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The Realisation of Auxiliaries in a Non-Standard Variety of English

An analysis of optional and non-optional realisation of auxiliaries in African American English

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ABSTRACT

This thesis seeks to understand the grammar of omitted auxiliaries in African American English (AAE) by asking the questions: Are auxiliaries in AAE present at any level of representation? Then, if they are, what rules or principles govern it? The scope is narrowed by only considering two types of sentences, plain declaratives, such as "she dancing", and sentences containing aspectual markers, such as "she BIN dancing". The realisation and non-realisation of the auxiliaries in these sentences are shown to be either optional (in plain declaratives) or non-optional (in sentences containing aspectual markers). The latter sentence type is analysed syntactically, where it is argued that the realisation of auxiliaries can be reminiscent of standard English (SE) do-support, showing that the auxiliaries are not deleted. When they appear in sentences containing aspectual markers, they are inserted rather than being forced to the surface. Furthermore, the plain declaratives are analysed phonologically, utilising an Optimality-Theoretic framework. This framework provides the explanation that weak syllables are deleted, leading to the medial auxiliaries to be omitted. It also captures the optionality of realisation of auxiliaries, showing the linguistic variation within AAE.

SAMMENDRAG

Denne masteroppgaven søker å forstå grammatikken bak utelatte hjelpeverb i afrikansk amerikansk engelsk (AAE) ved å stille disse spørsmålene: Er hjelpeverb i AAE til stede på et av representasjonsnivåene? Om de er det, hvile regler og prinsipper styrer dette? Omfanget til oppgaven blir begrenset ved å kun undersøke to ulike setningstyper: enkle deklarative setning, slik som «she dancing», og setninger som inneholder aspektuelle markører, slik som «she BIN dancing». Realiseringen og ikke-realiseringen av hjelpeverb i disse setningene er enten valgfritt (enkle deklarative setning), eller ikke (setninger som inneholder aspektuelle markører). Den sistnevnte setningstypen er analysert syntaktisk, hvor det blir argumentert for at realiseringen av hjelpeverbene kan minne om «do-support» i standard engelsk (SE), som viser at disse hjelpeverbene ikke er slettet. Når de blir brukt i setninger som inneholder aspektuelle markører, er de satt inn og ikke tvunget til overflaten. Videre er enkle deklarative setninger analysert fonologisk ved å bruke et optimalitet-teoretisk rammeverk. Dette rammeverket forklarer at svake stavelser blir slettet, som leder til uteblivelsen av hjelpeverb. I tillegg fanger det valgmulighetene angående realiseringen av hjelpeverbene, som viser den lingvistiske variasjon innad AAE.

ACKNOWLEDGEMENTS

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List of abbreviations

AAE	African American English
CP	Complementizer Phrase
DP	Determiner Phrase
LED	Left-edge deletion
MAD	Medial Auxiliary Deletion
NP	Noun Phrase
OT	Optimality Theory
PP	Prepositional Phrase
SE	Standard English
SPD	Subject Pronoun Dropping
STRST	STRONGSTART
t	Trace
TP	Tense Phrase
US	United States
vP	Little-*v* Phrase
VP	Verb Phrase

1 Introduction

1.1 Deletion in English varieties

"Why waste time say lot word, when few word do trick?" (McDougall, Daniels, Lieberstein, Gervais, 2011). This is a question asked by the fictional character, Kevin Malone, in the sitcom *The Office.* Most, if not all, will argue that this sentence construction is completely ungrammatical. However, perhaps to Kevin's delight, there are sentence constructions in colloquial English where one can delete and contract material, and still have the sentences remain grammatical.

(1)   She's playing a game.

In this sentence *is* has been contracted and cliticised to *she*. Generally, in (written) English, it is required to have a finite auxiliary, and these can be contracted as seen in the example above. However, in colloquial English we may observe that auxiliaries are completely left out of sentences.

(2)   You still writing your thesis?[1]
        "Are you still writing your thesis?"

In this example, the auxiliary *are* is missing at the left edge. This is a common form of deletion in colloquial English, where things are missing at the left edge. This is not restricted to only auxiliaries, as pronouns are also dropped at the left edge.

(3)   A: You coming to the party tonight?
        "Are you coming to the party tonight?"
        B: Can't, still writing my thesis.
        "I can't, I am still writing my thesis."

The left-edge deletion (LED) seen in the different examples have been extensively researched. Linguists such as Justin M. Fitzpatrick and Andrew Weir have utilised different theories trying to answer why this deletion happens and what kind of rules govern the deletion process. Another common form of deletion, which is perhaps a little less researched than LED, is deletion of medial auxiliaries in *wh*-questions.

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[1] Unless otherwise specified, all examples are my own. The examples of AAE are often my own formulations but since I am not a speaker of the variety, examples may have been inspired by sentences found in Green (2002) or Conner (2019).

(4)   Whatchu doin'?

        "What are you doing?"

All of these forms are seen in mainstream colloquial English, but what is seen less is medial auxiliary deletion (MAD) in declarative sentences. A variety of English in which this is observed is African American English (AAE).

(5)   a. Vani playing *Phasmophobia* with Georgia.

        "Vani is playing *Phasmophobia* with Georgia".

        b. Vani BIN playing.

        "Vani has been playing for a long time".

In (5a), the progressive auxiliary *is* does not appear, and in (5b), we do not see the perfect auxiliary *has* either. What is not immediately clear is whether these auxiliaries have been deleted or if there is no form of underlying representation. AAE is a non-standard variety of English, with its own grammar and rules, thereby making it difficult to ascertain whether deletion occurs or not. Due to this ambiguity, the realisation of auxiliaries in AAE becomes a very interesting phenomenon to research.

1.2 My goals for the thesis

Understanding the grammars of the different varieties in languages is an important part of linguistic research. Therefore, my goal is to give an analysis that can capture the patterns of optionality and variation within AAE, understanding how [non-] realisation of the auxiliaries works. The questions discussed in this thesis are the following: *Are auxiliaries in AAE present at any level of representation? Then, if they are, what rules or principles govern it?*

The observant reader might notice that (5a) mimics (1). This is intentional, as there seems to be a correlation between instances where one may contract auxiliaries in standard English (SE), and where one may delete auxiliaries in AAE. However, there are constructions in AAE, such as (5b), which, based on the perspective of an SE speaker, indicates that there is *supposed* to be an auxiliary. Is this truly the case? My proposal is that we are dealing with two different cases of non-realisation of auxiliaries. I believe in cases such as (5a), the non-realisation is optional; it is possible to formulate this construction with a full form, contracted and deleted auxiliary. On the other hand, I will argue that constructions such as (5b) do not have auxiliaries at any level of representation. The non-realisation is non-optional in these cases. Furthermore, I propose that the optional [non-] realisation should be analysed phonologically, while the non-optional [non-] realisation should be analysed syntactically.

1.3 The structuring of the thesis

Having given my goals for the thesis, I will now give a brief overview of the structure of the thesis. In section 2, I will explain the background of my thesis, giving an overview of what AAE is and explaining some of its grammar, while also presenting the data that will be covered throughout the thesis. Section 3 will discuss whether there is any deletion involved in AAE, giving an account of the variability observed within this particular variety and the use of auxiliaries in combination with aspectual markers. The next two sections will cover the main analysis for the thesis, whereas section 4 will analyse the non-optional [non-] realisation of auxiliaries, and section 5 will analyse the optional [non-] realisation of auxiliaries. Finally, I will conclude whether auxiliaries are present at any level of representation and explain the rules and principles that govern it.

2 Background

The background for this thesis consists of mainly two parts. The first presents an overview of AAE as a variety, its origins and distinction between this variety and SE. The second part covers the data that will be looked at in the thesis, while also briefly outlining the different articles alongside theories that will be used. A more detailed introduction to these theories and articles will find place in their respective sections.

2.1 On the origin and speakers of AAE

AAE[2] refers to a variety and linguistic system that African Americans use when speaking. This dialect stems from the variety of English spoken by the African diaspora and Caribbean Creoles (Green, 2002, p. 8). There are many different accounts as to when people started speaking AAE. Some will state that this happened when ex slaves were thrust into an environment where they had to learn to speak English, or it could have had its origins in Niger-Congo languages. There are hypotheses that AAE was originally a creole, such as Gullah or Jamaican creole (Green, 2002, p. 9). Other hypotheses claim that characteristics found in AAE can be traced back to other varieties of English, such as Southern American varieties and those speaker patterns found in the places where African Americans settled in the 18th – 19th centuries (Green, 2002, p. 9). There are different accounts as to what the origin of AAE is, due to there being very little data available regarding the language of slaves who were brought to America (Green, 2002, p. 9). The different accounts are significantly documented, and it is not my intention to argue for what is "correct", rather I want to introduce some ideas as to how the variety came to be.

I have stated that AAE is spoken by African Americans in the United States. However, it is not the case that every African American speaks this variety, neither is it the case that this dialect is bound to a specific geographical location. It can be hard to define exactly what it is, but the easiest way to illustrate what AAE is, might be to compare it to SE. It differs from SE both lexically and grammatically.

(6)   She be telling people she eight   (Green, 2002, p. 48).

      "She is always telling people she's eight".

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[2] An important aspect to note is the different names that have been used for AAE. These days, some common names other than AAE, are African American Language, Afro American English, and African American Vernacular English (AAVE). These different names all refer to the same variety, while perhaps highlighting different aspects of the dialect (Green, 2002, pp. 6–7). I have chosen to use the term AAE throughout my thesis, partly because Green (2002) is my main source regarding AAE, and because it will not be limited to a certain age group (AAVE might be considered by some to be a variety for young people) (Green, 2002, p. 7).

(7)	Y'all finna eat?	(Green, 2002, p. 70).
	"Are you getting ready/about to eat?"	
(8)	Sarah should'a dən ate.	
	"Sarah should have already eaten".	
(9)	Rosemari *BIN* running with Rebekka.	
	"Rosemari has been running with Rebekka for a long time"	

In these examples, we see some lexical items that do not appear in SE, such as *finna, dən,* and *BIN*, and (6) and (9) showcases a different grammar from that in SE. With such few examples, I have only *barely* scratched the surface of what it means to speak AAE. For this thesis, the grammar of AAE is the most important aspect. This will be analysed and discussed in-depth throughout the whole thesis. From the limited data presented, we do see a different grammar structure and lexical items, and due to this difference, some people carry the misconception that this variety of English is "broken". As will be made clear in this thesis, AAE is a valid variety with a functioning grammatical structure. While there are structural differences, there are also similarities to SE, where AAE speakers may produce utterances identical to those of SE. Having these similarities and differences provide ample opportunity to compare the two. In the following section I will continue the exposition of the grammar of AAE and compare it to SE.

2.2 AAE and its grammar

Having gone through some of the origins of AAE, I will now explain some of the grammar of AAE, where I specifically will look at the syntax and phonology. While people have made analyses of the formal linguistics, the variety has mostly been studied in historical and sociolinguistic aspects, with the implications for education being also being an important topic (Green, 2002, p. ix). *African American English: A Linguistic Introduction* (2002) is the first book length discussion regarding the formal linguistic aspects of AAE written by a native speaker of the variety (Green, 2002, p. ix), and most of my observations on AAE will be based on Green's analysis.

Looking at the syntax of AAE, some argue that a few of the defining syntactic features coincide with features of other varieties of English. Some of these being US Southern States English, and the Irish Hiberno English (Green, 2002, p. 35). One such syntactic feature is the aspectual marker *dən* which can be found in the Southern States English (Green, 2002, p. 35). Green notes that while there might be validity to the claim, it is important to not just look at the

superficial likeness between the varieties, but see if AAE exhibits the same patterns as other varieties (Green, 2002, p. 35). There are features that can only be found in AAE, and one such feature is that of habitual *be*. This is an aspectual marker that signals a habitual occurrence of an event (Green, 2002, p. 35).

(10)   Mariell be working late.

"Mariell is usually/always working late".

This gives an indication that AAE has its own grammar, and while there might be influences from other varieties of English, there are parts that stand out as "purely" AAE. While it would be interesting to compare the different varieties that have coinciding linguistic features with AAE, I will not be doing these types of comparisons. As aforementioned, I will be analysing and discussing the (apparent) medial auxiliary deletion that one sees in AAE, and I believe the best way to do this is by making some comparisons to the linguistic features of auxiliaries in mainstream colloquial English.

2.2.1 Comparing auxiliaries in AAE and SE

2.2.1.1 NICE-properties

As the use of auxiliaries is an integral part of this thesis, I want to give a very brief account of what defines an auxiliary in SE and contrast this to how auxiliaries are defined in AAE. In the linguistic world today, it is common knowledge that auxiliaries and lexical verbs differ from each other. A typical way of defining what an auxiliary is, and how this differs from a lexical verb, is by using the acronym NICE. This stands for **n**egation, **i**nversion, **c**ode, and **e**mphasis, which are properties that describe auxiliaries in standard English. Underneath, I have given examples that highlight each of these properties.

(11)   a. I can't deal with her today (negation).

b. *[3]I dealn't with her today.

c. Have you gone to the store today (inversion)?

d. *Went you to the store today?

e. I've seen the *Barbie* movie, and Winnie has too (code).

f. I saw the *Barbie* movie, *and Winnie saw too.

g. I *have* cleaned the house today (emphasis).

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[3] Throughout this thesis I will use an asterisk to indicate that a sentence is ungrammatical, the number sign if the sentence is ungrammatical in only certain contexts, and a question mark if it is unclear whether the sentence is grammatical or not.

h. #I *cleaned* the house today. (# on (h)'s emphatic reading)

(11ab) show the differences in negation with and without an auxiliary. In (11a) the aux *can*, unlike the lexical verb *deal*, can host negation. The reason for this is that syntactically, *deal* heads VP, and cannot raise past "not" to T.[4] The next example (11cd), which covers inversion with the subject, showcases the same type of "problem" as (11ab), where the need for an auxiliary stems from the lexical verb's inability to raise to C.

(12)   *Went you to the store?   (13)   Have you gone to the store?
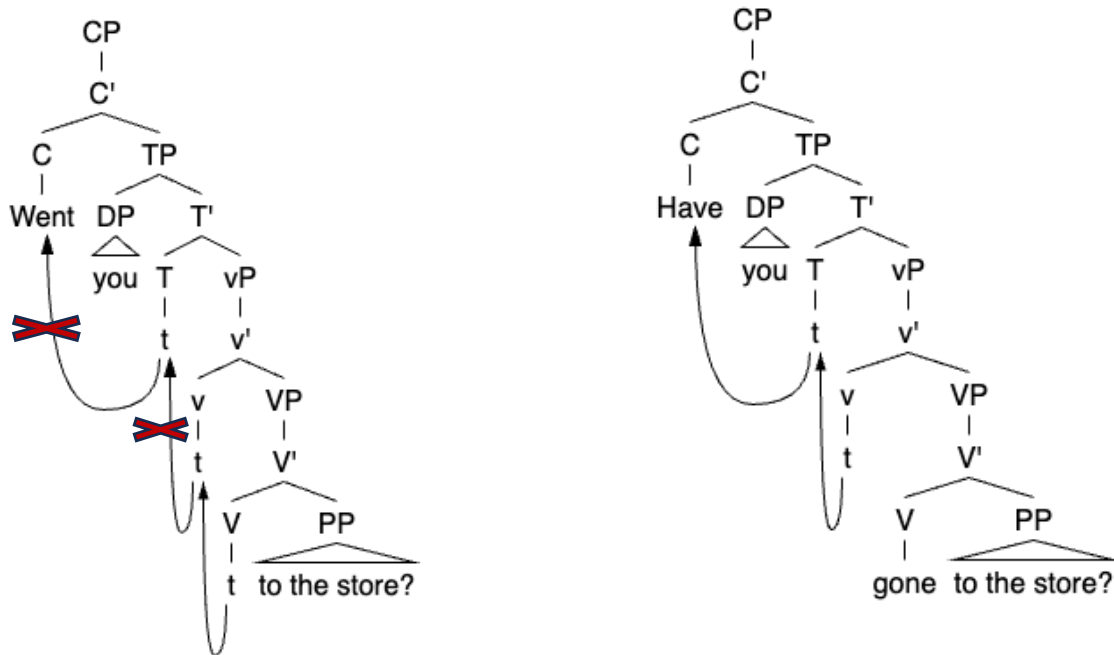
(12) showcases the impossible movement of *went* raising from V to C. Lexical verbs, with the exception of copula be, cannot raise in the same manner that aux *have* can as shown in (13). The movement that *have* undergoes is called subject-auxiliary-inversion (SAI), and this further distinguishes the aux from the lexical verb.

The next example, (11ef), showcases the property of code. This property refers to constructions where a previous VP is omitted, and the aux is repeated and left stranded (Garnvik, 2022, p. 8). As seen in (11f), it is not possible to strand the lexical verb *saw,* but the aux *have* may be stranded at the end of the sentence.

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[4] In this section I will not be presenting any syntax trees that showcase negation with and without an auxiliary. A more in-depth explanation can be found in section 4.1, and so I will only present the trees that deal with SAI.

