

ON THE SYNTAX OF TENSE IN STANDARD ARABIC

Mustapha Raissi

Ibn Zohr University, Morocco

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ABSTRACT

The paper considers the issue of tense in Standard Arabic. We show that simple tense, particularly past tense and present tense, is not morphologically expressed by the verb (Aoun, et al., 2010; Benmamoun, 2000; Ouali, 2018). In other words, the distinction between past tense and present tense is not accounted for by dint of morphological mechanisms. Rather, the two simple tenses are dealt with in terms of syntactic aspects. Accordingly, we argue for an abstract tense projection in the clause structure of Standard Arabic. Tense can be captured only by T, a Core Functional Category. As a corollary, we are not required to deploy other functional categories in the clausal skeleton, adhering to minimalist tenets along the lines proposed in Chomsky (2000a, 2001). The proposed analysis provides a solution for the issue of tense in Standard Arabic based solely on syntactic means.

KEYWORDS: *Standard Arabic, Tense, T, Clause Structure, Minimalist Tenets*

1. INTRODUCTION

Several languages possess a uniformly grammatical mechanism to express temporal information. The mechanism is labeled as tense. Throughout both generative and non-generative traditions, the status of tense has been vexed in Arabic, in general, and Standard Arabic (SA), in particular.¹ Traditional grammarians have regarded tense and verb to be intrinsically and integrally intertwined.² They have claimed that there are three verb forms, namely *fiʕl maḍi* (= literally, ‘past verb’), *fiʕl muḍariʕ* (= literally, ‘resembling verb’) and *fiʕl ʔamr* (= literally, ‘imperative verb’). Western linguists assume that the perfective is used to describe *fiʕl maḍi* ‘past verb’. The imperfective, on the other hand, is used to describe *fiʕl muḍariʕ* ‘resembling verb’.³

In this regard, there has been a long standing debate on whether verbs encode tense or aspect, or perhaps both, hence the functional status of SA clause structure is controversial. If we assume that the SA verb encodes tense, past/non-past difference, this entails that SA is a tense-based language (Benmamoun, 2000; Eisele, 1990; Fassi Fehri, 1993).

¹As the focus is on the morphosyntax, this paper does not dwell in sufficient detail on the semantics of tense in SA. On an in-depth semantic scrutiny of tense, the reader is referred to Eisele (1988). His work deals with Cairene Egyptian Arabic (CEA). It, however, can be of paramount contribution to grasp the semantics of tense in SA.

²This is pertinent to the interaction between lexical and functional categories. A crucially syntactic characteristic of functional categories is their features which trigger the displacement of lexical heads, i.e. verb, and NPs. As we will explore later, the interaction between the functional category of tense and the verb plays a crucial role to account for the past tense and present tense syntactic differences.

³Evidently, in Arabic traditional grammar, the difference between the perfective and the imperfective hinges on “tensedness”, as illustrated by the labels being given to each. The labeling is telling, since it considers the imperfective as tense-inert “the comparable [to a nominal]” (Soltan, 2011, p. 245).

However, if verbs encode aspect, complete/incomplete, SA is, hence, regarded as an aspect-based language (Wright, 1981).⁴

Putting the issue aside, there are a number of arguments that tense, particularly present tense and past tense, is not morphologically identified (Aoun, et al., 2010; Benmamoun, 2000; Ouali, 2018).⁵ Several modern linguists take a consensually syntactic approach to tense. Put differently, the distinction between present tense and past is not captured via morphological means, but rather via syntactic ones.⁶ This paper offers a purposefully elaborate discussion on tense. The latter, with ϕ -features, can be captured only by T, with no resort to other functional categories. T is a Core Functional Category (CFC) (Chomsky, 2000a, 2001). First, we discuss the morphology of simple tense. Second, we consider syntactic properties of simple tense.

2. Morphological Aspects of Simple Tense in Standard Arabic

This section concerns simple tense in SA. It offers morphological facts of simple tense in SA. The aim is to show that verb morphology encodes neither past tense nor present tense.

