argument of *believe* (TP) does not receive Case, which, in turn, means that it is not visible at LF for θ-role assignment. The fact that the complement TP is interpreted as a proposition of *believe* indicates that the structural Acc Case licensed by *believe* (V^0 in GB and v^{*0} in the Minimalist Program or MP) must be obtained by the TP. This casts doubt on the ECM analysis.

Raising-to-Object (Postal 1974; Johnson 1991; Lasnik & Saito 1991; Chomsky 1995; Runner 1995, 2006; Bruening 2001; Bošković 2002) assumes that *Mary* in (1) moves from the embedded subject position to an object position in the matrix clause, where it receives structural Acc Case from the Acc Case licensing head of *believe* (V^0/$Agro^0$/v^{*0}). This approach is supported by the observation that *Mary* is not in the embedded clause (in the surface structure) but rather in the matrix clause since a VP-adverb like *sincerely*, which is interpreted in relation to the matrix predicate, can follow *Mary*, as (2)–(3) show.[2]

(2) John believes Mary very sincerely to be the best candidate.
(Hornstein et al. 2005: 139)

(3) *Mary believes sincerely Gary to be a fool. (H. Lee 2007: 114)

As far as structural Case is concerned, this approach is also untenable because it leaves no structural Case for the clausal complement of *believe*, TP, which means that it will not be visible at LF for θ-role assignment, contrary to fact. I assume no Agr projections (Pollock 1989, Chomsky 1991) since they were eliminated in Chomsky (1995). I follow Chomsky (2001) in that T^0 licenses structural Nom Case on the subject and v^{*0} licenses structural Acc Case on the object. Thus, I dispense with $Agro^0$ and V^0 as structural Acc Case checking categories.

The present paper investigates the SA counterpart in (4), and provides a novel approach, based on a new interpretation of the morphosyntactic properties of this construction as well as on the distinction between structural Case and LEXICAL CASE laid out in Al-Balushi (2011).[3]

(4) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-**a** naam-uu-Ø
PST.believe.3SM-IND Ali-NOM the-students-ACC PST.sleep.3-PM-IND
'Ali believed the students slept/to have slept.'

[2] An anonymous *JL* referee points out that (2) is unacceptable in British English. Postal (1974) is the first to use the adverbial placement argument.

[3] I reserve 'Case' for structural Case, and 'case' for both lexical and default case. Verb glosses in the SA data will include a Verbal Case feature for both imperfective and perfective verb forms; this proposal will be motivated in Section 4.

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As will be clear from the presentation of the morphosyntactic properties of the 'believe'-construction in SA in Section 3, neither ECM nor R-to-O can be extended to (4). This is because the Acc-marked DP neither receives structural Acc Case from the matrix v^{*0} nor moves to the matrix clause for Case assignment, nor is it an argument of the embedded predicate.

The proposed conception of Case (Al-Balushi 2011: 122–136) allocates to the terms 'structural Case', 'lexical case', and 'default case' denotations that are slightly different from standard usage. Structural Case is 'licensed/checked' on arguments, XPs merged in the A-domain (e.g. Spec, v*P, and complement to V^0 position) with a [Case] feature, by functional heads in the A-domain, T^0 and v^{*0}, which I assume have intrinsic Case features; that heads have [Case] features was proposed in Chomsky (1995: 368) and Carstens (2001: 147), among others. As will be argued in Section 4, the intrinsic Case feature is VERBAL CASE (VC), a feature with licensing functions and morphological reflexes. Lexical case, which is Acc in SA, is 'assigned' to non-argument nominals (topics, predicates), elements merged in A-bar positions, without a [Case] feature by lexical elements (copular verbs, 'believe'-type verbs, and particles), which must discharge a lexical case to a nominal (unless blocked by another lexical case assigner). Besides, while arguments are licensed and made visible at LF for θ-role assignment by the feature [Case], non-argument DPs have similar features, like [Topic], with the potential of making them visible at LF for the Visibility Condition purposes. Default case is 'obtained' by non-argument nominals (default case mechanism applies) when they reach the morphological component without a morphological case specification as a result of not being in the scope of lexical case assigners (Schütze 2001, Soltan 2007); default case is Nom in SA (Mohammad 1990, 2000; Ouhalla 1994). Non-arguments are never in the scope of structural Case checking categories (T^0 and v^{*0}), since those are relevant to structural Case, that is, to arguments. Therefore, the terms 'Case checking/licensing' and 'case assignment' are NOT used interchangeably. Section 2 presents the view of SA clause structure that is necessary for the presentation of the properties of the 'believe'-construction, to be presented in Section 3. Section 4 discusses the conception of Case assumed here, with implications for the distinction between structural Case and lexical case. Section 5 presents the proposed analysis, motivates it, and compares it to some of the earlier proposals. Section 6 attempts to extend the current proposal to English. Section 7 concludes the paper.

2. THE PROPOSED VIEW OF CLAUSE STRUCTURE

Standard Arabic allows the SVO order, as (5) shows, and the VSO order, as (6) shows. While the verb in the SVO order carries full subject agreement, it carries partial agreement in the VSO order.

(5) ʔal-mudarris-aa-t-u katab-**na**-Ø r-risaala-t-a
the-teacher-P-F-NOM PST.write.3-PF-IND the-letter-F-ACC
'The female teachers, they wrote the letter.'

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(6) kataba-**t**-Ø l-mudarris-aa-t-u r-risaala-t-a
PST.write.3S-F-IND the-teacher-P-F-NOM the-letter-F-ACC
'The female teachers wrote the letter.'

Unlike Mohammad (1990), Benmamoun (1992, 2000), and Ouhalla (1994), who assume that the DP *ʔal-mudarris-aa-t-u* 'the female teachers' is a subject in (5)–(6), I follow Traditional Arab Grammarians (TAGs; e.g. Siibawayhi 1990: 278) and Soltan (2007: 50–61) who argue, for a number of reasons, that this DP is a subject in (6), merged in Spec,v*P, but a TOPIC in (5), merged in a left-peripheral A-bar position. For example, while (5) conveys a CATEGORICAL READING, where an individual is mentioned and commented on, (6) conveys a THETIC READING, which is a neutral report of an event (Basilico 1998: 546), suggesting that the two structures do not have the same semantics. Moreover, the pre-verbal DP can be associated with the subject, as (5) shows, as well as the object (theme), as (7) shows.

(7) ʔar-rasaaʔil-u kataba-Ø-**haa** l-mudarris-u
the-letters.F-NOM PST.write.3SM-IND-them.F the-teacher-NOM
'The letters, the teacher wrote them.'

In addition, since the idiom in (8) loses idiomaticity when the word order is changed, as (9) shows, A-movement, from post-verbal to pre-verbal position, has not occurred (assuming that raising does not affect idiomaticity).

(8) sabaqa-Ø s-sayf-u l-ʕaðl-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.'

(9) ʔas-sayf-u sabaqa-Ø l-ʕaðl-a
the-sword-NOM PST.preced.3SM-IND the-censure-ACC
[The structure sounds unnatural. No idiomatic reading.]

Thus, the two positions are not in the same domain. Also, when a subject in a coordinate structure is spelled out pre-verbally, it must be resumed by a pronoun in the coordinate island, as (10)–(11) show.

(10) ðahaba-Ø l-mudarris-u wa ṭ-ṭaalib-u
PST.leave.3SM-IND the-teacher-NOM and the-student-NOM
'The teacher and the student left.'

(11) ʔal-mudarris-u ðahaba-Ø **huwa** wa ṭ-ṭaalib-u
the-teacher-NOM PST.leave.3SM-IND he and the-student-NOM
'The teacher, he and the student left.'

Therefore, the post-verbal DP is an argument (in Spec, v*P) whereas the pre-verbal one is a topic, that is, in the A-bar domain.

Finally, assuming with Soltan (2007) that indefinite nonspecific NPs cannot occur pre-verbally, but only post-verbally, as (12)–(13) show, then the two positions are in different domains, A-bar and A, respectively.

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(12) *walad-un kasara-Ø l-baab-a
boy-NOM PST.break.3SM-IND the-door-ACC

(13) kasara-Ø walad-un l-baab-a
PST.break.3SM-IND boy-NOM the-door-ACC
'A boy broke the door.'

The fact that (14), with *walad-un* 'a boy' in pre-predicate position is a DP, not a clause, indicates that an indefinite nonspecific nominal is not allowed in pre-verbal position, that is, it may not be a subject.

(14) walad-un mariiḍ-un
boy-NOM sick-NOM
'A sick boy.' (≠ 'A boy is sick.')

While Soltan (2007) assumes that the topic is merged in Spec,TP in (5), in Spec,NegP in (15), and in Spec,ModP in (16), I argue that it is merged in Spec,TopP (Topic Phrase, Rizzi 1997) because many Arabic dialects allow two Neg particles in the clause (requiring two positions), as the Egyptian Arabic example in (17) shows, and also because modality particles are merged in Fin^0, the locus of finiteness, which makes a Mod^0 head superfluous.

(15) ʔal-mudarris-aa-t-u **lan** ya-ktub-na-Ø *pro*
the-teacher-P-F-NOM NEG.FUT IMPF-write.3-PF-IND ec
r-risaala-t-a
the-letter-F-ACC
'The female teachers, they will not write the letter.'

(16) ʔal-walad-u **qad** ya-naam-u
the-boy-NOM may IMPF-sleep.3SM-IND
'The boy may sleep.'

(17) **ma**-ʕraf-**ʃ**
NEG-know.1S-NEG
'I do not know.'

As for the subject in the DP-initial order (SVO), I will assume that it is *pro*, merged in the subject position, Spec,v*P. However, since *pro* – which I assume IS the full agreement morphology (Al-Balushi 2011) – is an affix, it must move to T^0 and be spelled out by the verb to avoid being a stranded affix, which is why the verb realizes full agreement in (5). The view that full agreement morphology constitutes a pronominal argument makes reference to the Basran Grammarians' incorporation analysis (Fassi Fehri 1993: 96); it has also been assumed in Platzack (2003). Thus, *pro* is licensed by full agreement.

