Tense or aspect? Semantics of the verbal suffix (-V) in Akan

Reginald Akuoko Duah, University of Ghana, Legon/Humboldt-Universität, Berlin
Stefan Savić, Rhodes University, South Africa

The present study investigates the semantics of a verbal suffix, the reduplicated vowel (-V) in Akan, while also addressing the role of tense and aspect (TA) markers in the morphological structure of the Akan verb. The verbal suffix (-V) has been analyzed as an aspectual marker by some but as a past tense by others. Based on data from native speaker's judgements and corpora, three observations are made in the present study: (i) the verbal suffix (-V) encodes a reference time (R) that is anterior to the speech time (S), (ii) the verbal suffix (-V) can be used in conditional and counterfactual sentences which have a reference time that coincides with speech time (R,S) or follows it (S_R), (iii) the completive meaning associated with events marked by (-V) is not asserted but a pragmatic interpretation that is associated with past tense in general. The study shows that the fact that the verbal suffix (-V) does not occur with the progressive and perfect aspects does not count as evidence against its status as past tense. Rather, in Akan, there is a general prohibition of overt marking of tense and aspect in a single clause, such that each verb is inflected for either tense or aspect, not both, in the clause.

Keywords: *past tense, completive aspect, perfect(ive), Akan, semantics*

1. Introduction

In this paper, we revisit the issue of whether the verbal suffix (-V) in Akan encodes tense or aspect. Starting with Christaller (1875), some linguists working on Akan have identified the verbal suffix (-V) as a tense marker (e.g. Dolphyne 1987; Boadi 2008). Departing from earlier works, Osam (1994) puts forward a proposal that the verbal suffix (-V) encodes an aspectual category he identified as the COMPLETIVE (COMPL) and argues against analyzing (-V) as a past tense marker. Since then, the analysis of the verbal suffix (-V) has been inconsistent among researchers. For instance, the choice of glossing of the suffix (-V) appears to be a matter of discipleship rather than based on any new evidence, since Christaller (1875) or Osam (1994). In this study, we examine Osam's (1994) arguments against a past tense analysis of the verbal suffix (-V) and show that the verbal suffix always encodes past time reference in a simple clause whereas completive meaning is merely a pragmatic effect associated with past time events.

Our data is from the Asante dialect, spoken mainly in the Ashanti region of Ghana. The data include grammaticality judgments about test sentences provided to nine (9) speakers aged between twenty-one (21) and twenty-eight (28). We also used sentences from texts written in the language. The paper is organized into the following sections: in section 2, we provide an overview of tense and aspect in Akan, exemplifying all the categories and their markers. Section 3 presents a theoretical discussion of the notion of tense and aspect. In section 4, we examine the semantics of the verbal suffix (-V) in simple clauses by employing various tests involving temporal adverbs and implicature cancellation. Section 5 addresses the apparent past-imperfective incompatibility in simple clauses by showing that the problem is not limited to the suffix (-V), but it is more widespread in the tense-aspect system of the language. Section 6 concludes the paper.

2. Background on Akan tense and aspect

In his seminal grammar on Akan, Christaller (1875) identified ten (10) tense-aspect-mood distinctions, majority of which are marked morphologically. Following Christaller, Dolphyne (1987) and Boadi (2008) isolate two tenses, past and future, and five (5) aspectual categories (Table 1). Christaller (1875) and Dolphyne (1987) distinguished between indefinite and immediate future but Boadi (2008) mentions only one future tense. Also, Christaller's (1875) present tense is identified as habitual by both Dolphyne (1987) and Boadi (2008).

Table 1: Tense-aspect system in Akan

	Christaller (1875)	Dolpyne (1987)	Boadi (2008)	Osam (1994, 2004)
TENSE				
Future (*bɛ-*)	✓	✓	✓	✓
Past (-V)	✓	✓	✓	
Present (HT)	✓			
ASPECT				
Completive (-V)				✓
Habitual (HT)		✓	✓	✓
Progressive (*re-*)	✓	✓	✓	✓
Perfect (*a-*)	✓	✓	✓	✓
Stative (LT)	✓	✓	✓	✓

Osam (2004: 5), on the other hand, argues that "Akan should be seen as a predominantly aspectual language, but with a two-way tense distinction—future vs non-future." According to Osam (2004), the future tense is marked but the non-future (present and past) tense is unmarked. Thus, in Osam's system there is only one overt tense, the future, and six (6) aspectual categories. As shown in Table 1, there is no past tense in Osam's system; the suffix (-V) is analyzed as completive aspect.

In the remainder of this section, we will briefly illustrate the use of tense-aspect in single-clause/simple sentences.[1] Tense-aspect categories are marked morpho-phonologically with morphemes and tones. The presentation here is meant as a quick background for the uninitiated reader (see Boadi 2008; Osam 2008 for more discussion).

As shown in (1a), the future tense is marked by a prefix *bɛ-*, which is attached to the verb. The prefix *bɛ-* encodes a future reference time for the event described by the verb.[2] The habitual is marked by a high tone (1b), which is "is incorporated into one of the syllables of the verb stem" (Boadi 2008: 12); present time reference is inferred from the habitual, since there is no overt making of present time in the language. The habitual can be distinguished from the stative in that the stative has a low tone (1c).

(1)   a.   *Nana bɛ́-dá   há.*
           Nana FUT-sleep here
           'Nana will sleep here.'

      b.   *Nana dá   há.*
           Nana sleep.HAB here
           'Nana sleeps here.'

---

[1] For a discussion on how tense-aspect is marked in serial verb constructions, see Dolphyne (1987) and Osam (2004).

[2] The prefix *bɛ-* can be used to express deontic meanings such as possibility and potentiality. However, Kusmer (2011) notes that *bɛ-* behaves more as a modal in the Fante dialect than in Asante.

c. *Nana dà   há.*
   Nana sleep.STAT here
   'Nana is sleeping here (now).'

