
***-ing* as an Agreement Marker in African American English: Implications for Acquisition¹**

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1 Introduction

This paper focuses on *-ing* in aspectual constructions in African American English (AAE) and argues that it functions as a morphological agreement marker that is required by the feature [HABITUAL], not as a progressive marker. Section 2 presents a general overview of the distribution of the forms of auxiliary *be*, which will be compared to aspectual (habitual) *be* in a later section. Section 3 considers the remote past marker *BIN* and suggests that *-ing* in *BIN V-ing* sequences is linked to the ambiguity in those constructions. *V-ing* in *BIN V-ing* constructions can have a progressive (or state) reading, or it can have a habitual reading. Section 4 presents an overview of aspectual *be* constructions, which are distinguished from progressive constructions and simple tense generics. Section 5 presents an analysis of *-ing* as an agreement marker that is required to occur on verbs in habitual remote past *BIN* and aspectual *be* constructions. The final section of the paper presents data from child comprehension tasks, which raise questions about the extent to which developing AAE speakers understand the habitual

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interpretation associated with aspectual markers *be* and *BIN*. In addition, the data raise questions about the extent to which children begin to associate *-ing* in aspectual *be* and remote past *BIN* *V-ing* constructions with the feature [HABITUAL] as they develop the AAE tense-aspect system.

2 Distribution of Forms of *Be_{aux}*

There are at least two BEs in AAE: the auxiliary (and copula) and aspectual *be*. The auxiliary *be* (*be_{aux}*) in AAE can be spelled out in its overt (contracted or full) forms, or it can be null (Labov 1969; Baugh 1980; Rickford, Ball, Blake, Jackson, and Martin 1991; Déchaine 1993; Green 1993; Walker 2000). Examples of the overt *be_{aux}* are in (1):²

- (1) a. Dee *be_{auxi}* + [EMPH] *t_i* running → Dee IS running.
- b. Dee *be_{auxi}* + [PAST] *t_i* running → Dee was running.
- c. Q*be_{auxi}* + [-PAST] *t_i* → IS Dee running?
- d. Dee *be_{auxi}* + [PAST] *t*+NEG_{*i*} running → Dee wasn't running.
- e. 1st singular [-PAST]: I'm running.
- f. 3rd singular neuter [-PAST]: It's running.

The data in (1) show that auxiliary *be* occurs in its overt form when it hosts an emphatic morpheme (1a), past tense (1b), question morpheme (*Q*) (1c), and past tense and negation morphemes (1d). In addition, *be_{aux}* surfaces in the environment of first person singular non-past and third person singular non-past neuter pronouns. Null (\emptyset) *be_{aux}* occurs when it is not required to host past tense or a *Q* morpheme, as illustrated in (2). The *Q* morpheme may signal question intonation and interrogative force and may be different from the one in (1c), which requires a host.

- (2) a. Dee \emptyset *be_{auxi}* + [-PAST] *t_i* running → Dee running.
- b. Dee \emptyset *be_{auxi}* + [-PAST] *t_i*+NEG_{*i*} running → Dee not running.
- c. Q Dee \emptyset *be_{auxi}* + [-PAST] *t_i* running → Dee running?

3 *-ing* and the Progressive

Be_{aux} (overt or \emptyset) *V-ing* marks the progressive in AAE just as it does in other varieties of English.

- (3) a. Dee running. ('Dee is running')

²The copula can also be null in AAE.

- b. Dee was running.
- c. Dee was sweeping the floor when the phone rang.

As in mainstream American English, stative verbs do not generally occur in the progressive in AAE (4a); however, there are contexts in which this restriction is relaxed (4b).

- (4) a. *Dee is/Ø knowing the answers.
- b. Dee is looking more and more like her mother these days.

V-ing also occurs as the predicate in *BIN* constructions. The remote past marker *BIN*, which is stressed, situates an eventuality or part of it in the remote past (Green 1998). *BIN V-ing* constructions are ambiguous between two readings that are labeled as *BIN_{STAT}* and *BIN_{HAB}*.

BIN_{STAT} situates the initial point of a state in the remote past. These *BIN* constructions are similar to progressives in that they also present “stable situations” (Smith 1997: 84).