While I (standardly) assume that subjects receive structural Nom Case licensed by T^0, I will follow TAGs (Al-Nadiri 1997: 511) and Soltan (2007: 54) that topics receive default Nom case at PF, for two reasons. First, the topic appears with lexical Acc case when preceded by *ʔinna* (a complementizer and an Acc

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case-assigning particle, Fassi Fehri 1993: 87). Assuming the CASE FREEZING CONDITION (CFC), which states that a DP may not assume more than one Case value (Uriagereka 2008), the DP *ʔal-mudarris-aa-t-i* 'the female teachers' in (18) may not have received lexical Acc case from *ʔinna* after receiving structural Nom Case from T^0.[4] I assume that *ʔinna* is merged in $Force^0$ since it is in complementary distribution with *hal*, the yes/no interrogative particle in SA, as (19)–(20) show, *ʔinna* and *hal* being clause type markers.

(18) ʔinna l-mudarris-aa-t-**i** katab-na-Ø *pro*
COMP the-teacher-P-F-ACC PST.write.3-PF-IND ec
r-risaala-t-a
the-letter-F-ACC
'Certainly the female teachers, they wrote the letter.'

(19) *ʔinna hal l-walad-a/-u mariiḍ-un
COMP INTERRO the-boy-ACC/-NOM sick-NOM

(20) *hal ʔinna l-walad-a/-u mariiḍ-un
INTERRO COMP the-boy-ACC/-NOM sick-NOM

Secondly, assuming that the topic is in Spec,TopP (or even in Spec,TP), and assuming Hallman (2004), who argues that a head may not check Case on an element in its Spec position because it does not c-command it, the topic may not receive structural Nom from T^0 since it is not c-commanded by T^0, being even higher than its Spec position. Since structural Case is (standardly) 'checked' in narrow syntax and lexical case is (by assumption) 'assigned' at the end of narrow syntax, and default case is 'obtained' at PF, then lexical case can only 'bleed' default case, but not structural Case (more on Case issues in Section 4). Thus, there is no need for such a nominal to realize or receive more than one Case or case value.

The same five arguments that pre-verbal DPs are topics in SVO structures could be extended to pre-predicate DPs in SA verbless sentences, exemplified in (21)–(23).[5] This is established in Al-Balushi (2012), where it is argued that although these sentences are finite clauses, encoding tense (Fassi Fehri 1993: 87–88; Benmamoun 2000: 40) and agreement (Fassi Fehri 1993: 88; Al-Balushi 2011: 111–112), they do not license structural Case.

[4] This view may be contrasted with one that assumes Multiple Case Checking, where a DP may check more than one Case value (e.g. Béjar & Massam 1999). This scenario, which may be possible in some accounts of control (e.g. Potsdam 2006) where a DP moves from one argument position to another, checking more than one structural Case value, is not involved in these SA constructions since what we have here is not multiple structural Case values, but rather different types of Case/case, structural, lexical, and default.

[5] Fassi Fehri (1993: 45) and Benmamoun (2000: 40–41; 2008) argue that a verbless sentence is composed of a subject and a predicate. While Benmamoun argues that the pre-predicate DP/subject receives Nom Case from T^0, Fassi Fehri (1993) and Ouhalla (1994) assume that Nom is assigned by a default mechanism in the DP-initial structure.

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(21) ʔal-walad-**u** sabbaaħ-**un**
the-boy-NOM swimmer-NOM
'The boy is a swimmer.'

(22) ʔal-walad-**u** mariiḍ-**un**
the-boy-NOM sick-NOM
'The boy is sick.'

(23) ʔal-walad-**u** fi l-bayt-i
the-boy-NOM in the-house-GEN
'The boy is in the house.'

Standard Arabic verbless sentences encode tense because the present tense operator in the verbless clause contradicts the past tense operator contributed by the temporal adverb, hence (24) is ungrammatical, in contrast to (25).

(24) *ʔal-walad-u mariiḍ-un bi-l-ʔams-i
the-boy-NOM sick-NOM in-the-yesterday-GEN

(25) ʔal-walad-u mariiḍ-un l-ʔaan-a
the-boy-NOM sick-NOM the-now-ACC
'The boy is sick now.'

Verbless sentences encode sentential agreement, as the negative clause in (26) shows.

(26) ʔal-ʔawlaad-u lays-**uu** marḍaa
the-boys-NOM NEG.3-PM sick.ACC
'The boys are not sick.'

However, (26) is not completely verbless since the Neg *laysa* is composed of the negative particle *laa* and the archaic copula-like element *ʔays* (Ouhalla 1993).[6] Nonetheless, our view is supported by the fact that verbless sentences are ungrammatical with the non-ϕ-inflecting negative particles, as (27)–(28) show, which indicates that these clauses encode agreement that must be realized by the particle in the absence of the verb.[7]

[6] Wright (1896: 96) calls *ʔays* a substantive that signifies being and existence, and TAGs treat *laysa* as a verb (Fassi Fehri 1993: 165). Generative Arabists also treat *laysa* as a verb since it inflects for agreement and, like the copula *kaana* 'be', assigns lexical Acc case to the predicate of verbless sentences.

[7] In the absence of both, these ϕ-features (on T^0) are spelled out by the topic itself (Al-Balushi 2011: 112). Also, one may argue that (28) becomes grammatical if the negative particle precedes the topic, as in (i); while this is true, one can still argue that whereas the particle is in Neg^0, the topic is in Spec,TP (A-bar position, Soltan 2007: 73), following it and spelling-out [ϕ].

(i) maa l-ʔawlaad-u marḍaa
NEG the-boys-NOM sick.NOM
'The boys are not sick.'

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(27) *ʔal-ʔawlaad-u laa marḍaa
the-boys-NOM NEG sick.NOM

(28) *ʔal-ʔawlaad-u maa marḍaa
the-boys-NOM NEG sick.NOM

With regard to Case, the topic surfaces with default Nom case at PF since it realizes lexical Acc case in the presence of *ʔinna*, as (29) shows; thus the DP *ʔal-walad-u* 'the boy' is not in the scope of a Case-checking category in (21)–(23).[8]

(29) ʔinna l-walad-**a** mariiḍ-un
COMP the-boy-ACC sick-NOM
'Certainly the boy is sick.'

Similarly, the predicate receives default Nom case in (21)–(22) since it realizes lexical Acc in the presence of the copula *kaana* 'be' (which assigns Acc case to the predicate, Benmamoun 2000: 43), as (30) shows.

(30) kaana-Ø r-rajul-u mariiḍ-**an**
PST.be.3SM-IND the-man-NOM sick-ACC
'The man was sick.'

Fassi Fehri (1993: 89) states that the copula assigns morphological Acc to the nominal or adjectival predicate. I take 'morphological' to mean lexical, that is, to imply that it is non-structural Case. In other words, like default case, lexical case satisfies the CASE FILTER (morphological component), with no licensing functions.[9] The topic, which is now a subject in (30), being in Spec,PredP (Predicate Phrase, Adger & Ramchand 2003), which is an argument position, receives structural Nom Case licensed by T^0.

Since verbless sentences encode [T] and [ϕ], but do not license structural Case, Al-Balushi (2012) argues that structural Case is absent due to the absence of the verb, thus establishing the connection between verbal licensing and argument licensing, as will be shown in Section 4.

3. MORPHOSYNTACTIC PROPERTIES OF THE 'BELIEVE'-CONSTRUCTION

This section presents the morphosyntactic properties of the 'believe'-construction in SA in (31).

[8] Al-Balushi (2012) argues that SA verbless sentences are verbless because the topic and the predicate do not require structural Case (hence the absence of the verb) since the topic satisfies the Case Filter by the mechanism of default case, and the Visibility Condition by the feature [Topic] (in complementary distribution with [Case]), and the predicate receives default Nom case for the Case Filter purposes, and is not subject to the Visibility Condition.

[9] The copular verb *kaana* is a member of a group known in the traditional literature as '*kaana* and its sisters', including *laysa* 'to not be', *ʔaṣbaħa*, *ʔamsaa*, *ʔaḍħaa*, *baata*, and *ṣaara*, all meaning 'to become', *ðalla*, *baqiya*, *maa zaala*, and *maa daama*, all meaning 'to remain'; these verbs license structural Nom Case on the following DP (in *kaana*-Subject-Predicate/*kaana*-Subject-VO structures), and assign lexical Acc case to the predicate; see Ryding (2005: 634–639) for illustrative examples.

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(31) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-**a** naam-uu-Ø
PST.believe.3SM-IND Ali-NOM the-students-ACC PST.sleep.3-PM-IND
'Ali believed the students slept/to have slept.'

First, I assume with Soltan (2007: 154–164) that the Acc-marked DP in (31) is in the embedded clause, and that it does not relate thematically or semantically to *ðanna* 'believe'. For example, there is no semantic difference between the construction in (31) and the one in (32), where the embedded clause is a full CP.

(32) ðanna-Ø ʕaliyy-un ʔanna ṭ-ṭullaab-**a**
PST.believe.3SM-IND Ali-NOM COMP the-students-ACC
naam-uu-Ø
PST.sleep.3-PM-IND
'Ali believed (that) the students slept.'

Furthermore, Soltan argues that the fact that the *ðanna*-construction does not have a parallel prolepsis structure with a dative PP, as (33)–(34) show, indicates that the Acc-marked DP does not (start in or) move to the matrix clause.[10]

(33) *ðanna-Ø ʕaliyy-un mina ṭ-ṭullaab-i
PST.believe.3SM-IND Ali-NOM from the-students-GEN
naam-uu-Ø
PST.sleep.3PM-IND

(34) *ðanna-Ø ʕaliyy-un mina ṭ-ṭullaab-i ʔanna-hum
PST.believe.3SM-IND Ali-NOM from the-students-GEN COMP-they
naam-uu-Ø
PST.sleep.3PM-IND

Moreover, if an adverbial follows *ṭ-ṭullaab-a* 'the students' in (31) above, as in (35), it can only modify the embedded clause, which indicates that the DP belongs there. This is also supported by the fact that using conflicting temporal adverbials

[10] A prolepsis structure is one where the Acc Case-/case-marked DP is base-generated in the matrix clause but binds an argument in the embedded clause. In contrast to the *ðanna* structure, where both the DP and the pronoun are in the embedded clause, the *ʔaraada* 'want' structure, exemplified in (i)–(ii), is analyzed as an instance of prolepsis (Soltan 2007: 138–154).

