THE SYNTAX OF COMPLEX TENSE IN MOROCCAN ARABIC[*]

Hamid Ouali & Catherine Fortin
University of Wisconsin-Milwaukee & University of Michigan

In this paper, we provide a Minimalist analysis of the syntax of complex tense in Moroccan Arabic (MA). We argue that in the clause structure of MA, tense and aspect are separate syntactic heads, and cannot be conflated into a single, multi-purpose head (contra e.g. Fassi Fehri 1993). As evidence, we demonstrate that selectional restrictions exist between tense and imperfective/perfective verb stems; we then show that these restrictions also exist for passive, causative and reflexive stems. We further argue that MA complex tense clauses, which consist of an auxiliary (KAN) and a verb stem, are biclausal; both auxiliary and lexical verb are fully inflected for tense and aspect. However, when compared to regular embedded clauses, the matrix domain in complex tense sentences is shown to be defective, as it lacks a vP. Complex tense sentences are further contrasted with ECM (exceptional case-marking) sentences, which are shown to contain two vPs, but are likewise defective as they lack a TP in the embedded domain.

1. **Tense and Aspect in Moroccan Arabic**

MA expresses aspect through the phonological realization of agreement markers and their position with respect to the verb stem, and tense through a prefix. We argue that Tense (T) and Aspect (Asp) correspond to different projections in the syntactic structure of MA (following in this respect a number of scholars like Benmamoun 2000, and contra other scholars including Fassi Fehri 1993), as shown in (1).

(1) TP
```
     TP
     /\
        T'
        /\
      T   AspP
           /\
            Asp'
             /\
       Asp
```
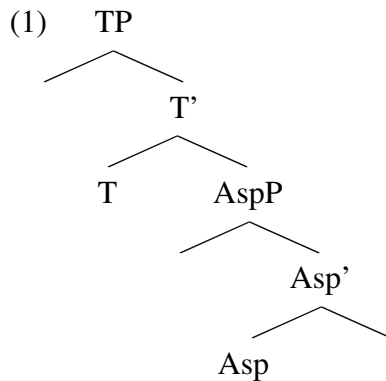
Unlike Standard Arabic (SA), MA expresses no mood distinctions morphologically; for this reason, we set aside the question of whether, and if so, where, mood is syntactically represented in MA clause structure.

(2) ya-drus-**u**   (SA)   (3)   y-drəs   (MA)
     3M-study.IMP-**IND**   3M-study.IMP
     'He studies/is studying.'   'He studies/is studying.'

1.1 *Selectional Restrictions*

As support for the clause structure we propose in (1), we will show that the distribution of imperfective and perfective stems in MA is governed by selectional restrictions with respect to tense. In MA, tense is represented by a prefix, while aspect is morphologically encoded by the position and phonological realization of the agreement marking on the verb. Agreement on imperfective verbs is realized as both a prefix and a suffix (4b), while agreement on perfective verbs is realized as a suffix only (4a).

(4) a. **Ø**   **/*ka**   **/*ɣa**   leʕb-**u**
         PAST   **/* PRES/*FUT**   play.**PERF**-3PL
         'They played'

     b. ***Ø**   **/ka**   **/ɣa**   **y**-leʕb-**u**
         *PAST **/PRES** **/FUT**   3-play.**IMP**-PL
         'They are playing/will play'

As illustrated in (4), perfective stems are only compatible with past tense, while imperfective stems are only compatible with present and future tense morphology. This is due to a selectional restriction between null past and perfective stem. Imperfective stems are 'default' and appear in all other environments. The following table illustrates the restricted selection between past and perfective and the default nature of imperfective with present and future.[1]

VERBAL ASPECTUAL FORMS	**TENSE AFFIXES**		
	ka/ta (PRESENT)	*ɣa* (FUTURE)	*Ø* (PAST)
PERFECTIVE	*	*	past
IMPERFECTIVE	progressive/ habitual present	Future	*

Table 1: Selectional Restrictions between Past Tense and Perfective Aspect

1.2 *Previous Analysis of MA Tense and Aspect: Benmamoun 2000*

We next briefly consider a previous analysis of MA tense and aspect, that of Benmamoun 2000. Benmamoun proposes a unified analysis of SA, MA and Egyptian Arabic clause structure. We follow him in claiming that Asp^0 and T^0 are syntactically separate. However, he argues that MA *ka/ta* are aspectual (imperfective) clitics, located in Asp^0, which carry no tense information, as shown in (5).