- (5) a. Dee BIN running.
‘Dee has been running for a long time’
- b. Dee BIN knowing Swahili.
‘Dee has known Swahili for a long time’

These *BIN* constructions can be represented in a Parsons-type (1990) analysis in which events are argued to underlie the eventualities to which sentences refer:

- (6) a. Dee BIN running.
- b. $(\exists I)[\text{long}(I) \ \& \ \text{Beg}(I) < \text{now} \ \& \ (\exists e)(\exists s)[\text{running}(e) \ \& \ \text{theme}(e, \text{Dee}) \ \& \ \text{IP state}(e,s) \ \& \ \text{Hold}(s, I)]$

The representation in (6b) indicates that some long interval begins before now, and the running event holds throughout that interval.

BIN_{HAB} situates the initial point of a habit in the remote past:

- (7) a. Dee BIN running for 30 minutes.
‘For a long time Dee has had the habit of running for thirty minute stretches’

In (7) temporal modification is restricted to the verb. Modification is of periods of shorter instantiations of eventualities, running events expressed by the verb and that constitute the habit. Temporal adverbials cannot modify

BIN or the length of the long interval. The sentence in (7a) can be represented as in (7b):

- b. $(\exists I)$ [long(I) & Beg(I) now (i) $i \in I$ & HAB_i [for 30 minutes, i]
 $(\exists e)(\exists s)$ [running(e) & theme(e, Dee) & IP state(e, s) & Hold(s, I)]]

Given the restriction on modification, (7a) cannot have the *BIN_{STAT}* reading that means that Dee's running started 30 minutes ago and has held throughout the 30-minute interval. In general, non-stative verbs can have both the *BIN_{STAT}* and *BIN_{HAB}* readings, and, in some contexts, stative verbs can also have both readings. This was also shown to be the case with *be_{aux}* V-*ing* progressives. (See 4a.) A summary of *BIN* readings is given below:

a. ✓ <i>BIN_{STAT}</i> , ✓ <i>BIN_{HAB}</i>	Dee BIN running. (5a, 6a)
b. ✓ <i>BIN_{STAT}</i> , ✓ <i>BIN_{HAB}</i>	Dee BIN looking like her mother. <i>BIN_{STAT}</i> 'Dee has looked like her mother for a long time' <i>BIN_{HAB}</i> 'For a long time, Dee has looked like her mother for periods of time'
c. ✓ <i>BIN_{STAT}</i> , ✓ <i>BIN_{HAB}</i>	Dee BIN having that car. <i>BIN_{STAT}</i> 'Dee has had that car for a long time' <i>BIN_{HAB}</i> 'For a long time, Dee has used that car from time to time'
d. ✓ <i>BIN_{STAT}</i> , ?# <i>BIN_{HAB}</i>	Dee BIN knowing how to fix washing machines.
e. ✓ <i>BIN_{STAT}</i> , # <i>BIN_{HAB}</i>	Dee BIN knowing Swahili.

Table 1 Summary of *BIN* Readings

Both the states indicated by the predicates *looking* (Table 1, b) and *having* (Table 1, c) can have an event reading in habitual contexts. However, the state indicated by the verb *know* is somewhat more resistant to an event reading, as shown in (Table 1, d) and (Table 1, e). While it may be slightly possible to force the *BIN_{HAB}* reading of *know how to fix washing machines*, it is not at all possible to get this reading for *knowing Swahili*, which shows that the type of predicate in the *BIN* construction has some effect on the interpretation.

4 -*ing* and Habitual

In addition to occurring in progressive contexts, V-*ing* also occurs in habitual *be* constructions, which can be distinguished from progressive contexts.