The progressive aspect is marked by a prefix *re-*, which expresses the information that the event described by the verb is in progress (2a). In the Asante dialect, however, the progressive surfaces as a lengthening of the final segment of the subject noun (2b) or determiner in the pre-verbal noun phrase (2c) (Dolphyne 1988).

(2)   a. *Adoma ré-sì(ẁ)   ǹ-tààdé.*   (Akuapem, Fante)
          Adoma PROG-wash PL-dress
          'Adoma is washing dresses.'
       b. *Adoma-a   sì   ǹ-tààdéɛ́.*   (Asante)
          Adoma-PROG wash PL-dress
          'Adoma is washing dresses.'
       c. *Pàpá nó-ò   sí   ǹ-tààdéɛ́.* (Asante)
          man DET-PROG wash PL-dress
          'The man is washing dresses.'

The perfect is marked by a prefix *a-*, which is attached to the verb stem. According to Osam (2008: 78), the prefix *a-* "links a past event to a present situation by showing that an event that took place in the past is of relevance to the present." Thus, in (4), the prefix *a-* indicates that the event described by the verb *di* 'eat' is completed and its result holds true at present.

(3)   *Kofi á-dì   àdùàné nó.*
       Kofi PRF-eat food   DET
       'Kofi has eaten the food.'

The focus of this paper is to provide a way of teasing apart a 'rather complex TMA system with complex ways in which past time reference is signalled' (sic) (Dahl 1985). The discussion concerns the verbal suffix (-V) in the tense-aspect system of Akan, which has been analyzed as past tense by some scholars, and completive aspect by others. This suffix occurs as a doubling of the final vowel or nasal of a verb when it is followed by another word, either a direct object or an adjunct, as shown in (4). However, if there is no (overt) object after the verb the suffix may occur as *-i/-e* (in Fante and Akuapem dialects) (5a) or as a doubling of the final vowel or nasal with *-(y)ɛ* in Asante (5b). For now, we have glossed the variant forms of the suffix as -V in the examples. The suffix -V seems to have two (2) functions: (a) it locates the event described by the verb in the past, (b) the event described by the verb is interpreted as completed.

(4)   a. *ɔ̀-dà-à   fáḿ.*
          3SG.SBJ-sleep-V ground
          'He slept on the floor.'
       b. *mè̀ bù-ù̀   àbàá nó.*
          1SG break-V stick DET
          'I broke the stick.'

(5)   a. *né   mààmé sú-ì.*
          3SG.POSS mother cry-V

79

'His mother cried.b. *né   màámé sù-ùyὲ.*
3SG.POSS mother cry-V
'His mother cried.'

In the negative, however, there appears to be a switch between the perfect prefix *a-* and the suffix *-V*, such that the sequence *neg + a- + stem* expresses negative past reference (6a) while *neg + stem + -V* expresses negative perfect (6b).

(6)   a.   *né   màámé à-ǹ-sú.*
             3SG.POSS mother V-NEG-cry
             'His mother did not cry.'

        b.   *né   màámé ń-sù-ùyὲ.*
             3SG.POSS mother NEG-cry-PRF
             'His mother has not cried.'

The close relationship between past tense and perfect(ive) aspect has been reported, with varying detail, in different languages. There seems to be a historical semantic link between the past tense and the perfect(ive). One obvious similarity is that events marked by the perfect(ive) tend to be taken for granted as having occurred in the past, since they are no longer in progress (Toews 2015). Thus, in some languages, e.g. South German dialects, spoken French, North Italian dialects, Romanian, some Slavic languages, the perfect(ive) marker has evolved into a past tense marker (see Bybee et al. 1994; Lindstedt 2000; Nurse 2008; Meermann & Sonnenhauser 2015). In Xhosa (Bantu, S42) the perfect suffix *-ile* in (7a) marks the past in (7b).

(7)   a.   *Ndilambile.*
             1SG.SBJ.hunger.PRF
             'I am hungry' (lit. I have become hungry).

        b.   *Ndifikile   izolo.*
             1SG.SBJ.arrive.PRF yesterday
             'I arrived yesterday.'

Nevertheless, past tense can be distinguished from perfect aspect in many ways. As far as Akan is concerned, in section 3, we will discuss evidence that the suffix -V is primarily a tense marker, and not aspect as has been claimed. Before that, however, we would like to briefly review some theoretical distinctions between tense and aspect in the literature.

3. Distinguishing tense from aspect

Before accounting for the semantics of the verbal suffix -V in Akan, a clear distinction between the semantics of tense and that of aspect needs to be drawn. According to Comrie (1976, 1985), tense involves the location of an event's time relative to the moment of speech. Tense is, therefore, a deictic category. By contrast, aspect is not a deictic category, but it represents the perspective from which the internal constituency of the situation is viewed (Comrie 1976). The two definitions are important in that they discern the two grammatical categories.[3]

---

[3] Comrie's definition of tense and aspect, however, has been criticized. His view that tense locates an event relative to the moment of speech is not entirely correct, as one and the same past event may be reported in both the past simple, e.g. *Mary ate an apple* and the present perfect, e.g. *Mary has eaten an apple*. The definition of aspect, on the other hand, appears to only be intuitively accessible and 'metaphorical in nature' (Klein 2013), but rather

In this study, we will follow the definitions of tense and aspect as formulated by Johnson (1981) and Klein (2013), a time-based approach labeled as *relational theory* by Binnick (2006). The crucial notions in the relational theory are Reichenbach's reference time (R), event time (E), and speech time (S).