Lastly, (11gh) deals with the property of emphasis. This one differs from the other properties, because (11h) is not *ungrammatical*. Emphasis concerns notions of affirmation and disagreement, where the former specifically often refers to the stress of words (Garnvik, 2022, p. 9). Garnvik (2022) explains that while every verb can be stressed due to focus purposes, the type of verb that is stressed will yield different types of readings (p. 9). The examples given below will showcase these different readings.[5]

(14)   A: Did you see it?

         B: No, I didn't *see* it, I *heard* it.

(15)   A: Did you see it?

         B: No, but I *did* hear it.

(16)   A: You didn't find it.

         B: What do you mean? I *did* find it!

(17)   A: You didn't find it.

         B: #I *found* it.

As seen in (14), it is possible for the lexical verb to be emphatic should the context be that you are questioning what kind of action is involved (Garnvik, 2022, p. 9). It is, of course, also possible for the auxiliary to be stressed in such contexts. In the case of doubtful statements, such as in (16) and (17), it would be unnatural to stress the lexical verb (Garnvik, 2022, p. 9). While lexical verbs may be emphatic in certain contexts, an auxiliary can be emphatic in any context (where it is needed), and there are some contexts where *only* auxiliaries can be stressed.

2.2.1.2 The properties of auxiliaries in AAE

The previous section has demonstrated how auxiliaries differ from lexical verbs, and what their properties are. Considering AAE, the auxiliaries have different properties, some which correspond with those of standard English auxiliaries, and others which do not. For the sake of relevancy, I will only be mentioning a couple properties which Green (2002) discusses. The first I will mention is that of auxiliaries appearing in contracted, reduced or zero forms. These could be forms such as 's, 'm, 'll/'a 'd and Ø (Green, 2002, p. 40). Some of these are normal in standard English, while others are not.

(18)   I'm walking to the store.

         b. It's raining outside.

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[5] The examples are my own formulations but are based on the examples given in Garnvik (2022), p. 9.

c. I'd go there if I could.

(19)   (Green, 2002, p. 40).

a. Bruce'a study when he get home.

b. They Ø walking too fast.

These two examples showcase the forms that are common in SE, and those that are not.

The other property that Green (2002) mentions which I will consider is that auxiliaries in polar questions (which in mainstream English would involve SAI) do not occur obligatorily. This is not entirely unique to AAE, because we do find deleted material at the left edge in SAI-sentences in colloquial English. However, the optionality of having auxiliaries in polar questions is not a defining property in colloquial English as it is in AAE.

If the auxiliary does not appear, the questions will be signalled with intonation (Green, 2002, p. 42). Green also notes that modals, past tense auxiliaries and copula *be* (was) cannot be omitted, since it would not be possible to retain a past tense reading without having the tensed auxiliaries/ copula *be*. However, they do not have to be inverted with the subject, as seen in (22b) (Green, 2002, p. 42).

(20)   a. Is she here?

b. She here?

(21)   (Green, 2002, p. 42)

a. Have Bob left?

b. Bob left?

(22)   (Green, 2002, p. 42)

a. You'a teach me how to swim?

b. Bruce was running?

c. #Bruce running? (# on (c)'s past tense reading).

In these examples, the (b) options are grammatical in standard colloquial English. It is unclear, based on what I have found in Green (2002) whether these will have the same interpretation in both AAE and SE. In SE, sentences such as the (b) options may be called rising declaratives which can have a "surprised"/ "wait really?!" interpretation (A. Weir, personal communication, 9th of March 2023). Green (2002) does not extensively explain the intonation used in these cases, i.e. whether they have a different interpretation from SE. The only comment regarding the intonation in these sentences is that one will use a question intonation to indicate that the construction is a question (Green, 2002, p. 42). The most important takeaway from both of

these properties is that we see there is a form of optional realisation regarding the auxiliaries in AAE.

2.2.2 Aspectual markers in AAE

The last aspect of African American English grammar that I want to introduce is their use of aspectual markers. These markers are verbs, that unlike tensed verbs that situates an event in time, refers to "duration, completion or habitual occurrence" (Green, 2002, p. 45). In standard English, one may refer to the durative (continuous) aspect of verbs such as *running*, or the perfect aspect of *have eaten*. This, of course, is used in AAE too, but this variety of English uses different aspectual markers that we do not see in SE. These markers are similar in form to auxiliaries in SE, which can lead to confusion between the two language systems (Green, 2002, p. 44). A non-AAE speaker might not understand the meaning behind the marker, and interpret it the same way one would with an auxiliary in SE (Green, 2002, p. 44).

There are many different markers in AAE, and I have already briefly introduced the habitual marker *be*, and have used the marker *dən* in the earlier example (8). Not every marker needs to be described and explained in detail, but one other marker I do want to introduce which will be integral to the thesis, is *BIN*. This marker may just seem like a stressed version of *been*, but it "situates an activity or state (or some part thereof) in the remote past" (Green, 2002, p. 54).

(23)   a. She BIN writing.

        "She has been writing for a long time".

        b. She been writing.

        "She has been writing".

In this example, BIN must be stressed to situate the activity in the remote past, should it not be stressed, it will not have the same effect. We also see that there are no auxiliaries that support the aspectual marker. There are only a few instances where one will see auxiliaries in combination with aspectual markers, one of these instances being when there is need for emphatic affirmation. I will provide an example here, but for the in-depth analysis, see section 3.3.

(24)   She HAVE BIN working.

        "She HAS been working for a long time".

Having explained a couple of the properties of auxiliaries in AAE, and having introduced aspectual markers, this lays the groundwork for what I am looking for. As briefly mentioned in

the introduction, I will analyse the instances where the auxiliaries appear to go missing (with respect to SE) in the middle of sentences, i.e. MAD. To do this, and to narrow down the scope of the thesis, I will look at only two types of sentences: Those containing aspectual markers and declarative sentences with omitted auxiliaries (that is, where an auxiliary would be present in SE). Both of these sentences are declarative sentences, but to make what I am referring to clearer, I will only refer to sentences such as those in (25) as plain declaratives, and those in (26) as sentences containing aspectual markers.

(25)   a. Sarah dancing.

        b. She out running.

        c. They brawling at the tavern.

(26)   a. He *BIN* married.

        b. Bruce *BIN* running.

Having briefly introduced some of the history and grammar of AAE, I will now introduce some of the data and briefly mention the theories that will be used in this thesis.

2.3 Introducing the data and theories used in the thesis

As seen in the previous section of the thesis, we know that there are apparent missing auxiliaries in AAE, and that this is not exclusive to this specific variety. In this thesis, I will be analysing different theories of deletion in English, where most of these do not deal with AAE directly. The theories of deletion I will be using (in order of appearance) are Labov (1969), which discusses the deletion and contraction of the English copula, Thoms (2011) discussing do-support from a perspective of locality, Fitzpatrick (2006), which handles deletion through movement, Hendrick (1982), which deals with deletion fed by rules of contraction, and finally, Weir (2012) which analyses left-edge deletion (LED) in an optimality theoretic framework. Of these articles, Labov (1969) is treated differently, because I do not analyse the theory, but I use his proposals to corroborate a proposal that I will introduce in section 3. The other theories will be introduced and analysed in their respective sections, and my aim now is to introduce the data that is covered in the thesis.

2.3.1 Data regarding deletion in SE

In previous sections, I have introduced the concept of missing medial auxiliaries in AAE. I have also mentioned that (the apparent) deletion of material is not unique to AAE but can also be found in mainstream colloquial English. This thesis aims to understand whether there is any form of deletion in AAE, or if the absence of auxiliaries is not due to any process of deletion.

By using articles that do not directly cover the absence of auxiliaries in AAE, it provides the thesis with data that can be compared to that of AAE. Seeing that deletion is possible in colloquial English gives reason to believe that there could be a form of deletion in AAE too. With examples such as (18), it can be argued that there is optionality to the realisation of auxiliaries, which then gives reason to believe deletion is involved.

In the introduction I briefly gave an overview of deleted auxiliaries in colloquial English. In this section I will give a more detailed overview of the data, while also comparing it to the data found in AAE. The articles I am using in the thesis, that deal with deletion, are analysing deletion that happens at the left edge in English sentences, with exception of Labov (1969).

(27)   a. Anyone home?

"Is anyone home?"

b. A: You coming to the party tonight?

   B: Can't, gotta work on my thesis.

A: "Are you coming to the party tonight?"

B: "I can't, I have got to work on my thesis."

c. Be there soon [ATTESTED].

"I will be there soon".

These examples show different instances of left-edge deletion, with different types of deleted material. Some of the sentences, (27ab), involve deletion of fronted auxiliaries, (27b) shows deletion of pronouns, while (27c) involves both the deletion of aux and pronouns. It is clear that deletion in colloquial English is not limited to *only* auxiliaries or *only* pronouns. Weir (2012) has an example that involves partial deletion of a word.

(28)   'Fessor arrived yet?   (Weir, 2012, p. 109)

"Has the professor arrived yet?"

All of these examples showcase the different types of material that can be deleted at the left edge in English constructions. As seen with my translations of the examples, it is possible to construct these sentences in full form. In some cases, it is also possible to have contracted auxiliaries.

(29)   a. A: You're coming the party tonight, right?

           B: Can't, I've gotta on my thesis.

        "B: I can't…"

        b. I'll be there soon.

(29a) has a slightly different reading than (29b), while they might not be completely interchangeable, we still see that it is possible to have the auxiliaries be contracted. This gives us insight to there being optionality regarding the realisation of auxiliaries.

None of these examples consider medial auxiliary deletion, but there are cases where this happens in colloquial English. A famous example is a line from *Friends* said by Joey Tribbiani.

(30)   (Crane, Kauffman, Bright, Borkow, Curtis, Chase, Malins, Calhoun, Silveri, Goldberg-Mehan, Reich & Cohen, 1994-2004).

        How *you* doin'?

        "How are *you* doing?"

It is quite common to see deletion of medial auxiliaries in SE, but this is mostly seen in *wh*-questions, which is very briefly touched upon in Hendrick (1982). While it could have been possible to expand this analysis to include *wh*-sentences, I have decided to only consider declaratives to narrow the scope of the thesis. Nevertheless, it is worth mentioning that deletion does not only happen at the left edge in standard English, but also happens with medial auxiliaries.

2.3.1.1. Comparing the data in SE and AAE

In this thesis, I am specifically looking at (apparent) medial auxiliary deletion in AAE. However, as shown in the previous section, the absence of auxiliaries (and other words) is not exclusive to this particular variety. Therefore, it is important to understand where SE and AAE differ and are alike. What makes it important to capture a grammatical analysis of the absent auxiliaries in AAE?

As seen in section 2.3.1, a common form of deletion in colloquial English is left-edge deletion. This covers different types of deleted material, and since I am only covering the absence of auxiliaries in AAE, I will only consider deletion where it is auxiliaries that go missing. Such an example would be (27a), and we know these types of sentences can also be found in AAE. There are certain restrictions to when auxiliaries can go missing in polar questions.

(31)   a. *I going crazy?

"Am I going crazy?"

b. You there?

"Are you there?"

c. She alright?

"Is she alright?"

d. We there soon?

"Are we there soon?"

e. They coming here tonight?

"Are they coming here tonight?"

From these examples we can see that it would be ungrammatical to have LED when there is a first-person subject. It is generally seen across different types of deletion (both in SE and AAE) that it is not possible to have deletion when there is a first-person subject.

(32)   a. *I dancing (AAE).

"I am dancing.

b. *Why I here? (SE/AAE).

"Why am I here?"

Another restriction that is found across the different variations, is that of not being able delete auxiliaries in past tense.

(33)   a. #She alright? (# on (a)'s past tense reading). (SE/AAE).

"Was she alright?"

b. #She running. (# on (b)'s past tense reading). (AAE).

"She was running".

One last restriction is that of *where* the deletion/contraction happens. It is ungrammatical for deletion or contraction to happen in the final position in an English construction.

(34)   a. *What a good day it's!

b. * What a good day it!

Where does AAE differ from SE? It seems that generally, deletion in SE is limited to LED and deletion of auxiliaries in *wh*-questions. This type of auxiliary omission is grammatical in AAE too, however, instances where sentence constructions with omitted auxiliaries would only be grammatical in AAE.

(35)   a. Sara playing D&D.

         "Sara is playing D&D".

         b. Sara BIN playing D&D.

         "Sara has been playing D&D for a long time".

Generally, we do not see this type of deletion in SE. There are some instances, such as in (76a), where SE-speakers will utter sentences without medial auxiliaries, however it is more likely that this type of speech has been influenced by AAE. LED and *wh*-questions have been extensively researched in the linguistic field, and while omitted auxiliaries in plain declaratives in AAE also have been researched, by e.g. Labov, there is need for more formal linguistic research regarding this phenomenon, and especially regarding sentences containing aspectual markers. AAE has more options for (apparent) deletion of auxiliaries, and since it is a different variety with its own grammar, it is important to understand where the grammar overlaps with SE and where it does not. It is also very interesting to look at the omitted auxiliaries in sentences containing aspectual markers, as SE does not have these markers.

This lays the groundwork for my thesis, having given an introduction to AAE and its use of auxiliaries, NICE-properties, and explaining some of the data that I will be looking at. In the following section I will be researching if (or when) auxiliaries are underlyingly present in AAE, considering different diagnostics and earlier research done in the field.

3 (When) are auxiliaries underlyingly present in AAE?

Part of the problem that I am researching is whether the omitted auxiliaries in declarative sentences in AAE are deleted either through syntactic or phonological means, or if the grammar structure of this variety means there was never any auxiliary in the first place. My hypothesis is that the answer of whether auxiliaries are present at any level of representation differs in the two types of sentences I am looking at. I believe that there are underlying auxiliaries in plain declaratives, and that auxiliaries are not present in sentences containing aspectual markers. In this section I will go through different arguments for when auxiliaries could be underlyingly present in AAE. I will briefly review sentences containing aspectual markers, but these will be discussed and analysed properly in section 4, focusing first on plain declaratives.

3.1 Variability in AAE

When introducing the properties of auxiliaries in section 2.2.1.2, one of the properties presented is that auxiliaries can appear in different forms. Therefore, it seems that there is an apparent optionality between the different forms of auxiliaries.

(36)   a. Ellen's jogging with Felix.

        b. Ellen jogging with Felix.

        c. Ellen is jogging with Felix.

Since it is possible to have both a contracted form and a zero-form of the aux, it could be that sentences such as (36b) arise from a variable process which deletes a surface auxiliary. While Green (2002) does not mention the full form of the auxiliaries, Labov (1969) takes this full form into account, exemplified by (36c). This is the only article I have used which inherently focuses on aspects of the African American English grammar. It was written in 1969, and while there have been more recent studies, such as Green (2002) or Conner (2019), I believe that there is no pressing reason to assume that the system Labov describes has substantially changed.[6] As in Green (2002), Labov (1969) makes the observation that there is a lack of copula and auxiliary *be* in this variety, as seen here:

(37)   a. She absolutely crazy.

        "She is absolutely crazy."

        b. He reading over there.

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[6] Even if the AAE system *has* changed, we still want a grammatical system that can accommodate the observations that were made in 1969.

"He is reading over there".

Some may mistakenly argue that AAE inherently lacks copula and auxiliary *be*, however, this is not the case. There are examples of *be* being used in its full (finite) form in the dialect.

(38)　(Labov, 1969, p. 719)

　　a. I was small; I was sump'm about one year o' baby.

　　b. She was likin' me … she was likin' George too.

Labov (1969) lists forms of *be* that regularly appear, and it seems that the simple past form of *be* is not deleted. A form that appears with overwhelming frequency is the contracted form of *be*, especially in combination with first person, and it is also common to find the forms *I's*, *tha's* and *wha's* (Labov, 1969, p. 719). Through the examples given in Labov (1969), one can further argue for the existence of an underlying auxiliary (and copula) *be* (p. 720). This corroborates the proposal of there being optionality regarding which form of auxiliary is used.

Furthermore, Labov (1969) discusses when it is grammatical to have contractions in an English construction, which I have briefly touched upon in section 2. Labov makes the observation that when SE can contract, AAE can delete *is* and *are* (Labov, 1969, p. 722).

(39)　(Labov, 1969, p. 722)

　　a. *He's as nice as he says he's (SE).

　　b. *He's as nice as he says he (AAE).

　　c. Who's *it*? (SE).

　　d. Who *it*? (AAE).

Should the contraction or deletion be in the final position, such as in (39ab), the sentence will be ungrammatical. In (39cd), the sentences are grammatical if *it* is stressed. Labov (1969) therefore proposes a rule that states "Wherever SE can contract, [AAE] can delete *is* and *are*, and vice versa; wherever SE cannot contract, [AAE] cannot delete *is* and *are*" (Labov, 1969, p. 722). I will follow Labov's proposal in believing that there is an intimate link between deletion in AAE and contraction in SE. Due to constraints within the thesis, I will not be doing an in-depth discussion of the paper, and I have chosen what is most relevant for my thesis. What this article highlights is that there is optionality between the different forms of auxiliaries, which indicates that auxiliaries in plain declaratives are underlyingly present.

