

# Ling 566

## Mar 13, 2019

Variation in the English Auxiliary System

# Overview

- AAL copula absence
- Why it's not phonological deletion
- Alternative syntactic analyses
- The winner: An empty element (!)
- Reflection on syntactic argumentation
- Reading questions

# Linguistic Argumentation

- The available data usually underdetermines the analysis (cf *to*)
- Sometimes appeals to naturalness can help
- Further constraints come into play when we try to make interacting analyses consistent
- Still, just about everything could be done differently if we're willing to change assumptions
- Data underdetermines the theory; difficult to argue that something must be analyzed a certain way

# An Unusual Case

- The verbless sentences in Chapter 15 provide a rare example where the data seem to force a particular kind of analysis
- Specifically: an empty element
- And we tried **very** hard to avoid it

# Notes on African American Language

- aka AAE, AAVE, Ebonics, Black English, and various other things
- All natural languages are systematic
- This is just as true of stigmatized varieties as of prestige dialects
- The claim that AAVE has “no discernible rules” (columnist William Raspberry) is blatantly false
- This is not to deny the social and economic value of using a prestige dialect
- But prestige is not correlated with systematicity

# Missing *be* in AAL

- Some AAL sentences:

*Chris at home*

*We angry with you*

*You a genius*

*They askin for help*

- Like GAE sentences with a form of *be* missing
- Analogous sentences occur in many languages

# AAL Also Allows Sentences With *be*

*Chris at home*

*Chris is at home*

*We angry with you*

*We're angry with you*

*You a genius*

*You are a genius*

*They askin for help*

*They're askin for help*

# Labov's Deletion Account

- Copula absence comes about when contracted auxiliaries (*'s* and *'re*) are deleted altogether
- Predicts that copula absence is only possible where contraction is: (strong claim)

*You got to be good, Rednall!*

*\*You got to  $\emptyset$  good, Rednall!*

*Be nice to your mother!*

*\* $\emptyset$  Nice to your mother!*

*It ain't a flower show, is it?*

*\*It ain't a flower show, 's it?*

*\*It ain't a flower show,  $\emptyset$  it?*



# Counterexamples to Labov's Account

*How old you think his baby is*

*\*How old you think his baby 's*

*How old you think his baby ∅*

*Tha's the man they say is in love*

*\*Tha's the man they say 's in love*

*Tha's the man they say ∅ in love*

- The relevant examples here are with fully contracted 's
- These examples show that copula absence can't depend on copula contraction

# Our Challenge

- Provide a precise analysis of AAL copula absence within our theory
- Account for all of the facts covered by the deletion account
- Deal with the counterexamples to the deletion account

# Two Possible Analyses

1. Add another initial symbol which is [HEAD [PRED +]], not [HEAD *verb*]:

$$\left[ \begin{array}{l} \text{HEAD} \\ \text{VAL} \end{array} \left[ \begin{array}{l} \begin{array}{l} \textit{pos} \\ \text{PRED} \quad + \end{array} \\ \begin{array}{l} \text{SPR} \quad \langle \rangle \\ \text{COMPS} \quad \langle \rangle \end{array} \end{array} \right] \right]$$

2. Write a special grammar rule for verbless clauses:

$$\left[ \begin{array}{l} \textit{phrase} \\ \text{SYN} \\ \text{SEM} \end{array} \left[ \begin{array}{l} \begin{array}{l} \text{HEAD} \left[ \begin{array}{l} \textit{verb} \\ \text{FORM} \quad \textit{fin} \end{array} \right] \\ \text{VAL} \left[ \begin{array}{l} \text{SPR} \quad \langle \rangle \end{array} \right] \\ \text{MODE} \quad \textit{prop} \\ \text{INDEX} \quad \boxed{2} \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{l} \boxed{1}\text{NP} \\ \text{CASE} \quad \textit{nom} \\ \text{AGR} \quad \textit{non-1sing} \end{array} \right] \left[ \begin{array}{l} \text{SYN} \\ \text{SEM} \end{array} \left[ \begin{array}{l} \begin{array}{l} \text{HEAD} \left[ \begin{array}{l} \text{PRED} \quad + \end{array} \right] \\ \text{VAL} \left[ \begin{array}{l} \text{SPR} \quad \langle \boxed{1} \rangle \end{array} \right] \\ \text{INDEX} \quad \boxed{2} \end{array} \right] \end{array} \right]$$