(i) ʔaraada-Ø ʕaliyy-un ṭ-ṭullaab-a ʔan
PST.want.3SM-IND Ali-NOM the-students-ACC COMP
ya-naam-uu-Ø
IMPF-sleep.3-PM-SUB
'Ali wanted the students to sleep.'

(ii) ʔaraada-Ø ʕaliyy-un mina ṭ-ṭullaab-i ʔan
PST.want.3SM-IND Ali-NOM from the-students-GEN COMP
ya-naam-uu-Ø
IMPF.sleep.3-PM-SUB
'Ali wanted (from) the students to sleep.'

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results in grammaticality when *ṭ-ṭullaab-a* follows the matrix clause adverb, but ungrammaticality when it precedes both adverbials, as in (36)–(37).

(35) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a bi-l-ʔams-i
PST.believe.3SM-IND Ali-NOM the-students-ACC in-the-yesterday-GEN
naam-uu-Ø
PST.sleep.3-PM-IND
'Ali believed the students slept yesterday.'

(36) ðanna-Ø ʕaliyy-un bi-l-ʔams-i ṭ-ṭullaab-a
PST.believe.3SM-IND Ali-NOM in-the-yesterday-GEN the-students-ACC
sa-ya-naam-uu-na ɣad-an
FUT-IMPF-sleep.3-PM-IND tomorrow-ACC
'Ali believed yesterday the students will sleep tomorrow.'

(37) *ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a bi-l-ʔams-i
PST.believe.3SM-IND Ali-NOM the-students-ACC in-the-yesterday-GEN
sa-ya-naam-uu-na ɣad-an
FUT-IMPF-sleep.3PM-IND tomorrow-ACC

Therefore, I will assume that the Acc-marked DP is merged and remains in the embedded clause. In addition, Soltan argues that the embedded clause in (31) is a TP, since the embedded clause lacks a CP layer (lacking an overt complementizer), and that the Acc-marked DP is base-generated and remains in its highest Spec position (Spec,TP, or Spec,NegP for negative sentences), which Soltan assumes to be an A-bar position. In other words, this DP does not move from the thematic domain to its surface position, for a number of reasons. For example, raising is excluded because idiomaticity is lost when post-verbal DPs are spelled out pre-verbally, as (38)–(39) show.

(38) ðanna-Ø ʕaliyy-un ṭ-ṭaalib-a
PST.believe.3SM-IND Ali-NOM the-student-ACC
sa-ya-ṭruq-u l-ħadiid-a wa huwa saaxin-un
FUT-IMPF-hammer.3SM-IND the-iron-ACC and it hot-NOM
Literal: 'Ali believed the student will strike the iron while it is hot.'
Idiomatic: 'Ali believed the student will take action at the right moment.'

(39) ðanna-Ø ʕaliyy-un l-ħadiid-a
PST.believe.3SM-IND Ali-NOM the-iron-ACC
sa-ya-ṭruq-u-hu ṭ-ṭaalib-u wa huwa saaxin-un
FUT-IMPF-hammer.3SM-IND-it the-student-NOM and it hot-NOM
Only literal: 'Ali Believed the student will strike the iron while it is hot.'

Also, the fact that the Acc-marked DP can be associated with subjects, as (40)–(41) show, and non-subjects, as (42)–(43) show, indicates that it is base-generated in its surface position.

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(40) ðanna-Ø ʕaliyy-un ṭ-ṭaalib-a
PST.believe.3SM-IND Ali-NOM the-student-ACC
qubiḍa-Ø ʕalay-hi
PST.PASS.arrest.3SM-IND on-him
'Ali believed the student was arrested.'

(41) ðanna-Ø ʕaliyy-un ṭ-ṭaalib-a ħaḍara-Ø
PST.believe.3SM-IND Ali-NOM the-student-ACC PST.come.3SM-IND
huwa wa ʔax-uu-hu
he and brother-NOM-his
'Ali believed the student and his brother came.'

(42) ðanna-Ø ʕaliyy-un ṭ-ṭaalib-a
PST.believe.3SM-IND Ali-NOM the-student-ACC
kaafaʔa-Ø-**hu** l-mudarris-u
PST.reward.3SM-IND-him the-teacher-NOM
'Ali believed about the student that the teacher rewarded him.'

(43) ðanna-Ø ʕaliyy-un ṭ-ṭaalib-a jaaʔa-Ø
PST.believe.3SM-IND Ali-NOM the-student-ACC PST.come.3SM-IND
ʔab-uu-**hu**
father-NOM-his
'Ali believed about the student that his father came.'

Thus, the Acc-marked DP is not an argument of the embedded verb, but is co-indexed with a pronoun in the thematic domain.

Given these observations, Soltan (2007: 160–161) concludes that the 'accusative DP in *ðanna*-type sentences is base-generated in a peripheral position inside the embedded clause and A′-binds a resumptive pronoun in the thematic domain'. Therefore, and given the absence of an overt complementizer, argues Soltan, 'there is no phase boundary between *v** and the highest DP in the embedded clause, and accusative case assignment should proceed via Agree' (page 161) between v^{*0} and the Acc-marked DP in embedded Spec,TP.

Although I agree with Soltan that the Acc-marked DP is merged and remains in the embedded clause and that it is Case-marked in its base-generated position, I disagree as to the category of the embedded clause and the exact position of the Acc-marked DP as well as the type of case that it receives. 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 predicate; more on this in Section 5.

The position that the embedded clause in (31) is a full CP is based on three arguments. First, given Soltan's observation that 'the embedded verb is in its tensed indicative form, not the subjunctive non-tensed form' (Soltan 2007: 154), I argue that the complement clause in (31) is a tensed/finite CP. This claim is

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supported by the fact that the embedded verb can realize the past vs. non-past distinction, as (44)–(46) show, thus encoding the feature [Precedence], which 'is at the heart of what can be called the narrow tense system' (Cowper 2005: 15).

(44) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a laʕib-uu-Ø
PST.believe.3SM-IND Ali-NOM the-students-ACC PST.play.3-PM-IND
bi-l-ʔams-i
in-the-yesterday-GEN
'Ali believed the students played yesterday.'

(45) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a
PST.believe.3SM-IND Ali-NOM the-students-ACC
ya-lʕab-uu-na l-ʔaan-a
IMPF.**PRS**-play.3-PM-IND the-now-ACC
'Ali believed the students are playing now.'

(46) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a
PST.believe.3SM-IND Ali-NOM the-students-ACC
sa-ya-lʕab-uu-na ɣad-an
FUT-IMPF-play.3-PM-IND tomorrow-ACC
'Ali believed the students will play tomorrow.'

Basically, the embedded verb can have a tense specification different from that of the matrix verb. Also, that the embedded T^0 is ϕ-complete is shown by the morphology of the embedded verbs in (44)–(46).

In addition, Rizzi's (1997) proposal that Fin^0 is the locus of the inflectional properties available in the Infl domain indicates that Fin^0 is available to anchor the tense and agreement (finiteness) specification on T^0, thus indicating the existence of the CP layer, which makes Soltan's position untenable, especially that it assumes that finiteness may reside in T^0 (Soltan 2007: 161 fn. 7).

Secondly, there are Holy Qur'an data where the embedded Fin^0 is occupied by a particle which assigns VC (Verbal Case), as (47) shows, thus indicating the presence of the CP layer.[11]

(47) 'bal ðanan-t-um-Ø [**ʔan** lan ya-nqalib-a
so PST.believe-2-PM-IND COMP NEG.FUT IMPF-return.3SM-SUB
r-rasuul-u wa l-muʔmin-uuna ʔilaa ʔahlii-him
the-messenger-NOM and the-believer-P.NOM to families.GEN-their
ʔabad-aa]' (48:12)
never-ACC
'So, you thought that the messenger and the believers would never return to their families.'

[11] Standard Arabic and Qur'an Arabic (Classical Arabic) differ only in phraseology and vocabulary (Holes 2004: 5; Ryding 2005: 4).

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Thirdly, given sentences like (48)–(49), where the Acc-marked DP, which belongs in the embedded clause, appears to the left of negative particles (where Neg^0 is higher than T^0, as argued in Fassi Fehri 1993: 87, and Soltan 2007: 185), it is clear that the DP *ṭ-ṭullaab-a* is not in the embedded Spec,TP position, but rather in the embedded Spec,TopP, whose presence indicates that the embedded clause is a CP.

(48) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-**a** **lan**
PST.believe.3SM-IND Ali-NOM the-students-ACC NEG.FUT
ya-naam-uu-Ø
IMPF-sleept.3-PM-SUB
'Ali believed that the students will not sleep.'

(49) ðanna-Ø ʕaliyy-un ṭ-ṭullaab-a **lam**
PST.believe.3SM-IND Ali-NOM the-students-ACC NEG.PST
ya-naam-uu-Ø
IMPF-sleep.3-PM-JUSS
'Ali believed that the students did not sleep.'

4. THE PROPOSED CONCEPTION OF CASE

Since earlier approaches to 'believe'-type constructions are based on the theory of Case at the time, this section will present the theory of Case adopted here, but will start with arguments against the earlier proposals of structural Case.

4.1 *Against earlier Case proposals*

Following standard views on Case, structural Case has been assumed to be licensed in SA by tense and agreement (Aoun, Benmamoun & Sportiche 1994: 204; Ouhalla 1994: 48; Benmamoun 1999: 110; 2000: 40–41; 2008: 106–110; Soltan 2007). To motivate the proposed theory of Case, I will show that structural Case is licensed in the absence of agreement and tense. First, I assume Chomsky's (2001) claim that ϕ-specification must be complete for T^0 and v^{*0} to check Case on the relevant goals. He argues that '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]' (Chomsky 2001: 6; italics in the original); that is, a ϕ-incomplete T^0 or v^{*0} is a ϕ-defective probe, which cannot value [Case] on the goal. Nonetheless, SA verbs are not allowed to fully agree with the subject, always lacking [Number], as (50) shows.