3.2 Tag questions

The previous section went through Labov's theory, which I have used to corroborate the proposal that there is deletion involved in plain declaratives. Another argument for the auxiliaries having a representation comes from tag questions. Examples of tag questions in standard English might look like the examples given below.

(40)   a. He isn't doing his homework, <u>is he?</u>

           b. You have looked at the news, <u>haven't you?</u>

           c. Ole Martin wants to play *Baldur's Gate 3*, <u>doesn't he?</u>

In these examples, there are both negated and non-negated forms of different auxiliaries. In tag questions, the tag is formed by either repeating the auxiliary verb in the main sentence or using do-support. Moreover, the tag will have an opposing relation to the auxiliary, creating these positive-negative relations as we can see in (40). The tags will also include an obligatory pronominal subject, as seen in the examples above. In (40ab), the verb in the tag refers back to the original auxiliary (isn't – is, have – haven't). In cases where there is no auxiliary, and the lexical verb cannot host negation, the tag is created using do-support.

How does this look in AAE? In sentences in which there is (apparently) no auxiliary, the tags are created as if there actually is (Green, 2002, p. 43).

(41)   a. Felix not eating, is he?

           b. She dancing, ain't she?

           c. He ain't ate, have he?

As in standard English, there is a positive-negative correlation between the tag and the auxiliary in the main clause. In (41bc) the sentences use a type of negation, *ain't*, observed in many varieties of English but which is very well known to African American English. *Ain't* can refer back to multiple auxiliaries, where Green (2002) explains that when *ain't* is present in the main clause, such as in (41c), the corresponding tags will either be *have* or *be*. (Green, 2002, p. 43). Green (2002) argues that tag questions give insight to which auxiliary would appear if one was there; the tag forces the auxiliary to the surface (2002, p. 43). The same arguments could be made with VPE, i.e. the C(ode) property.

(42)   Sarah dancing, and Kjersti *is* too.

The VPE can be used to diagnose which auxiliary (if any) would be present in plain declaratives, essentially forcing the auxiliary to the surface as Green (2002) mentioned with

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the tag questions. The implication of "forcing the auxiliary to the surface" means that the auxiliary exists at a level of representation. This leads me to believe that the auxiliaries do get deleted, and that it is not the case that they never existed in the first place. The auxiliary in the tag is a repetition[7] of and refers back to the one that is in the main clause. To make this "relationship" clearer, I have exemplified it below.

(43)　　a. Felix ~~[is]~~ not eating, is he?

　　　　b. She ~~[is]~~ dancing, ain't she?
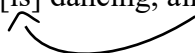
　　　　c. He [ain't] ate, have he?

Due to the optional realisation of auxiliaries that Labov (1969) observes, and Green's argument that tag questions force the auxiliary to the surface, I believe that the omitted auxiliaries in plain declaratives in AAE must be present at a level of representation. In this section I have not discussed the relationship between aspectual markers and auxiliaries. I have decided to look at this in the following section on its own, because I am under the impression that sentences containing aspectual markers operate differently than the plain declaratives.

3.3 The relationship between aspectual markers and auxiliaries

In earlier sections I have introduced the concept of aspectual markers and introduced some of them. To quickly recap these, the marker *BIN* denotes a meaning of remote past, while aspectual *be* has a habitual meaning. The last marker is *dən*, carrying the meaning of something already having been done (Green, 2002, p. 46). This marker slightly differs from the others, due to its ability to appear alongside other aspectual markers.

(44)　　a. Elinda be dən did her obligatory assignments.
　　　　"Elinda usually has already done her obligatory assignments".
　　　　b. *Elinda be BIN did her obligatory assignments.

Due to the difference in nature between *dən*, *be* and *BIN*, I will only be considering the last two markers in the discussion of how omitted auxiliaries work in (sentences containing aspectual markers in) AAE. From examples (5b) and (10) we have already seen the way in which these aspectual markers are most likely used. There are instances when one will see auxiliaries be

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[7] This being if there is an auxiliary, if there is a lexical verb that needs a do-support in negation, the do-support will be used again in the tag.

used in combination with the aspectual markers, and the auxiliary being used will depend on the marker.

(45)   Felix DO be eating.

        "Felix IS usually eating".

(46)   Felix HAVE BIN eating.

        "Felix HAS been eating for a long time."

(47)   (Green, 2002, p. 67)

        You should'a BIN dən called me down there.

        "You should have called me down there a long time ago".

(48)   Bruce has been eating.

As seen in these examples, the auxiliaries in (45) and (46) are used to provide emphatic affirmation. The marker *BIN* is already stressed, and if it is not stressed, such as in (48), it will not denote the same meaning as in (46). While *BIN* carries a meaning of something going on for a while, *been* is only a functional word that does not carry a meaning in the same way. Since *HAVE* and *DO* are used for emphasis, the auxiliaries do not just have a functional aspect, but are also used to affirm the meaning of the aspectual markers.

The use of auxiliaries for emphatic affirmation is one of the few instances where we see auxiliaries in combination with aspectual markers. However, there is an instance where we always see an auxiliary together with the aspectual marker.

(49)   Malin should'a dən wrote the task.

        "Malin should have already written the task".

The morpheme *'a* is peculiar in AAE. In the context of (49), it denotes the meaning of *have* in SE. However, it can also act as a contracted form of *will*. The distinction is made through the combination of words and the placement of the morpheme. With the combination of noun + *'a*, the position of *'a* is in the finite auxiliary position, where the modal *will* would appear in SE.

(50)   You'a teach me how to swim?   (Green, 2002, p. 42)

        "You will teach me how to swim?"

However, in combination with other verbs, and most often modal verbs, *'a* will be read as *have*. As aforementioned, the position of the morpheme will likely be why it is possible to have it be read as an auxiliary, and I believe that the context of the sentence makes it clear what auxiliary *'a* acts as.

In cases such as (45) and (46) , the auxiliaries supporting the aspectual markers are there for emphatic affirmation. It is possible to omit these auxiliaries and still have a grammatical sentence. While the sentences no longer are emphatic, it is possible to not have any auxiliaries supporting the aspectual markers. However, in the case of (49) , the modal and contracted auxiliaries cannot be omitted. The reason why *should* cannot be omitted is due to its modal status. Fitzpatrick (2006) argues that semantically contentful auxiliaries cannot be dropped, and this is the case for all the different modal auxiliaries. It is also important to keep the support of the contracted *have*, as modal verbs cannot be followed by past tense verbs. They require non-finite complements, such as the example shown below.

(51)   a. Tora should get an S+ ranking in League of Legends.

b. *Tora should gotten an S+ ranking in League of Legends.

c. Tora should have gotten an S+ ranking in League of Legends.

This showcases how, should one use the bare form of *should*, the following complement needs to be non-finite. However, with the support of a non-finite *have*, as seen in (51c) it is possible for the complement to be in past tense form. The example only accounts for SE, but the same rules apply for AAE.

(52)   a. *You should BIN dən called me down there.

”*You should called me down there a long time ago”.

b. You should’a BIN dən called me down there.

“You should have called me down there a long time ago”.

Even in AAE, it is ungrammatical for the modal to be followed by anything other than a non-finite complement, which in this case would be the morpheme *‘a*. It therefore seems that the rules regarding modality are the same in both standard English and African American English. The question then becomes, why can *BIN* be combined with past tense forms without the support of *have*? While *BIN* certainly seems like a stressed version of *been*, there are differences which I have briefly mentioned earlier. *Been* is a functional word, while *BIN* denotes a meaning of something having gone on a long time. It is also possible for *BIN* to be combined with simple past tense verbs, unlike *been*.

(53)   a. Lars BIN went on a walk with Pluto.

“Lars went on a walk with Pluto for a long time.”

b. *Lars been went on a walk with Pluto.

c. *Lars has been went on a walk with Pluto.

d. Lars has been going on a walk with Pluto for a long time.

(53) showcases the differences mentioned above, both regarding meaning and what is grammatical. Looking back at the modal *should,* it both functions and denotes the same meaning in SE and AAE, while *BIN/been* does not. For this reason, I am assuming that the grammar is different regarding this aspectual marker. It is quite interesting to understand why and how *BIN* can function without *have,* and I will provide an explanation for this in section 4.3.2, but the most important aspect is understanding whether the omitted auxiliaries are underlying or not.

Another type of auxiliary that is seen in combination with the auxiliary markers, is the past form of *have* in past perfect sentences.

(54)   a. Torhild had BIN watched *Porco Rosso* [remote past perfect].

"Torhild had watched *Porco Rosso* a long time ago".

b. Ronja had dən went to Sumo [past perfect resultant state].

"Ronja had already gone to Sumo*".*

c. Ellen had BIN dən fed Felix [remote past perfect resultant state].

"Ellen had already fed Felix a long time ago".

All of these different forms are mentioned in Green (2002, p. 46). I believe that the past perfect forms are a different case from what I am researching in this thesis, but to cover all my bases I want to explain why this will not be included in my analysis. There is a difference from the past perfect form in standard English and in African American English. As seen in (54a), the past perfect aux is combined with *watched,* which I will assume is the -en participle form in AAE. We can see that the participle forms are different in AAE and SE, but varieties of English having different forms of -en participles is very common. In the cases that do not include any form of auxiliary together with the aspectual marker, such as (5b), it will be given a present perfect reading when translated to SE. We know that *BIN* does not give tense when it stands alone, and therefore, without any auxiliary, it would be impossible for the sentence to have a past perfect meaning. Therefore, *had* must be included to be able to have the correct reading of the sentence. Having auxiliaries included in sentences with past perfect form does not make the use of aux more "optional" and does not indicate whether there are underlying auxiliaries in the sentences. The past perfect form seems to function the same in both AAE and SE, and consequently, I do not think this will indicate whether deletion is involved in sentences containing aspectual markers.

Finally, the last type of auxiliary one may see in combination with aspectual markers is the *'s*. This is exemplified by Green (2002).

(55)   No. That's BIN gone (Green, 2002, p. 96).

This is an interesting case, because unlike plain declaratives in AAE, one does not observe the same optionality regarding the use of auxiliaries together with the aspectual markers. This can seem to be an argument against my definition of the relationship between auxiliaries and aspectual markers. However Green (personal communication, 31st of March 2023) suggests that (55) may be a marginal case, stating that *'s* is not often observed together with an aspectual marker, but speakers who are moving closer to SE might insert auxiliaries where one would not usually see them. (55) is grammatical in SE too, and therefore it might not be surprising if it were accepted and produced by a speaker who is "moving closer" to SE. It is, of course, not the case that AAE and SE exist in two separate vacuums, which is proven by (55). However, for the case of this thesis, I will not consider examples that can be considered as "AAE speakers moving closer to standard English". It is an interesting phenomenon to look at how the language is changing and how AAE and standard colloquial English are influenced by each other, but this would be outside the scope of the thesis.

4 Non optional [non-] realisation of auxiliaries[8]

In the previous sections of this thesis, I have argued the deletion in plain declarative sentences in AAE. I have also laid out arguments why different theories of deletion do not apply to sentences containing aspectual markers. Therefore, this section will be dedicated to explaining why sentences containing aspectual markers, such as (5b), act differently from plain declaratives, such as (5a).

4.1 Syntactic Structure of Standard English

As this section is going to discuss syntactic structures, specifically the syntax of auxiliaries and do-support in Standard English, I will give an overview of the syntactic structure of SE. Basing myself on the Minimalist Program, I am operating with the X' theory when creating syntax trees. The syntactic structure of standard English clauses will therefore always start with CP-TP-VP. I will briefly explain why the structure is how it is, as a background for why do-support is needed in English.

The highest layer of a clause is the Complementizer Phrase (CP). This phrase can host complementizers, such as *that* (Adger, 2003, p. 289). We also see that *wh*-words and auxiliaries in polar questions are moved into C (Adger, 2003). Hence, it is clear that CP is needed in embedded sentences and interrogatives. What is unclear is whether CP is needed in simple matrix sentences. Linguists disagree on this, some arguing that one only needs TP as the highest layer, while others argue that due to uniformity across clauses, a simple sentence must be a CP since embedded sentences are CPs (Adger, 2003, p. 294). There are certainly instances where simple sentences are CPs, and this is when auxiliaries are moved into C in (simple) polar questions (Adger, 2003, p. 294), which can be seen in (13). While it is unclear whether simple declaratives are CPs or TPs, I personally include null-complementizer CPs in simple declaratives mainly due to uniformity across clauses.

More importantly, embedded under CP is Tense Phrase (TP). This is the phrase above VP (or *v*P), and the reason why one cannot have *just* VP/*v*P is because tense features can be marked on positions outside of *v*P (Adger, 2003, p. 161). This happens in English if there are auxiliaries in addition to the lexical verbs. Knowing that these features can be marked on positions outside of *v*P gives proof to why there is need for another phrase, which would be TP in this case. When

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[8] A few of the ideas presented here (specifically that there might be such a thing as "have-support") have first been presented in an earlier term paper written spring 2023 in SPRÅK3210 at NTNU. See appendix 2 for the paper.

there are no auxiliaries present, TP provides tense to the lexical verb by having the affix lowering to *v*P. It is not possible for a lexical verb to raise to T in English, unless it is copula *be*. Auxiliaries, on the other hand, can raise to T. This becomes relevant when looking at the NICE properties, where there is movement involved. Taking negation as an example, the verb would need to raise past the negator into T, which would not be possible for the lexical verbs.

(56)   *She dances not.
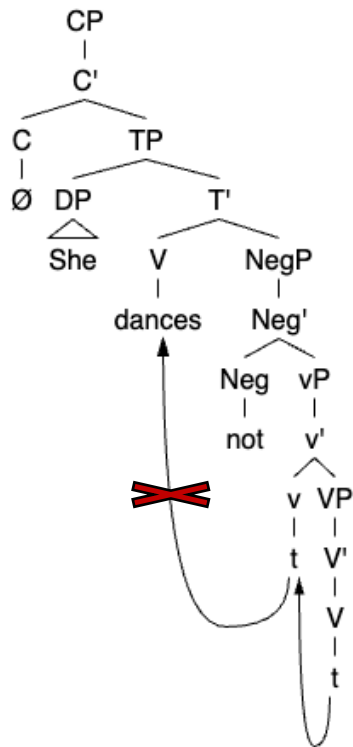
This type of movement is impossible in English. Lexical verbs cannot and will *never* move to T under any circumstances in English. Therefore, should there be negation in a sentence, one would need to insert an auxiliary. As there are no auxiliaries available in this sentence, do-support is used.

(57)   She does not dance.[9]
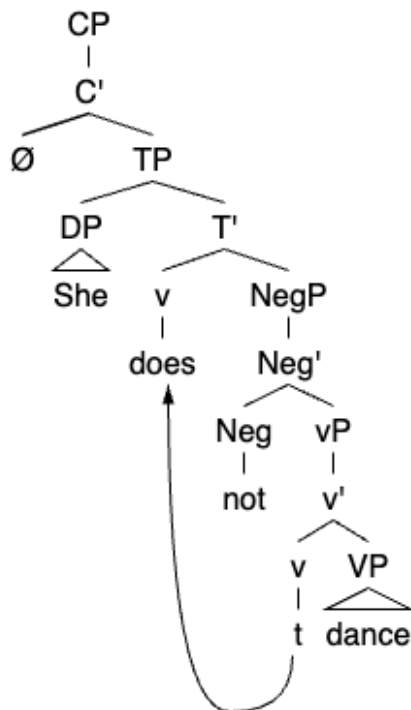
This is a grammatical version of (56), which shows another reason as to why there is need for TP. There are different analyses of how do-support works in English, the analysis I am following is based on that of Thoms (2011) where *do* is interpreted as a *v* that raises from *v* to T. The details of this, why do-support is needed and how it is used will be discussed an analysed in section 4.2, and the most important takeaway from these examples is that lexical verbs never move to T in English, and therefore English sentence constructions require auxiliaries in the situations where there must be movement to T.

Finally, embedded under TP is Verb Phrase (VP).[10] As made clear by its name, this node hosts verbs. As discussed above, tense features can be marked outside of VP, and in simple sentences with only a lexical verb, T undergoes the morphological operation of Affix Hopping (Radford, 2004, p. 132). The affix lowers from T to V, or in the cases of there being a copula *be*, the verb raises to T for the affix. For the sake of this thesis, what is most important to note regarding the

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[9] In this tree some may notice that I do not have V to *v* movement. Linguists are generally unsure about this type of movement, where Thoms (2011) addresses this in a slightly ambivalent way, not coming to a conclusion (p. 13). This movement is not the most important part of my analysis, and in my analysis I will only have *v* to V movement if there are no auxiliaries in the structure. I interpret auxiliaries as originating in *v*, and therefore filling the *v* that V would otherwise move into.

[10] In the structures I make in this thesis, *v*P is also included (which is then what is embedded under TP), however it is not necessarily needed in all English sentence constructions, therefore I will only present VP at this point.