2.1 Past Tense

In SA, the simple past tense is encoded by using the perfective form of the verb. Aoun et al. (2010) offer the following verb paradigm to describe this form:

⁴This morpho-semantic characteristic leads some linguists (Benmamoun, 2000; Fassi Fehri, 1993; Soltan, 2007, among others) to posit the presence of an aspectual projection (Aspect Phrase) in the Arabic clause structure. For example, Benmamoun (2000) assumes the existence of an aspectual projection right above the VP. It is “headed by the clitic *ta/ka* in Moroccan Arabic, by *bi* in Egyptian Arabic, and by an abstract morpheme in Standard Arabic” (p. 32).

The paper does not dwell on the way tense is intertwined with aspect. This is considered as a rosy area for future research. Perhaps, it would help produce an insightfully deeper account of both tense and aspect in SA.

⁵There are actually indispensable differences between those linguists. Benmamoun (2000) provides solid arguments that as the past tense, the present tense is an abstract morpheme, in that both are not expressed by an independent morpheme on the predicate. They are, nevertheless, poles apart:

. . . unlike the past tense, the present tense does not have an agreement morpheme that is exclusive to its verbs, nor does it have a suppletive form of negation. The same agreement morpheme is used in the future tense, nonfinite clauses, and negative imperatives. (p. 33)

Benmamoun (2000), then, concludes that the perfective verb bears abstract past tense features. The imperfective one, on the contrary, does not carry any abstract features. It is merely the realization of a nonfinite verb, a default form of the verb. Aoun et al. (2010) argue that the verb morphology marks neither tense nor aspect. Ouali (2018), however, assumes that aspect is realized by the verb morphology.

⁶As it will be shown subsequently, Aoun et al. (2010), Benmamoun (2000), and Ouali (2018) proffer a number of grounds, displaying that present tense and past tense are not morphologically marked.

Person	Number	Gender	Affix	Verb+Affix
1	Singular	F/M	-tu	katab-tu
2	S	M	-ta	katab-ta
2	S	F	-ti	katab-ti
3	S	M	-a	katab-a
3	S	F	-at	katab-at
2	Dual	M/F	-tumaa	katab-tumaa
3	D	M	-aa	katab-aa
3	D	F	-ataa	katab-ataa
1	Plural	M/F	-naa	katab-naa
2	P	M	-tum	katab-tum
2	P	F	-tunna	katab-tunna
3	P	M	-uu	katab-uu
3	P	F	-na	katab-na

(Aoun et al., 2010, p. 21)

Now, we consider the following instance:

- (2). katab-a karim-un r-risaalat-a
 write. PERF-3sgmas Karim-NOM the-letter-ACC
 “Karim wrote the letter.”

In the paradigm (1), the verb, *kataba*, is a trilateral verb (*fīʕl θulaathii*). It is a sound (regular) verb (*fīʕl saħiħ saalim*), belonging to Form I (*mujarrad*). The perfective form is derived from the tri-consonantal root *k-t-b*. This form is realized by the vocalic pattern *CaCaC* in (2). The verb bears a suffix, marking agreement features (ϕ -features). The verb is associated with aspectual and temporal interpretations. The former concerns the event completion. The event of *writing* has been completed, previous to the Speech Time (S) (Reichenbach, 1947). The relevant question is whether verb morphology plays a role in the temporal interpretation (Ouali, 2018).

Apparently, the agreement suffix and the vocalic melody represent the past tense. As a corollary, the past tense can be analyzed by two standard approaches. One assumes that the suffix on the verb bears both tense and agreement. More specifically, this approach predicts that the suffix is the only past tense-carrier. The verb morphology denotes the past tense (Aoun et al., 2010; Benmamoun, 2000). The other claims, in the spirit of McCarthy’s (1979) autosegmental study of Arabic morphology, that the vocalic melody realizes the past tense. The suffix is merely a realization of agreement (Benmamoun, 2000).⁷

The first analysis is inadequate for several grounds. There are contexts where the suffix is used, but the tense encoded is not past (3). Also, we find constructions where the suffix is not used, but the tense is still past (4) (cf. Ouali, 2018):

- (3) ʔal-walad-u jaaʔ-a l-ʔaan-a

⁷Fassi Fehri (1993) presumes that the vocalic melody bears tense/aspect and voice.

the-boy-NOM arrive.PERF-3sgmas now

“The boy has arrived now.”

(4) lam ya-ktub

Neg.pst 3sgmas-write.IMP

“He didn’t write.”

(3) illustrates that the perfective form with its suffix denotes the present perfect. (4) demonstrates that the past tense is encoded by the affix *-m* on the negative marker (cf. Benmamoun, 2000).