# A Counterexample to Both:

*How old you think his baby  $\emptyset$*

- LDDs require that a non-empty GAP list be licensed by a lexical head that is missing an argument
- Neither the initial symbol analysis nor the grammar rule analysis posits a lexical head corresponding to *is* that would license the gap
- If we posit a silent variant of finite forms of *be*, we solve this problem

# The Silent *be* Analysis

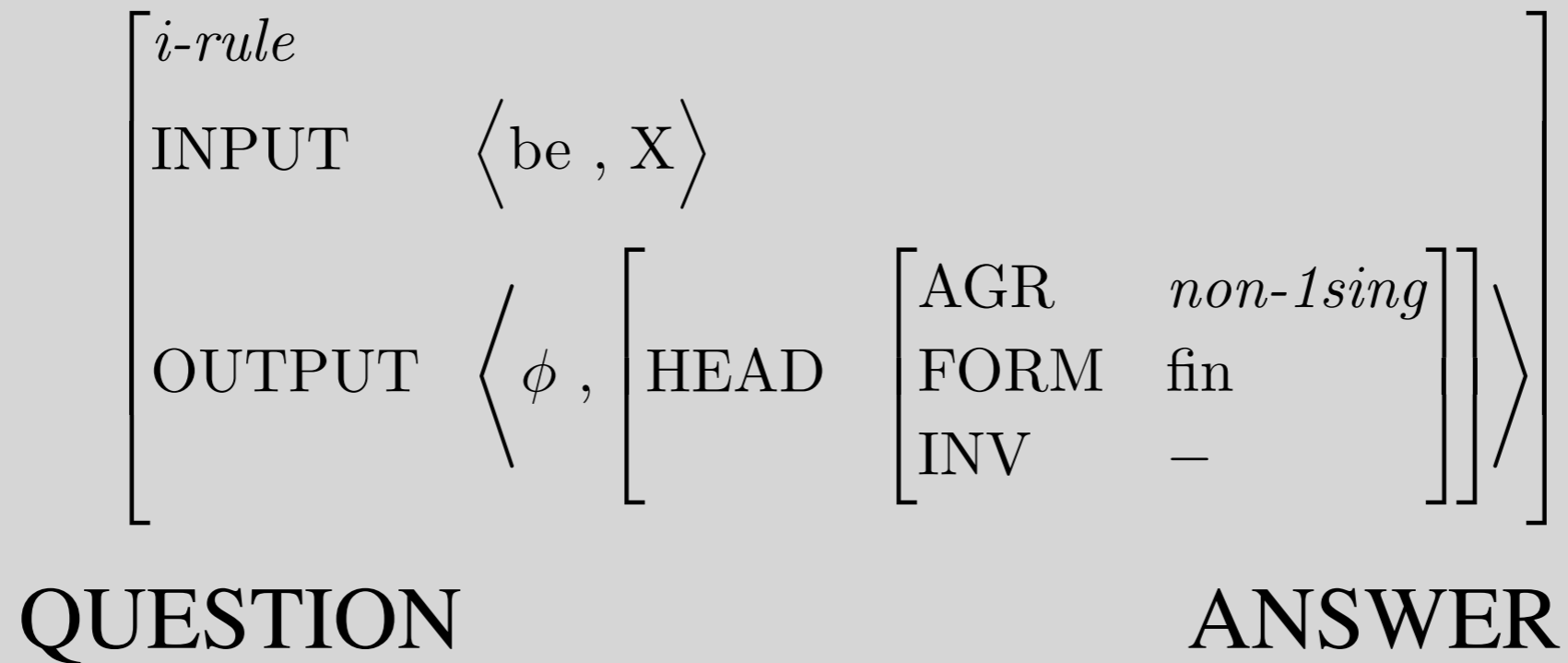
## Silent *be* Lexical Rule

$$\left[ \begin{array}{l} i\text{-rule} \\ \text{INPUT} \quad \langle \text{be}, X \rangle \\ \text{OUTPUT} \quad \langle \phi, \left[ \text{HEAD} \left[ \begin{array}{ll} \text{AGR} & \textit{non-1sing} \\ \text{FORM} & \textit{fin} \\ \text{INV} & \textit{—} \end{array} \right] \right] \rangle \end{array} \right]$$