(50) *katab-**na**-Ø/kataba-**t**-Ø l-banaat-u r-risaala-t-a
PST.write.3-PF-IND/PST.write.3S-F-IND the-girls-NOM the-letter-F-ACC
'The girls wrote the letter.'

Also, SA T^0 can be even more ϕ-defective since the verb can agree with the subject only in terms of [Person], as (51) as well as the Qur'anic verse in (52) show.

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(51) saafara-Ø l-banaat-u
PST.travel.3SM-IND the-girls-NOM
'The girls (have) traveled.'

(52) 'ʔiðaa jaaʔa-Ø-kum l-muʔmin-**aa**-**t**-u
if PST.come.3SM-IND-you the-believer-P-F-NOM
muhaajir-**aa**-**t**-in . . . ' (60:10)
migrating-P-F-ACC
'If the female believers came to you migrating . . . '

Besides, SA v*[0] is also ϕ-defective since the verb is not allowed to realize object agreement, neither fully (number and gender) nor partially (number or gender), as (53) shows.[12] I assume that verbal morphology reflects the featural composition of T[0] and v*[0].

(53) *katab-**na**-Ø/-**uu**-Ø/-**at**-Ø r-rajul-u r-rasaaʔil-a
PST.write.3-PF-IND/-PM-IND/-SF-IND the-man-NOM the-letters.F-ACC

Secondly, Pesetsky & Torrego (2001, 2004) argue that Nom Case and Acc Case are licensed on the DP as a result of valuing an uninterpretable [*u*T] feature on D[0] by an interpretable [*i*T] counterpart on the relevant Case-checking heads. Thus, tense is crucial for licensing structural Case. However, SA imperatives, which lack tense (as do imperatives crosslinguistically, Huntley 1980, Zanuttini 1991, Henry 1995, Han 1998, Rupp 1999, Jakab 2002, Mauck et al. 2005, Wratil 2005, Bennis 2007, Pak et al. 2008), license structural Case. Derived from the jussive (Wright 1896: 61), SA imperative verbs lack tense morphology, as Table 1 shows. In addition, they do not exhibit the past vs. non-past distinction, and thus lack the feature [Precedence] (Cowper 2005), which indicates that they lack [T].

Jussive	Positive imperative	Negative imperative		3rd positive imperative
ta-ktub-na-Ø	ʔu.ktub-na-Ø	laa	ta-ktub-na-Ø	li-ya-ktub-na-Ø
2-write-PF-JUSS	write-PF-JUSS	NEG.IMPR	2-write-PF-JUSS	IMPR-IMPF-write-PF-JUSS

Table 1
Structure of the Standard Arabic imperative verbs.

Imperatives just denote 'future orientation', which makes reference to mood, not tense (Cowper 2005, Cowper & Hall 2007). Thus, imperative clauses in SA lack a TP and instantiate a MoodP instead. Nonetheless, both Nom and Acc are licensed in the second person imperative construction in (54), and also in the third person imperative construction in (55).[13]

[12] This approach was challenged in Carstens (2001), Tanaka (2005), Alboiu (2006), and Bobaljik (2008), among many others.

[13] The prefix *ʔu-* in the positive imperative form does not represent an exponent or morpheme, it is just 'inserted to observe the ban on initial consonant clusters in Arabic' (Benmamoun 1995: 151).

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(54) ʔu.ktub-Ø ʔanta wa ʔax-**uu**-ka
write.SM-JUSS you.SM.NOM and brother-NOM-your
r-risaala-t-**a**
the-letter-F-ACC
'You and your brother write the letter!'

(55) 'li-yu-nfiq-Ø ð-**uu** saʕat-in min
IMPR-IMPF-spend.3SM-JUSS owning-NOM wealth.F-GEN from
saʕat-i-hi' (65:7)
wealth.F-GEN-his
'Those (of you) who are financially capable, spend [in accordance]!'

Also, Pesetsky & Torrego (2001) argue that Nom Case is a [*u*T] on D^0 because the SA Nom Case suffixes are identical to the 'mood' suffixes of the verb form that carries tense, as Table 2 shows. However, I think this similarity should indicate connection between Nom Case and 'mood' (or its new interpretation, in the next section), not tense, since the singular Acc Case suffix in SA is identical to the 'mood' suffix of a verb form that does NOT carry tense, the subjunctive.

	Singular	Dual	Plural
1.	ʔal-muʕallim-**u** the-teacher-NOM	ʔal-muʕallim-**aan** the-teacher-D.NOM	ʔal-muʕallim-**uun** the-teacher-P.NOM
2.	yu-ʕallim-**u** IMPF-teach-IND	yu-ʕallim-**aan** IMPF-teach-D.IND	yu-ʕallim-**uun** IMPF-teach-P.IND

Table 2
Similarity between the nominative and indicative suffixes.

Given the defective subject and object agreement, reflecting ϕ-defective T^0 and v^{*0}, as well as the absence of [T] in imperatives, reflecting [T]-less T^0 and v^{*0}, I argue that agreement and tense are not responsible for licensing structural Case in SA.

4.2 *Verbal system in Standard Arabic*

This section reviews the relevant properties of SA verbs with the goal of showing that they encode a Verbal Case feature [VC]. The Arab grammarians of Basrah (Siibawayhi 1990: 407–410) maintained that SA verbs come in three paradigms: the perfective (past tense), the imperative, and the imperfective, which has three forms: indicative, subjunctive, and jussive. These modality-related labels were first contributed by the German philologist Caspari (in Wright's 1896 translation), where it is proposed that the relevant verbal particles are mood assigners and that the suffixes mark mood. Wright's translation states that SA verbs come

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in two paradigms: perfective, and imperfective, which has five moods (indicative, subjunctive, jussive, imperative, and energetic/emphatic). Traditional Arabic grammars use terms that indicate the inflectional state of the verb rather than its semantic interpretation: 'marfuuʕ', 'manṣuub', and 'majzuum'.[14] As (56)–(58) show, SA verbs receive a form of case, assigned by certain particles (Siibawayhi 1990).

(56) sa-ʔa-ʕmal-**u** *(ħattaa) ʔa-njaħ-**a**
FUT-1S-work-IND until 1S-succeed-SUB
'I will work until I make it.'

(57) yu-riid-**u** l-walad-u *(ʔan) yu-ʃaahid-**a**
IMPF-want.3SM-IND the-boy-NOM COMP IMPF-watch.3SM-SUB
t-tilfaaz-a
the-TV-ACC
'The boy wants to watch TV.'

(58) *(ʔin) tu-ðaakir-**Ø** ta-njaħ-**Ø**
if 2-study.SM-JUSS 2-pass.SM-JUSS
'If you study, you pass.'

The particles *ʔan* 'a Comp particle' and *ħattaa* 'until' assign the subjunctive VC. The particle *ʔin* 'if' assigns the jussive VC; (56)–(57) also show that the indicative VC is not assigned by particles, as maintained by TAGs (e.g. Al-Nadiri 1997: 439) and Fassi Fehri (1993: 164). I will return to this important point in Section 4.3.[15] The assumption that SA verbs receive case is based on a number of observations. First, like DPs, verbs receive their inflectional states when in the scope of Case/case assigners. Secondly, as Table 2 shows, the indicative form suffixes are similar to the Nom case suffixes. Also, the singular subjunctive suffix is similar to the singular Acc case suffix, as (59) shows; Al-Balushi (2013) provides a unified account of the similarities and differences between the Nom and indicative suffixes as well as between the Acc and subjunctive suffixes in SA.

[14] The first two labels ('marfuuʕ' and 'manṣuub') are also used for Nom- and Acc-marked nominals, respectively. A verb's 'inflectional state' refers to the inflection that it realizes or the form that it assumes given the constructions that it takes part in and the particles that it follows, which prompted the Arab grammarians to refer to it as 'case', since it is assigned in a specific structural configuration and is often similar to nominal case in terms of morphology.

[15] The subjunctive-assigning particles are *ʔan*, *lan*, *wa* of simultaneity, *li-* of denial', *ʔiðan*, *ħattaa* 'until', *ħattaa* of optative, *kay*, *li-* of optative, *likay*, and *fa-* of optative. The jussive-assigning particles are *lam*, *ʔalam*, *lammaa*, *ʔalammaa*, *li-* of command, prohibitive *laa*, *ʔayna*, *ʔin*, *ʔið-maa*, *man*, *maa*, *mahmaa*, *mataa*, *ʔayyaana*, *ʔaynamaa*, *ħayθumaa*, *ʔannaa*, *kayfamaa*, *ʔayy*; see Al-Balushi (2011: 78–85) for the meanings/functions of these particles as well as for illustrative examples.

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(59) 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.'

Thirdly, the fact that certain particles assign certain VC values and not others, suggests that (like nominal Case forms) only certain verbal forms are licensed in certain contexts. Fourthly, the VC-assigning particles must be followed only by verbs, and never by other elements, as (60)–(61) show.

(60) *lan l-walad-u ya-ktub-a r-risaala-t-a
NEG.FUT the-boy-NOM IMPF-write.3SM-SUB the-letter-F-ACC

(61) *ʔan l-kasuul-u ya-ktub-a r-risaala-t-a
COMP the-lazy-NOM IMPF-write.3SM-SUB the-letter-F-ACC

Fassi Fehri (1993: 82–83) questioned Wright's modality-based proposal, and interpreted these facts such that verbs receive TEMPORAL CASE (TCase) (p. 163–164). He proposed that the relevant suffixes mark temporal cases assigned to verbs by particles or by default (indicative) in the same manner nouns receive their cases; as we will soon see, while Fassi Fehri's TCase is concerned with morphological realization, the proposed concept also has syntactic implications. Also, Benmamoun (2000: 31), who observes that '[e]ach mood ending seems to comprise a heterogeneous class of temporal and syntactic contexts', argues that the SA so-called mood suffixes do not map to the three relevant moods. I follow Fassi Fehri and Benmamoun in dissociating these suffixes and forms from modality.