VP is how verbs can raise out of VP into other nodes. As shown with the examples above, lexical verbs, again with the exception of copula *be*, never raise from V to T in English. Verbs can raise into *v*P (meaning the first movement in (56) is acceptable), but not further. The inability of raising from V to T (to C) is a language change, as there is evidence of this having being possible earlier. Radford (2004) gives an example from Shakespeare's play *The Two Gentlemen of Verona*, which says "Saw you my master?" (p. 133). The construction of this sentence would be unacceptable in SE today, and one would have to use do-support as shown in the example below.

(58)   a. *Saw you my master?   (Shakespeare, 1589-1593, p. 13)

        b. Did you see my master?

This has been a very brief overview of the structure of English clauses, which gives motivation for why there must be do-support. In the next section, I will discuss and analyse the do-support phenomenon and see if this is applicable for the sentences containing aspectual markers in AAE.

4.2 Do-support in Standard English[11]

Much of my analysis of the sentences containing aspectual markers in AAE relies on previous analyses of do-support in SE. Do-support is a phenomenon found in the English language, where a "dummy do" is inserted in sentences where there is no auxiliary to bear morphology (Thoms, 2011, p. 2). These situations may be in sentences involving SAI, T to C movement, etc, as seen in (57).

(59)   a. She dances.

        b. *Dances she?

        c. Does she dance?

Do-support is often described as a last resort to make sure that T is affixed to something as lexical verbs cannot raise from V to T (Thoms, 2011, p. 2). Moreover, do-insertion can happen in declarative sentences in which the *do* is emphatic.

(60)   a. *She did finish her thesis [non-emphatic].

        b. She ***did*** finish her thesis.

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[11] My main source for the analysis of do-support will be Thoms (2011), but I will also use other articles to corroborate the ideas presented.

However, there are problems with the "Last Resort Operation" analysis of do-support, especially when considering more recent works by Chomsky. To summarize it in broad strokes, the Last Resort Operation violates Inclusiveness, meaning that one should not, at a later stage of derivation, introduce new words that were not among the words one started with(Thoms, 2011, p. 3). Moreover, there is empirical evidence that do-support may appear in non-emphatic contexts, both in various English dialects and in Germanic languages (Thoms, 2011, p. 3), meaning that structures such as (60a) can be grammatical without being emphatic.

Therefore, in a re-analysis of the phenomenon, Thoms (2011) suggests that do-support should be analysed through a lens of locality. There is earlier work regarding this type of analysis, such as Embick & Noyer (2001), where the argument is that if T and *v* are adjacent, there will not be do-support. If there is, for example, T-to-C movement, *do* will be inserted (p. 587). Thoms (2011) argues that the reason this happens is because T has an uninterpretable V-feature, which means that T requires a *v* (with an interpretable V-feature) very local to T, or a *v* that has moved to T. This means that when T and *v* are adjacent, T can be checked by *v*'s interpretable V-feature. If they are not adjacent, T's uninterpretable feature remains unchecked, and this means that do-support is needed, and it will raise from *v* to T (Thoms, 2011, pp. 9–10). Thoms gives examples of syntactic structures in which there would or would not be do-support (2011, p. 10). For the sake of relevancy, I will not include all the structures, but have created a couple examples based on these.

(61)   Sebastian sings The Final Countdown.
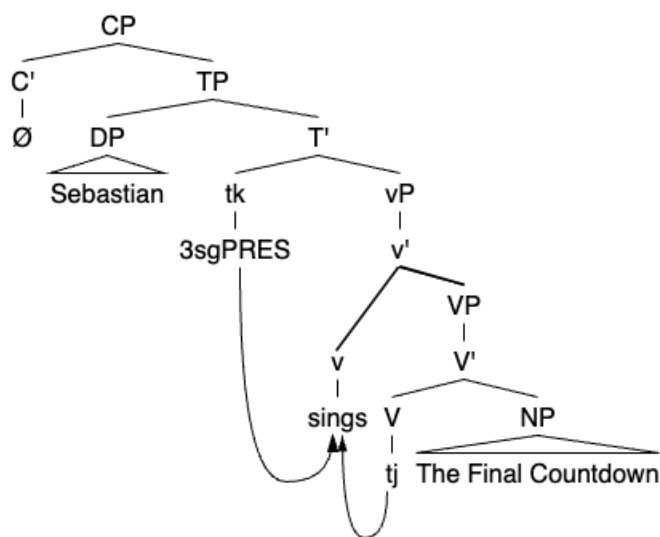
This tree showcases how, when there is adjacency between T and *v*, there is no need for do insertion. The affix lowers from T to *v*,[12] and the lexical verb *sing(s)* moves from V to *v*, due to there being no auxiliary to fill the *v*.

(62)   Sebastian does not sing the Final Countdown.
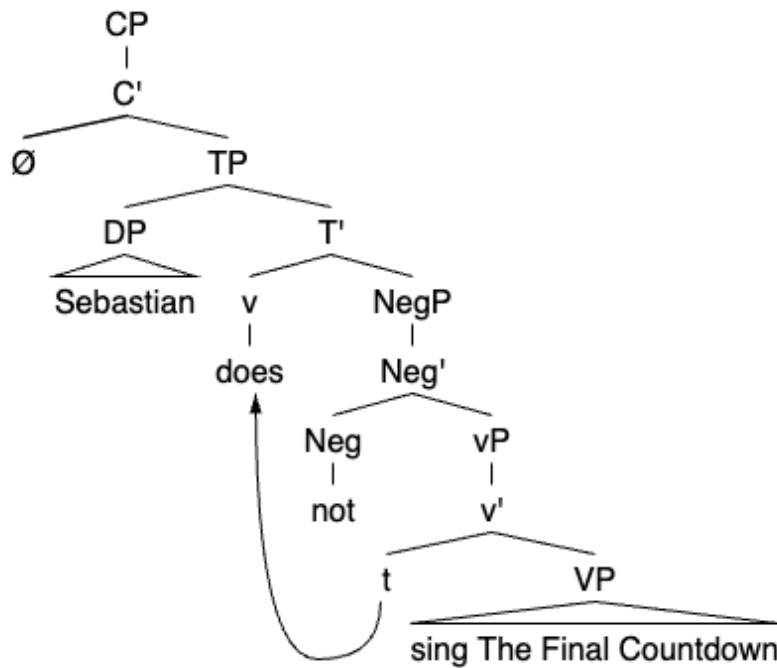
In this version of the sentence, there is negation involved. This forces T and *v* apart, meaning there is no adjacency between the two nodes. Having briefly introduced the NICE properties, we know that lexical verbs, in this case *sing*, cannot raise past the negation to T. As there are no other auxiliaries in the sentence, there will be a do insertion. *Do* is moved from *v* to T, and *sing* does not move into *v*. This checks T's uninterpretable V-feature, and the sentence remains grammatical.

Having introduced do-support in SE, I will now move on to analysing the parallels between do insertion in SE and the way auxiliaries work in sentences containing aspectual markers in AAE.

4.3 The parallels of do-support and auxiliaries in sentences containing aspectual markers in AAE.

In earlier sections, I have made it clear that I believe there is a form of deletion happening in declarative sentences in AAE, but that this is not the case with sentences containing aspectual

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[12] It lowers from T to V, but because of the movement, it lowers to *v*.

markers. What are the differences between these two types of sentences, and what are the arguments for there being no deletion here?

4.3.1 The differences between auxiliaries in plain declaratives and in sentences containing aspectual markers

Before I explain the relevance of do-support in this context, I will lay out some facts regarding auxiliaries and declarative and sentences containing aspectual markers in AAE. As seen earlier, there is complete optionality regarding plain declarative sentences as seen in (36). This optionality is one the reasons I believe that the auxiliary is deleted in declarative sentences such as (5a), and that they must be underlying. This is shown in sentences with tag questions that force auxiliaries to the surface, and this type of optionality is not seen in sentences containing aspectual markers. Firstly, the markers behave more particularly than auxiliaries that have undergone medial auxiliary deletion (Leirtrø, 2023, p. 10). Conner (2019) notes that aspectual *be* cannot be omitted (p. 95), and Leirtrø (2023) argues that the case must be the same for aspectual *BIN* (p. 10). The reason why these markers cannot be omitted in the same manner as other auxiliaries is due to the markers carrying meaning, in the same fashion as modal verbs and therefore, deletion of these will lead to a change in the meaning of the sentence (Leirtrø, 2023, p. 10).

Secondly, one does not observe the same type of optionality regarding inclusion of auxiliaries in sentences containing aspectual markers. Green (2002) states that this inclusion rarely happens

Green (Personal communication, 31st of March 2023) states that auxiliaries rarely appear alongside aspectual markers, and that generally, this only happens when the auxiliary is used for emphasis. This means that auxiliaries only appear in particular situations, unlike the auxiliaries that may appear in declarative sentences in AAE.

(63) a. She BIN dancing.

   "She has been dancing for a long time".

   b. *She have BIN dancing [non-emphatic].

   c. She HAVE BIN dancing.

   "She HAS been dancing for a long time".

   d. ?She's BIN dancing.

As seen in (63) , (63b) is ungrammatical, while (63c) is acceptable. This is very reminiscent of the earlier analysis of do-support, stating that outside of Last Resort, do-support can appear in emphatic contexts. While it is false that *do* may *only* appear in emphatic contexts, the parallel between the two can still be observed; *do* and *have* can be used emphatically in different contexts.

(56) and (62) showcase how "do" will be inserted into sentences that need it. This is different from earlier examples from AAE, such as (41), where the auxiliary we see appearing is forced to the surface. Following Green (2002) I make the same assumption that this means there is an underlying auxiliary which has been deleted. While the same arguments could be made for sentences containing aspectual markers, I believe, much like with do-support, that auxiliaries that appear with an aspectual marker are *inserted* rather than *forced* to the surface (Leirtrø, 2023, p. 11).

Due to the behaviour of the auxiliaries in this context, I believe that they have to be analysed differently from those appearing in plain declarative sentences. The auxiliaries, mostly *have*, appear in emphatic contexts, or if there is need to express (past) tense. Here we start seeing many parallels to do-support, and I believe that the analysis of do-support can be transferred into this context, meaning that we have something that might be called "have-support", that is inserted into sentences, rather than being forced to the surface.

4.3.2 Sentences containing aspectual markers and do support.

An important argument for this is how linguists analyse language. Generally, linguists try creating rules that are not ad-hoc and are applicable across different languages and varieties. It is possible to draw parallels between do-support and *have* in sentences containing aspectual markers, because it has been observed that one can use do-support in sentences containing aspectual markers. This specifically refers to the aspectual marker *be*, where *do* can be used emphatically.

(64)   Håvard DO be painting his nails.

      "Håvard IS usually painting his nails".

This is different from the aspectual marker *BIN*, where *have* is used emphatically.

(65)   Håvard HAVE BIN painting his nails.

      "Håvard HAS painted his nails a long time ago".

This gives us insight to which auxiliaries "go with" which aspectual markers. According to Green (2002), *do* appears with aspectual *be*, and *have* appears with aspectual *BIN* (p. 68). There is another interesting case shown in Conner (2019), where supposedly, *be* supports *BIN*.

(66)   (Conner, 2019, p. 98)
    a. Joe BIN married, and Sue also told you he *was*.
    b. Joe BIN went to college, and his brother *did*, too.

Green (2002) does not give any examples of *be* supporting *BIN*, neither are there any examples of *do* supporting *BIN*. This is the only example I have found with *be* supporting *BIN*, and while there might be more examples of this, I believe that VPE does not necessarily give insight to which verbs support which aspectual markers. To make this clearer, I have translated the example into standard English.

(67)   a. Joe *has* been married for a long time, and Sue also told you he *was*.
    b. Joe *has* gone to college a long time ago, and his brother *did,* too.
    c. Joe went to college a long time ago, and his brother *did*, too.

In the SE translation, we see that in both (67ab), one will use *have*, but the aux in the VPE sites does not necessarily tell us anything about the putative aux in the first clause. In the alternative translation of (66b), in (67c), the main clause is simple, and we know there is no need for an auxiliary, and therefore there is do-insertion in the elided clause. This differs from my earlier claim where I mention that VPE, alongside tag questions, provide arguments for why there must be underlying auxiliaries in plain declaratives. As seen in the example above, the auxiliaries in the elided clause do not match the auxiliaries found in the main clause. However, it generally seems like the aux in the elided clause in plain declarative VPEs *does* match the auxiliary that would have been in the main clause.

(68)   a. Ole Martin reading *Ulysses*, and Sebastian *is* too.
    b. Ole Martin crazy, and Sebastian *is* too.

As has been established, it seems that plain declaratives and sentences containing aspectual markers function differently from each other. In these examples, and with the previous I have provided in (42), it does seem like VPE can force an auxiliary to the surface, or in the case of (68b), copula *be*. It could be the case that *when* there is an underlying auxiliary, the VPE can force it to the surface, but when there is *not*, the aux used in the VPE sites will not have any

correspondence with what auxiliary "should have been" in the main clause. Therefore, while it at first glance, might seem like both *be* and *do* can support the aspectual marker BIN, I make the assumption that it does not, both based on how (64) would look in SE, but also since Green (2002) which auxiliary supports which aspectual markers (p. 68).

One can expect aspectual markers to behave in the same manner grammatically, regardless of which auxiliary is included in the sentence (Leirtrø, 2023, p. 12). Therefore, seeing that the earlier examples (64) and (65) include *do* and *have* (depending on whether one uses *be* or *BIN*), I will make the proposal that regardless of whether *do* or *have* is used, the sentences function under the same grammatical system. This means that I believe both *do* and *have* are inserted when they are needed. We already know that *do*-support is used in situations where there is a lack of auxiliary that can raise into T, which would mean that *have* in these cases would be akin to *do*-support; it would act as *have*-support. Drawing on Thoms (2011) analysis regarding locality, I will give a comparison between do-support in standard English, and the potential "have-support" in sentences containing aspectual markers in AAE.

As aforementioned, Thoms (2011) argues that do-insertion is not based on "last resort", rather on locality. If T and *v* are not adjacent, and there is no other auxiliary that can raise to T, there will be do-insertion. My question is therefore, can this be applied to sentences containing aspectual markers? Green (1998) gives the following as an example of the syntactic structure for aspectual markers, which I have taken from Conner (2019, p. 100). Unfortunately, Conner does not give bibliographic details for Green's article and I have been unable to find it. To make the structure more readable, I have recreated it myself. .[13]

---

[13] I believe there might be some mistakes in the tree, such as AspP going to AspP' (and not Asp'), and there being a V' over eat. However, since this was how the tree was made, I did not want to make any changes.

(69)

```
                CP
                |
                C'
              /    \
            C       TP
                    |
                    T'
                  /    \
                T       NegP
                       /    \
                     not     AuxP
                             |
                             Aux'
                           /      \
                        Aux        AspP
                         |          |
                      do/have      AspP'
                                  /     \
                               Asp       AspP
                                |         |
                             be/BIN      Asp'
                                        /    \
                                     Asp      VP
                                      |        |
                                     dən       V'
                                               |
                                               V'
                                               |
                                              eat
```
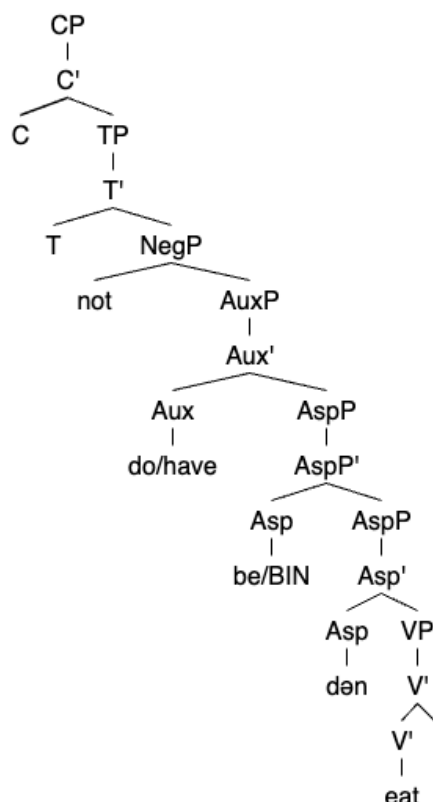
This differs from Thoms (2011) seeing that T is not adjacent to *v*, rather, without any auxiliaries, it would be adjacent to AspP. Conner (2019) then comments that in newer literature, giving reference to Green (2016), Lisa Green argues that "the syntactic locus" of the aspectual markers is not AspP, rather, it is *v*P (Conner, 2019, p. 100). However, Conner again does not give bibliographic details for Green (2016), and it seems to be inaccessible. Nevertheless, basing myself on this and what I have found on my own, I propose that the aspectual markers *be/BIN* do not belong under the AspP node, rather they take the position as *v* heads. Looking at (69), the placement of AspP above VP is the same as *v*P, which makes it plausible that aspectual markers take the position as *v* heads. Throughout this thesis, I have not said *what* aspectual markers are, as in if they can be considered verbs or auxiliaries. Based on their placement in a syntactic structure, I am making the assumption that they are a special kind of auxiliary, and not participle forms despite their similarity to the SE participle forms. Harwood (2014) makes the argument that *v*'s are auxiliaries (p. 306), meaning that if aspectual markers indeed are *v* heads, they can be argued to be auxiliaries. Should these markers have an auxiliary status, it would make sense that these markers generally do not show up with other auxiliaries "on top". What would set these "special auxiliaries" apart from auxiliaries in SE is that they cannot raise

to T. Supposing that the aspectual markers are *v* heads, I believe that they are not the *highest v* heads. They become special because they have a *v* above them, which normally would be silent, as seen in (70). Despite this small difference, T and *v* would still be adjacent, meaning that it would be possible to apply Thoms' proposal to the sentences containing aspectual markers in AAE.