In habitual constructions, habitual or aspectual *be* (*be_{asp}*) indicates that an eventuality recurs:

- (8) Dee be running.
'Dee usually runs/is usually running'

Habitual *be* constructions are similar to simple tense generics, but they can be distinguished from generics in that *be_{asp}* constructions are not ambiguous between habitual/generic and ability readings, but simple tense generics are:

- (9) a. Bruce work on old Thunderbirds.³
b. Bruce be working on old Thunderbirds.
'Bruce works on old Thunderbirds from time to time'

While the sentence in (9a) can have the reading Bruce will work on Thunderbirds or has the ability to work on old Thunderbirds although he may not have had the opportunity to do so, or it can mean that he actually works on old Thunderbirds from time to time.⁴ The sentence in (9b) can only have the universal reading, in which Bruce does indeed work on old Thunderbirds from time to time; it cannot have the ability reading in which Bruce can work on old Thunderbirds but has never actually worked on one. The *be_{asp}* construction such as that in (9b) has as its core reading habitual, but it is expressed with *be V-ing*, not simple tense. The *be V-ing* construction is similar in morphological form to the progressive, and it also has an in-progress reading:

- (10) Dee be riding her bike when the phone ring.
a. in-progress reading: Dee's bike riding is in progress when the phone rings.

However, the sentence in (10) also has the closed reading (Smith 1997), in which the bike riding event is not in progress when the phone rings:

- b. closed reading: Dee's bike riding begins after the phone rings.

The reading in (10b) clearly distinguishes the *be_{asp}* construction from the progressive. The habitual *be* construction differs from the progressive in one

³Person and number agreement marking in AAE is variable at best. In most cases, there is no overt person and number agreement marking in 3rd person singular contexts.

⁴The characterization of the generic reading as an ability reading is based on the notion of capacity reading in Schubert and Pelletier (1989).

additional way. As shown in (11a), *be_{asp} V-ing* is compatible with both states and events; however, as shown in (11b), progressive *be_{aux} V-ing* is not compatible with stative verbs:⁵

- (11) a. Dee be knowing how to fix washing machines.
 Literally: Dee usually shows that she knows how to fix washing machines (by repairing broken machines, giving advice about which parts of the machines should be replaced, etc.).
 b. *Dee Ø/IS knowing how to fix washing machines.

The example in (11a) provides further support that *be_{asp} V-ing* and *be_{aux} V-ing* (progressive) are different and that difference may be linked to *-ing* in both forms. The descriptive generalization is that *be_{asp}* is analyzed as introducing a habitual operator (HAB) into the logical representations. HAB binds variables ranging over eventualities. It relates an eventuality expressed by a predicate to an occasion. Consider the representation below:

- (12) a. Dee be riding her bike when the phone ring.
 b. HAB_e [ring (phone, e)] [riding bike (Dee, e)]

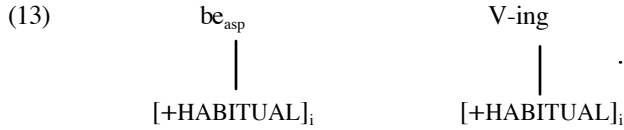
Informally, the representation in (12) says that habitually when the phone rings, Dee rides her bike at that time.

5 *-ing* as an Agreement Marker

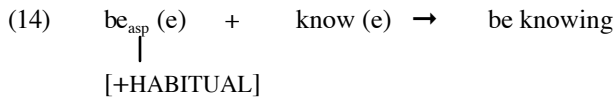
5.1 *-ing* and *Be_{asp}* Agreement

In the preceding section, it has been shown that *be_{asp} V-ing* and *be_{aux} V-ing* differ in several ways, and the differences raise the question about the role of *-ing* in the constructions. *Be_{asp} V-ing* can have the in-progress reading, but even when it has that reading, it still has the habitual or quantificational reading. In this construction, I want to suggest that *-ing* matches the habituality of *be_{asp}*, so it is analyzed as an agreement marker rather than as a marker of an event that is in progress. As an agreement marker, *-ing* is required in *be_{asp} V-ing* constructions; that is, *be_{asp}* forces the verb to occur with morphological agreement expressed as *-ing*:

⁵As is clear from the sentence *Dee is looking more and more like her mother these days*, stative verbs can occur in the progressive with a type of event reading.