---

[1] An anonymous reviewer raises the question of whether it is a coincidence that past T is the only T to select the perfective aspect and the only marker that is null and suggests that perfective verb forms do indicate tense and may raise to T. If Perfective was marked for tense, as the reviewer claims, and would have to move to T to check its Tense feature, it is not clear why the verb does not move to T to check tense in present. Unless the reviewer clarifies that her/his objection does not hold.

(5)   Asp

        Asp   VP
        Ka/ta

            …   …   [irrelevant details omitted] Benmamoun (2003: 33)
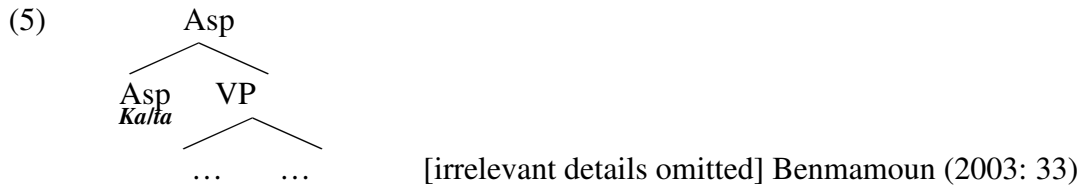
These morphemes have a habitual and progressive interpretation, and cliticize to the imperfective verb. Given this line of argument, one would predict that the future tense marker ɣ*a*, which Benmamoun 2000 argues in Chapter 5 to be merged under T^0 and in chapter 2 to be used with verbs in the imperfective form, to co-occur with the aspectual morphemes *ka/ta* to generate a future habitual/progressive reading. Notice that, according to his arguments, ɣ*a* is merged in T^o and *ka/ta* is merged in Asp^o, as shown in (5), and both are only compatible with an imperfective verb. However, the prediction that ɣ*a* and *ka/ta* may co-occur is not borne out, as shown in (6).

(6)   **ɣa**   **(*ka)**   y-ləʕb-u
          FUT   3-play.IMP-PL
          'They will play'

We argue instead that *ka/ta* are present tense morphemes that are merged in T^o. We also argue, agreeing with Benmamoun, that the future maker ɣ*a* is a tense marker and is merged in T^o. The fact that *ka/ta* and ɣ*a* cannot co-occur is accounted for in the same manner as why English *will* and *–ed* cannot co-occur (that is, both *will* and *–ed* are merged in T^0).[2]

    We follow Benmamoun in arguing that the vowel melody in MA plays no role in realizing tense or aspect (and, in effect, that MA need not be analyzed as a templatic language).[3] We also follow Benmamoun

---

[2] The only context where ka/ta can co-occur is in complex-tense constructions which involve using the copula *kan* 'be' with the main verb, and which we argue are bi-clausal, as discussed in detail in section 2.

[3] In contrast, Fassi Fehri's 1993 analysis of SA clause structure, shown in (i), holds that Voice/Aspect/Tense are merged together into a single morpheme within the IP domain. The IP domain also contains Agreement and Mood. Note that, for Fassi Fehri, tense markers are vowels that merge in the stem of the verb, or prefixal/suffixal consonants which are strictly internal to the word.

(i)   [CP [ModP [IP (Voice/Aspect/Tense; Agr; Mood) [VP

in arguing that the vocalic melody does not represent voice (active v. passive) either. As shown in (7), the vocalic melody in MA stems does not change whether voice is active or passive; MA uses a prefix (*t-*) to express passive/reflexive/middle voice.

(7)a.   Ø   klə-Ø   b.   Ø   t-klə-Ø
        PAST   eat.PERF-3M   PAST   PASS-eat.PERF-3M
        'He ate.'   'It was eaten.'

1.3 *Passives, Causatives & Reflexives*

Passive, reflexive and causative stems provide further evidence for our claim that tense and aspect are syntactically distinct in MA. The selectional restrictions described above for perfective and imperfective stems are also observed by causative, passive, or reflexive stems. Past tense selects for perfective aspect, while present/future tense selects for imperfective aspect. As in the case of imperfective and perfective stems, with causative, passive and reflexive stems, the aspect of the verbal stem is signaled by agreement only.