(70)   Sebastian BIN singing.

```
                    CP
                    |
                    C'
            _____|_____
            Ø               TP
                     _____|_____
                    DP             T'
                  __|__          __|__
              Sebastian Ø      vP
                              |
                              v'
                           ___|___
                          Ø       vP
                                  |
                                  v'
                               ___|___
                              v       VP
                              |      _|_
                             BIN  singing
```
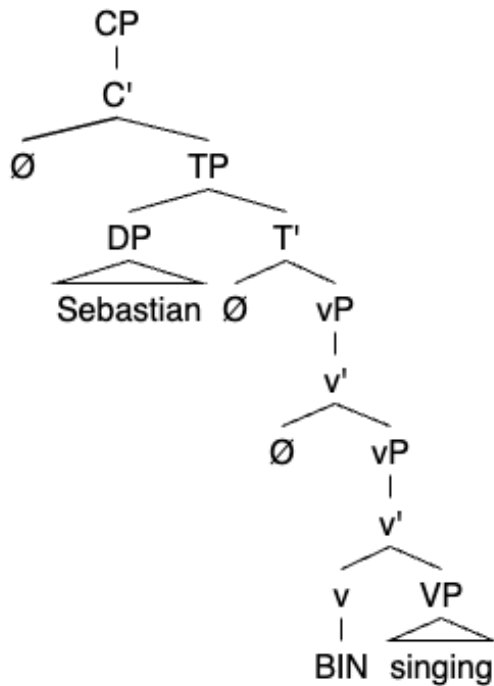
This is, what I propose to be, the standard syntactic structure of a sentence containing aspectual markers. This is slightly different from Thoms (2011) analysis, where there is a silent T and *v*, the silent T being taken from Green's analysis in (69). A problem may arise here with the T being silent, and there being no movement from T to *v*. Leirtrø (2023), following Conner (2019), suggests that T does not obligatorily need to be filled, as observed in sentences such as (5a). The author further notes that there are instances where this must happen, such as in ellipsis, where a phonologically realised head is required to license the ellipsis. and due to the Agree relation and the [E] feature, the head must be in T (p. 12). It is clear that the situation regarding T and the use of auxiliaries in sentences containing aspectual markers in AAE is different from ellipsis. However, I believe Leirtrø (2023) makes a point in saying that there must be situations where T needs to be filled. Such a situation could be when there is need for emphatic support in sentences containing aspectual markers. Suppose that even though T is

silent, the uninterpretable V feature is still checked by the *v*. In the case of emphatic support, *HAVE/DO* will fill the highest *v* and raise to T, still keeping it checked. While T can be silent in AAE, it needs to be filled in the case of there being auxiliaries in the sentence.

(71)   Sebastian HAVE BIN singing.
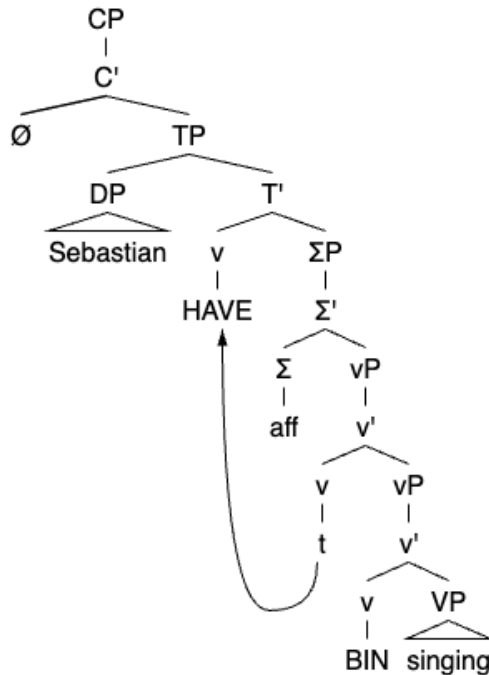
In this tree, T and *v* are no longer adjacent. This is due to ΣP, which is a phrase that hosts emphatic affirmation, without it necessarily being pronounced as a morpheme of its own, prompting do-support (Laka Mugarza, 1990; Thoms, 2011, p. 10). *HAVE* is formed in the highest *v*P, raising to T and checking its uninterpretable V-feature. This follows Thoms (2011) analysis regarding locality in do-support, and below I give my proposal for how this tree would look with do-support.

(72)   Sebastian DO be singing.
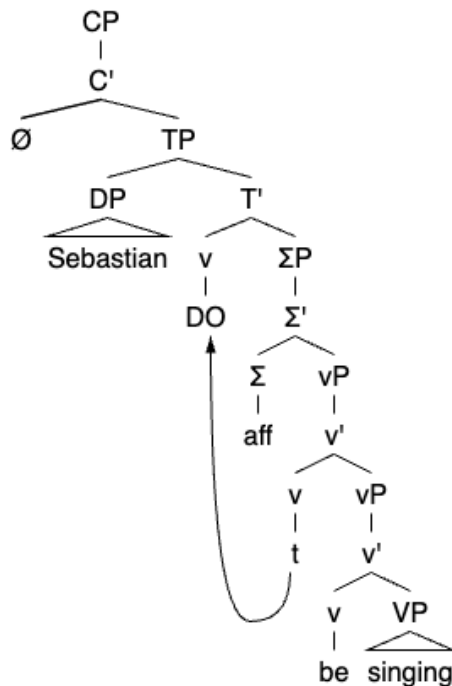
In the case of there being do-support, such as with the aspectual marker *be*, I believe the syntactic structure could look like this. Since do insertion in standard English would end up in T, it makes sense that this is the final destination of *do* in AAE too. Therefore, it is my assumption that the syntactic structure of emphatic *be/BIN* are the same because they behave in the same manner, and they both work the same way do-support would in standard English. Seeing that there is very little optionality in when one can use auxiliaries together with aspectual markers, and seeing how it is possible to draw parallels between Thoms' analysis regarding adjacency, I believe that it is safe to conclude that there is no form of deletion in sentences containing aspectual markers, and that emphatic *HAVE* could be called "have-support" due to how it functions in the same way do-support does.

Having reached a conclusion regarding the non-optional realisation of auxiliaries in AAE, I will now give my analysis of the optional realisation, before providing a conclusion to the thesis.

5 Optional [non-] realisation of auxiliaries

In my analysis regarding the omitted auxiliaries in sentences containing aspectual markers, I have concluded that the auxiliaries are not underlying. Rather, they must be inserted in the few situations where auxiliaries are observed together with aspectual markers. Having solved this problem, I will now discuss MAD in plain declaratives. I have already established that I believe the realisation of auxiliaries in plain declaratives to be optional. Therefore, this section will discuss and analyse deletion at the syntax-phonology interface.

The different sections in this chapter will cover different theories. Section 5.1 will cover Fitzpatrick's syntactic theory of deletion, and section 5.2 will handle Hendrick's phonological theory of deletion. The theories in both of these sections are considering SE and not AAE, and therefore I am looking for what can be extended for AAE, while also arguing for why I will not be analysing the deletion in plain declaratives with these theories. Finally, the last section, 5.3, will cover Weir's use of Optimality Theory in his 2012 article. Here I will give my analysis for MAD in plain declaratives, coming to a conclusion on what rules govern the rules of deletion in these sentences.

5.1 Deletion through movement

5.1.1 A brief introduction to Fitzpatrick (2006)

Fitzpatrick (2006) discusses deletion through movement, and argues that there are cases where deletion in fact is the result of syntactic movement "out of a phonologically and semantically interpreted domain" (Fitzpatrick, 2006, p. 399). In this paper, Fitzpatrick mainly discusses the case of LED, while also briefly mentioning the case of aux-drop in *wh*-questions, in which he bases himself on Hendrick (1982), which I will look at in section 5.2. Fitzpatrick mentions that aux-drop is not just a case of "sloppiness", because there are certain instances where we know that it is impossible to omit an auxiliary, meaning there have to be rules governing the process (Fitzpatrick, 2006, p. 401). Such an example could be (39b), where deletion in the final position would be ungrammatical.

The suggestion is, based on the theory of cyclic spell-out by Chomsky and Nissenbaum, that the deletion does not happen "due to phonological or even syntactic deletion, but rather the result of the peculiar properties of the root, which allow an auxiliary to move outside of the domain in which it would be phonologically and semantically interpreted" (Fitzpatrick, 2006, p. 428). Fitzpatrick's analysis leads to the conclusion, contrary to Chomsky, that the head movement is syntactic rather than phonological (Fitzpatrick, 2006, p. 428).

5.1.2 Discussing and analysing Fitzpatrick's proposals

Having briefly introduced the main points of Fitzpatrick (2006), I will now consider the arguments made in the article and whether these can be applicable for the MAD in sentences containing aspectual markers in AAE. Fitzpatrick (2006) is very specific regarding what type of deletion he is looking at.

(73)   Anyone home?

    "Is anyone home?"

Fitzpatrick (2006) argues that this type of "aux-drop" is *only* possible when the missing aux is left-most in a structure, i.e., it has to have been raised at the root level (Fitzpatrick, 2006, p. 402). He does mention that auxiliary omission is possible in some *wh*-questions, which could be sentences such as this:

(74)   How you doing?

    "How are you doing?"

Basing himself on Hendrick (1982), he says that this type of auxiliary omission differs from "aux-drop" and that omission in *wh*-questions is a phonological phenomenon (Fitzpatrick, 2006, p. 403).

At the core of Fitzpatrick's argumentation, we have the theory of Cyclic Spell-Out, first introduced by Chomsky in "Derivation by Phase" (2001). This hypothesis proposes that when phonetically interpreting a syntactic structure, one will not interpret the structure "as a whole". Rather, it is interpreted in successive stages, having the nodes being interpreted from terminal nodes to root (Chomsky, 2001; Simpson & Wu, 2020, p. 1). It is not unheard of to have heads interpreted in successive stages. The Minimalist model by Chomsky assumes that operations of movement often are triggered to satisfy feature-checking requirements "of an attracting functional head" (Simpson & Wu, 2020, p. 2). It can be argued that the movement in (13) happens to feature-check T and C. Chomsky's suggestion is therefore that movement may take place and feed phonetic interpretation (spell-out) mid-derivationally. Then, the syntactic derivation continues with deleting relevant features, and the applications of movement and structure building (Noam Chomsky, 2001; Simpson & Wu, 2020, p. 4). It is the heads that send their complements to spell-out, and therefore, there will be a highest head (the root) present in the syntactic structure, but it is not pronounced (A. Weir, personal communication, 9th of November 2023). The status of the peculiar root in this theory is what frames everything in Fitzpatrick (2006), and he bases himself on this theory to argue that aux-drop is a syntactic

phenomenon. What Fitzpatrick uses in his argumentation is the fact that the root cannot be sent to spell-out, and therefore it will be deleted. In a syntactic structure, the deletion may look like this:

(75)   Anyone seen Kjersti?
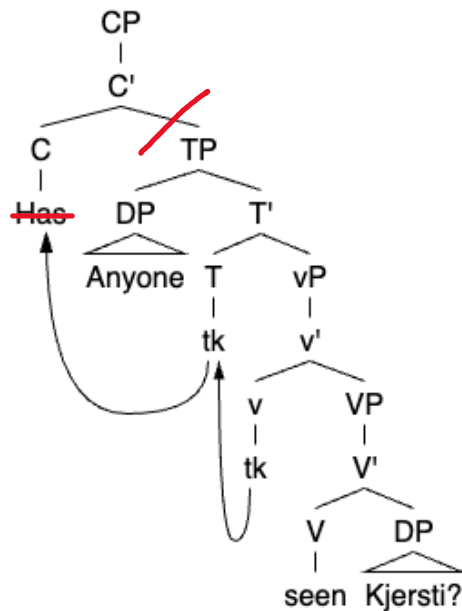
In this case, the root will be the CP, with the head *has*. Due to it being impossible to interpret, it will be deleted, "cutting off" this entire part. Since this type of deletion essentially is "cutting off" part of the syntactic structure, it can *only* happen to the root, since it is the left-most utterance in a sentence. As aforementioned, Fitzpatrick (2006) claims that aux-drop is only possible when the auxiliary has been raised at the root level (p. 402). This, then, does not take into account the medial auxiliary deletion that happens in plain declaratives in AAE. A quick counter argument to this is the fact that we know AAE has different grammar from SE, which can be seen with the sentences containing aspectual markers. However, there is evidence for omission of medial auxiliaries in colloquial English. These are examples from a Welsh speaker (76a) and Standard American speakers (76bc).

(76)   a. Can't complain, popping candy *good* [ATTESTED].
        "I can't complain, popping candy is *good*".
        b. "Those people real bad, prison real bad"   (Goor, Schur, Guest, Appel, 2017).
        "Those people are really bad, prison is really bad".
        c. "We been talkin' for hours"   (Carpenter, 2022).
        "We have been talking for hours".

(76) proves that aux-drop does not only happen in the left-most position in a sentence in colloquial English. We already know this type of omission to be common in AAE and seeing that speakers of other varieties can produce sentences with MAD gives an indication that the phenomenon is not entirely unique to AAE. However, it is possible, in fact most likely, that this type of omission has not arisen independently in colloquial English, rather this arises from influence of AAE. Regardless, knowing that SE speakers may construct sentences containing MAD, Fitzpatrick's claim stating that aux-drop *only* happens at the left edge seems to be unsubstantiated. This does not mean that his analysis of LED is wrong but it is clear that it cannot be extended to an analysis of MAD.

5.2 Deletion fed by rules of contraction

Fitzpatrick (2006) refers to Hendrick (1982) to argue that *wh*-sentence deletion is not a syntactic phenomenon (Fitzpatrick, 2006, p. 402). Hendrick (1982) recounts different theories of deletion, saying that reduced yes-no-questions are a product of syntactic deletion, as Fitzpatrick (2006) does (Hendrick, 1982, p. 801). The article brings up Labov (1969), which I have already discussed, recounting Labov's argument regarding deletion in AAE being fed by rules of contraction in SE (Hendrick, 1982, p. 808). Hendrick (1982) makes it clear that while Labov (1969) argues for phonological deletion being fed by contraction, the same cannot be said for syntactic deletion.

(77)　　a. She here?

　　　　"Is she here?"

　　　　b. *'s she here?

　　　　c. She's here?

(78)　　(Hendrick, 1982, p. 808)

　　　　a. Did Kay see Bill (yesterday)?

　　　　b. *'d Kay see Bill (yesterday)?

　　　　c. Kay see Bill (yesterday)?

Hendrick (1982) proposes that polar questions cannot be phonological as it is not possible to contract the auxiliary, as seen in (77b), but it *is* possible to delete the auxiliary, as shown in (77a). However, it is grammatical should the contracted auxiliary not precede the subject in the sentence construction. It is not clear whether Hendrick has considered this, and it could be an indication that his prediction is wrong, but he does list another example (78), where it would not be possible to have auxiliary be contracted in any form.

Another argument used to corroborate the proposal that phonological deletion is fed by contraction is through *wh*-questions, where they might seem very similar to reduced polar questions, but they cannot be analysed in the same way. While it is possible for there to be deletion in polar questions even when contraction is impossible, it is not possible for *wh*-questions.

(79)　(Hendrick, 1982, p. 811)

　　　a. Why're you sitting here?

　　　b. Why you sitting here?

(80)　a. Why's she sitting here?

　　　b. *Why she sitting here?

Hendrick provides more examples to prove this, and it does seem like deletion only occurs whenever contraction also can. There are instances, such as (80) where contraction *is* possible, but deletion is unacceptable (Hendrick, 1982, p. 811). Nevertheless, this does not disprove the statement that phonological deletion is fed by rules of contraction. It is very likely that there must be more conditions for when deletion can happen, which is the reason for why it is ungrammatical in (80b). Hendrick (1982) acknowledges this and throughout the rest of the article, the author argues for another rule to explain phonological deletion. The new rule created bases itself on a proclisis rule, Tense Contraction (Hendrick, 1982, p. 814). He does not go on to explain what this rule is but cites Bresnan (1972) "Contraction and the transformational cycle", which is not accessible. What I can make of this is that there is some rule of syntax and prosody which makes Tense and the subject into a "unit", which is then input to (optional) phonological rule which do the actual reduction or deletion. I believe that there might be a restriction regarding the tense of the word or clitic, because in cases where the clitic is in past tense ('d from had), deletion is not possible.