Given the preceding discussion, I would like to argue that all the SA verbs must be subsumed under the three known VC-categories, indicative, subjunctive, and jussive, which are used as cover terms for the various moods and functions that SA verbs convey, comprising indicative, subjunctive, optative, conditional, imperative, jussive, and emphatic. The feasibility of this classification stems from its correlation with the three VC forms (given the relevant particles) resulting from VC assignment marked with morphological inflection.

The jussive VC form conveys the imperative, conditional, and energetic moods and is also used in past negatives, as (62)–(65) respectively show.

(62) laa ta-ktub-**Ø** (ʔanta) r-risaala-t-a
NEG.IMPR 2-write.SM-JUSS you.SM.NOM the-letter-F-ACC
'Don't (you) write the letter!'

(63) mataa tu-hmil-**Ø** duruus-a-ka ta-rsub-**Ø**
whenever 2-neglect.SM-JUSS lessons-ACC-your 2-fail.SM-JUSS
'Whenever you neglect your lessons, you fail.'

(64) ta-rbaħ-u maa-lam ta-ɣuʃʃ-an-**Ø**
2-gain.SM-IND if-NEG.PST 2-cheat.SM-ENER-JUSS
'You make profit if you do not cheat.'

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(65) lam ya-ktub-**Ø** l-walad-u d-dars-a
NEG.PST IMPF-write.3SM-JUSS the-boy-NOM the-lesson-ACC
'The boy did not write the lesson.'

The subjunctive VC is used to convey the optative and subjunctive moods and is also used in future negatives, as (66)–(68) respectively show.

(66) ya-drus-u l-walad-u likay ya-njaħ-**a**
IMPF-study.3SM-IND the-boy-NOM so.that/for IMPF-succeed.3SM-SUB
'The boy studies so that he would pass.'

(67) ħaawala-Ø l-walad-u ʔan ya-ktub-**a**
PST.try.3SM-IND the-boy-NOM COMP IMPF-write.3SM-SUB
r-risaala-t-a
the-letter-F-ACC
'The boy tried to write the letter.'

(68) lan ya-ktub-**a** l-walad-u d-dars-a
NEG.FUT IMPF-write.3SM-SUB the-boy-NOM the-lesson-ACC
'The boy will not write the lesson.'

The indicative VC form is used in declarative present (generic and deictic) and future sentences, as well as in the embedded clause of causative verbs, as (69)–(72) respectively show.[16]

(69) ʔal-walad-u ya-ktub-u duruus-a-hu
the-boy-NOM IMPF-write.3SM-IND lessons-ACC-his
'The boy writes his lessons.'

(70) 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.'

(71) sa-ya-ktub-u l-mudarris-u d-dars-a
FUT-IMPF-write.3SM-IND the-teacher-NOM the-lesson-ACC
'The teacher will write the lesson.'

(72) jaʕala-Ø l-mudarris-u l-ʔawlaad-a
PST.make.3SM-IND the-teacher-NOM the-boys-ACC
ya-qraʔ-uu-na l-kitaab-a
IMPF-read.3-PM-IND the-book-ACC
'The teacher made the boys read the book.'

[16] An anonymous *JL* referee points out that indicative verb forms are also found embedded under verbs of 'beginning', as in *ʃaraʕa l-walad-u ya-qraʔ-u l-kitaab-a* 'the boy began reading the book', and verbs of 'becoming', as in *ʔaṣbaħa l-walad-u yu-ħibb-u l-qiraaʔat-a* 'the boy became fond of reading'.

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Moreover, I would like to propose that the perfective form is also marked for VC (albeit with no morphological marking) since it conveys indicative mood in the past tense. Wright (1896: 51–52) 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 perfect and imperfect states.

Also, Fassi Fehri (1993: 83–84) states that the 'perfect form of the verb is almost exclusively used for the indicative Mood (presumably by default)'. The perfective is similar to the indicative form of the imperfective in that it receives VC without particles, and also because it does not co-occur with tense- or mood-inflecting particles. Thus, I argue that the perfective verb is also inflected for indicative VC.[17] Table 3 presents the four verbal forms which are marked for the three VC values which convey a heterogeneous set of functions.[18]

4.3 *Verbal Case: The syntactic proposal*

The verbal inflection facts discussed in the previous section prompted TAGs to assume case assignment in the verbal as well as the nominal system. Since TAGs (as well as Fassi Fehri 1993) assumed the indicative VC to obtain by default, it becomes clear that they took these facts to only have morphological implications, such that the relevant particles assign MORPHOLOGICAL VERBAL CASE (m-vc). Though I agree with this view, I believe that this morphological phenomenon, m-vc assignment by particles, indicates abstract verbal licensing. Assuming the standard Case theory with roots in Chomsky & Lasnik (1977), Chomsky (1980, 1981, 1995), and Vergnaud (1982, 2008), where morphological nominal case (m-case) was assumed to be indicative of abstract Case (nominal licensing),[19] I take m-vc to be indicative of abstract verbal licensing; that is, by analogy with m-case, which reflects DP licensing, I claim that m-vc also reflects verbal licensing. To support this claim, let us examine the data in (73)–(76).

(73) John tried [*he/*him/PRO to leave early].

Only PRO is grammatical in (73) because there is no Case licenser for the embedded Spec,TP position. Thus, elements that must realize m-case (given the

[17] An anonymous *JL* referee points out that perfective verb forms can also occur in Sub-marked contexts, following *ʔan* (a subjunctive assigner), as in *sabaqa ʔan raʔay-tu-hu* 'I have previously seen him', as well as in Juss-marked contexts, following *ʔin* (a jussive assigner), as in *ʔin raʔay-ta-hu ʔabliɣ-hu salaami* 'if you see him, give him my regards'. This provides support for the view adopted in this paper that the perfective is similar to the imperfective verb forms.

[18] Several generative-age authors have proposed that verbs/VPs receive Case (see Roeper & Vergnaud 1980; Zagona 1982; Fabb 1984; Roberts 1985a, b).

[19] The relation assumed between m-case and Case does not obtain in default case contexts; see Schütze (2001).

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	[ϕ]	Present tense indicative VC	Past tense indicative VC	Subjunctive VC	Jussive VC
1.	1s	ʔa-drus-u	daras-tu-Ø	ʔa-drus-a	ʔa-drus-Ø
		1-study-IND	study-1-IND	1-study-SUB	1-study-JUSS
2.	1p	na-drus-u	daras-naa-Ø	na-drus-a	na-drus-Ø
		1P-study-IND	study-1P-IND	1P-study-SUB	1P-study-JUSS
3.	2sm	ta-drus-u	daras-ta-Ø	ta-drus-a	ta-drus-Ø
		2-study-IND	study-2-IND	2-study-SUB	2-study-JUSS
4.	2sf	ta-drus-ii-n	daras-t-i-Ø	ta-drus-ii-Ø	ta-drus-ii-Ø
		2-study-F-IND	study-2-F-IND	2-study-F-SUB	2-study-F-JUSS
5.	2dm	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
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
		IMPF-study-IND	study-IND	IMPF-study-SUB	IMPF-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
		IMPF-study-D-IND	study-D-IND	IMPF-study-D-SUB	IMPF-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
		IMPF-study-P-IND	study-P-IND	IMPF-study-P-SUB	IMPF-study-P-JUSS
14.	3pf	ya-drus-na-Ø	daras-na-Ø	ya-drus-na-Ø	ya-drus-na-Ø
		IMPF-study-PF-IND	study-PF-IND	IMPF-study-PF-SUB	IMPF-study-PF-JUSS

Table 3
Standard Arabic verbs in the three Verbal Case (VC) values.

Case Filter, which Chomsky (1981: 49) assumes to be part of the PF-component), like lexical DPs, are not allowed in a position where abstract Case is not licensed (assuming no Null Case), since this would result in not satisfying the Case Filter. Null Case was proposed in Chomsky & Lasnik (1993) and argued against in Baltin & Barrett (2002) and Cecchetto & Oniga (2004), among others. Chomsky (1981: 49) excluded gerunds and lexical NPs from the subject position of infinitival clauses, since they are not allowed 'in positions in which no Case is assigned'. To show that m-vc indicates VC, let us examine SA verbless sentences once more.

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(74) *ya-kuun-u r-rajul-u mariiḍ-an/-un
IMPF.PRS-be.3SM-IND the-man-NOM sick-ACC/-NOM

(75) *ʔar-rajul-u ya-kuun-u mariiḍ-an/-un
the-man-NOM IMPF.PRS-be.3SM-IND sick-ACC/-NOM

(76) ʔar-rajul-u mariiḍ-un
the-man-NOM sick-NOM
'The man is sick.'

The grammaticality of (76) indicates that (74)–(75) are ungrammatical because the copular verb is not licensed in this position. Like the embedded subject position in (73), where elements which realize m-case (lexical DPs) are not licensed, verbless sentences provide a context where verbs, which realize m-vc, are not licensed.[20] Thus, like DPs (assumed to require licensing, [Case]), SA verbs seem to require abstract licensing, that is, [VC]. Thus, the different verbal forms (indicative, subjunctive, and jussive) can be argued to reflect abstract verbal licensing [VC] similar to abstract DP licensing (e.g. Nom, Acc). Given the standard view that [Case] is encoded on D^0, I will assume that [VC] is encoded on T^0 and v^{*0}. Therefore, besides [T], [ϕ], and [Mood], verbs in SA are marked for [VC]. This indicates that the indicative form obtains by default only morphologically, that is, in the absence of VC-assigning particles, but not syntactically, since it does not appear in verbless sentences where copular verbs are not licensed.

Assuming Rizzi (1997) that finiteness resides in the Comp domain (Fin^0), and given the observation that (most of) the VC-assigning particles are Comp elements, I will assume that Fin^0 has a valued [VC] feature, which values the [VC] features on T^0 and v^{*0}, which results in valuing [Case] on the subject and object as Nom and Acc, respectively.[21] Also, given the observation that [T] and [ϕ] (as well as [Mood]) do not license structural Case in SA, I will take them to indicate finiteness in the Infl domain (I-finiteness). In this way, [VC] on Fin^0 constitutes Comp finiteness (C-finiteness), which is the element that licenses Case in the clause. Structural Case is licensed in the clause iff Fin^0 c-selects an XP that has a categorial [V] feature and at least one I-finiteness feature, [T], or [Mood], or [ϕ] (Al-Balushi 2011: 140). Thus, Case is licensed in verbal and copular sentences (where there is a VP) but not in verbless sentences (which have a PredP), since the selected TP lacks a categorial [V] feature. Though verbless sentences have a

[20] See Benmamoun (2000: 42–48) for arguments against the presence of a null copula in verbless sentences.