Aoun et al. (2010) proffer a pertinent argument against the first approach. It is based on the negative marker *laysa* and aspectual particle *laazaala*.⁸⁹ They embrace a suffix which shows all the forms of the perfective verb in (1), but with a present tense interpretation.¹⁰ Therefore, the existence of a similar suffix in two different paradigms leads to the conclusion that the suffix on the verb is not a realization of the past tense. It bears solely agreement.

Let us now examine if the vocalic melody is accountable for the past tense. In fact, the similarity of inflection in two different paradigms – the perfective one in (1) and that of the aspectual particle *laazaala* – argues against the belief that vocalic melody on the verb carries tense in SA (McCarthy, 1979). The vocalic melody of the root *zwl* of the aspectual particle *laazaala* is indistinguishable from the vocalic melody of the so-called hollow roots – roots with a medial glide (Aoun et al., 2010).¹¹

Recollect that the derivation of *katab* in (2) is resulted by mapping the consonantal root *k-t-b* onto the template *CaCaC*. If the vocalic pattern *-a-a-* is in charge of the past tense, so it can be always used, irrespective of the voice of the verb – active or passive (cf. Benmamoun, 2000). This does not happen, however:

(5) kutib-at r-risaalat-u

write.PASS/PERF-3sgfem the-letter-NOM

“The letter was written.”

(5) Shows that the vocalic melody employed in the passive voice is *-u-i-*. Consequently, the vocalic melody carries solely voice. Also, considering the fact that tense is an inflectional category and voice a derivational category, they cannot reasonably be carried by the same grammatical morpheme, the vocalic melody. Past tense is thus not an autosegmental feature (Benmamoun, 2000).

In sum, neither the overt suffix of the perfective form (which appears to bear merely agreement) nor the vocalic

⁸ *Laysais* regarded as a verb within the Arabic grammatical tradition due to its agreement with the subject, unlike the other negative particles (Benmamoun, 2000).

⁹ Aoun et al. (2010) cite only *laazaala*. SA, nonetheless, has also *maazaalaa*, used for a similar purpose (Soltan, 2011).

¹⁰ For an elaborate discussion, see Aoun et al. (2010) and Benmamoun (2000).

¹¹ This is even more patent in Moroccan Arabic (MA). It lacks a discrete vowel melody which can be linked with a specific grammatical tense (or aspect). The schwa /ə/ is the solely stem vowel, existing in the context of both the perfective and the imperfective verbs (Benmamoun, 2000).

melody on the verb expresses the past tense. Past tense in SA is presumably a null morpheme, heading its projection, as proposed in Aoun et al. (2010), Benmamoun (2000), and Ouali (2018). The notion of null morpheme is fundamental in the generative grammar. It accounts for the fact that some objects are syntactically and semantically active, but lacking a phonological content.

2.2 Present Tense

As regards the imperfective form, a similar conclusion can be reached. This form of the verb is used to denote the present tense in SA. Aoun et al. (2010) characterize it as the following:¹²¹³

(6)

Person	Number	Gender	Affix	Affix+ Verb
1	Singular	M/F	?a-	?a-drus(u)
2	S	M	ta-	ta-drus(u)
2	S	F	ta—iin(a)	ta-drus-iin(a)
3	S	M	ya-	ya-drus(u)
3	S	F	ta-	ta-drus(u)
2	Dual	M/F	ta—aan(i)	ta-drus-aan(i)
3	D	M	ya—aan(i)	ya-drus-aan(i)
3	D	F	ta-aa	ta-drus-aan(i)
1	Plural	M/F	na-	na-drus(u)
2	P	M	ta—uun(a)	ta-drus-uun(a)
2	P	F	ta—na	ta-drus-na
3	P	M	ya—uun(a)	ya-drus-uun(a)
3	P	F	ya—na	ya-drus-na

(Aoun et al., 2010, p. 21)

This form exists in a number of aspectual and temporal contexts (Aoun et al., 2010; Benmamoun, 2000; Ouali, 2018). First, the imperfective form is found in simple declarative clauses, with a present tense (habitual or progressive) interpretation:

(7) ya-ktub karim-un r-risaalat-a
 3sgmas-write.IMP Karim-NOM the-letter-ACC

¹²The perfective and imperfective forms are essentially different in the manner agreement is expressed. In the former, all agreement features are displayed by the suffix on the verb (1). In the latter (6), there is a separate agreement, in that the prefix bears primarily person, excluding the first person plural, where number is also realized on the prefix, whereas the suffix carries primarily number. Gender is, however, expressed by number if it is phonologically realized as in the plural; or else, it is displayed on the person prefix, aside from the second person singular feminine, where it is realized by a suffix, as it is pointed out in Benmamoun (2000). Aoun et al. (2010) claim the asymmetry is the consequence of the interaction between T and V in syntactic derivations. Put simply, past tense T demands raising of a hosting element, normally V. Present tense T, on the contrary, does not cause an equivalent effect.

¹³The imperfective paradigm manifests three moods, viz. the indicative, the subjunctive, and the jussive. A fourth mood is the energetic (emphasis), comprising the suffixation of *na* to the imperfective. This is, nevertheless, not germane to our discussion. The reader is referred to Benmamoun (2000) for a critical elucidation.

“Karim writes/is writing the letter.”

Second, there is the occurrence of the imperfective in the context of tensed negative constructions, as demonstrated in (8):

- (8) a. lam ta-drus
 Neg.pst 3sgfem-write.IMP
 “She didn’t study.”
- b. laa ta-drus
 Neg.prs 3sgfem-write.IMP
 “She doesn’t study.”
- c. lan ta-drus
 Neg.fut 3sgfem-write.IMP
 “She won’t study.”

Tense is interpreted by dint of the negative particles. *lam* in (8a) demonstrates the past interpretation. *laa* in (8b) manifests the present interpretation.¹⁴ *lan* in (8c) bears the future interpretation. The imperfective verb is, hence, not a tense-carrier.

Third, the imperfective form occurs with modals (9a), future tense markers (9b), non-finite embedded clauses (9c), and negative imperatives (9d).¹⁵

- (9) a. qad ya-drus
 may 3-study
 ‘He may study.’
- b. sa-ya-drus
 fut-3-study
 ‘He will study.’
- c. ?araada ?an ya-drusa
 wanted.3ms Com 3-study
 ‘He wanted to study.’
- d. laa ta-drus

¹⁴We will notice that *laa* is not, in fact, restricted to present tense contexts.

¹⁵As the imperative form is not our concern, the reader is referred to Benmamoun (2000), where an important difference between positive and negative imperatives is observed, regarding the realization of the person agreement prefix. The positive imperative lacks the person prefix, while the negative one obligatorily bears it.

Neg 2-study.s

‘Do not study.’

(Aoun et al., 2010, p. 25)

The imperfective form exists in various tense contexts. It is thus implausible to suggest that it refers to a specific temporal reading.¹⁶

To sum up, the perfective and the imperfective forms of the verb occur in different temporal contexts. The verb morphology in SA hence marks neither past tense nor present tense.¹⁷ Thus, we are required to resort to syntax to capture the distinction between the two tenses. Tense in SA is an abstract morpheme, generated in T.

A sound analysis of tense is obliged to account for two relevant issues. One is the distinction between past and present tense clauses, with no overt tense morphology on the verb. The other is the lack of any constraint on the exclusive existence of the perfective and the imperfective verbs in past or present tense contexts respectively.

3. Syntactic Properties of Simple Tense in Standard Arabic

In this section, syntactic matters of simple tense are discussed. First, we provide further grounds in favor of an abstract tense projection in SA clause structure. Then, simple tense projection is dealt with.

3.1 Arguments for an Abstract Tense Projection

We regard Aoun et al.’s (2010) arguments in favor of postulating an abstract tense projection in SA clause structure.¹⁸ They proffer three relevant arguments.

Firstly, the subject of finite clauses appears with nominative Case in SA. The latter is overtly displayed by the suffix *-u*:

- (10) daxala l-walad-**u**
 entered.3ms the-child-Nom

‘The child came.’

(Aoun et al., 2010, p. 18)

The conventional presumption within the P&P framework is that nominative Case is closely intertwined with the existence of a tense head. This close relationship is a piece of evidence for the presence of a tense projection in SA. A TP is, traditionally, positioned between CP and VP.