Klein (1992, 2013) proposes that tense represents the relation between R and S (and not E and S), where S represents the present moment, the 'now', i.e. the moment at which the utterance is produced, which divides the timeline into the past and the future but E represents the time at which the reported event occurs, and it can be located before S, at S or after S (see Reichenbach 1947). Thus, the possibilities for tense are the present, the past, or the future (or any of the remoteness degrees of the latter two, e.g. remote past, near future, etc.). Klein (2013) defines R as the moment for which a claim is made, as it does not necessarily coincide with the moment when the reported event occurred.[4]

For instance, in (8a), E is placed before another past point in time, R, but in (8b), E and R coincide, whereas in (8c), R is placed at S, and the past event of eating is viewed from the present. The difference between the simple past *ate* in (8b) and the present perfect *have eaten* in (8c) does not depend on the moment when the event occurred, but the time for which the claim is made. Thus, it can be said that tense informs the hearer about where the time for which the claim about the reported event is made is located, relative to moment of speech.[5]

(8)   a.   Marry had eaten an apple.
             (E‿R‿S)
       b.   Marry ate an apple.
             (E, R‿S)
       c.   Marry has eaten an apple.
             (E‿R,S)

On the other hand, aspect represents the relation between R and E (Johnson 1981; Klein 1992, 2013). For example, the English progressive aspect indicates that E, e.g. the event of writing in (9a), surrounds R which is a point in time (when I came home). Note the different temporal relation between E and R when the event of writing has the morphologically unmarked non-progressive aspect. Thus, we can distinguish between tense and aspect primarily in terms of whether they relate R to S, or R to E.

(9)   a.   She was reading a letter (when I came home).
             (EEEE_R_EEEE)
       b.   I read the letter (when I came home).
             (R‿E)

An aspectual category which does not exist in English but has been argued for Akan is the completive aspect, which marks that an event has reached its point of completion. An example is the morpheme *-sha-* in the Swahili verb in (10a), which gives rise to the interpretation of arrival, as opposed to the same verb without *-sha-* (10b).

---

impractical when determining the semantics of aspect.

[4] Bohnemeyer (2014) splits R into two different notions, which, in combination with E define relative tense (perspective time) or aspect (topic time).
[5] Thus, such forms as the English past continuous are not pure tenses, but combinations of past tense and progressive aspect.

(10) a. *u-ki-sha-end-a* *Mombasa, u-ta-ni-sahau.*
          SM.2.SG-SIT-COMP-go-FV Mombasa SM.2.SG-FUT-OM.1.SG-forget
          'If you get to Mombasa, you will forget me.'

     b. *u-ki-end-a* *Mombasa, u-ta-mw-on-a* *Henry.*
          SM.2.SG-SIT-go-FV Mombasa SM.2.SG-FUT-OM.3.SG-see-FV Henry
          'If you go to Mombasa, you'll see Henry.' (Rose et al. 2002: 16)

As has been shown in this section, tense and aspect can be combined in a single clause (or verb form). However, it is important to note that more than one tense cannot be combined within one verb form, as there cannot exist several locations of one R relative to S (Nurse 2008). In the next section, we discuss the semantics of the verbal suffix (-V) by employing several tests to show whether it behaves as a tense category or it is aspectual, like the completive marker *-shi-* in Swahili (10).

4. Semantics of verbal suffix (-V)

In this section, we examine whether the verbal suffix (-V) in Akan encodes primarily a tense (R S) or aspectual (R E) relation. In doing so, we will employ various tests involving time adverb(ial)s and implicature cancellation.

      One of the main tests that regards the distinction between tense and aspect markers is the marker's (in)compatibility with different time adverbials. As Klein (1995: 25) notes, time (temporal) adverbs "specify the position of a time span on the time axis in relation to some other time span." Thus, we expect that tense markers will co-occur with time adverbials denoting the same part of the timeline (past, present, or future), whereas aspect markers are not restricted to one part of the timeline. As demonstrated in (11-12), the English past tense marker can only be used in past contexts, but the perfect aspect marker can occur in present, past, and future contexts.

(11) a. I saw their house *yesterday*.
     b. $^?$I saw their house *now*.
     c. # I saw their house *tomorrow*.

(12) a. I had already seen their house when you arrived.
     b. I have already seen their house / I have seen their house now.
     c. I will call you tomorrow when I have seen their house. / Tell me what you think
          when you have seen their house.

The verbal suffix (-V) in the affirmative (and prefix *a-* in the negative) does not occur with time adverbials which have a non-past reference. As shown in the examples below, both the affirmative suffix and the negative prefix forms can be used with the temporal adverb *ènórà* 'yesterday' (13a-b) but not with *sèèséí* 'now' (14a-b) or *ɔkyéná* tomorrow' (15b-c). Likewise, the future tense prefix -*bɛ* occurs with adverbs which have a future time reference, like *ɔkyéná* 'tomorrow' (15a), but not with those which refer to present time or past events (13c, 14c). Thus, both the verbal suffix (-V), like the future tense marker, encodes a single temporal delineation, that is, the past.

(13) a. *mè* *hù-ù èfíe* *nó ènórà.*
          1SG see-V house DET yesterday
          'I saw the house yesterday.'

b. *m-à-ǹ-hú*   *èfíé nó ènórà.*
    1SG-V-NEG-see house DET yesterday
    'I did not see the house yesterday.'

c. #*ɔ̀-bɛ́-kɔ́*   *fíé   ènórà.*
    3SG.SBJ-FUT-go home yesterday
    '#He will go home yesterday.'

(14)   a. #*sèèséí mè tè-è   àséɛ́.*
    now   1SG hear-V under
    '#Now, I understood it.'

    b. #*sèèséí m-à-ǹ-té   àséɛ́.*
    now   1SG-V-NEG-hear-V under
    '#Now I did not understood it.'

    c. #*sèèséí m-ɛ́-frɛ́   nó.*
    now   1SG-FUT-call 3SG.OBJ
    'Now I will call him' (intended: #Now, I am calling him).

(15)   a. *wó bɛ́-súá   àdéɛ́ ɔ̀kyéná.*
    2SG FUT-study thing tomorrow
    'You will study tomorrow.'

b. #*Kwame bà-à   ɔ̀kyéná.*
    Kwame come-V tomorrow
    '#Kwame came tomorrow.'

c. #*Kwame à-ǹ-má   ɔ̀kyéná.*
    Kwame V-NEG-come tomorrow
    '#Kwame did not come tomorrow.'