[21] The view that C^0 is the locus of finiteness such that it is the licenser of structural Case is consistent with Platzack & Holmberg's (1989) finding that finiteness is an operator in C^0 whose realization is necessary for Nom Case, and with Kayne's (1994) proposal that finiteness requires incorporation of I^0 into C^0, as well as with Vincent's (1997, 1998) finding that inflectional categories are also spelled out on C^0. This way, finiteness 'constitutes a more basic property of the C system that interacts with functional heads in the IP domain' (Nikolaeva 2007: 8).

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Comp domain (Al-Balushi 2012: 7), their FinP lacks a [VC] feature.[22] Therefore, SA seems to have two versions of Fin^0, with and without a valued [VC] feature; it also has two versions of T^0, with and without a [VC] feature.[23]

Al-Balushi (2011: 279–287) also argues that *pro* does not receive Case; it does not require Case for the Case Filter since it is phonetically null. It does not need Case for LF visibility since it is co-indexed with the topic, which is made visible at LF by the feature [Topic]. This co-indexation makes *pro* visible at LF to transmit the θ-role to the topic; *pro* appears in SA in SVO sentences, where Nom Case is licensed, and in participial and verbless sentences, where Nom Case is not licensed, since these structures have topics, not subjects (Al-Balushi 2011, 2012). The claim that *pro* receives no Case is problematic for SVO sentences (as well as for VO sentences, with a null subject and no topic), since a crash is inevitable. However, assuming Hale & Keyser (2000), I follow Al-Balushi (2011: 279–287) in that Nom on T^0 of SVO/VO sentences is licensed via a CONFLATION procedure whereby the movement of *pro* (full ϕ-features/agreement morphology, hence lexical head) to T^0 amounts to the licensing of Nom Case; thus *pro* receives no Case.

Unlike structural Case, lexical case is irrelevant for licensing and LF visibility; that is, like default case, it satisfies the Case Filter, which is also satisfied by structural Case. This conception of Case provides a uniform treatment of nominals appearing with morphological case marking in A and A-bar positions in SA. The goal of Section 4 has been to establish the link between verbs, hence [VC] on T^0 and v^{*0}, and argument licensing (structural Case), which renders lexical elements relevant to non-arguments (lexical case).

5. A-BAR ECM IN STANDARD ARABIC

5.1 *The analysis*

The morphosyntactic presentation of the 'believe'-construction in Section 3 has revealed that the Acc-marked DP is base-generated and remains in the embedded clause, specifically in the embedded Spec,TopP, and that it is not an argument of the embedded predicate. Besides these findings, I would like to make a number of assumptions. First, unlike Chomsky (2001), I assume that AGREE is a relation between a probe and a goal that results in valuing virtually any feature; thus it is not restricted to ϕ-feature valuation. Secondly, I assume with Rezac (2004: 107) that the search-space is 'the entire syntactic object in which a probe finds itself',

[22] Bahloul (2008: 169–170) argues that verbless sentences in SA lack a verb because Mod^0 (the Modality head) selects a PP, or an NP, or an AP, but not a VP, which makes reference to the featural composition of Modality in the clause.

[23] In sentences with subjunctive or jussive VC verbs, a process of m-vc assignment takes place. When the VC-assigning particle enters the derivation, it enters an Agree relation with the verb, where it assigns it a VC specification relevant for the morphological component. Thus, particles have indices that specify the VC values that they assign.

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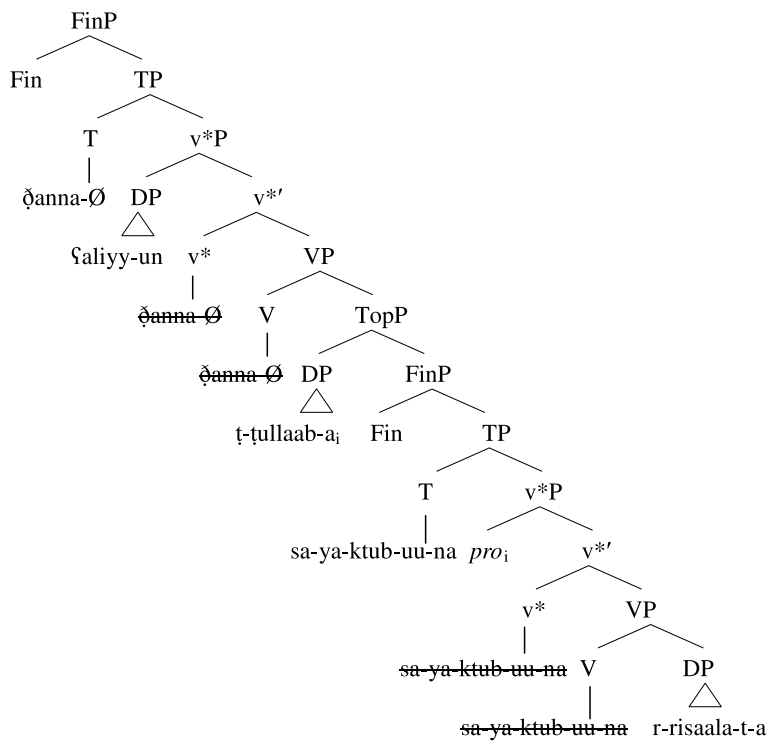
thus the search-domain of the probe can also expand upward. Also, Baker (2010: 1) states that, in general, 'a functional head can search upward or downward through the syntactic tree in order to find a DP/NP that it can agree with'. Thus, I will assume that the probe may c-command the goal and the goal may c-command the probe. Thirdly, I do not assume ϕ-features to be involved in structural Case checking in SA (contra Soltan 2007), given its defectivity, unless *pro* must be licensed, which makes reference to the SVO order; thus the full ϕ-morphology is there to license *pro*, that is, to reveal its ϕ-content. Therefore, I assume with Bobaljik (2008) that ϕ-agreement is a morphological, not syntactic, operation. With these assumptions in mind, let us see how Al-Balushi's (2011) Case system handles (77), which has the tree structure in (78).

(77)

ðanna-Ø	ʕaliyy-un	ṭ-ṭullaab-a
PST.believe.3SM-IND	Ali-NOM	the-students-ACC
sa-ya-ktub-uu-na	*pro*	r-risaala-t-a
FUT-IMPF-write.3-PM-IND	ec	the-letter-F-ACC

'Ali believed the students will write the letter.'

(78)



I will start with structural Case checking in the embedded clause. Since the embedded clause is a CP, then Fin^0 is present and c-selects a TP with both a categorial [V] feature (given the verb) and a [T] feature (given the independent

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tense operator in the embedded clause); T^0 and v^{*0} have unvalued [VC] features. 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; that is, the two features become two instances of one feature (Frampton & Gutmann 2000, Pesetsky & Torrego 2007). Agree between T^0 and Fin^0 takes place, resulting in valuing [VC] on T^0, and automatically on v^{*0}. The fact that the embedded T^0 has a valued [VC] feature means that it can license Nom Case on the embedded subject, which is *pro*, merged in Spec,v*P and co-referential with the topic in embedded Spec,TopP. Assuming that *pro* does not receive Case, a crash seems inevitable. Nonetheless, I argue that Nom on T^0 is checked via a conflation procedure (Hale & Keyser 2000). In other words, it is licensed as a result of the movement of *pro* (full agreement affix, lexical head) to T^0, which results in the verb (in T^0) realizing the full ϕ-content of *pro*, a characteristic of SVO structures in SA. In contrast, the verb in VSO structures (in T^0) does not carry full [ϕ] information, since this is realized by the subject in Spec,v*P. The object (probe) enters an Agree relation with v^{*0} (goal) and gets its [Case] feature valued as Acc. The embedded verb (as well as the matrix one), not being in the scope of a VC-assigning particle, realizes the default indicative m-vc morphology at Spell-Out.

Case checking in the matrix clause proceeds roughly in the same fashion. Since the selected TP has both a categorial [V] feature and a [T] feature, Fin^0 will value [VC] on T^0 and v^{*0}. T^0 will then value [Case] on the lexical DP subject *ʕaliyy* as Nom. As for the Acc Case feature on v^{*0}, being structural, I argue that it is licensed on the CP complement, for purposes of LF visibility, since the CP, unlike the Acc-marked DP, is an argument of the matrix verb.

This leaves the Acc-marked DP, *ṭ-ṭullaab-a* 'the students', without a structural Case checking category, in violation of both the Case Filter and the Visibility Condition, which undermines the present account, but this is just apparent. To illustrate, since the Acc-marked DP is an A-bar element, then, by assumption, it has no [Case] feature, especially that it is not an argument of either predicate, and so, unlike arguments, is not subject to the Visibility Condition via Case; *ṭ-ṭullaab-a* is licensed into the derivation through co-indexation with *pro*. It, nonetheless, has to satisfy the Visibility Condition since it is co-indexed with an argument, *pro*, which has no means of being visible at LF for θ-role assignment. Therefore, I assume that since *ṭ-ṭullaab-a* occupies the Spec,TopP position, it has the feature [Topic] (checked by the Top^0 head). Like [Case], Al-Balushi (2011) claims that [Topic] makes topics visible at LF. Thus, *pro*, which is co-indexed with *ṭ-ṭullaab-a*, becomes visible at LF, which allows it to receive the relevant θ-role from the embedded verb and transmit it to *ṭ-ṭullaab-a*. As for the Case Filter, I argue that *ṭ-ṭullaab-a*, being a non-argument, receives lexical Acc case from the matrix verb *ðanna*, as a lexical element; *ðanna* is a member of a group of verbs, known in the traditional grammar of Arabic (Siibawayhi 1990) as '*ðanna* and its sisters', which assign case to two nominals, a DP and a predicate; examples include *xaala* 'imagine', *ħasiba* 'believe', *ʕadda* 'consider', and *jaʕala* 'make'.