(81)　(Hendrick, 1982, p. 814)

　　　a. He'd been thinking about leaving.

　　　b. He'd left.

The reason why deletion is not possible, Hendrick (1982) argues, is due to a sentence boundary immediately dominating a past perfect [progressive] auxiliary (Hendrick, 1982, p. 815). I have already touched upon the deletion of past [perfect] tense auxiliaries, and this provides another explanation as to why this would not be possible.

With this proclisis rule, Hendrick (1982) notes that it feeds both syntactic and phonological deletion. He also notes that the proclisis rule will only affect fronted auxiliaries (Hendrick, 1982, p. 818). Some may argue that auxiliaries in *wh*-questions are medial since they are not sentence initial, but with fronted I assume Hendrick means auxiliaries that have undergone SAI. He also proposes that since the proclisis rule affects both phonological and syntactic deletion, phonological deletion should affect fronted auxiliaries just as in syntactic (Hendrick, 1982). This seems to disregard Labov (1969), where he argues that deletion in AAE is phonological. It could be that Hendrick (1982) is only considering SE. Since his hypothesis is only considering fronted auxiliaries, I will not use this to further analyse the optional realisation of auxiliaries in AAE.

5.2.1 How these articles can be used to corroborate my proposals in the thesis

So far in the thesis, I have used three separate articles, and while I will not use the theories in these articles for my analysis, I will be using different parts of the theories to corroborate my predictions. Labov (1969) has given me reason to believe that the realisation of auxiliaries in plain declaratives in AAE is optional. This is also the first of the articles to mention that this type of deletion is phonological. Both Fitzpatrick (2006) and Hendrick (1982) corroborate this. In Fitzpatrick (2006) we find that syntactic deletion can only affect sentence-initial auxiliaries, as the deleted auxiliary is "cut off" from the rest of the sentence. Hendrick (1982) proposes that phonological deletion can only affect fronted auxiliaries, which I disagree with. The reason being that we know, based on Labov (1969) that the rules of contraction feeds rules of deletion in plain declaratives in AAE. This Hendrick (1982) uses to define what type of deletion is phonological and syntactic.

Therefore, I will argue that deletion in plain declaratives in AAE must be phonological, despite Hendrick's claim that it only affects fronted auxiliaries. Moreover, Hendrick (1982) notes that there is a link between syntactic and phonological deletion, and that they mirror each other closely (Hendrick, 1982, p. 818). While Hendrick (1982) makes his predictions as to why that is, I believe that with the use of the OT theory, I can cover the optionality of deletion in plain declaratives in AAE, while also being able to acknowledge the link between syntax and phonology. In the following section, I will firstly introduce this theory, and I will quickly recount Weir's use of this theory in his 2012 article. Finally, I will analyse the deletion in plain declaratives in an optimality theoretic framework, before giving my conclusion to the thesis.

5.3 An Optimality-Theoretic account of auxiliary deletion

5.3.1 Introduction to Optimality Theory

Optimality Theory (OT) is a theory created to solve a problem in phonology. Chomsky had created a phonological theory that takes basis in rewrite rules. While this type of theory can explain some phenomena very well, it does not explain how phonological systems fit together (McCarthy, 2008, p. 1). What this sought out to do was to be able to capture typological optionality in easier ways than the rewrite rules did. Languages link underlying representations (input) with the surface representations (output). Given an input, there will be a large number of possible candidates for the output, and which output is chosen will depend on the language, or even variety of language, one speaks.

In OT, the choice of output for a given input is determined by *markedness* and *faithfulness* constraints. The latter type is a constraint that prohibits differences between input and output (McCarthy, 2008, p. 13). This could e.g., be prohibiting deletion in the output. On the other hand, markedness constraints are constraints regarding the output forms, which could be that syllables must not have codas. These are just the main categories that other constraints are placed into. Constraints are ranked in a hierarchy, with the most important constraint being leftmost in a tableau. To make this clearer, I have lifted an example from Archangeli (1999) to help illustrate.

(82)   / ŋa – pču/ → [ŋapču]: "fifty" (Archangeli, 1999, tableau 1).

/ŋa – pču/	ONSET *COMPLEX	FAITH	NOCODA
☞ a. [ŋap.ču]			*
b. [ŋa.ču]		*!	

In this tableau we are seeing three different constraints, where the highest constraint is not violated by any of the candidates. The markedness constraint NOCODA is violated once by the first candidate, while the second violates the faithfulness constraint. Each of these candidates violates one constraint one time, and this is why the ranking of the constraints is important. FAITH dominates NOCODA, meaning that this constraint is decisive, and violations of the higher ranking constraints will be more important (McCarthy, 2008, p. 10). The exclamation point indicates that the violation (indicated by the asterisk) is fatal, giving the candidate a worse score. These factors lead to candidate (a) being left as the winner. The question then becomes, why must the constraints be violable? To explain it simply, constraints are violable due to the

many different outputs that exist. However, violations do not happen without reason. There must be conflicting constraints, which then compels violations to happen (McCarthy, 2008, p. 10).

The language used in the tableau above is Tibetan, and certainly, not every language will function in the same way as this one does. Not every language will have the constraint NoCoda, or there might be languages where this would be an even higher ranked constraint. By reranking the different constraints, we will get different results, which then would represent the different grammars.

5.3.2 Weir (2012) and an Optimality-Theoretic account of deletion

OT, in the early days, had its focus on words, but in more recent years, there have been articles written analysing LED using an Optimality-Theoretic account. Weir (2012) argues that subject dropping/LED is the result of "a general process of weak syllable drop at the left edge of prosodic phrases, in order to satisfy a constraint requiring prosodic phrases to start with accented syllables" (Weir, 2012, p. 106). Sentences with subject pronoun dropping (SPD) may look like following:

(83)   a. I haven't been to the States yet.

        b. Haven't been to the States yet.

(84)   A: Why didn't you come to practice?

        B: *e* didn't feel like it.

(85)   A: What have you been up to today?

        B: *e* 've been working on my project proposal.

These are only a few examples, and Weir (2012) concludes that the phenomenon of pronoun dropping, which has been documented in earlier works, is a more general phenomenon that deals with an "unbounded process of 'erosion' from the left edge" (Weir, 2012, p. 109). Meaning that LED not only deals with SPD but can also deal with auxiliaries (and more) as seen in the example below.

(86)   a. You eaten anything today?

        "**Have** you eaten anything today?"

        b. You good?

        "**Are** you good?"

        c. Not much I can do about it.

        "**There is** not much I can do about it."

In an earlier example (28), we also see that not only words are affected by LED, but also parts of the word. Seeing that LED can affect syllables, it would not make sense to call this a syntactic type of deletion, which challenges the claims made by Fitzpatrick (2006). Therefore, Weir proposes that the deletion can be analysed through the framework of Optimality Theory (Weir, 2012, pp. 109–110). The motivation for deletion, according to Weir (2012), is that there are constraints that prohibit weak syllables at the left edge. The constraint STRONGSTART states that "a prosodic constituent optimally begins with a leftmost daughter constituent which is not lower in the prosodic hierarchy than the constituent that immediately follows" (Selkirk, 2011, p. 470; Weir, 2012, p. 111). Below I have lifted a tableau from his analysis to make clear how his analysis works (Weir, 2012, p. 112).

(87)

	[CP [TP [D He] [TP [T is] [VP [V going]]]]]	STRST	MATCH (ω, Lex)	MAX	MATCH (S, P)
a.	[ι [φ (σ He) [φ (σ is) [φ [ω going]]]]]	*!*			
b.	[ι [φ [φ [ω He]] [φ [φ [ω is]] [φ [ω going]]]]]		*!*		
c.	[ι [φ (σ He's) [φ [ω going]]]]	*!			*
d.	[ι [φ [ω He's going]]]	*!			**
☞ e.	[ι [φ [ω's going]]]			he	*
f.	[ι [φ [ω going]]]			he, is!	

In this tableau, Weir (2012) uses the constraints STRONGSTART, MATCH (ω, Lex), MAX, MATCH (S, P). It is the markedness constraint STRONGSTART that motivates deletion, assigning a violation whenever a constituent precedes another constituent that is higher in the prosodic hierarchy. I will come back to exactly what this prosodic hierarchy is, but the most important part to know for now is that syllable (σ) is placed lowest in the hierarchy. Therefore, *He* (σ) is deleted and *is* (σ) is cliticised onto *going*. In opposition of STRONGSTART, we have MAX, a faithfulness constraint, which prohibits deletion. MAX is ranked much lower than STRST, which allows for deletion to take place.

I have mentioned that the reason why I have chosen to use OT is due to the theory's ability to capture optionality, and one of the ways to do this is through floating the constraints, which Nagy & Reynolds (1997) proposes. There may be one floating constraint, that can change its hierarchical rankings in relation to other fixed constraints (Nagy & Reynolds, 1997, p. 38). However, it is also suggested in Oostendorp (1998) that one can generally float the different faithfulness constraints to be able to capture optionality in different languages (Van Oostendorp, 1998). In Weir (2012), the author floats the MAX constraint, which leads to

different outcomes. Having MAX ranked higher than STRONGSTART, will lead to any deletion being penalized and the most faithful candidate will be the winner (Weir, 2022, p. 10). I will once again lift tableaux from Weir (2012) to illustrate (pp. 118 – 119).

(88)

		[CP [C Has] [TP [DP [D the] [NP [N professor]...	MAX	STRST-ι	STRST-φ	STRST-ω
☞	a.	[ι (σ Has) [φ [φ (σ the) [φ [ω pro(Ft fessor)...		*	*	*
	b.	[ι [φ [φ (σ the) [φ [ω pro(Ft fessor)...	has!		*	*
	c.	[ι [φ [ω pro(Ft fessor)...	has!, the			*
	d.	[ι [φ [ω (Ft fessor)...	has!, the, pro			

(89)

		[CP [C Has] [TP [DP [D the] [NP [N professor]...	STRST-ι	STRST-φ	STRST-ω	MAX
	a.	[ι (σ Has) [φ [φ (σ the) [φ [ω pro(Ft fessor)...	*!	*	*	
	b.	[ι [φ [φ (σ the) [φ [ω pro(Ft fessor)...		*!	*	has
	c.	[ι [φ [ω pro(Ft fessor)...			*!	has, the
☞	d.	[ι [φ [ω (Ft fessor)...				has, the, pro

In these tableaux, when MAX is the highest ranked constraint, the most faithful candidate (a) wins, while having MAX rank last leads to (d) winning. Having the possibility of floating constraints gives us the possibility to see optionality between speakers, and it captures variation within the language/variety one is examining. It will especially be great for analysing plain declaratives with full form, contracted and zero-form auxiliaries, ref. (36).

For my own analysis, I will follow Weir's approach in his analysis of LED and extend this analysis to deletion not at the left edge of clauses. My hypothesis is that the deletion is still happening at the left edge of something else, like a prosodic phrase corresponding to aux + VP. Therefore, I believe it is possible to use some of the same constraints that Weir presents in his article for my own analysis. The constraint STRONGSTART becomes especially relevant for my analysis, as it motivates deletion. Weir (2012) uses the constraint to argue that weak syllables will be deleted at the left-edge. However, since I am not analysing this type of deletion, it is important to figure out how one can unite this constraint with MAD. Weir (2012) mentions that it is possible to decompose STRONGSTART into different subconstraints which then penalise particular instances of weak starts (p. 117). In the following sections I will introduce the constraints I will be using and give my analysis regarding the optional realisation of auxiliaries in plain declaratives in African American English.

5.3.3 The constraints used for the analysis

In this section I will introduce the different constraints that I will work with in this analysis.

(90)   a. MATCH (Clause, *ı*)

The left and right edges of a clause (CP) are mapped to the left and right of an Intonational Phrase (greek sign) (Weir, 2012, p. 111).

b. MATCH (Phrase, φ)

The left and right edges of a phrase (maximal projection XP which is not a CP) are mapped to the edges of a Phonological Phrase (ø, but greek) (Weir, 2012, p. 111).

(91)   *Prosodic hierarchy*
Utterance
Intonational Phrase (ı)
Phonological Phrase (φ)
Prosodic Word (ω)
Foot (Ft)
Syllable (σ)

(92)   MAX

Every terminal with a specified contentful realisation in the underlying structure (input) must have a realisation in the output (Weir, 2022, p. 9).

(93)   a. STRONGSTART

A prosodic constituent optimally begins with a leftmost daughter constituent which is not lower in the prosodic hierarchy than the constituent that immediately follows (Selkirk, 2011, p. 470; Weir, 2012, p. 111)

b. STRONGSTART-*ı*

Assign a violation to any *ı* whose leftmost daughter is lower in the prosodic hierarchy than the constituent immediately following (Weir, 2012, p. 117).

c. STRONGSTART-*φ*

Assign a violation to any *φ* whose leftmost daughter is lower in the prosodic hierarchy than the constituent immediately following (Weir, 2012, p. 118).

In my analysis I will follow Weir in coalescing the MATCH constraints into a single constraint MATCH (S[yntax], P[honology]) (Weir, 2012, p. 111). I have also listed the subconstraints of STRONGSTART, but I will not specify which of the subconstraints is used unless it is relevant, thereby coalescing the constraints into one. The important part to note is by being aware of these subconstraints, we know it is possible to delete leftmost daughters in a phonological phrase, and not just the intonational phrase.

5.3.4 The analysis of deletion in plain declaratives

Having identified the different constraints, it is now possible to create an analysis of the phenomenon of MAD. In the tableaux, fatal violations that take candidates out of the running will be marked with exclamation points, and violations in general are marked with an asterisk. For the MAX constraint, I have marked the violations by writing out the word that is deleted, which is penalised by the constraint. Should the violation be fatal, I will add an exclamation point.

(94)

[CP [TP [DP Sarah] [TP [T is] [VP [V dancing]]]]]	STRST	MATCH	MAX
a. [ι [φ (ω Sarah) [φ (σ is) [φ (ω dancing)]]]]	*!		
b. [ι [φ (ω Sarah's) [φ (ω dancing)]]]		*!	
☞ c. [ι [φ (ω Sarah) [φ (ω dancing)]]]			is

Going through the tableau above, I will explain why it had the outcome it did. The first candidate, (a), is faithful to the syntactic mapping of the sentence. However, it does violate STRONGSTART, as *is* is lower in the prosodic hierarchy than *dancing*. This problem is solved by the second candidate, (b), which has cliticised the auxiliary to *Sue*. It no longer violates STRONGSTART, but does violate the MATCH constraint, as the clitic should have, according to the MATCH constraint, matched up with the left edge of the TP (is dancing). This violation leads to the disqualification of the candidate, which leaves us with the last. (c) also violates a constraint, MAX, as it has a deleted auxiliary. However, since the candidates have a violation each, the hierarchy of the constraints determine which candidate wins. Since MAX ranks lowest, and it is not a fatal violation, we are left with (c) as the winner.

This is a successful explanation of MAD in plain declaratives in AAE, however, it does not account for when the subject is pronominal. Here, I will make different assumptions than Weir (2012), because in the article, Weir is looking at *weak* pronouns, which would not be presented as lexical words, but functional (Weir, 2012, p. 111). I make the assumption that in sentences such as "*She* dancing", the pronoun is not weak.

(95)

[CP [TP [DP She] [TP [T is] [VP [V dancing]]]]]	StrSt	Match	Max
a. [ι [φ (ω She) [φ (σ is) [φ (ω dancing)]]]]	*!		
b. [ι [φ (ω She's) [φ (ω dancing)]]]		*!	
☞ c. [ι [φ (ω She) [φ (ω dancing)]]]			is

The outcome of (95) is the same as that of (94), since the pronoun is treated as prosodic and lexical word. *If* the pronoun had been weak, I believe the outcome would be different. Seeing that STRST values the prosodic hierarchy, and the pronoun would be considered a syllable.

(96)

[CP [TP [D She] [TP [T is] [VP [V dancing]]]]]	StrSt	Match	Max
a. [ι [φ (σ She) [φ (σ is) [φ (ω dancing)]]]]	*!*		
b. [ι [φ (σ She's) [φ (ω dancing)]]]	*!	*!	
c. [ι [φ (σ She) [φ (ω dancing)]]]	*!		is
d. [ι [φ (ω s'dancing)]]		*!	she
☞ e. [ι [φ (ω dancing)]]			She, is

In this tableau, the outcome is (e), which is simply "dancing". There are contexts in which this could work, such as:

(97)   A: What's Sarah doing?
      B: Dancing.

However, in other contexts it would render the utterance incomprehensible.

(98)   a. She dancin' over there in a way that I would never be able to.
      b. *Dancin' over there in a way that I would never be able to.

In (98b) the sentence "loses" its referent, while in (97) the referent is known through the question asked. This means that the outcome in (96) is certainly a *possible* utterance in some contexts, but cannot be treated as the "only" answer to what happens if there is a pronominal subject. This would be the outcome should the pronoun be weak, but if it is strong, the outcome would be (95). However, we know that the different outcomes of (a), (b), and (c) are all

grammatical in AAE. While this section has provided an analysis of MAD in plain declaratives, the following section will consider the optionality between the different candidates and how this can be captured.