¹⁶ Future tense in SA is expressed by using the imperfective form combined with a future marker:

- (i) *sawfa/sa- ja-ktub-u ʕalj-un r-risalat-a yadan*
 fut. 3.sg.-write.imp.-ind.ali-nom the-letter-acc. Tomorrow
 ‘Ali will write the letter tomorrow.’ (Ouali, 2018, p. 97)

In (i), the future tense is marked by the modal auxiliary *sawfa* or its proclitic form *sa-* and the imperfective verb *ja-ktub-u*. Statistically, *sais* more recurrent than *sawfa*.

¹⁷ Aoun et al. (2010) achieve a similar result, regarding aspect, particularly with modern Arabic dialects, namely Lebanese Arabic (LA) and MA.

¹⁸ There is a cross-linguistic distinction on whether an element heads a syntactic projection or not. A good instance is the category of agreement which causes a number of issues (Chomsky, 1995b). Tense is no exception. The morphology of some languages lacks an overt tense marker. This leads to the proposal that their syntax lacks a TP projection.

Secondly, expletive constructions provide corroboration for a tense projection exists in SA clause structure. The tense head carries an EPP requirement. The latter is fulfilled by dint of the occurrence of an expletive subjects in Spec-T:

- (11) hunaaka walad-un ya-drusu fii l-bayt-i
 there boy-Nom 3-study in the-house-Gen
 ‘A boy is studying in the house.’ (Aoun et al., 2010, p. 19)

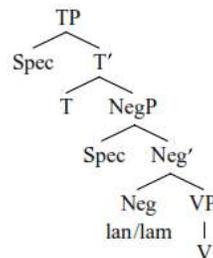
Thirdly, negative constructions in SA argue for an independent tense projection. The sentential negative particle is the tense-carrier, not the verb, as noted earlier:

- (12) a. lam ta-ktub
 Neg.past 3f-write
 ‘She didn’t write.’
 b. lan ta-ktuba
 Neg.fut 3f-write
 ‘She won’t write.’ (Aoun et al., 2010, p. 19)

The sentential negative *lam* bears the past tense (12a). The future tense is appeared on the sentential negative *lan* (12b).¹⁹

We can account for these facts, if we assume that tense occupies its own projection in SA:

(13)



(Aoun et al., 2010, p. 19)

As past and future tenses are realized on the negative particles, this can be captured by projecting negation between TP and VP. The negative head is, therefore, the closest host for tense. If the sentential negation is absent, the closest host is the verb. This is contingent upon an independent tense projection (Benmamoun, 1992), as referred to in Aoun et al. (2010).

On the other hand, in the non-existence of the negation projection, the verb may raise and merge with tense. If the

¹⁹ The existence of a negative particle bearing future tense in SA is sound, in that the TP comprises the future as a feature (Benmamoun, 2000).

negation projection is present, however, verb movement across it would violate Relativized Minimality (RM) (Rizzi, 1990).²⁰ The realization of both the past and future tenses on the negative particles posits that the abstract tense head requires lexical support, consequently the inflected negatives (Aoun et al., 2010).²¹

In regard to negation in the context of the present tense, there is the absence of a negative particle, particularly related to this tense. The negative, existing in this context, *laa*, occurs also as constituent negation (14a), and on negative quantifiers (14b):

(14) a. *laa walada fi l-bayt-i*
 no boy in the-house
 ‘There is no boy in the house.’

b. *laa ?ahad*
 no one

‘No one’

(Aoun et al., 2010, p. 28)

The lack of a negative particle in the context of present tense leads to solely one proposal. There is no lexical requirement on the present tense head in T, unlike the past (or future) tense which needs to be lexically supported. The present tense does not, hence, force verb movement or merger with negation. The past (or future) and present tenses are syntactically worlds apart in SA. The asymmetry occurs because V obligatorily raises to T in past tense constructions, but it does not in present tense ones.

3.2 Simple Tense Projection

As seen above, a number of arguments point to the projection of tense (Tense Phrase) in the SA clause structure. More specifically, tense is a formal feature which projects syntactically. There is a common view that the clause structure of simple sentences entails a single tense projection (Aoun et al., 2010; Benmamoun, 2000). We assume that present and past are morphologically null, as concluded earlier. A relevant question is thus the following: how can we account for the difference between past tense and present tense syntactically? A seemingly sound syntactic analysis, we hold, chalks up the contrast between the two tenses to the properties of T (Aoun et al., 2010; Benmamoun, 2000).