Aspects in Akan, on the other hand, do not show such restrictions because they may not be limited to a particular 'temporal frame' (Dahl 1985). Thus, as shown in (16) and (17), unlike the past and future tenses, the (affirmative and negative) perfect and progressive aspects can be used with temporal adverbs which have a past or future reference.

(16)   a. *m-à-fá   àdúró ènórà.*
    1SG-PRF-take medicine yesterday
    'I have taken medicine yesterday.'

b. *mè ǹ-fá-à   àdúró ènórà.*
    1SG NEG-take-PRF medicine yesterday
    'I have not taken medicine yesterday.'

c. *ènórà ɔ́-ɔ́-hwɛ́   sìní nó mè dá-àyɛ́.*
    yesterday 3SG.SBJ-PROG-watch movie DET 1SG sleep-V
    'Yesterday, as he was watching the movie I slept.'

(17)   a. *ɔ̀kyéná ná wó á-dì   ǹ-féɛ́ dù!*
    tomorrow PRT 2SG PRF-eat PL-year ten
    'You will be ten years old tomorrow!' (lit. you have eaten ten years tomorrow)

b. *ɔ̀kyéná   ná wó ń-nì-ì   ǹ-féɛ́ dù!*
    tomorrow PRT 2SG NEG-eat-PRF PL-year ten
    'You will not be ten years old tomorrow!' (lit. you have not eaten ten years

tomorrow)

    c.   *ɔkyéná   yɛ̀-ɛ̀-kɔ́   Kumase.*
          tomorrow 3PL.SBJ-PROG-go Kumase
          'Tomorrow, we will be going to Kumase.'

Further, the suffix (-v) cannot be used to express tense in events which are future (18d) but aspects can be embedded in a future time reference (18a-18c).

(18)   a.   *frɛ̀   mɛ̀ béré à   ɔ́-bá   nó.*
          call.IMP 1SG time REL 3SG.SBJ-PRF-come CD
          'Call me when she has arrived.'

    b.   *frɛ̀   mɛ̀ béré à   ɔ́-ɔ́-bá   nó.*
          call.IMP 1SG time REL 3SG.SBJ-PROG-come CD
          'Call me when she is arriving (i.e. when she is on her way).'

    c.   *frɛ̀   mɛ̀   béré à   ɔ́-bá   nó.*
          call.IMP 1SG.OBJ time REL 3SG.SBJ-come.HAB CD
          'Call me when she arrives.' (i.e. Call me every time she arrives.)

    d. # *frɛ̀   mɛ̀   béré à   ɔ̀-bá-àyɛ́   nó.*
          call.IMP 1SG.OBJ time REL 3SG.SBJ-come-V CD
          '#Call me when she arrived.'

A past tense marker, however, may be used with a non-past temporal reference in conditionals such as sentences that express situations which are 'contrary to facts, false or unlikely' (Karawani 2014). In English, the past tense form of the verb can be used to express a present counterfactual situation (19b) or future counterfactual situation (19c). This use of the past tense morphology, sometimes referred to as 'fake past' (Iatridou 2000), 'hypothetical past' (Bybee et al. 1994) and 'non-actual veridicality' (Karawani & Zeijlstra 2013), in counterfactual conditionals has also been reported in languages such as Greek (Iatridou 2000), Palestinian Ara- bic (Karawani & Zeijlstra 2013; Karawani 2014), Hindi, Zulu (Bjorkman & Halpert 2012; Halpert & Karawani 2012) and Dakaaka (von Prince 2019).

      The Akan verbal suffix (-v) is used in conditionals of the type *X* AS SOON AS *Y* marked by the modal emphatic operator *ara* (20) and in counterfactual conditional sentences made up of a subordinate clause with a conditional marker *aa*, a counterfactual modal operator *anka* in the main clause (Amfo 2005). As shown in (20), although the protasis of the conditional has a future reference time the verb is marked by the suffix (-v) Similarly, as (21) shows, the verbal suffix (-v) may be used in a counterfactual conditional which involves a past (21a), present (21b) or future (21c) situation. It can be observed from the sentences in (21) that, unlike English, in the counterfactual conditional the verbal suffix (-v) can be used both in the subordinate and main clause. However, both the *X* AS SOON AS *Y* conditional and the counterfactual conditional, the verbal suffix (-v) is non-indicative and does not necessarily encode past time, therefore, it can be used with temporal adverbs such as *ɔkyéná* 'tomorrow' and *sèèséí* 'now'. Thus, the verbal suffix (-v) can be used to express a non-temporal meaning in non-actual events.

(19)   a.   If John had been here (yesterday), the party would have been fun.

      b.   If John were here (now), the party would have been fun.

      c.   If John were to be here (next week), the party would be fun. (Karawani 2014: 3)

(20)   a.   *ɔkyéná   wó bá-àyɛ́ árá   nɑ́ mè-è-kɔ́   fíé.*
           tomorrow 2SG come-V EMPH PRT 1SG-PROG-go home
           'Tomorrow, as soon as you come, I will go home.'

      b.   *ɔkyéná   wó dúrù-ùyɛ́ árá   frɛ́ mé.*
            tomorrow 2SG arrive-V EMPH call 1SG
            'Tomorrow, as soon as you arrive call me.'

(21)   a.   *ɛnórá   mè tè-èyɛ́ áà   ànkà mè frɛ́-ɛ̀ nò.*
            yesterday 1SG hear-V COND MOD 1SG call-V 3SG.OBJ
            'If I heard it yesterday, I would have called her.'
      b.   *sèèséí wó sìésìè-è   wò hó áà   ànkà mè kɔ̀ kyèrɛ́-ɛ̀ wò hɔ́.*
            now   2SG dress up-V 2SG body COND MOD 1SG go show-V 2SG there
            'If you got dressed now, I would show you the place.'
      c.   *ɔkyéná   wó bà-àyɛ́ áà   ànkà mè kɔ̀-ɔ̀   fíé.*
            tomorrow 2SG come-V COND MOD 1SG go-V home
            'If you came tomorrow, I would go home.'