1.3.1 *Reflexives*

The reflexive stem (*t-ʕang* 'hug each other') is phonologically invariant, whether its aspect is perfective, as in (8a), or imperfective, as in (8b); aspect is identifiable only by the position and phonological shape of the agreement marking, as described in Section 1.1.[4]

(8)   a.   Ø   /*ka   /*ɣa   t-ʕang-**u**
           PAST   /*PRES /*FUT   REFL-hug-3PL

---

[4] An anonymous reviewer objects to our use of 3rd person plural throughout. We use it for consistency reasons only; our claim that the aspect of the verbal stem is signaled by agreement still holds regardless of what person and number is involved:

(i)   ka   n-t-ʕang-**u**
        PRES   1-REFL-hug-PL
        'we hug each other'
(ii)   Ka   t-t-ʕang-**u**
        PRES   2-REFL-hug-PL
        'you hug each other'

'They hugged.'
b. *Ø　　/ka　　/ɣa　　**y**-t-ʕang-**u**
　*PAST　/PRES　/FUT　3-REFL-hug –PL
　'They are hugging/will hug.'

1.3.2 *Passives*

The passive stem (*t-ʕəng* 'was hugged') is phonologically invariant, whether its aspect is perfective, as in (9a) or imperfective, as in (9b); once again, aspect is identifiable only by the agreement markers. Note that reflexives and passives are formed with the same prefix, *t-*. However, reflexives can be distinguished from passives according to the shape of the stem vowel; the reflexive stems contain a full vowel, the passive stems a reduced vowel.

(9)a.　Ø　　/*ka　/*ɣa　t-ʕəng-**u**
　　　PAST　/*PRES /*FUT　PASS-hug-3PL
　　　'They were hugged.'
　b.　*Ø　　/ka　　/ɣa　　**y**-t-ʕəng-**u**
　　　*PAST　/PRES　/FUT　3-PASS-hug-PL
　　　'They are being/will be hugged.'

1.3.3 *Causatives*

The causative stem (*w-kkəl* 'cause to eat') is also phonologically invariant, whether its aspect is perfective, as in (10a), or imperfective, as in (10b); aspect is identifiable only according to the phonological realization of the agreement markers.

(10)a.　Ø　　/*ka　/*ɣa　w-kkəl-**Ø**-ha
　　　PAST　/*PRES /*FUT　CAUS-eat-3SM-her
　　　'He made her eat.'
　b.　　*Ø　/ka　　/ɣa　　**y**-w-kkəl-ha
　　　*PAST　/PRES　/FUT　3SM-CAUS-eat-her
　　　'He makes /will make her eat.'

In Section 1, we've shown that the vocalic melody in MA appears to carry no information about tense and aspect. Aspect is signaled by the position and shape of the agreement markers on the verb stem. Tense is a prefix, which selects for a certain aspectual form: past selects perfective aspect, while present and future both select imperfective aspect. Therefore, we've argued that aspect and tense must be represented separately in MA clause structure.

In Section 2, we turn to our analysis of complex tense constructions in MA.

2. **Complex Tense v. ECM Constructions**

Having established that tense is morphologically marked in MA and that there is a selectional restriction between the tense marker and the aspectual form of the verb, we now examine how complex tense is expressed in this language, and analyze the syntax of sentences such as in (11).

(11) ɣa   y-kun-u   ka   y-leʕb-u
      FUT   3-be.IMP-PL   PRES   3-play.IMP-PL
      'They will be playing'

In such sentences the verb co-occurs with the copula *kan* 'be'. Both the copula and the main verb are preceded by a tense marker, contrary to what we find in ECM (exceptional case-marking) constructions such as (12), where the embedded verb cannot be preceded by a tense marker.

(12) Ø   bghi-t-**hum**   (*ka)   y-leʕb-u
      PAST   want.PERF-1SG-them   (*PRES)   3-play.IMP-PL
      'I wanted them to play'

Both complex tense constructions and ECM constructions can be contrasted with regular embedded clauses, as in (13). Unlike complex tense constructions, regular embedded clauses license their own subject, different from the subject licensed in the matrix clause; unlike ECM constructions, this subject must bear nominative case.