5.3.5 How optionality can be captured with an Optimality-Theoretic Framework

As aforementioned, one of the reasons I have chosen the optimality-theoretic framework is due to how it can capture optionality. Weir (2012) accounts for optionality by having MAX as the floating constraint, and I have chosen to have MAX and MATCH be floating constraints. This makes it possible to account for the variety within AAE. I have already considered how (c) can be established as the winner, and will therefore only show how (a) and (b) can be the winning candidates.

(99)

[CP [TP [DP Sarah] [TP [T is] [VP [V dancing]]]]]	STRST	MAX	MATCH
a. [ι [φ (ω Sarah) [φ (σ is) [φ (ω dancing)]]]]	*!		
☞ b. [ι [φ (ω Sarah's) [φ (ω dancing)]]]			*
c. [ι [φ (ω Sarah) [φ (ω dancing)]]]		Is!	

In (99) there has been a change in the outcome by having MAX second in the hierarchy. MATCH penalises contractions and having it lowest in the hierarchy makes way for having (b) come out as the winner.

(100)

[CP [TP [DP Sarah] [TP [T is] [VP [V dancing]]]]]	MAX	MATCH	STRST
☞ a. [ι [φ (ω Sarah) [φ (σ is) [φ (ω dancing)]]]]			*
b. [ι [φ (ω Sarah's) [φ (ω dancing)]]]		*!	
c. [ι [φ (ω Sarah) [φ (ω dancing)]]]	Is!		

The outcome of having MAX at the top of the hierarchy, followed by MATCH, leads to the most faithful outcome of (a). All of these rankings showcase the vast variety within AAE, and how there is optionality between the different candidates. It is likely that some of these candidates are more common than others, but it is still clear that all of the candidates are equally valid as utterances in AAE.

Unlike in AAE, the (c) option in the tableaux will generally not be said (unless one is influenced by the speech of AAE). To account for this, I have made a new tableau where it would be impossible for (c) to be the winner. I believe that AAE and SE differ by having MAX rank higher than both STRST and MATCH in SE. In this case I will be looking at STRST-φ because MAX can be ranked below STRST-ι which will give the LED effect. In this case, MAX will be treated as a fixed constraint that cannot be floated.

(101)

[CP [TP [DP Sarah] [TP [T is] [VP [V dancing]]]]]	MAX	STRST-φ	MATCH
a. [ι [φ (ω Sarah) [φ (σ is) [φ (ω dancing)]]]]		*!	
☞ b. [ι [φ (ω Sarah's) [φ (ω dancing)]]]			*
c. [ι [φ (ω Sarah) [φ (ω dancing)]]]	Is!		

This tableau has the same outcome as (99), only having MAX ranking highest. To capture the optionality between (a) and (b), one could float MATCH.

(102)

[CP [TP [DP Sarah] [TP [T is] [VP [V dancing]]]]]	MAX	MATCH	STRST-φ
☞ a. [ι [φ (ω Sarah) [φ (σ is) [φ (ω dancing)]]]]			*
b. [ι [φ (ω Sarah's) [φ (ω dancing)]]]		*!	
c. [ι [φ (ω Sarah) [φ (ω dancing)]]]	Is!		

With this ranking, we are left with (a) as the winner, which is the most faithful candidate. This gives insight that AAE varies more, given that all the candidates are possible utterances by AAE speakers. Through this we can also see how the OT analysis can take the different varieties of English into account.

This brings us to the end of my analyses. There are parts of all the theories and hypotheses of deletion that I believe are useful and could be true. However, OT captures both how and why MAD happens, and the optionality within the variety of AAE.

6 Conclusion

6.1. Summary and conclusion to the thesis

The focal point of this thesis has been the omission of auxiliaries within African American English variety. I have looked at two types of sentences in this paper, one being plain declaratives such as (5a), and the other being sentences containing aspectual markers, such as (5b). These two sentence types have respectively been analysed syntactically and phonologically. Through these analyses, I have shown that the inclusion of auxiliaries in sentences containing aspectual markers can be compared to do-support in SE, while there is optionality within the choice of realisation of auxiliaries in plain declaratives.

The thesis sought to answer the following questions: Are auxiliaries in AAE present at any level of representation? Then, if they are, what rules or principles govern it? The conclusion is that the answer depends on what sentence type one is analysing. Sentences containing aspectual markers do not have auxiliaries present at any level of representation. This is due to the nature of these markers, as they are not perfect participles, rather, I argue them to be v-heads. They are a special type of auxiliary that do not head the highest vP and cannot raise to T. Since they are auxiliaries and not perfect participles, it is natural to assume that it is unnecessary for more auxiliaries to appear "on top". In the few cases where we do see auxiliaries in combination with the aspectual markers, the type of auxiliary observed with the marker is limited. With *BIN*, *HAVE* may appear in emphatic contexts, while emphatic *DO* supports *be*. This indicates that the realisation of auxiliaries is not optional as there are only a few, set cases where they appear. When they do appear, they act in the same manner as do-support in SE, where T and v become separated, and therefore the emphatic auxiliary is formed in the highest v and raises to T.

On the other hand, we have plain declaratives, where Labov (1969) covers the optionality of realisation of auxiliaries. This forms the baseline for my analysis, where I conclude that the deletion that occurs must be phonological as syntactic deletion seems to only affect left-edge auxiliaries. To be able to cover both the optionality of the realisation of auxiliaries, and understand the rules that govern it, I chose to analyse the phenomenon through an Optimality-Theoretic framework. By using the constraint STRONGSTART, it is possible to argue that the deletion happens due to STRST penalising the weak syllables in the auxiliaries. By floating the faithfulness constraints, it is possible to capture the optionality observed in the plain declaratives. Thus, the problems discussed (, and their conclusions,) prove how varieties within a language can have overlapping grammar, while also differing massively.

6.2 Further research

Due to both the scope and length of this thesis, many things have been excluded or covered very briefly. Further research could lend itself to a comparative analysis of more varieties in English, in which different types of deletion occur. This could provide further insight to how the different varieties work, and where the grammars differ and coincide. By looking at more varieties, we would also gain a deeper understanding of whether some of the theories are ad-hoc or not.

Furthermore, I think analysing more sentences in the Optimality-Theoretic framework would have been very productive. In a longer thesis I would have looked at some of the data presented in Fitzpatrick (2006), since he analysed the deletion syntactically, while Weir (2012) analysed the same type of sentences phonologically. I would have also included *wh*-questions to see how this would affect the OT analysis. By including these types of sentences in my thesis, the analysis could have been more holistic.

In the section where I discussed "have-support" in AAE, I believe it would be possible to extend my analysis. I could only briefly discuss the role of aspectual markers, and having a more in-depth analysis of whether these can be considered auxiliaries or not would provide more insight to the issue. Moreover, if given the possibility, researching more English varieties and finding if they have have-support in the same manner that AAE does could be productive. This could either corroborate or contradict the analysis of this phenomenon.

Lastly, since I am not a speaker of AAE and do not know anyone who speaks this variety, I believe that interviewing native speakers of AAE could have strengthened the thesis. While I based myself on Lisa Green, a native speaker, I also had to base myself on my own intuition. In the OT analysis, I argued that in sentences such as "she dancing", the pronoun would not be weak. This is based on Weir (2012) where he proposes that weak pronouns will be deleted, which led to the conclusion that *she* could not be a weak pronoun. However, interviewing AAE speakers would have given me a deeper understanding of their pronunciation of these different sentences. This could have possibly affected the way in which I would have constructed my analysis, and it is currently something which I wish to further research.

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Appendix 1 – The Thesis' Relevance for the Teaching Profession

The thesis I have worked on has not been related to didactics or pedagogics, however, I still believe that my work on this has given me insight that can be brought into my teaching profession.

Firstly, much of my work has been based on a non-standard variety of English, which often has been dismissed as "broken English". I believe that by working this closely with AAE, I have a new and deep understanding of how this variety works, which will be relevant as I teach English to my students. Varieties of English are vital to understanding how incredibly vast the language truly is, and by showing my students how differently people may sound while they speak English, I hope they also will gain the confidence to speak English even if they do not sound completely British or (standard) American.

While I have focused on the formal linguistics of AAE, by having studied this variety for well over a year I have also gotten to learn more about the culture of African Americans and their origins. As culture and multiculturalism is a very important aspect of the English class in Norway, I hope that my work on this thesis has given me the insight to be able to teach my students about both AAE and African American culture in a respectful and tactful manner. There is so much to discover by looking at different varieties of English, and I hope my students can experience the same joy I have had learning about all of this.

Furthermore, working on my thesis has given me a set of skills that I think will be very important while working as a teacher. My future students will have to write essays, and with my experience of writing a thesis I believe I can help them with organising and structuring data and arguments. I also think that my years at university has helped me develop my critical thinking skills, which is important to pass on to students, especially in this day and age where you can find everything and anything on the Internet.

Finally, having worked closely with a supervisor for this long, I hope that I can be to my future students what my supervisor has been to me. Andrew Weir truly helped me understand my own ideas, and how to develop them further. His work has given me inspiration to how I can guide my future students and be encouraging while also being able to correct them when they make mistakes. As I will be teaching teenagers, I hope everything I have learnt through working on my thesis will make me into a teacher that can motivate and inspire students, and also help them grow self-confidence and a sense of self-worth.

Verb Phrase Ellipsis in African American English, and the need for morphology in T

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1 Introduction

Verb Phrase Ellipsis (VPE) is a topic of interest within the realms of formal linguistics. Continuously, linguists are looking at the identity of ellipsis, and what it is that may license the ellipsis. Part of understanding ellipsis lies in analysing varieties of English outside of Standard English. African American English (AAE) is particularly interesting, because of the optionality of auxiliaries in declarative sentences, meaning that there is an optionality in the need of morphology in T. Whether it is a standard declarative sentence, or one that makes use of aspectual markers, the way in which auxiliaries behave is quite different from Standard English. Most often, one sees that the auxiliary is omitted, and in aspectual sentences, it is rare that there is a combination of an auxiliary and aspectual marker. However, there is a case wherein morphology in T becomes obligatory, which is in VPE. While it seems to be optional in almost any other case, it is needed to head ellipsis sites. Based on this phenomenon, my thesis question is therefore, *given that AAE does not seem to require morphology in T, why does it become a requirement in VPE*?

In this term paper, I will start by introducing the different theories of licensing of VPE. I will then give a quick introduction of the optionality of auxiliaries in AAE, before analysing VPE in AAE through the lens of the theories of licensing, which in turn will lead me to the conclusion that the reason morphology is needed in T, is because there is a need for an overt phonologically realized head to license ellipsis.

2 Theories of Ellipsis Licensing

What licenses an ellipsis? This is a question that has been discussed for a while in the sphere of formal linguistics. Different theories have emerged from this, many of which I will present here. In particular, what it is that licenses verb phrase ellipsis becomes relevant in sentence pairs such as (1ab).[14]

(1)   I can't believe Sarah doesn't like broccoli.

    a. I can't believe Lars doesn't ___, either.

    b. *I can't believe Lars ____, either.

It is cases like these that have caused linguists to believe that auxiliaries may be the licensors of ellipsis. These examples indicate that the licensing conditions are invoked by the environment to the left of the ellipsis. Therefore, it has been hypothesized that members of the Aux family may govern ellipsis sites (Johnson, 2001, p. 1). However, it was soon realized that this could not be the case. While *to* might be a member of the Aux family, there are cases in which it is impossible for this auxiliary to license ellipsis.

(2)   *Mag Wildwood came to read Fred's story, and I also came to___ (Johnson, 2001, p. 2).

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[14] Unless stated otherwise, the examples have been created by me. Some of them may take similar form to examples from Conner (2019), Green (2002) and Johnson (2001), but they are my own wording.

This example gives insight to how Aux cannot be the sole licensor of ellipsis. As linguists began looking for other explanations, Lobeck came up with the proposal that ellipsis sites needed to be "head governed" (Johnson, 2001, p. 2). In recent years, the notion of head governing has fallen out of fashion, but the ellipsis needing a head is still prevalent today (A. Weir, personal communication, 26.04.23). However, as I am recounting the different theories for ellipsis licensing, I will use the "same language" as the linguists did at the time.

Coming back to *to* in (2), the explanation for the ungrammaticality is that *to* is not a head governor. However, there are examples of ellipsis sites being preceded by *to*.

(3)   Mag Wildwood wants to read Fred's story, and I also want to___ (Johnson, 2001, p. 1).

There are different explanations for this, and two people who have brought a lot to the discussion are Lobeck and Zagona. Lobeck explained this by saying that the higher verb can govern the site. By using the Government Transparency Corollary one can explain (3) by saying that *to* incorporates into *want*. Therefore, it becomes possible for it to govern the ellipsis site. In cases like (2), *to* would not be able to incorporate, because it is an infinitive (Johnson, 2001, p. 2). Meanwhile, Zagona argues that the difference between (2) and (3) is related to the licensing conditions on *to*, not the licensing conditions on VPE. It is argued that in cases such as (3), *to* is phonologically re-bracketed with preceding material, which then makes it possible for *to* to head ellipsis. For re-bracketing to be possible, *to* has to "gain proximity to its host through Head Movement" (Johnson, 2001, p. 2). Therefore, in (3), it is possible for *to* to undergo Head Movement to *want*, while it is blocked in (2).

Looking at some different examples of ellipsis sites being headed by *to*, it is possible to observe some differences.

(4)   a. *Mariell and Winnie might go to Milan if they ever figure out when to___.
        b. You shouldn't play with wolves, because it's dangerous to___.
        c. *You shouldn't play with wolves, because to ___ is dangerous.

In (4a), the reason why the sentence becomes ungrammatical is because *to* is embedded in an indirect question. Indirect questions are argued to be islands, which in turn makes extraction and creating ellipsis sites nearly impossible. For the sentence to become grammatical, *to* would have to move out of the infinitive to license the ellipsis (Johnson, 2001, p. 3). For (4bc), the difference between the two examples seem to come from the position of *to*. It seems that *to* cannot head an infinitive that is in subject position. Following Zagona and Lobeck's arguments, *to* cannot move into proximity of the Head position, because it is blocked by the position of the infinitive. Had it been in the complement position, it could be possible for the clause to elide (Johnson, 2001, p. 3). Considering the arguments made, it seems possible to conclude that when infinitival *to* head an island, elision will, under most

circumstances, be impossible. However, the sensitivity to islands is generally not found for VPE in finite clauses, as shown by (5).

(5)   Mariell left for Milan even though Winnie didn't____.

According to Johnson (2001), the important thing to look at is the distinction between finite and infinitival clauses. This is in opposition of Zagona and Lobeck's views, as they have argued that the difference between (4a) and (5) lies within the properties of *to*, and the auxiliary having to move and incorporate to be able to license ellipsis. The reason why Johnson (2001) disagrees with this view, is because it is possible to create other infinitival examples where the ellipsis site is not directly preceded by *to* (Johnson, 2001, p. 7).

(6)   *Mag Wildwood came to be introduced by the barkeep and I also came to be___ (Johnson, 2001, p. 7).

Since there is virtually no distinction between (4a) and (6), it is possible to argue that one should not put the "responsibility" on the island effect, rather one should examine whether there are other licensors of ellipsis (Johnson, 2001, p. 7). Johnson (2001) argues that basing the licensing conditions on proximity to Aux is too narrow. The licensing condition on VPE should not only encompass VPE; it should also explain the cases of NPE, IPE and APE (Johnson, 2001, p. 4). Therefore, it is suggested that VPE is licensed by VP Topicalization, where the VP must first topicalize before it can elide (Johnson, 2001, p. 7). This directly ties in with the difference between finite and infinitival clauses, because topicalized VPs are unable to "land" inside infinitival clauses in the same manner that they can in finite (Johnson, 2001, p. 7).

In the discussion of topicalization, it may be relevant to bring up the discussion of whether traces and ellipses are the same thing. The previous arguments made by Lobeck and Zagona are generally based on the Empty Category Principle, meaning that their theories are closely tied with positions that consider traces to be licensed (Johnson, 2001, p. 4). In line with this thought, it is possible to draw parallels between traces and ellipses. Johnson (2001) mentions Wasow (1972) that argues that "VP Ellipsis consists of a full-fledged VP with no lexical items inserted into it" (Johnson, 2001, p. 6). Chomsky (1995) argues, in the same vein, that traces are "full-fledged exemplars of the moved phrase, but with their lexical items removed" (Johnson, 2001, p. 6). These descriptions indicate that traces and ellipses can be analysed in the same manner. Based on the likeness between the two, and the VP Topicalization, it seems that the licensing conditions on ellipsis draw on the conditions on traces (Johnson, 2001, p. 8).

In later times, people have moved away from the notion of VPE being licensed by topicalization. In Conner (2019) we find a recount of more recent theories, where she brings up Potsdam. Potsdam argues, in the same vein as Johnson (2001), that there are licensors outside of the Aux family, albeit it seems that not every head can realize. There have been observations that ellipsis cannot be realized in clauses that appear to lack a TP projection, and it seems that the heads need to be morphologically realized (Conner, 2019, p. 10).