Several proposals have been presented to account for why past tense markers are used in counterfactual sentences, especially with regards to sentences with a future time reference. Iatridou (2000) proposed that past tense semantically encodes a distance from the present (or remoteness), which could refer to a world or time in the past or future. In line with this analysis, Karawani & Zeijlstra (2013: 118) speculate that the past tense "semantically always refers to any non-present tense, but in most cases the availability of future tense morphology instead pragmatically blocks a future tense interpretation of the past morpheme." However, as (22) show, in Akan, the past and future tense are interchangeable in a counterfactual conditional that refers to past or future situation. Whether or not a past tense is used in a future time reference or a future tense is used in a past time event depends on pragmatic veridicality. Thus, in the absence of non-veridical operators like *aa...anka* and *ara*, past tense morphology is not used in a future time event and a future tense is not marked on a past event in Akan.

(22)   a.   *ɔkyéná   wó bà-àyɛ́ áà   ànkà m-ɛ́-tɔ́   bì.*
            tomorrow 2SG come-V COND MOD 1SG-FUT-buy some
            'If you would come tomorrow, I would buy some of it.'
      b.   *ɛnórá   mè tè-èyɛ́ áà   ànkà m-ɛ́-frɛ̀   nò.*
            yesterday 1SG hear-V COND MOD 1SG-FUTcall 3SG.OBJ
            'If I heard it yesterday, I would have called her.'
      c.   *ɛnórá   ɔ̀-bɛ́-bá   áà   ànkà ɔ̀-bɛ́-frɛ́   wó.*
            yesterday 3SG.SBJ-FUT-come COND MOD 3SG.SBJ-FUT-call 2SG
            'Yesterday, if he would come, he would call you.'

Another interpretation associated with the verbal suffix (-V) is 'completion'. According to Osam (2008: 84), "[the suffix] is found only on events that are known to be completed or perfective before the time of speaking [and] it is used to code events that have been brought to a closure before the time of speech." Although Osam (2008) admits that the suffix refers to events located in past time, he maintains that "past time is a secondary meaning" of the suffix.[6] Thus, Osam analyzes the verbal suffix as involving two meanings: (i) it *encodes* a relation E R, where the event (E) is completed at the reference time (R); (ii) the suffix *implies* a relation R S, where the reference time (R) is past to the speech time (S). As (23) shows, Osam's (2008) analysis of the verbal suffix is similar to the past perfect or pluperfect in English.

---

[6] This idea goes back to Dahl (1985) who identified suffix -V as one of two pluperfects in Akan "which is restricted to past time reference."

(23)   [-V] $\Rightarrow$ **E_R_S**

As we have shown above, the verbal suffix (-V) is used to mark events whose reference time (R) is anterior to the speech time (S) (except in non-actual situations). Thus, the past time function of this marker appears to be part of the semantics of the suffix. The completive meaning associated with the suffix may not be part of its meaning. If completive meaning were encoded by the verbal suffix (-V), it should not be able to occur in a sentence which contains a clause that cancels the event's completion. However, speakers found it acceptable when the event marked by the verbal suffix (-V) is followed by the clause *did not finish* (8:1 ratio) (24a, 25a). On the other hand, when the perfect *a-* is marked in the initial clause, speakers found it less acceptable to cancel the event with the clause *but did not finish* (6:3 ratio) (24b, 25b).[7]

(24)   a.   *ò-sì-ì   ǹ-tàǎdéɛ́ nó   nàǹsó ɔ̀-à-ǹ-wìé.*
             3SG.SBJ-wash-V PL-cloth DET but   3SG.SBJ-V-NEG-finish
             'He washed the clothes, but he did not finish (the job).'

         b.   # *ɔ̀-à-sí   ǹ-tàǎdéɛ́ nó   nàǹsó ɔ̀-à-ǹ-wìé.*
             3SG.SBJ-PRF-wash PL-cloth DET but   3SG.SBJ-V-NEG-finish
             '#He has washed the clothes, but he did not finish.'

(25)   a.   *mè̀ kɔ̀-ɔ̀   sùkúù nàǹsó m-à-ǹ-wìé.*
             1SG go-V   school but   1SG.SBJ-V-NEG-finish
             'I attended school, but I did not complete it.'

         b.   # *m-à-kɔ́   sùkúù nàǹsó m-à-ǹ-wìé.*
             1SG-PRF-go school but   1SG.SBJ-V-NEG-finish
             '#I have attended school, but I did not complete it.'

         Similarly, Dahl (1985) noted that the suffix (-V) is compatible with imperfective reading.
He states:

         It is striking that both Akan and Oneida use the 'framepast' in the classical example of a
         context where the Russian uses an imperfective verb to denote what is in the literature
         called a 'two-way distinction', that is, an action which led to a result which has later been
         cancelled (sic). (Dahl 1985: 149)

         For instance, in (26a) the suffix (-V) marked on the verb *bie* 'open' does not mean that the window is still open, but rather the opposite. On the other hand, the perfect marker *a-* cannot be used in a context where the window is no longer open. Thus, the suffix (-V) does not semantically encode completion. Instead, it locates a reference time (R) as anterior to speech time (S).

(26)   Context: It is cold in the room. The window is closed. Did you open the window?