(13) Ø   gal-t   Fatima bəlli   **huma** ka   y-ləʕb-u
      PAST   say.PERF-1SG Fatima that   they   PRES   3-play.IMP-PL
      'Fatima said that they are playing/ they play'

We propose here that the structure of complex tense clauses is biclausal, as illustrated in (14).

(14) Complex tense clauses:
      [TP [AspP [VP BE [TP [AspP [*v*P [VP main verb
                                no vP in matrix domain

This explains the fact that both the main verb and the copula are inflected for aspect and agreement and preceded by a tense marker. Complex tense *BE* selects φ-complete TP. In ECM structures, however,

the matrix *WANT* selects for imperfective aspect as shown in (15), and therefore the embedded clause does not contain its own tense.

(15) *WANT*-type (ECM) clauses:
       [TP [AspP [vP [VP WANT [AspP [*v*P [VP

                                        no TP in embedded clause

Consequently, perfective aspect is not licensed in the embedded clause of ECM constructions. We only find perfective aspect in the embedded clause when it is selected by T^0, and specifically past T^0, as discussed in the previous section. Imperfective aspect must be selected by future or present T^0 or ECM verbs, which makes a default form as discussed in section 1.

   The clause structure of complex tense clauses involves two TPs and a single vP (in the embedded domain) as illustrated in (14). Conversely, the clause structure of an ECM sentence involves only a single TP (in the matrix domain) but two vPs as shown in (15), unlike regular embedded clauses, which involve two TPs and two vPs as shown in (16).

(16) Regular embedded clauses:
       [TP [AspP [vP [VP SAY [CP [TP [AspP [*v*P [VP

2.1   *Complex Tense Constructions*

   As previously mentioned, complex tense in MA is expressed by using a copula with the main verb. The copula is preceded by a tense marker, and so is the main verb. In the examples in (17), the copula is preceded by a past tense morpheme. The main verb is preceded by a (null) past tense marker in (17a), and the sentence has past perfect interpretation; by a present tense marker in (17b), and the sentence has a past progressive interpretation; and by a future marker in (17c), and the sentence has a future in the past interpretation. The interpretation of the embedded tense head is dependent on matrix -deictic- tense (i.e. anaphoric to matrix tense; see e.g. Stowell 1996, and Fassi Fehri 2004 for Standard Arabic).[5]

(17) a. *Past Perfective*
    Ø   kan-u   **Ø**   ləʕb-u
    PAST be.PERF-3P   **PAST** play.PERF-3PL
    'They had played'

    b. *Past (Perfective) Progressive*
    Ø   kan-u   **ka**   y-ləʕb-u
    PAST be.PERF-3P   **PRES** 3-play.IMP-PL
    'They were playing'

    c. *Future in the Past*
    Ø   kan-u   **ɣa**   y-ləʕb-u
    PAST be.PERF-3P   **FUT**   3-play.IMP-PL
    'They were going to play'

In (18a-c), the copula is preceded by a future tense marker, and the main verb combines with each of the different tense markers)namely past, present and future), resulting in future perfective, future progressive, and future in the future interpretations respectively.[6]

(18) a. *Future Perfective*
    ɣa   y-kun-u   **Ø**   ləʕb-u
    FUT 3-be.IMP-PL   **PAST** play.PERF-3PL
    'They will have played'

    b. *Future Progressive*
    ɣa   y-kun-u   **ka**   y-ləʕb-u
    FUT 3-be.IMP-PL   **PRES** 3-play.IMP-PL
    'They will be playing'

    c. *Future in the future*
    ɣa   y-kun-u   **ɣa**   y-ləʕb-u
    FUT 3-be.IMP-PL   **FUT**   3-play.IMP-PL
    'They will be about to play'

As expected, complex tense constructions are also permitted with embedded causatives, as shown in (19a-c) and (20a-c), as well as with reflexives and passives, which are not shown.

(19) a. *Past Perfective Causative*
    Ø   kan-Ø   **Ø**   w-kkəl-Ø-ha
    PAST be.PERF-3SM   **PAST** CAUS-eat-3SM-her
    'He made her eat.'

    b *Past Perfective (Progressive) Causative*
    Ø   kan-Ø   **ka**   y-w-kkəl-ha
    PAST be.PERF-3SM   **PRES** 3SM-CAUS-eat -her
    'He was/has been making her eat.'