(7)   (Conner, 2019, p. 10).
        a. *Kim needn't be there but it is imperative that the other organizers___.
        b. Kim needs to be there, but it is better that the other organizers **not**___.

The presence of a morphologically realized head in (7b) makes it possible for elision to take place. The head must be filled, and within all data of ellipsis, VPE only occurs in the presence of a morphologically overt head (Conner, 2019, p. 11). Specifically, the head needs to be phonologically realized, and therefore, Conner (2019) introduces a revised licensing condition, based on Potsdam's condition: "An elided VP must be the complement of a *phonologically realized head*" (Conner, 2019, p. 11). The condition created by Potsdam has paved way for the role of overtness in VPE, which Conner (2019) highlights as imperative based on the arguments above. However, there are parts of Potsdam's judgements that still fail to describe the phenomenon of VPE as a whole.

(8)   (Conner, 2019, p. 15).
        a. I should have tried Insanity, and you should have, too.
        b. *I should have tried Insanity, and you should___, too.

If Potsdam's hypothesis was completely correct, one would expect (8b) to be grammatical, because the complement must delete. However, one sees that it is not correct (Conner, 2019, p. 15). A more recent theory is presented by Aelbrecht (2009). By creating an Agree-based analysis, she makes a case against Potsdam's judgements. Using data such as (8), she suggests that the licensor does not only elide its sister, but may target *v*P at any distance, even with the interference of other phrases (Conner, 2019, p. 15).

Parts of Aelbrecht's analysis is based on one of Merchant. Having reconstructed Lobeck's analysis, Merchant proposes that there is an [E] feature that can occupy a functional head. This feature triggers ellipsis at Phonological Form (PF) (Conner, 2019, p. 6). For ellipsis to occur, the feature is activated through feature-feature matching, where there is an evaluation of features of [E] that are specific to the functional head it occupies, or the matching happens in the local

checking domain (Conner, 2019, p. 7). The functional head will vary depending on what type of ellipsis is taking place. In sluicing, the functional head is C, while in VPE, [E] occupies T (Conner, 2019, p. 7). Therefore, the way that the feature checking would work in VPE, the [E$_{VP}$] would occupy T, and based on earlier arguments, it seems that this head would need to be overt. Moreover, the elided phrase must have all the features needed before the elision may be invoked. Aelbrecht suggests that there is an unvalued F-feature in [E] that needs to be checked against the licensor. Thus, the licensing of the ellipsis may happen through [E] identifying an interpretable F, which then can be checked via Agree (Conner, 2019, p. 17).

This all takes basis in claims that VPE cannot find place in clauses that do not have a TP layer. An example of such a clause is the gerundive form.

(9)   *I hadn't been thinking about it, but I recall Diana having been (Conner, 2019, p. 16)

Through data such as this, Aelbrecht proposes that T alone is the licensing head (Conner, 2019, p. 15). However, such claims lead to wrong conclusions, as this does not take overtness into account. The proposal wrongly predicts that VPE can be licensed by a null form in T, however, no data support this (Conner, 2019, p. 20). There are more steps involved in the process of licensing ellipsis, and Conner (2019) argues that one should indeed assume that an Agree relation is necessary, especially since this accounts for non-local licensing. Claiming that T alone is the licensing head, will not account for any of this (Conner, 2019, p. 20). Therefore, Conner (2019) makes a conclusion that phonologically realized functional morphemes are licensors, and that the ellipsis will be licensed when an Agree relation is established between the licensor and the target of ellipsis. Together with the E-feature, composed of syntactic and semantic information, it seems that these different theories may give an answer to what it is that licenses ellipsis (Conner, 2019, p. 21).

3 Verb Phrase Ellipsis in African American English

3.1 A brief overview of the role of auxiliaries in AAE

So far in this paper I have only discussed cases of VPE in Standard English, and this will lead me into the second part of the paper that revolves around AAE. In this variety of English, we will see that declaratives are not necessarily formed with auxiliaries (Green, 2002, p. 43)

(10)   a. Sue Ø dancin'.
         b. He Ø walking to the grocery store.
         c. Lars Ø already sleeping.

In these different examples we see that the sentences lack morphology in T. This is different from Standard English, as there would be a need for auxiliaries to fill T.[15] The medial auxiliary deletion is not obligatory, however, as it is fully possible to include an auxiliary and still have the sentence retain the same meaning and be grammatical. Therefore, we see that there is optionality in the inclusion of auxiliaries. However, the same optionality does not exist in the language's use of aspectual markers, such as aspectual *be* and *BIN*. I would describe *BIN* as a stressed version of *been*, and it *has* to be stressed to be seen as an aspectual marker (Green, 2002, p. 55). Examples include:

(11)   a. Sarah BIN married.

b. Bruce be running.

(12)   Sarah has been married.

Because of the aspectual markers used in (11), the sentences get different meanings than if they had been without. (11ab) retains a meaning of the "activity" being durative. It means that *Sarah* has been married for a long time, and that *Bruce* has been running for a long time (Green, 2002, p. 45). If one were to use the auxiliary *have*, as in (12), it would not have the same meaning. One would likely interpret the meaning of (12) as the people having been married at one point, but not anymore. (11a) makes no indication of the relationship having ended.

The optionality for auxiliaries does not exist in the same way in these types of sentences. It is possible to include auxiliaries to create an emphatic environment, such as (13a), however, the use of *have* in (13b) would be seen as ungrammatical, as this would not be an emphatic environment. There are very few environments where one will see auxiliary inclusions together with aspectual markers, especially contracted forms of Aux. More than likely, the reason why instances such as (13c) happen is due to speakers of AAE moving closer to Standard English (L. Green, personal communication, 31.03.23).

(13)   a. Sarah HAVE BIN married.

b. *Sarah have BIN married.

c. ?Sarah's BIN married.

In other words, we see that auxiliaries act in a particular way together with aspectual markers in AAE. There is much to be discussed regarding this particular phenomenon in AAE, however, due to the scope of the paper I cannot go into detail regarding this. The important thing to note is that auxiliaries and morphology in T do not seem to be obligatory in AAE. This is until we look at VPE.

(14)   a. Sue dancing, and Rachel **is** too.

b. Sue dancing, *and Rachel Ø too.

c. Sarah BIN running, and Lars **have** too.

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[15] It should be mentioned that there are examples of missing auxiliaries in declaratives in colloquial English, though this is not relevant for my analysis.

d. Sarah BIN running, *and Lars BIN too.

e. Lars be running, and Sarah **do** too.

f. Lars be running, *and Sarah be too.

These examples showcase that it is not possible to leave out the auxiliary in the elided clause of the sentence, neither is it possible to use the aspectual markers as support. Therefore, we see that auxiliaries become obligatory in VPE. Why is that? As I have already presented earlier, this likely has to do with the licensing conditions of VPE. Therefore, I will now discuss and analyse the VPE in AAE and see if it is possible to answer *why* morphology in T becomes obligatory.

3.2 The Licensing of Verb Phrase Ellipsis in African American English
3.2.1 The optionality of auxiliaries

As seen earlier, I have chosen two specific types of sentences that are found in AAE: sentences containing a null auxiliary and aspectual sentences. I believe these sentences have different properties in terms of how the missing auxiliaries work, however, I do think that the T can be filled with the same type of morphology in both types of sentences. In this chapter I will firstly analyse the sentences with a null-verb, such as those shown in (10) and (14ab). Furthermore, I will analyse the VPE constructed with aspectual markers, before arriving at a conclusion.

As aforementioned, we see that the sentences in AAE do not require morphology in T. As discussed by Conner (2019), there are linguists who believe that T is an important aspect in licensing ellipsis. The example of (14ab) shows the phenomenon of medial auxiliary deletion, and how the optionality of covert auxiliaries disappears when the auxiliaries are used as licensors of ellipsis sites (Thoms, 2019, pp. 1021–1022). If T needs to be filled, as it has been concluded earlier in the paper, it makes sense that there is a need for an auxiliary when there is no form for morphology in T. By looking at Merchant's analysis, we know that that the [E] feature needs to occupy a functional head. It could be argued that null auxiliaries do not satisfy the properties needed for a functional head, however, in cases such as sluicing, the head is empty. Why then, is it a requirement for the functional head in VPE to be filled? This likely points back to Conner's claim that licensors need to be overt, which will be brought up at a later point. While the discussion of why sluices may have an empty functional head, but verb phrase ellipsis may not, is interesting, I will not be able to go into detail on this due to the scope of the paper. I will, therefore, assume that the presence of a phonologically realized head is needed for [E$_{VP}$] to be able to occupy the functional head. Based on the [E] feature, I imagine the VPE will look like (15), syntactically.

(15)   Sue dancing, and Rachel [$_{T'}$[$_T$ [E$_{VP}$] **is** [vP Δ]]] too.

This example shows us that the auxiliary appearing in the elided clause is the same as the one that would have appeared in the main clause in Standard English. Green (2002) brings up tag questions as a way of forcing auxiliaries to the surface (Green, 2002, p. 43).

(16)   a. Sarah not cheating, is she?
        b. Sarah not cheating, *Ø she?

The tag question is indeed another situation wherein we find obligatory use of auxiliaries. It is possible to assume that the VPE in AAE have the same effect, where the auxiliary is forced to the surface. This turns the covert auxiliary overt, which, in turn, gives ground for elision, as already established.

Therefore, we see that the empty T cannot head an ellipsis site. Because T is empty, an auxiliary will be forced to the surface to make elision possible. Conner (2019) argues for the need of overtness in VPE, giving examples from Standard English showcasing that the head cannot be empty. The structure of VPE in AAE does indeed support this claim, since VPE is ungrammatical with an empty T. While AAE works differently from Standard English in many prospects, it does seem like ellipsis, or at least VPE, may follow the same rules as in Standard English.

3.2.2 Aspectual Phrases and Verb Phrase Ellipsis

In this next part of the paper, I will go on to analyse VPE in the aspectual sentences of AAE. I have not analysed these together with the standard declaratives, as I believe they function differently. While sentences such as those in (10) operate without any type of auxiliary, the aspectual sentences do not operate with only a main verb. As aforementioned, the aspectual markers behave in a more particular way, and there is less optionality with these types of sentences than with those sentences that have undergone medial auxiliary deletion. Conner (2019) mentions that the aspectual *be* is always uninflected and cannot be zero-marked (p. 95). I assume that *BIN* cannot be zero-marked either. Having the aspectual markers be deleted will lead to a change in the meaning of the sentence, and so it makes sense that one cannot delete these types of verbs.

Why is it that one cannot use the aspectual markers to license ellipsis? As seen in (14df), this leads to ungrammaticality. The reason for this could be that the aspectual markers do not head TP. Conner (2019), based on other literature, argues that the habitual be, which I also take to include *BIN*, heads the Aspectual Phrase (AspP) (Conner, 2019, p. 95). If, as we have observed in Standard English, one needs T to be filled in VPE, it makes sense to see the auxiliaries make an appearance. As briefly mentioned, the theory of Agree-relation is discussed in Conner (2019). The theory predicts that the phrases headed by *be* will be targets of ellipsis. It is part of the LexP, and will therefore be deleted (Conner, 2019, p. 96). Due to the prediction that the aspectual marker needs to be deleted, we find that it cannot head an ellipsis.

Moreover, as we have seen earlier, having infinitival heads as licensors seem to give varying results regarding grammaticality. Johnson (2001) has argued that the reason for this is due to topicalization, and that a topicalized VP cannot land inside an infinitival clause the way it can with a finite clause. Linguists have moved away from this notion, but it is still important to note, since the aspectual markers not only are part of a LexP that will be elided, additionally, they are non-finite, which will contribute to the impossibility of having aspectual markers head an ellipsis site. Furthermore, the use of the [E]-feature further proves that the aspectual markers need some type of support for VPE. Since the aspectual markers head AspP, the functional head, T, remains empty. Therefore, an auxiliary is needed to fulfil the properties needed to create verb phrase ellipsis.

In the declaratives with medial auxiliary deletion, we see that the auxiliary that appears as the head of the ellipsis is the same as the auxiliary that was deleted. The same cannot be said for the aspectual phrases, as we see with the use of do-support in (14e). Do-support is seen in many different contexts in Standard English. Generally, we see it being used as support for main verbs if there are no auxiliaries.

(17)   a. Rosemary came for dinner.

b. Did Rosemary come for dinner?

c. *Came Rosemary for dinner?

(18)   a. Ellen is coming for dinner.

b. Is Ellen coming for dinner?

Here we see that there is a need for do-support in (17) as the main verb cannot be inflected with the subject, while in (18) the auxiliary can perform the SAI. As aforementioned, Green (2002) argues that in sentences such as (16), which I predict also happens with VPE, the deleted auxiliary is forced to the surface, meaning that the auxiliary is "underlying". This is not the case for do-support. Do-support is "inserted" to carry tense and agreement morphology (Thoms, 2011, p. 2). It is not "brought to the surface" the way the auxiliaries are in (16). Oftentimes, one describes do-support as a "last resort" when there is absence of V-raising to T. To "rescue" the T from remaining unaffixed, *do* will be inserted (Thoms, 2011, p. 2). Therefore, this only happens in certain environments, such as in (17) where the main verb is unable to raise to C, and in VPE if there is no form for auxiliary to carry morphology (Thoms, 2011, p. 2).

Therefore, with the need for a morphologically, or phonologically as Conner (2019) states, realized head, do-support becomes necessary in VPE with aspectual markers. However, we see in (14c) that *BIN* does not use do-support, rather, *have* supports the aspectual marker. Is this the same case as (16), where the auxiliary is forced to the surface? I believe this to not be the case. The reasoning for this is, firstly, because one will expect aspectual sentences to "behave" the same way, regardless of which exact aspectual marker is used. Conner (2019) notes that the different aspectual markers, *be, BIN,* and *dǝn*, all head AspP, though it is assumed that *dǝn* merges into a lower AspP shell. They will all be targeted

of ellipsis, and cannot be stranded (Conner, 2019, p. 97). Due to the aspectual markers having the same properties, I will assume that the same support system will be used for all of it. Green (2002) only brings up *have* in support of *BIN*. Such as in (14c), but also in emphatic environments, as previously mentioned. Conner (2019) does bring up instances of other auxiliaries being used for support.

(19)   (Conner, 2019, p. 98)

a. Joe *BIN* married, and Sue also told you he **was.**

b. Joe *BIN* went to college, and his brother **did**, too.

(19b) showcases the use of do-support in relation to *BIN*, however, we also see the use of *be* being used as support. It is an interesting prospect to see exactly what leads to these differences in what auxiliary is used as support, but as this is beyond the scope of the term paper, I will not be able to go into detail regarding these differences. The use of do-support leads me to believe that there is a possibility that there could be something such as *have*-support in AAE.[16] Having the assumption that aspectual markers will behave in the same manner grammatically, I will assume that *have* is inserted rather than being forced to the surface. Since *have* can be used as an auxiliary, it can fulfil the same duties as do-support does. In the case of VPE, it can act as the functional head, and the overt phonologically realized head that is needed to license the ellipsis and is therefore very much akin to do-support.

4 Conclusion

Finally, to answer my thesis question, why is morphology in T required in VPE? Having looked at theories of ellipsis licensing, there are differing opinions in exactly what it is that licenses ellipsis. However, what is common ground for almost every theory is the importance of T. Following Conner (2019) who, based on Potsdam et. al., argues that there is a need for a phonologically realized head to license the ellipsis. Given the theories regarding the Agree relation and the [E] feature, the head needs to be in T to be a licensor. In declaratives with medial auxiliary deletion, T will remain empty, which makes it impossible for elision to occur. Therefore, we see that the underlying auxiliary is forced to surface, and fills T. In aspectual sentences, seemingly, there are no underlying auxiliaries, and therefore, there is a need for do-support. As we have seen with *BIN*, there seems to be a have-support that can fill T. In these different examples, we have seen that auxiliaries are what fills T and become the heads that license the ellipsis.

As a final note, if I were to further my research in this field, I would go beyond just looking at auxiliaries filling T. As exemplified in (7), it seems that negators may also license ellipsis, which I have not had the space to discuss. I would say that this is in part something my paper lacks, as I only looked at auxiliaries, and therefore, it would be interesting to look at what else may fill T. Furthermore, I would

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[16] Seeing that *be* supports *BIN* in (19a), it could be possible to argue that there is a be-support also. However, due to *have* being the auxiliary that is used the most in relation with *BIN*, I will only discuss this.

look deeper into the phenomenon of *have*-support. Based on what I have found in the literature used for this term paper, it seems very likely that it is possible to draw parallels between *have* and *do*. Since the research becomes more limited in "squibs" such as this, in a setting where it would be possible, I would have a deeper examination of the difference between the declarative sentences with medial auxiliary deletion, and the aspectual sentences. Is the use of *have* indeed *have*-support, or is it an underlying auxiliary that has been forced to the surface? Conclusively, there is much more to research in the field of AAE and VPE.

5 Literature

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