---

7   An anonymous reviewer points out that examples (24b) and (25b) are acceptable in the language. While we do
     not contest the reviewer's observation, it is worth noting that the respondents found the sentences in question to
     be acceptable only in certain contexts. For instance, in (24b), some speakers commented that the meaning of
     completion can be canceled if there are other chores that go with washing, but the person did not complete these.
     Also, regarding (25b), some respondents commented that the completive meaning can be canceled if one is only
     referring to the activity of going to school. Either way, our results show that there seems to be a stronger association
     of completive meaning with the perfect aspect rather than the verbal suffix (-V).

a. *wó nà wó bíé-è m̀pómá [n]ó ànáá?*
2SG PRT 2SG open-V window DET QUES
'Was it you who opened the window?' (Dahl 1985: 149, tones and glossing ours)

b. # *wó nà wó á-bíé m̀pómá nó ànáá?*
2SG PRT 2SG PRF-open window DET QUES
'Was it you who has opened the window?'

The evidence considered so far suggests that the verbal suffix (-V) is a past tense marker and not completive aspect. It locates reference time (R) as anterior to speech time (S) (in actual situations) (27) while the perfect *a-* expresses a relation between event time (E) and reference time (R) (28). We will, therefore, gloss the verbal suffix (-V) as past tense (PST) in the remainder of the paper.

(27)   [-V] $\Rightarrow$ R_S

(28)   [*a*-] $\Rightarrow$ E_R

In the next section, we discuss one restriction on the distribution of the suffix (-V), which led to its analysis as aspect rather than tense in Akan.

5. Co-occurrence restrictions of past tense

The verbal suffix (-V), unlike the English past tense, cannot be used in a clause which has imperfective marking, such as the progressive. As shown in (29), the past tense suffix cannot be used when the verb is marked with the progressive to express past progressive (29b). Likewise, as (30) shows, the perfect aspect cannot be used with the past tense in the same clause to express a past perfect(ive).

(29)   a. *mè-è-tɔ́ àtà-àdéɛ́.*
1SG-PROG-buy dress
'I am buying a dress.'

b. * *mè-è-t-ɔ̀-ɔ̀ àtààdéɛ́.*
1SG-PROG-buy-PST dress
Intended: 'I was buying a dress.'

(30)   a. *Yaw à-súá àdéɛ́.*
Yaw PRF-study thing
'Yaw has studied.'

b. * *Yaw à-súá-à àdéɛ́.*
Yaw PRF-study-PST thing
'Yaw had studied.'

According to Osam (2008), the explanation for the ungrammatical sentences in (29b) and (30b) is that the suffix (-V) is completive aspect and, therefore, cannot co-occur with the progressive and perfect aspects. Osam (2008) argues the following:

> If the primary function of the suffix under consideration were to code past time, we should expect to find it used with an event in progress in the past [...] The suffix in question cannot code any imperfective event that occurs in the past prior to the time of speaking. For me, this is the strongest evidence that the suffix I am calling the completive is not primarily a tense marker marking past time. (Osam 2008: 85)

Osam's (2008) argument raises the following questions: (a) if the suffix (-V) is a past tense marker, as we have claimed, why does it not occur with an aspect, such as perfect and progressive? (b) if it is completive aspect, as claimed by Osam (2008), why does it not occur with the future tense marker? (c) Is the suffix (-V) incompatible with imperfective events in general? We address these questions in the remainder of the paper.

The answer to the first two questions can be seen from the syntactic distribution of tense and aspect markers. In Akan, it is generally not possible to combine tense and aspect on the same verb in a simple clause.[8] For example, as shown in (31) and (32), the future tense and the perfect aspect cannot be marked in the same clause [*PRF+FUT]. Neither can we have the future tense and progressive aspect in the same clause [*PROG+FUT]. In fact, combining the progressive aspect and future tense results in immediate future reading (32c). Also, even if we were inclined to analyze the suffix (-V) as completive aspect, as (33) shows, it cannot be used with the future tense, although future completive events should be acceptable.

(31)   a.   *Ama à-súá   àdéɛ́.*
               Ama PRF-study thing
               'Ama has studied.'

          b.   * *Ama à-bɛ́-súá   àdéɛ́.*
               Ama PRF-FUT-study thing
               'Ama will have studied.'

(32)   a.   *pàpá nó-ò   tɔ́ káà.*
               man DET-PROG buy car
               'The man is buying a car.'

          b.   * *pàpá nó-ò   bɛ̀-tɔ́ káà.*
               man DET-PROG FUT-buy car
               Intended: 'The man will be buying a car.'

---

8 In a serial verb construction, it is possible to combine tense and aspect, e.g. [FUT-CONS] (6a) or two aspects, e.g. [PRF-PROG] (6b) (see Dolphyne 1987; Osam 2004; Duah 2013).

    (i)   a. *ɔ̀-bɛ̀-kɔ́   à-bá.*
              3SG.SBJ-FUT-go CONS-come
              'He will go and come back.'

          b. *Kofi á-hóhóró nè   ǹsá-à   dìdí.*
             Kofi PRF-wash 3SG.POSS hand-PROG eat
             'Kofi has washed his hand and is eating.'

c. *pàpá nó-ò   bɛ̀-tɔ́   káà.*
man DET-PROG FUT-buy car
'The man is about to buy a car.'

(33)   a.   *ɔ̀-bɛ́-wíé   sùkúù ɔ̀kyéná.*
3SG.SBJ-FUT-finish school tomorrow
'He will finish school tomorrow.'

b.   * *ɔ-bɛ́-wíé-è   sùkúù ɔ̀kyéná.*
3SG.SBJ-FUT-finish-PST school tomorrow
Intended: 'He will have finished school (by) tomorrow.'

Thus, in Akan only one of each category of tense or aspect may be marked in a clause but not both. If only aspect is marked in the clause it takes a default present tense reference, which is unmarked (34).

(34)   a. *ɔ̀-ɔ̀-sòmá   nó.*
3SG.SBJ-PROG-send 3SG.OBJ
'She is sending him.'

b. *Kofi á-nyáné.*
Kofi PRF-be awake
'Kofi is awake.'