The analysis of *-ing* as an agreement marker in be_{asp} *V-ing* constructions captures the difference in meaning between be_{asp} *V-ing* and be_{aux} *V-ing* constructions. Another advantage of such an analysis is that it provides an indirect explanation for why be_{asp} can never occur as \emptyset , but be_{aux} can. The explanation is that be_{asp} introduces into the representation an eventuality argument, so it cannot be absent. Habituality and the eventuality argument are linked to *-ing*:



On the other hand, in the case of be_{aux} *V-ing*, be_{aux} does not introduce any additional information into the structure, so it is not required to occur on the surface. Furthermore, if it is indeed the case that *-ing* in progressive constructions stativizes verbs, then it is clear why be_{aux} *-ing* is not compatible with stative verbs. On the other hand, *-ing* in aspectual *be* constructions coerces verbs to have a habitual reading, and this coercion applies to stative verbs by making them take on eventive readings.

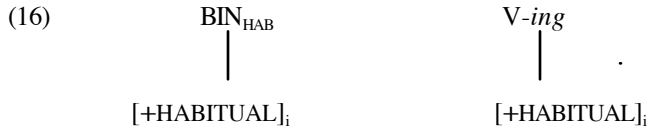
- (15) a. *Bruce is/ \emptyset knowing the answer.
 b. Bruce be knowing the answer.
 Literally: Bruce generally does something to show that he knows the answer.

Along these lines, be_{asp} must occur on the surface, not as a stativizer but as a quantificational element that introduces an eventuality argument into the representation and forces verbs to take a habitual interpretation. This description is compatible with the representation in (12b) above.

5.2 Extending the Agreement Analysis to BIN_{HAB}

The BIN_{HAB} *V-ing* reading is quite similar to the be_{asp} *V-ing* reading. Both constructions indicate habits, but the difference is that the former refers to habits that started in the distant past, while the latter does not make any claims about how far in the past the habit started. Given the similarity between the two constructions, it seems possible to extend the *-ing* analysis

proposed for be_{asp} V-*ing* constructions to *-ing* in BIN_{HAB} constructions. That is *-ing* in BIN_{HAB} constructions also matches the [HABITUAL] feature associated with BIN , as shown in the representation below:



A question that arises in light of the proposal for V-*ing* in BIN_{HAB} constructions is about the source of the [HABITUAL] feature. There are a number of explanations for this feature. The explanation that I will present is related to the cooccurrence restriction on be_{asp} and BIN . The claim is that both markers are generated in the head of the Aspect Phrase (AspP), so they cannot occur at the same time. The following are ruled out just for that reason:

- (17) a. *_[AspP] be BIN [_{VP} running] (*Bruce be BIN running.)
 b. *_[AspP] BIN be [_{VP} running] (*Bruce BIN be running.)

While the cooccurrence of be and BIN leads to ungrammaticality, the logical interpretation resulting from the sequence of the two is compositional and the actual meaning of habitual remote past, the reading of BIN_{HAB} . The meaning cannot be a result of the combination of the two markers because they never cooccur, but it might result from a habitual feature that may be left in the representation because there is no place for be_{asp} when BIN already occupies the Asp position. Because BIN also carries a pitch accent, then it is the marker that always wins out when there is competition between be_{asp} and BIN for the Asp position. Therefore, the sentences in (17) are ungrammatical. The meaning is conveyed by *Bruce BIN running*, and the argument here is that the feature [HABITUAL] occurs because the marker be_{asp} cannot. In this case, the *-ing* in BIN_{HAB} V-*ing* constructions is required by [HABITUAL] much like it is required in be_{asp} V-*ing* constructions.

The properties of progressive *-ing* in AAE that occurs in be_{aux} V-*ing* constructions is also found in BIN_{STAT} V-*ing* constructions (4a, b). The *-ing* in those constructions indicates that the eventuality indicated by the verb has been in progress from some point in the remote past to the speech time. In such cases, *-ing* can be argued to be a stativizer, which is different from the *-ing* that is required to match the [HABITUAL] that is associated with be_{asp} and BIN_{HAB} .

In summary, the argument is that *-ing* in be_{asp} and BIN_{HAB} V-*ing* constructions is a type of morphological agreement that is required by the fea-

ture [HABITUAL]. It does not have the same function as progressive *-ing* in *be_{aux}* and *BIN_{STAT}* V-*ing* constructions.