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5.2 *More on the analysis*

The present account is based on two main assumptions, that the Acc-marked DP is visible by [Topic], and that it receives lexical case. First, the claim that the DP *ṭ-ṭullaab-a* 'the students' in (77) in pre-verbal position is visible by [Topic], not [Case], is supported by an argument which involves the examples in (79) and (80).

(79) ʔaṭ-ṭullaab-**u** qaraʔ-uu-Ø *pro* l-kitaab-a
the-students-NOM PST.read.3-PM-IND ec the-book-ACC
'The students, they read the book.'

(80) ʔinna ṭ-ṭullaab-**a** qaraʔ-uu-Ø *pro* l-kitaab-a
COMP the-students-ACC PST.read.3-PM-IND ec the-book-ACC
'Certainly, the students, they read the book.'

Basically, *ʔaṭ-ṭullaab-u* in (79) does not receive the agent θ-role because of the Nom case that it realizes, since this is default Nom. This is because if *ʔaṭ-ṭullaab-u* received the agent θ-role by the Nom case in (79), then it must receive the theme θ-role by Acc in (80), but this is not the case since it is still the agent. Thus, the pre-verbal DP in (79)–(80) becomes visible by [Topic]. This view is more plausible than an alternative where *ṭ-ṭullaab-a* and *l-kitaab-a* 'the book' in (80) (or *ṭ-ṭullaab-a* and the complement CP in (77)) receive Acc Case from v*^{0}, since then they will compete for the theme θ-role at LF; this alternative is also implausible since v*^{0} does not license Acc Case on more than one element.

Thus, the Acc assigned by *ʔinna* is different from the Acc licensed by v*^{0}, such that only the latter is relevant for LF-visibility. That this approach is on the right track is supported by the fact that *ʔinna* has no v*^{0} projection that licenses structural Acc Case, since a verbless sentence with *ʔinna*, like (81), has a PredP projection.

(81) ʔinna r-rajul-a mariiḍ-un
COMP the-man-ACC sick-NOM
'Certainly, the man is sick.'

Also, unlike v*^{0}, *ʔinna* assigns Acc to agents and themes alike, as (82)–(83) respectively show

(82) ʔinna ṭ-ṭaalib-**a** jaaʔa-Ø
COMP the-student-ACC PST.come.3SM-IND
'Certainly, the student came.'

(83) ʔinna ṭ-ṭaalib-**a** ḍaraba-Ø-hu ʔab-uu-hu
COMP the-student-ACC PST.hit.3SM-IND-him father-NOM-his
'Certainly, the student, his father hit him.'

The complementizer *ʔinna* 'indeed, truly, verily' is a member of a group of particles known in the traditional literature as '*ʔinna* and its sisters', comprising *ʔanna* 'a Comp element meaning 'that'', *kaʔanna* 'as though', *laakinna* 'but',

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layta 'wishing', and *laʕalla* 'perhaps, maybe'. They have the same potential of assigning lexical Acc case to the following DP (in *ʔinna*-DP-Predicate/*ʔinna*-DP-VO structures), which always has the status of topic; see Ryding (2005: 425–428) for examples and discussion.

The view that the Acc-marked DP in (77) receives lexical rather than structural case from *ðanna* is supported by the fact that it also receives lexical Acc case from *ʔanna*, as (84) shows.

(84) ðanna-Ø ʕaliyy-un ʔanna ṭ-ṭullaab-**a**
PST.believe.3SM-IND Ali-NOM COMP the-students-ACC
naam-uu-Ø
PST.sleep.3-PM-IND
'Ali believed (that) the students slept.'

This indicates that the Acc-marked DP always occupies an A-bar position, and hence is not in the scope of a structural Case checking category, thus reserving the structural Acc Case for the CP argument. This view is also supported by the observation that *ðanna* can evidently assign lexical case to non-arguments, as the nominal and adjectival predicates in the complement clauses of (85)–(86) respectively show.[24]

(85) ðanna-Ø ʕaliyy-un r-rajul-**a** mudarris-**an**
PST.believe.3SM-IND Ali-NOM the-man-ACC teacher-ACC
'Ali believed the man to be a teacher.'

(86) ðanna-Ø ʕaliyy-un r-rajul-**a** mariiḍ-**an**
PST.believe.3SM-IND Ali-NOM the-man-ACC sick-ACC
'Ali believed the man to be sick.'

[24] Though this might seem like a violation of the PHASE IMPENETRABILITY CONDITION (Chomsky 2001), it is not because the embedded CP does not count as a strong phase when it is verbless. Chomsky (2001: 14) states that '[s]ome 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'. Moreover, Gallego & Uriagereka (2007: 159) state that 'only weak phases allow for higher Probes to target their *complement domain*, hence overriding Chomsky's (2000, 2001) *Phase Impenetrability Condition*' (italics in the original). One important fact about the embedded CP when it is verbless is that its temporal reference is not independent of that of the matrix verb; that is, its [T] feature is anaphoric, which makes it count as a weak phase. This, however, does not undermine its status as a finite clause. Landau (2004) argues that complement clauses with dependent and anaphoric tense are finite clauses with [T] on both I^0 and C^0. The absence of the verb prevents the embedded CP from having its own tense operator; this CP has an I^0 that encodes full agreement as the ϕ-inflecting negative particle in (i) shows.

(i) ðanna-Ø ʕaliyy-un r-rijaal-a lays-**uu** marḍaa
PST.believe.3SM-IND Ali-NOM the-men-ACC NEG.3-PM sick.ACC
'Ali believed the men not to be sick.'

When the embedded clause has a verb, it has its own tense operator; the verb through its licensing feature, [VC], introduces structural Case and makes the CP a strong phase that is impenetrable.

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This is a reasonable explanation since it is implausible to assume that v*^{0} may also license case to the predicate (for lack of thematic/transitivity relationship). The claim that predicates receive lexical rather than structural case is also supported by the standard assumption that they are not subject to the Visibility Condition (Aoun 1979).

Moreover, the alternative view that *ṭ-ṭullaab-a* in (77) above receives Acc case from a null version of *ʔanna* (not from *ðanna*, as argued here) is incorrect since, unlike *ðanna*, which assigns lexical case to two elements (the topic and the predicate) as (85)–(86) show, *ʔanna*, and hence its purported null version, assigns lexical case to one element only, the topic (Siibawayhi 1990), as (87) shows; the predicate in (87) carries default Nom case, the same case it realizes with *ʔinna*, as (81) shows.

(87) ðanna-Ø ʕaliyy-un ʔanna r-rajul-**a** mariiḍ-**un**
PST.believe.3SM-IND Ali-NOM COMP the-man-ACC sick-NOM
'Ali believed (that) the man is sick.'

Thus CP arguments always have an unvalued [Case] feature which is valued via Agree with the relevant functional head (v*^{0}) for purposes of LF-visibility. Uriagereka (2006, 2008) argues that all arguments, including CPs, carry Case, which he assumes to be Null Case. If Null Case is not available, as the present account assumes, the system must allocate another Case value for CP arguments. Clausal complements have been argued to receive structural Case in Massam (1985), Plann (1986), Bošković (1995), Tsai (1995), Picallo (2002), J.-S. Lee (2005), and Al-Balushi (2011).

If on the right track, this analysis assumes a distinction between structural Case and lexical case. Both are very common in SA, which calls for a distinction between the two operations based on their contexts and properties. For one thing, structural Acc Case is licensed by v*^{0}, whereas lexical Acc case is assigned (discharged) by different elements, a heterogeneous group; structural Acc Case is also licensed in double object constructions by Appl^0, the head of the Applicative Phrase in complement to V^0 position (Fournier 2010, Pylkkänen 2002). Also, while the non-checking of structural Case leads to a crash, the non-assignment of lexical case does not when blocked by another lexical case assigner, as in the 'believe'-structure where the embedded CP is introduced by *ʔanna*, as in (87), which blocks lexical case assignment by *ðanna*. This is true since the predicate realizes default Nom case, as it does in sentences with *ʔinna*, as (81) shows. This property of lexical case is also illustrated by sentences like (88)–(89), where the non-assignment of lexical Acc case by *kaana* 'be' in (89) does not result in a crash.

(88) kaana-Ø l-walad-u mariiḍ-**an**
PST.be.3SM-IND the-boy-NOM sick-ACC
'The boy was sick.'

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(89) kaana-Ø l-walad-u ya-qraʔ-u l-kitaab-a
PST.be.3SM-IND the-boy-NOM IMPF-read.3SM-IND the-book-ACC
'The boy was reading the book.'

5.3 *Comparison with other analyses*

Although the Acc-marked DP belongs in the embedded clause and receives case from the matrix clause, the present account is different from classical ECM, for two reasons. First, the Acc-marked DP is not an argument of the embedded predicate. Secondly, it does not receive structural Acc Case, but rather lexical Acc case. Furthermore, it is different from R-to-O since the Acc-marked DP does not move, but is case-marked in its base-generated position. In what follows, I will show how earlier analyses, although they might be suitable for the respective languages, may not be extended to the SA 'believe'-construction.

Uriagereka (2006: 268) argues that the Acc-marked DP in the English construction is an argument of *believe*, and 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, ...

Thus, Uriagereka argues that Null Case is licensed on the TP complement and Acc Case on the DP argument. This analysis is undermined by the standard view that the Acc-marked DP is not thematically related to *believe* (Aldridge 2010: 168, among others) as well as by the objection to the conception of Null Case; see Baltin & Barrett (2002) and Cecchetto & Oniga (2004) who argue that Null Case must be eliminated from UG.

In an R-to-O analysis proposed for Turkish, Zidani-Eroğlu (1997) argues that, though thematically related to the embedded predicate, the Acc-marked DP moves to the matrix clause. Her analysis claims that the Acc-marked DP is Case-marked in the matrix clause 'though it does not discuss its exact position in that clause or the manner in which accusative Case is assigned' (page 219). This analysis, too, does not work for the SA construction since the Acc-marked DP is not an argument of the embedded predicate, and also because it does not move.