In simple past tense, the clause structure necessitates T, which bears [+past], and hence attracting verbal elements,

²⁰ RM bans licensing relations across c-commanding objects of a similar sort. For instance, a head (e.g. a complementiser) is unable to license its trace across another head. RM is a reformulation of the Head Movement Constraint (HMC) (Travis, 1984), which prohibits movement of a head across another intervening head (Aoun et al., 2010).

²¹ This can be discussed under the general relationship between verb movement and inflectional morphology. This dependency can be captured via two approaches or theories, namely Support Theory and Checking Theory. Under the first, the relation between a functional head (T or Neg) and the lexical head (V) is morpho-phonological. The latter offers support to the former. The role of head movement (or lowering rules) is to provide a host for the phonologically dependent functional head. Head movement was regarded as a word formation process, merging a bare stem and a morpheme. The options are, however, few. Chomsky (1995b), to settle this conundrum, proposed that the tense morpheme can be lexically generated on the verb, hence doing away with word formation. Put differently, V owns its inflectional properties from the lexicon. These features are obligatorily analogous with features of functional categories, such as T or Neg, since they license the morphological features of V, received from the lexicon. This is called Checking Theory. The choice between the two approaches is essentially theoretical in nature (Shlonsky, 1997).

attract any verb (7), repeated as (18). With regard to negative constructions, the tenseless negative particle is solely permitted (8b), repeated as (19). It also does not need the copula *kana* in verbless contexts (20) (Aoun et al., 2010; Benmamoun, 2000):

(18) ya-ktub karim-un r-risaalat-a
 3sgmas-write.IMP Karim-NOM the-letter-ACC
 “Karim writes/is writing the letter.”

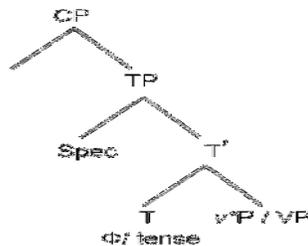
(19) laa ta-drus
 Neg.prs 3sgfem-write.IMP
 “She doesn’t study.”

(20) ?al-bint-u fi l-manzil-i
 the-girl-NOM in the-house-GEN
 “The girl is in the house.”

T[-past] is, solely, specified for [+D]. This feature can be checked by the subject. V is not attracted in present tense contexts since T[-past] lacks the [+V] feature. The obligatory movement of the subject to Spec-TP results in the SVO order. The VSO is less favored in such contexts (Aoun et al., 2010; Benmamoun, 2000).

However, categorial features like [+D] and [+V] are not detectable (uninterpretable) at the interface, thus a difficulty to capture them, under minimalist assumptions. We account for tense, banking on agreement features (ϕ -features), following Chomsky (2000a, 2001). Due to economy matters, the following clause structure is, thus, assumed:

(21)



T is regarded as a CFC, as it carries ϕ -features (and tense feature).²⁴We assume this minimal structure thus far, evading much structure. If it is fruitful, there will be no need to postulate other functional categories in SA inflectional structure. Its efficiency is crucially of empirical evidence. As a result, the difference between past and non-past tenses in SA relates to agreement features on T. Past T is ϕ -complete, triggering verb movement. V raises to T to check its ϕ -features. The latter is morphologically manifested as a suffix (cf. Soltan, 2007). On the contrary, non-past T is ϕ -

²⁴ T also bears an EPP feature, but for our present purposes, it is rather trivial to incorporate it.

incomplete. Hence, the verb stays in situ.

4. CONCLUSION

In this paper, we dealt with the conundrum of simple tense in SA from a syntactic perspective. First, we studied the morphology of the verb to see whether it plays a role in the temporal interpretation or not. The inference from empirical data was that simple tense is not morphologically encoded by the verb. As a corollary, there was the recourse to syntax to capture the problem of simple tense. More specifically, we argued for an abstract tense projection in the clause structure of Standard Arabic. T, as a CFC, was posited to account for tense in the clause skeleton based on minimalist assumptions. The distinction between past and non-past tenses is relevant to agreement features on T. While the former is ϕ -complete, the latter is ϕ -incomplete. This has important effects on the movement of the verb in SA. The suggested analysis offered a syntactic solution for the issue of tense in SA without resorting to morphological means.

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