The complementary syntactic distribution of tense and aspect in a clause can be likened to what has been reported for some Bantu languages. For instance, Simango (2010) observes that in ciCewa "the occurrence of affixes on the verb complex is itself subject to co-occurrence restrictions; that is, when certain nodes in the structure are filled others cannot be." Thus, the non-occurrence of the past tense suffix with the two aspects, perfect and progressive, is due to a morphosyntactic restriction that produces a surface structure of either overt tense or aspect spell-out in a clause (Kusmer 2011).[9]

The third question that we would like to address is whether the past tense is compatible

---

[9] For instance, in Akan, the future tense marker bɛ́ is in complementary distribution with motional prefixes bɛ̀- and kɔ-. On the other hand, the past tense suffix (-V), the perfect and the progressive markers can co-occur with the motional prefixes.

(i)   a.   *ɔ̀-bɛ̀-fá.*
3SG.SBJ-INGRES-take
'She comes to take it.'

b.   * *ɔ̀-bɛ́-bɛ̀-fá.*
3SG.SBJ-FUT-INGRES-take
'She will come to take it.'

c.   *ɔ̀-kɔ̀-dá.*
3SG.SBJ-EGRES-sleep
'She goes to sleep.'

d.   * *ɔ̀-bɛ́-kɔ̀-dá.*
3SG.SBJ-FUT-INGRES-sleep
'She will go to sleep.'

with imperfective semantics. As we have already noted in (31)–(33), in Akan, it is generally not possible to combine tense and aspect in the same clause, which explains why the past tense does not co-occur with the progressive and perfect aspects. As Osam (2008: 86) notes, the only way the language expresses past-progressive is "by using periphrastic expressions and discourse dependent inference of the past time." As shown in (35), the particle *na*[10] can be used to link a clause marked by the past tense and another containing the progressive (35a) or perfect (35b). We observe also in (35) that *na* can link a clause marked by future tense to another clause marked by the progressive (36a) or perfect (36b). The initial clause, which provides the reference time (R) may be deleted in which case a default interpretation of past time reference (R_S) is interpreted for the deleted clause.

(35)   a. *(ɔ̀-bá-àyɛ́   nó) ná mè-è-kɔ́   Kumase.*
            3SG.SBJ-come-PST CD PRT 1SG-PROG-go Kumase.
            '(When she arrived) I was leaving for Kumasi.'

        b. *(ɔ̀-bá-àyɛ́   nó) ná Ama á-dwáré.*
            3SG.SBJ-come-PST CD   PRT Ama PRF-bath
            '(When she arrived) Ama had had a bath.'

(36)   a. *wó bɛ́-sɔ́rɛ́   nó ná mè-è-dìdì.*
            2SG FUT-rise up CD PRT 1SG-PROG-eat.RED
            'By the time you wake up, I will be eating.'

        b. *Yaw bɛ́-dúrú   ha᷄ nó ná   m-à-wá-ré.*
            Yaw FUT-arrive here CD PRT 1SG-PRF-marry
            'By the time Yaw gets here, I would be married.

Regarding the issue of whether or not the past tense can be used in imperfective events, we observed in (26) that the past tense suffix (-v) can be used in events which have not come to a completion. It should be noted that Akan does not morphologically mark the imperfective so the claim that the verbal suffix (-v) cannot be used with imperfective events is challenging to test. One option is to resort to lexical aspect, which may be expressed as part of certain events encoded by verbs, as in (26). Thus, the verbal suffix (-v) is not semantically incompatible with imperfective semantics, but it does not occur with any aspectual category in the same clause because of morphosyntactic restrictions in the language.

6. Conclusion

In the present paper, we have shown that Akan has a past tense marker, a verbal suffix (-v) in the affirmative (and a prefix (*a-*) in the negative), which is used to encode events that have a reference time that is anterior to the moment of speech (R_S). Although an event marked by the past tense form may be interpreted as completed, the interpretation of completion appears to be a pragmatic effect that is associated with past events in general but does not constitute the underlying semantics

---

[10] The particle *na* is sometimes analyzed as a past tense marker (e.g. Saah 2002; Boadi 2008; Kandybowicz 2015). However, *na* is only used to mark a relation between two clauses and their propositions but does not encode any tense by itself (Duah 2019).

of the form. Unlike the past tense, however, events marked by the perfect are understood as completed and, therefore, cannot be followed by a clause that denies the event's completion without resulting in a contradiction. The study shows that like the simple past tense in English, the Akan past tense can be used in conditional and counterfactual sentences in the present or future. In this use, the past tense form is non-indicative, that is, it does not strictly encode the R_S relation, but it marks an event in a non-actual situation. We have also provided evidence that Akan generally does not allow for the use of both tense and aspect in the same simple clause; when both tense and aspect need to be encoded in one verb form, only aspect gets overt expression. If the temporal reference does not include the moment of speech, said verb needs to be introduced by a connector *na* and preceded by another clause with tense specification. This implies that tense and aspect in Akan exhibit significantly different syntactic behavior.

Acknowledgements

Abbreviations

1	first person
2	second person
3	third person
AG	agentive
CD	clause final determiner
COMP	complementizer
COMPL	completive
COND	conditional marker
DET	determiner
EGRES	egressive
EMPH	emphatic marker
FUT	future
FV	final vowel
HAB	habitual
IMP	imperative
INGR	ingressive
MOD	modal
NEG	negative
OBJ	object

OM	object marker
PRT	particle
PRF	perfect
PL	plural
POSS	possessive
PROG	progressive
PST	past
REL	relativizer
SBJ	subject
SG	singular
SM	subject marker
STAT	stative
QUES	question marker

References

Amfo, Nana Aba. 2005. Modal marking in Akan: the case of *anka*. Journal of Pragmatics, 37(7). 997–1013.

Binnick, Robert I. 2006. 11 aspect and aspectuality. The handbook of English linguistics 36.244.

Bjorkman, Bronwyn & Halpert, Claire. 2012. In an imperfect world: deriving the typology of counterfactual marking. Talk at Modality Workshop, University of Ottawa (April 20, 2012)

Boadi, Lawrence Akwasi. 2008. Tense, aspect and mood in Akan. In Ameka, Felix & Kropp-Dakubu, Mary Esther (eds.), Aspect and modality in Kwa languages, 9–68. Amsterdam: John Benjamins.