---

[6] Although complex tenses formed with a present tense auxiliary are possible, in practice they appear to be blocked by simple tense expressions.

c. *Future in the Past Causative*
  Ø   kan-Ø   **ɣa**   y-w-kkəl-ha
  PAST be.PERF-3SM **FUT**   3SM- CAUS-eat -her
  'He was about to/going to make her eat.'

(20)   a. *Future Perfective Causative*
        ɣa   y-kun   **Ø**   wkkəl-Ø-ha
        FUT 3SM-be.IMP **PAST** eat.CAUS-3SM-her
        'He will have made her eat.'

    b. *Future Progressive Causative*

        ɣa   y-kun   **ka**   y-wkkəl-ha
        FUT 3SM-be.IMP **PRES** 3SM-eat.CAUS-her
        'He will be making her eat.'

    c. *Future in the Future Causative*
        ɣa   y-kun   **ɣa**   y-wkkəl-ha
        FUT 3SM-be.IMP **FUT** 3SM-eat.CAUS-her
        'He will be about to make her eat.'

In the next section, we will propose a detailed analysis of the syntax of these complex tense constructions.

2.1.1 *The structure of complex tense clauses[7]*

    The clause structure in (21) repeats the structure we offered for complex tense structures in (14). We propose that the matrix copula *BE* selects TP. This embedded T, like the matrix T, is φ-complete i.e. it is marked for φ-features and tense.[8] This is demonstrated by the full tense marking on both embedded and matrix verbs. The embedded domain contains a vP, but the matrix domain does not. This is unlike *WANT*-type clauses, which do contain a vP in the matrix domain and which we will revisit in Section 2.2.

(21)   Complex tense clauses:
        [TP [AspP [VP BE [TP [AspP [*v*P [VP main verb
                                   no vP in matrix domain

    The matrix domain clearly does not contain a vP, since complex tense clauses do not project an independent external argument. The copula *kan* in BE clauses can only license one subject as shown in

---

[7] See Fassi Fehri 2004 for an approach to complex tense in Standard Arabic which is, in some respects, analogous to the one proposed here, as he also appeals to multiple TPs.

[8] Here we realize that there is discrepancy between our use of Φ-completeness and that of Chomsky (2000) for whom a Φ-complete T entails that it is selected by C.

(22) vs. (23), although as (23) shows the subject can occur in a variety of positions.

(22)   * l-bnat…ɣa   y-kun-u   l-wlaad   ka   y-ləʕb-u
          The-girls FUT   3-be.IMP-PL   the-boys   PRES   3-play.IMP-PL

(23)   (l-bnat)ɣa..   y-kun-u..(l-bnat)   ka   y-ləʕb-u   (l-bnat)
          (the-girls) FUT 3-be.IMP-PL (the-girls) PRES 3-play.IMP-PL   (the-girls)
          'The girls will be playing'

No matter what position in the sentence the subject ends up in, it is always marked for nominative case. The copula *kan* cannot assign accusative Case to the embedded subject, as shown in (24), where the subject is a pronoun in the accusative form. For the sentence to be grammatical the pronoun (subject) has to be in the nominative form, as illustrated in (25).

(24)   * ɣa   y-kun-u-**hum**   ka   y-ləʕb-u
          FUT   3-be.IMP-PL-**them**   PRES   3-play.IMP-PL

(25)   ɣa   y-kun-u   **huma** ka   y-ləʕb-u
          FUT   3-be.IMP-PL   **they** PRES 3-play.IMP-PL
          'They will be playing'

Since complex tense clauses contain two TPs, it is predicted that such clauses would allow negation to surface in two different positions. This prediction is borne out. There is no semantic difference between the two i.e. the scope of negation does not change, regardless of whether negation dominates both TPs as in (26a), or just the lower TP as in (26b).[9]

(26)a. **ma**   ɣa (*ma)   y-kun-u-ʃ   Ø   mʃa-w   daba
          NEG   FUT   NEG   3-be.IMP-P-NEG   PAST   leave.PERF-3P   now
          'They will not have left now/by now'