Alboiu & Hill (2011) analyze R-to-O in Romanian structures with verbs of knowledge as an instance of A-bar movement. The embedded thematic subject may be Nom-marked in the embedded finite clause or Acc-marked in the matrix clause, as (90)–(91) respectively show.

(90) Am văzut [că **Ion/el** lăcomeşte la mâncare]
AUX.1 seen that Ion/he is.greedy.3S at food
'I/We saw that Ion is greedy with food.'

(91) L_k-am văzut pe **Ion**$_k$ [că lăcomeşte$_k$ la mâncare]
CL.3SM.ACC-AUX.1 seen DOM Ion that is.greedy.3S at food
'I saw Ion being greedy with food.'

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To account for the latter case, Alboiu & Hill provide evidence that the Acc-marked DP is base-generated in the embedded clause, and that it moves out of the embedded finite CP, since matrix clause material may intervene between the Acc-marked DP and the embedded CP.

They argue that (91) results from A-bar movement of the embedded subject to the highest Spec position in the matrix v*P, triggered by an [Evaluative] (discourse) feature, as well as by a [*u*Top] feature on matrix v^{*0}. As such, the Acc-marked DP, the authors argue, receives two Case values, Nom from embedded T^0 and Acc from matrix v^{*0}, but realizes the latter. Alboiu & Hill's analysis is also not extendable to SA since the Acc-marked DP in SA does not move and also because it receives case only once.

In a recent R-to-O analysis, H. Lee (2007) argues that the English embedded subject (Acc-marked DP) is raised from its base-generated position to the matrix Spec, VP (not Spec, v*P). The proposed movement operation is triggered by the ϕ-agreement features on V^0 (V^0-Agree) inherited from v^{*0}. The embedded subject first moves to embedded Spec,TP, but since non-finite T^0 cannot value the [Case] feature on the DP, it moves further to the matrix Spec,VP. H. Lee's analysis, too, is not extendable to SA since it does not provide for the Case-visibility requirements of the clausal argument.

The recognition that Acc Case is needed for both the complement clause and the DP means that any analysis must provide two structural Acc Case values. However, unlike *give*, a double object verb which has v^{*0} and $Appl^0$, and so can license Acc Case on both objects, *believe* does not have two functional heads associated with structural Acc Case. This issue can be resolved by another analysis of the 'believe'-construction, one that may be based on Hiraiwa's (2001) 'Multiple Agree' system. Making the case for ECM in Japanese, Hiraiwa claims that 'if a probe for multiple goals is *derivationally unique*, then *multiple ECM* should be grammatical in the ECM construction in Japanese' (page 74; italics in the original). In other words, Hiraiwa argues that the matrix v^{*0} licenses Acc Case on the two Acc-marked nominals in (92), derivationally simultaneously, to avoid intervention effects. Basically, assuming that the probe feature is [+multiple], it continues to probe until it Agrees with all the matching goals in an accessible domain, in a single operation.[25]

(92) John-ga [$_{CP}$[$_{TP}$ Mary-wo me-wo waru-i] to] omoikondei-ta
John-NOM Mary-ACC eyes-ACC bad-PRS COMP believe-PST
'John believed Mary's eye to be bad.'

(Hiraiwa 2001: ex. (18))

Thus, the matrix v^{*0} can simultaneously check Acc Case on two elements, which makes this analysis extendable to the English and SA 'believe'-type

[25] Though grammatical, (92) is degraded, not because of ECM- or Case-related issues, but because of the Double Object Constraint, which bans multiple Acc-marked DPs in a sentence; (92) becomes fully acceptable with clefting; see Hiraiwa (2002) for discussion of related issues.

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constructions, since now v*^{0} may license Acc Case on the TP/CP (argument) and the Acc-marked DP (non-argument). Nonetheless, Hiraiwa's innovative analysis may be rejected on the basis of a standard view of Case and argumenthood. To illustrate, adopting an original idea of Hale & Keyser's (1993), Chomsky (1995: 315–316) proposes that verbs with internal arguments (transitive, ditransitive, and unergative) have a verbal shell, with v*P and VP projections.[26] While the internal arguments are merged in the Spec and complement positions of the VP, the external argument is merged in Spec,v*P; intransitive/unaccusative verbs lack the v*P layer. He continues, 'the *v*-VP configuration can be taken to express the causative or agentive role of the external argument' (Chomsky 1995: 315). Assuming Burzio's Generalization (Burzio 1986: 178) which states that '[a]ll and only the verbs that can assign a θ-role to the subject can assign (accusative) case to an object', it becomes clear that there is a strong relationship between assigning an external θ-role and licensing structural (objective) Acc Case on the internal argument. This role is both naturally and conveniently given to v*^{0}, since it is the marker of transitivity (creating the external θ-role) that makes the verb 'accusative', hence able to assign Acc Case (Hornstein et al. 2005: 102–103), which I take to be structural Case since it is licensed on an argument (internal θ-role bearing XP). If on the right track, this approach indicates that non-arguments may not receive Case from v*^{0}. Thus, this indicates that an extension of the Multiple Agree mechanism to (at least) the SA 'believe'-construction will not be able to account for the Acc case on the Acc-marked non-argument DP. Therefore, Hiraiwa's approach is also untenable.

The present account also contrasts with Soltan (2007), who assumes that *ṭ-ṭullaab-a* in (77) receives structural Acc Case from the matrix v*^{0}. Soltan's position is untenable for two reasons. First, it leaves no structural Case to be licensed on the complement clause, in violation of the Visibility Condition. Secondly, it allows Agree to take place between structural Case-checking heads and A-bar elements, which have no [Case] features.

6. A POSSIBLE EXTENSION TO ENGLISH

Extending the analysis proposed for the SA 'believe'-construction to the English counterpart in (93) must not be discouraged by the fact that the embedded clause in the latter is non-finite.

(93) John believes Mary/her to be sick.

Assuming that the proposed distinction between structural Case and lexical case holds in English too, the Acc-marked DP in (93) may receive lexical Acc case from *believe* (as a lexical element), but not Null Case, or structural Acc Case from the matrix v*^{0}, since the latter is reserved for the clausal complement.

[26] The VP-shells proposal is credited to Larson (1988, 1990).

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Since *Mary* in (93) is in the matrix clause, where it is not thematically related, and assuming that it is in Spec,VP, as independently argued in H. Lee (2007), which could arguably be an A-bar position in Minimalism, it is really possible that *Mary* is an A-bar element, an argument of neither predicate.[27] The standard view that this DP is thematically related to the embedded predicate can be captured if we assume that it is co-indexed with a *pro* in the embedded thematic domain. Thus, the external argument of the embedded predicate, *pro*, receives the θ-role from the predicate at LF. Following Al-Balushi (2011), *pro* (with no [Case] requirement) becomes visible via co-indexation with *Mary* since the latter has a feature equivalent to [Topic], which, by assumption, allows it to be visible. This allows the relevant θ-role to be transmitted from *pro* to *Mary*. This way, the complement clause receives the structural Acc Case from matrix v^{*0}. After all, it is the clausal complement of *believe* that must receive the structural Acc Case licensed by the matrix v^{*0} in the non-ECM/R-to-O construction in (94), where the Acc-marked DP is absent, otherwise a crash is inevitable; this also shows that the non-assignment of lexical case by *believe* does not result in a crash, since it is blocked by *that*, which, as argued in Al-Balushi (2011: 313–314), is a VC licenser, whose presence in the embedded clause indicates finiteness, that is, structural Case. Moreover, the same structural Case value must be licensed on the DP complement in (95). Therefore, a unified approach to argument XPs should maintain that they require structural Case for visibility purposes.

(94) John believes that Mary/she is sick.

(95) John believes Mary/her.

This also calls for investigating the contexts and properties of lexical case in English as well as in other languages, without which, I believe, analyses of 'believe'-type constructions will either be based on stipulating structural Acc Case-assigning heads (e.g. V^0 or $Agro^0$), or ignoring the visibility requirement of the clausal complement of *believe*, or allowing v^{*0} to license Acc Case on arguments and non-arguments alike.

The proposal that the Acc-marked DP is an A-bar element, and that it receives lexical Acc case may be extended to constructions like (96), where *for*, a non-finite Comp (lexical element in $Force^0$) may be argued to assign lexical, not structural, Acc to *John*, which could be in the embedded Spec,TopP.

(96) I planned for John/him to go.

[27] That Spec,VP may not be a potential θ-position in at least 'believe'-type constructions (where the main verb has a clausal internal argument) is supported by the Minimalism view that the external argument originates in Spec,v*P and the internal argument in the complement to V^0 position. The two internal arguments of double object verbs occupy the Spec and complement positions of ApplP (Pylkkänen 2002).

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Though the current proposal does not provide independent evidence that the Acc-marked DP in the English 'believe'-construction is an A-bar element, it is at least a possibility worth pursuing.

7. Concluding remarks

This paper has provided an analysis for the 'believe'-construction in SA according to which the matrix v^{*0} licenses structural Acc Case on the CP argument, and *ðanna* 'believe' assigns lexical Acc case to the Acc-marked DP. This analysis, based on a re-interpretation of the morphosyntactic properties of this construction, avoids the shortcomings of Soltan (2007), where it is assumed that v^{*0} licenses Acc Case to the A-bar DP whereas the complement clause argument receives no Case value. It also avoids the disadvantages of some of the earlier analyses. Of those, Uriagereka's (2006) analysis, where the 'v^{*0}-believe complex' provides two Case values, seems to be the closest to the present account, with the non-trivial differences that the Acc-marked DP is not an argument of *believe*, and that the extra case value provided by this complex is an instance of lexical case, not Null Case.

In addition to the analysis of the 'believe'-construction, this paper has presented a new conception of structural Case based on a re-interpretation of the properties of the SA verbal system as well as verbless sentences and the relevant tense and agreement facts, incorporating insights from TAGs. It has also revealed some morphosyntactic and semantic differences between structural Case and lexical case in SA, despite the identical phonetic realization.

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