6 *-ing* Agreement and Acquisition of Aspectual Markers

Given the prominence of aspectual markers and the interpretation of verbal predicates in aspectual marker sequences, a number of questions about the development of these markers and their use with certain predicates in child AAE arise. In order to address some of these questions, data from two comprehension tasks, one on *BIN* and the other on *be_{asp}*, are considered.

6.1 *BIN* Comprehension Tasks

The *BIN* data are from forty-two three- to five-year-old developing AAE-speaking children in a child development program in southwest Louisiana.⁶ The participants were tested on ten scenarios that portrayed objects/characters as having been engaged in an activity for a long time as compared with other objects/characters that had been in the state or engaged in an activity for a shorter time. The scenarios consisted of short stories, pictures, and prompts. The interviewer read the short story to the participant while pointing to the corresponding pictures and asked *BIN* prompts (or target questions) related to the pictures. A sample scenario is given below:

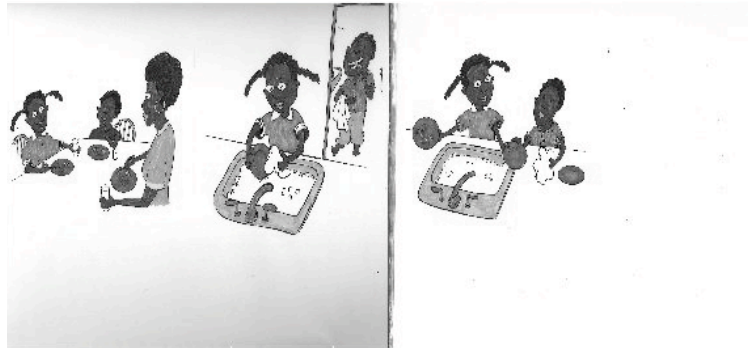


Figure 1 *BIN* Scenario (*BIN_{STAT}*)

Bruce and Jenny's mother told them that they could watch TV if they wash and dry the dishes after dinner. Jenny started washing the dishes while Bruce went to put on his pajamas and brush his teeth. Then he came back to help Jenny dry the dishes.

⁶Eight participants have been added to the study since the presentation. The overall results have not changed.

The ten scenarios consisted of *BIN* followed by *V-ing*, *V-ed*, *N*, and *Adj*; however, only *BIN V-ing* results will be reported here. The percentage correct for the *BIN V-ing* scenarios is given in the table below:

Prompt	% Correct
Scenario 1: Who <i>BIN</i> working at the kitchen sink? (Jenny) 'Who has been working at the kitchen sink for a long time?' (gloss)	83
Scenario 2: Who <i>BIN</i> knowing how to climb trees? (Jenny) 'Who has known for a long time how to climb trees?' (gloss)	81
Scenario 3: Who <i>BIN</i> fixing bikes? (the old man) 'Who has been fixing bikes for a long time?' (gloss)	55

Table 2 *BIN V-ing* Results

The participants scored over 80% correct on the *BIN working* and *BIN knowing* scenarios. The claim is that children who interpret *BIN* as a distant past marker, distinct from the simple past, will select Jenny for the *BIN working* scenario, and they will select the character who has known how to climb trees longer than the other characters for the *BIN knowing* scenario. In both cases, we get the *BIN_{STAT}* reading, in which a state has held from the distant past to the speech time. For example, according to the scenario, Jenny started working at the kitchen sink a long time ago, and the working at the kitchen sink event has held since that time. The participants scored much lower on the *BIN fixing* scenario. The difference between the *BIN fixing* scenario and the other *BIN V-ing* scenarios is that it is ambiguous between a *BIN_{STAT}* and a *BIN_{HAB}* reading. That is, in the *BIN fixing* scenario, the targeted character (old man) is not portrayed as fixing a bike at the speech time, so the story and pictures are compatible with the reading in which the old man started fixing bikes a long time ago, and he still fixes them from time to time. Compare the *BIN working* scenario, in which Jenny is portrayed as working at the kitchen sink, to the *BIN fixing* scenario, in which the old man is not working on the bike. If it is the case that children are sensitive to the *BIN_{STAT}* and *BIN_{HAB}* readings, then a possible explanation for the lower *BIN fixing* score is that the children have some difficulty with the *BIN_{HAB}* reading, in which *V-ing* is taken as a habitual agreement marker rather than as an in progress marker. The data for the *be_{asp}* scenarios offer some support for the hypothesis that children have difficulty with the habitual interpretation.