---

[9] This might suggest that vP is the event domain: as there is only one vP in complex tense clauses, there is no difference in scope of negation. As will be shown below, the situation is different in ECM constructions, which contain two vPs, hence two event domains. Whether negation is higher than the embedded vP only, or higher than the matrix vP, results in a difference in scope of negation. A full analysis of event structure of MA is beyond the scope of this paper, but see Travis 2000 for a proposal of the syntactic representation of event structure that is compatible with our analysis of MA clause structure.

b.   ɣa   y-kun-u   **ma** Ø   mʃa-w-ʃ   daba
        FUT   3-be.IMP-P   NEG   PAST   leave.PERF-3P-NEG   now
        'They will have not left now/by now'

Let us now analyze the syntax of ECM constructions, which are normally biclausal, and see what sets them apart from the complex tense structures.

2.2   *Want-type (ECM) Constructions*
2.2.1 *The Structure of ECM Constructions*

As we proposed above, and as represented in (27), matrix WANT selects for imperfective aspect, regardless of matrix tense. Matrix WANT cannot select for perfective aspect.

(27)   WANT-type (ECM) clauses:
       [TP [AspP [vP [VP WANT [AspP [*v*P [VP
                                  no TP in embedded clause

We argue that perfective aspect on the embedded verb cannot be licensed because perfective must be selected by embedded past T, regardless of main clause tense. Since the embedded clause contains no TP, perfective aspect is impossible as shown in (28) through (30).

(28)   Ø   bɣa-Ø-ha   t-akul / * kl-at
       PAST   want.PERF-3SM-her   3SF-eat.IMP / eat.PERF-3SF
       'He wanted her to eat.'
(29)   ka   y-bɣiha-ha   t-akul / * kl-at
       PRES   3SM-want.IMP-her   3SF-eat.IMP / eat.PERF-3SF
       'He wants her to eat.'
(30)   ɣa   y-bɣiha-ha   t-akul / * kl-at
       FUT   3SM-want.IMP-her   3SF-eat.IMP / eat.PERF-3SF
       'He will want her to eat.'

We argue that WANT-type verbs, unlike complex tense constructions, both license embedded subjects and assign/value their (accusative) Case. Consequently, both the embedded domain and the matrix domain contain vPs, each of which licenses an external argument. The examples in (31) and (32) illustrate that the subject of the embedded clause must bear accusative case.

(31) Ø   bɣi-t-**hum**   y-ləʕb-u
      PAST   want.PERF-1SG-them   3-play.IMP-PL
      'I wanted them to play'
(32) * Ø   bɣi-t   **huma**   y-ləʕb-u
          PAST   want.PERF-1SG   they   3-play.IMP-PL

As in complex tense clauses, there are two positions available for negation: surrounding the matrix verb, as in (33), and surrounding the embedded verb, as in (34). However, each position corresponds with a different interpretation; that is, in ECM sentences, scope of negation *does* depend upon its surface position. Negation takes wide scope in (33), and narrow scope in (34).

(33) Ø   **ma**-bɣi-t-hum-**ʃ**   y-leʕb-u
      PAST   NEG-want.PERF-1SG-them-NEG   3-play.IMP-PL
      'I didn't want them to play'
(34) Ø   bɣi-t-hum   **ma**-y-ləʕb-u-**ʃ**
      PAST   want.PERF-1SG-them   NEG-3-play.IMP-PL-NEG
      'I wanted them not to play'

2.2.2 *A puzzle: a complementizer in ECM clauses?*

Embedded clauses in *WANT*-type sentences are optionally headed by (what appears to be) a complementizer, *baʃ*, as shown in (35).

(35) Ø   bɣa-Ø-ha   (**baʃ**)   t-akul
      PAST   want.PERF-3SM-her   3SF-eat.IMP
      'He wanted for her to eat.'

This poses a puzzle for our claim that *WANT*-type verbs in MA select AspP, as these embedded clauses do appear to be (optionally) headed by a C^0. However, we will show that *baʃ* is not a true complementizer, and hence does not pose a difficulty for our analysis. First, the optional C^0 in *WANT*-type clauses (*baʃ*) is not the same C^0 observed in regular embedded clauses (*bəlli*).