Bybee, Joana & Perkins, Revere Dale & Pagliuca, William. 1994. The evolution of grammar: Tense, aspect, and modality in the languages of the world, volume 196. Chicago: University of Chicago Press.

Christaller, Johannes Gottlieb. 1875. A grammar of the Asante and Fante language called Tshi Chwee, Twi based on the Akuapem dialect with reference to the other (Akan and Fante) dialects. Basel: Basel Evangelical Missionary Society.

Comrie, Bernard. 1976. Aspect: An introduction to the study of verbal aspect and related problems, volume 2. Cambridge: Cambridge University Press.

Comrie, Bernard. 1985. Tense, volume 17. Cambridge: Cambridge University Press.

Dahl, Östen. 1985. Tense and aspect systems. New York: Blackwell.

Dolphyne, Florence Abena. 1987. On negating the consecutive verb in Akan. Journal of West African Languages, 19(1). 70–80.

Dolphyne, Florence Abena. 1988. The Akan (Twi-Fante) language: Its sound systems and tonal structure. Accra: Black Mask Ltd.

Duah, Reginald Akuoko. 2013. Force dynamics and causation in Akan. University of Ghana, Legon. (Doctoral dissertation.)

Duah, Reginald Akuoko. 2019. Coordination, tense and focus, and the road in between: The case of the particle *na* in Akan. Talk presented at Synsem Colloquium, Potsdam Universität (April 21, 2019).

Halpert, Claire & Karawani, Hadil. 2012. Aspect in counterfactuals from A(rabic) to Z(ulu). In Choi, Jaehoon & Hogue, E. Alan & Punske, Jeffrey & Tat, Deniz & Schertz, Jessamyn & Trueman, Alex (eds.), Proceedings of the 29th West Coast Conference on Formal Linguistics, volume 29, 99–107. Somerville, MA: Cascadilla Proceedings Project.

Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. Linguistic inquiry 31(2). 231–270.

Johnson, Marion R. 1981. A unified temporal theory of tense and aspect. In Tedeschi, Philip & Zaenen, Annie (eds.), Syntax and semantics 14 Tense and aspect, 145–175. Ann Arbor, Michigan: Academic Press Inc.

Kandybowicz, Jason. 2015. On prosodic vacuity and verbal resumption in Asante Twi. Linguistic Inquiry, 46(2). 243–272.

Karawani, Hadil. 2014. The real, the fake, and the fake fake: In counterfactual conditionals, crosslinguistically. Netherlands Graduate School of Linguistics (Doctoral dissertation).

Karawani, Hadil. & Zeijlstra, Hedde. 2013. The semantic contribution of the past tense morpheme kaan in Palestinian counterfactuals. Journal of Portuguese Linguistics, 12(1).

Klein, Wolfgang. 1992. The present perfect puzzle. Language 525–552.

Klein, Wolfgang. 1994[2013]. Time in language. London: Routledge.

Klein, Wolfgang. 1995. Frame of analysis. In Dietrich, Reiner & Klein, Wolfgang & Colette Noyau (eds.), The acquisition of temporality in a second language, 17–29. Amsterdam: John Benjamins.

Kusmer, Leland Paul. 2011. There is no future: Diachronic verbal morphology in Fante Twi. Swarthmore College (Honors thesis).

Lindstedt, Jouko. 2000. The perfect-aspectual, temporal, and evidential. In Dahl, Östen (ed.), Tense and aspect in the languages of Europe. Empirical Approaches to Language Typology (6), 365–384. Berlin: De Gruyter Mouton.

Meermann, Anastasia & Sonnenhauser, Barbara. 2015. Distance: between deixis and perspectivity. In Sonnenhauser, Barbara & Meermann, Anastasia. Distance in language: grounding a metaphor, 37-66. Cambridge: Cambridge Scholars Publishing.

Nurse, Derek. 2008. Tense and aspect in Bantu. Oxford: Oxford University Press.

Osam, Emmanuel Kweku. 1994. Aspects of Akan grammar: A functionalist perspective. University of Oregon, Eugene (Doctoral dissertation).

Osam, Emmanuel Kweku. 2004. An introduction to the structure of Akan: its verbal and multiverbal systems. Accra: Department of Linguistics, University of Ghana.

Osam, Emmanuel Kweku. 2008. Akan as an aspectual language. In Ameka, Felix & Kropp-Dakubu, Mary Esther (eds.), Aspect and modality in Kwa languages, 69–89. Amsterdam: John Benjamins.

Reichenbach, Hans. 1947. The tenses of verbs. Elements of Symbolic Logic 287–298.

Rose, Sarah & Beaudoin-Lietz, Christa & Nurse, Derek. 2002. A glossary of terms for Bantu verbal categories: With special emphasis on tense and aspect, volume 55. Munich: Lincom Europa.

Saah, Kofi Korankye. 2002. The nature and function of Akan verbal affixes. In Kropp-Dakubu, Mary Esther & Osam, Emanuel Kweku (eds.), Studies in the languages of the Volta Basin I, 180–196. Legon: University of Ghana.

Simango, Ron. 2010. Causative disguised as stative: The affix-ik/-ek in cicewa. Southern African Linguistics and Applied Language Studies 27(2). 121–134.

Toews, Carmela Irene Penner. 2015. Topics in Siamou tense and aspect. University of British Columbia (Doctoral dissertation).

von Prince, Kilu. 2019. Counterfactuality and past. Linguistics and Philosophy 42(6). 577–615.

Reginald Akuoko Duah
Department of Linguistics,
University of Ghana
P. O. Box LG 61, Legon
Accra, Ghana
raduah@ug.edu.gh

Stefan Savić
Department of English Language and Linguistics,
Rhodes University
Grahamstown - 6140
South Africa
stefansavics@gmail.com