- This is a highly specialized lexeme-to-word rule (i-rule)

# Some Questions About This Rule

## Silent *be* Lexical Rule



Which lexemes does it apply to?

Those spelled *be*

Why is the output [FORM *fin*]?

\**You got to Ø good*

Why is the output AGR *non-1sing*?

\**I Ø hungry.*

Why is the output [INV –]?

\**It ain't a flower show, Ø it?*

# How does this account for LDDs?

Silent *be* Lexical Rule

$$\left[ \begin{array}{l} i\text{-rule} \\ \text{INPUT} \quad \langle \text{be}, X \rangle \\ \text{OUTPUT} \quad \langle \phi, \left[ \text{HEAD} \left[ \begin{array}{ll} \text{AGR} & \text{non-1sing} \\ \text{FORM} & \text{fin} \\ \text{INV} & - \end{array} \right] \right] \rangle \end{array} \right]$$

Answer: The usual way. That is, the output of this rule (silent *be*) can have a non-empty GAP list. The fact that the verb is not pronounced doesn't matter.

# A Possible Objection

- Earlier, we touted the WYSIWYG character of our theory: everything justified by something observable.
- Doesn't positing an inaudible verb undermine that claim?
- Response
  - A word with no phonology is just the shortest possible word
  - Positing one such word, with restricted distribution is qualitatively different from allowing multiple "empty categories" that can appear in many places



# Conclusions

- Studying a variety of languages and dialects is important to discovering what formal devices are necessary to account for natural language
- Formulating a precise theory of grammar allows us to investigate in detail the differences between dialects and between languages
- We were able to make the argument for a silent verb because our analyses were precise, and the consequences could be worked through

# Overview

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# Reading Questions

- I was a little confused by section 15.2. We posit an entry for have in (2), then we say that this entry is incorrect, as both AUX + and AUX - should be allowed. But then the section concludes by explaining why this is not entirely right either. Does this mean that the auxiliary behavior of the verb have cannot be supported by our grammar?
- I'm confused by the examples in (3), which show that speakers who allow the use of "have" as a main auxiliary verb also allow for other auxiliary verbs to be used in the same way. Why would these examples affect whether "have" is AUX + or -? Can't we have different lexical entries in the grammar that could take the same role in a sentence? (Since, for example, we have many cases where we could switch two nouns as the subject of a sentence and have the sentence remain grammatical.)

# Reading Questions

- In (26), if the second NP (Mohammed Ali) is not predicative, then how can we rule it as a grammatical sentence in AAVE?
- For the missing forms of Be in AAVE, can't we make a rule (like the Imperative Rule) that makes the "be" verb demanded but never realized?
- How is copula deletion different from "gappy" constituents or ellipsis where elements also appear to be missing, but are handled without introducing "silent" words. What prevents us from treating zero-copula as a different type of gap?

# Reading Questions

- Can we use the acceptability of the silent copula analysis as a justification for parallel deviations from surface-orientation in SAE as well? For example:
  - a.i. You ok?
  - ii. \*You ok.
  - b.i. That the thing you were looking for?
  - ii. \*That the thing you were looking for.
- The easy out here (unless I'm missing something, which is entirely possible) would be to take something like the Silent be Lexical Rule and just replace the AGR non-1sing requirement with MODE ques, but is that sufficiently justified?

# Reading Questions

- How would the "silent be" theory/rule be parsed? If there is no observed form of be, would a parser guess and assign "silent be" to gap-like locations until the sentence was grammatical? Also, what is the best method for complete coverage? Is it silent-be?
- Has there been work done specifically on a full HPSG model of AAVE? I hate to be subjectively judgmental, but I greatly dislike the notion of a zero-output inflectional rule; it seems rather arbitrary. I would be more convinced if perhaps there were other phenomena in AAVE which could be well-represented with similar types of rules?