(36) Ø   gal-Ø   Ali   **bəlli**   (Meriam)   mʃ-at   (Meriam)
      PAST   say.PERF-3SM Ali   that   (Meriam)   leave.PERF-3SF(Meriam)
      'Ali said that Meriam left.'
(37) * gal Ali baʃ Meriam mʃat.

Additionally, *WANT*-type verbs cannot select *bəlli.*

(38)   Ø   bɣa-Ø-ha   Ali   **(*bəlli)**   t-əmʃi Meriam.
         PAST   want.PERF-3SM-her Ali   (that) 3SF-leave.IMP Meriam
         'Ali wanted Meriam to leave.'

Furthermore, *baʃ* does not block movement of the embedded subject clitic into the matrix clause, as would be expected if it were C^0, as shown in (39). Nor does *baʃ* block accusative Case assignment from the matrix verb to the embedded subject, also shown in (39), and it does not appear to have any Case-assigning properties of its own, unlike *for* in English, as in (40).

(39)   Ø   bɣa-Ø-ha   baʃ   t-akul
         PAST   want.PERF-3SM-her   that   3SF-eat.IMP
         'He wanted for her to eat.'
(40)   I want very much *(for) John to go.

Finally, *baʃ* cannot co-occur with tense.

(41)   Ø   bɣa-Ø-ha   baʃ   **(*ka/*ɣa)**   t-emʃi
         PAST   want.PERF-3SM-her   that   (PRES/FUT)   3SF-leave.IMP
         'He wanted her to go.'

As *baʃ* cannot co-occur with tense, *baʃ* cannot intervene in complex tense (*BE*) contexts.

(42)   ɣa   y-kun-u   (*baʃ)   ka   y-ləʕb-u
         FUT   3-be.IMP-PL   (that)   PRES   3-play.IMP-PL
         'They will be playing'

    While the true nature of *baʃ* remains an open question, we have established that it is not a complementizer, and hence does not present a problem for our claim that ECM verbs select AspP.

3. Conclusion

    To summarize the main theoretical contributions of our paper, we have argued that tense and aspect are distinct in the clause structure of

MA. Tense and Aspect are projected separately in the structure of MA. We have shown that the properties of MA complex tense clauses, in which both the auxiliary and lexical verb are fully inflected for tense, aspect, and agreement, are accounted for with a biclausal structure. Complex tense clauses contain two complete TPs, and, as they license a single external argument, a single vP, in the embedded domain. The properties of MA ECM clauses can similarly be accounted for with a biclausal structure that differs from that of the complex tense clauses in two ways. The embedded verb in ECM clauses is not marked for tense because the embedded domain lacks a TP; the ECM verb selects AspP. Given that two external arguments are licensed in ECM clauses, two vPs are present, one in the matrix domain and another in the embedded domain. Both complex tense clauses and ECM clauses have been further contrasted with regular embedded clauses, which are maximally a CP and which are not structurally defective in any way.

REFERENCES

Benmamoun, Elabbas. 2000. *The feature structure of functional categories.* New York: Oxford.

Chomsky, Noam. 2001b. "Derivation by phase". *Ken Hale: a life in language*, ed. by Michael Kenstowicz. Cambridge: MIT Press.

_____. 2004. "Beyond explanatory adequacy". *Structures and beyond: current issues in the theory of language*, ed. by Adriana Belletti. Oxford: Oxford University Press.

Fassi Fehri, Abdelkader. 1993. *Issues in the structure of Arabic clauses and words.* Dordrecht: Kluwer.

_____. 2004. "Temporal/aspectual interaction and variation across Arabic heights". *The syntax of time*, ed. by Jacqueline Guéron and Jacqueline LeCarme. Cambridge: MIT Press.

Ouali, Hamid and Acrisio Pires. To appear. "Complex tense, agreement and wh-extraction". *Proceedings of the 31st Annual Meeting of the Berkeley Linguistics Society (2005)*.

Stowell, Tim. 1996. "The phrase structure of tense". *Phrase structure and the lexicon*, ed. by Johan Rooryck and Laurie Zaring. Dordrecht: Kluwer.

Travis, Lisa. 2000. "Event structure in syntax". *Events as grammatical objects,* ed. by Carol Tenny and James Pustejovsky. Stanford: CSLI Publications.