6.2 *Be_{asp}* Comprehension Tasks

The *be_{asp}* comprehension tasks were designed to determine whether developing AAE-speaking children associate *be_{asp}* with habitual situations. The *be_{asp}* data are from twenty-five developing AAE-speaking children in a child development program in southwest Louisiana.⁷ The six test scenarios included a short story, corresponding pictures, and a prompt or target question that featured *be_{asp}* followed by a verbal or non-verbal predicate. A sample scenario is given below:



Figure 2 *Be_{asp}* Scenario

At lunchtime, all the kids eat together. Bruce always has turkey sandwiches because he loves turkey. He had turkey sandwiches last week and this week. Jenny likes peanut butter and jelly or ham and cheese. She doesn't eat turkey for lunch. Faye likes everything. She sometimes has a cheese sandwich. Today, Faye has a turkey sandwich but Bruce doesn't. He has soup. *Who be having turkey sandwiches for lunch?*

As the results show, the participants scored much higher on the *BIN* scenarios than they did on the *be_{asp}* scenarios:

⁷Nine participants have been added to the study since the presentation.

Prompt	% Correct
Scenario 1: Who be swimming in the neighborhood pool? 'Who usually swims in the neighborhood pool?' (gloss)	48
Scenario 2: Who be having turkey sandwiches for lunch? (Bruce) 'Who usually has turkey sandwiches for lunch?' (gloss)	56
Scenario 3: How does Faye be getting to school? 'How does Faye usually get to school?' (gloss)	56
Scenario 4: Where does Jenny's sister Haley be hiding? 'Where does Jenny's sister Haley be hiding?' (gloss)	60

Table 3 *Be_{asp}* V-*ing* Results

Given the function of *be_{asp}*, there is no ambiguity; all of the constructions have a habitual reading. While the participants scored above chance on all of the scenarios, they did not score above 60%. The result for *BIN fixing* (Table 2) is closer to the result for the *be_{asp}* scenarios than it is to the results for the *BIN_{STAT}* V-*ing* scenarios. If the child speakers have not quite grasped the feature [HABITUAL], then they would be expected to do less well on *BIN_{HAB}* and *be_{asp}* scenarios than on the other scenarios. These are the findings; however, because there is only one *BIN_{HAB}* scenario in the *BIN* experiment, it is not clear how reliable the claim about *BIN_{HAB}* is. However, the results for *be_{asp}* seem to be more robust. Nevertheless, given the claim about [HABITUAL] requiring an *-ing* agreement marker, more data and experimentation on these constructions would be useful in providing insight into children's interpretation of the habitual markers and the type of morphology that accompanies them.

7 Summary

V-*ing* occurs in progressive contexts as well as in *be_{asp}* contexts, and there is sufficient evidence to show that *-ing* in the two contexts has different functions.

-ing in *be_{aux}* V-*ing* constructions indicates that an eventuality is in progress, while *-ing* in *be_{asp}* V-*ing* contexts is a type of agreement required by the habitual marker *be_{asp}*. In other words, in the latter context, *-ing* is a morphological marker that agrees with the [HABITUAL] feature of *be_{asp}*, which can coerce even stative predicates into a habitual reading. The question about whether *-ing* in *BIN_{HAB}* V-*ing* constructions is also a type of

morphological agreement that is required by the [HABITUAL] feature was also raised. Data from developing AAE-speaking children show that they fare well on BIN_{STAT} *V-ing* constructions; however, they do less well on be_{asp} *V-ing* and BIN_{HAB} *V-ing*. The claim is that children have difficulty with the habitual feature associated with the aspectual markers, but more experimental work should be conducted to determine whether children encounter the same type of problems with be_{asp} and BIN_{HAB} .

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