# Reading Questions

- Does the existence of pi-rules contradict the notion of being surface-orientated? I can sort of see a parallel between D-Structure/Phonetic Form and pre-pi-rule/post-pi-rule, especially for pi-rules such as the inversion rule. In the case of AAVE be, can we use a pi-rule to nullify the phonetic realization of the be in certain environments?



# Reading Questions

- In this chapter we departed from being strictly surface-orientated motivated by the AAVE be, while still preserving the two other characteristics of HPSG: constraint-based and strongly lexicalist. Is it possible that some other data sometimes force us to depart from those two characteristics as well?
- Can you give any other examples of "silent" words in AAVE or in other languages?



# Reading Questions

- Are there other dialect differences (in English or other languages) that require a similar silent lexeme analysis? And is it correct to assume that these analyses only come up in dialectal differences where the "standard" dialect has a non-silent form of the lexeme?

# Reading Questions

- In Russian, zero copula is only possible in present tense; in past and future there is no other way to mark tense than by marking it on the verb. I assume this is a cross-linguistic pattern and that AAVE also follows this pattern?
- The conclusion of this chapter seems to be, 'We don't observe this thing but it must exist because (and only because) there's no other analysis that fits with our theory, therefore it must actually be there, just invisible.' This has me wondering, how do you decide when data that unquestionably contradicts the framework necessitates a change to the framework and when the framework should hold despite such data?

# Reading Questions

- Where does AAVE come from? Was it developed from combining SAE and another language, since it does not fit well with a surface-oriented analysis?
- How is it determined which dialect of a language is the standard? I'm told my Spanish is quite urban and not at all standard or "textbook" Spanish. I'm primarily aware of some phonological differences, but not so much syntactic ones. Would Spain Spanish be considered the standard since that's where the language originated?

# Reading Questions

- Fn 5 talks about idiolects and how there are no two idiolects that are completely the same. But then what language variety are we modeling in a syntax class? If two people never agree on *all* judgments, how is it possible to model any language variety other than idiolects?

# Reading Questions

- Can both the SAE and the AAVE entries exist in the same grammar allowing for dialect variation within syntactic validity -- is this a way to explain how comprehensible these usages are?  
Presumably which one is produced is beyond the syntax? In other words, we can have whole parts of the grammar that are redundant, right? How do mixed-languages like Spanglish work? Can they just be all the rules and lexical items from both languages together? Has this been mentioned?

# Reading Questions

- So we have the zero copula rule to account for the occurrences in AAVE that have no copula. Are there examples of other rules created specifically to account for language in non-SAE contexts? And outside of AAVE, what are some other major versions/dialects of English?
- I would like to know how one decides which lexical entry would be applied if given no language context. That is if we don't know if a sentence is standard English or AAVE, how do we decide the lexical entry for a word, especially for polysemes? Is it by trial-and-error?

# Reading Questions

- How might we use a computational grammar to analyze a sentence with an unknown English sociolect (i.e. we don't know ahead of time what sociolect we are looking at). Would our grammar need to have all of the rules of all possible sociolects in order to accept all possible sentences (and perhaps risk overgenerating), or would we have multiple grammars and then apply them one after the other until one worked?



# Reading Questions

- When we make a grammar for a particular language, how do we determine which dialects to take into account for analysis? How do we decide that two varieties are so dissimilar that they cannot be accounted for in the same grammar? Or, how do we determine that two varieties are similar enough that they can be?



# Reading Questions

- In sociolinguistics class, I remember learning that in AAVE, copula deletion follows a very consistent pattern, in which the rate of omitted be is greatest with a gon(na) future or progressive verb (she Ø gon tell him; she Ø walking), and decreases in frequency before adjectives (she Ø happy), a locative (he Ø in the car), and noun phrases (he Ø a man). How do we go about representing these variations in the frequency of a pattern when doing phrase structure rule analysis?

# Reading Questions