## Ling 566 Dec 5, 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
- Preview of final exam


## 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
We angry with you
You a genius
They askin for help

Chris is at home
We're angry with you
You are a genius
They're askin for help

## Labov's Deletion Account

- Copula absence comes about when contracted auxiliaries ('s and it '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 $\varnothing$ good, Rednall!
Be nice to your mother!
* $\varnothing$ 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, $\varnothing i t$ ?

## Counterexamples to Labov's Account

How old you think his baby is<br>*How old you think his baby 's<br>How old you think his baby $\varnothing$<br>Tha's the man they say is in love<br>*Tha's the man they say 's in love<br>Tha's the man they say $\varnothing$ 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 $[\mathrm{PRED}+]$ ], not [HEAD verb]:

$$
\left[\begin{array}{lll}
\text { HEAD } & \left.\begin{array}{ll}
p o s & \\
\text { PRED } & +
\end{array}\right] \\
\text { VAL } & \left.\begin{array}{ll}
\text { SPR } & \rangle \\
\text { COMPS } & \rangle
\end{array}\right]
\end{array}\right]
$$

2. Write a special grammar rule for verbless clauses:


## Reading Question

- I would like a little more explanation on the statement on pg 461: "the analysis incorrectly predicts that the missing copula is possible only in root sentences." Isn't $S$, a root node, the complement of a complementizer in a CP? So wouldn't the analysis deal with embedded clauses just fine, since it changes what the initial symbol can be, thus changing what the $S$ within a CP can be? Or is the $S$ within an embedded clause somehow different from the S at the root of the tree?


## A Counterexample to Both:

 How old you think his baby $\varnothing$- 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 $b e$, we solve this problem


## The Silent be Analysis

## Silent be Lexical Rule

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

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


## Some Questions About This Rule

Silent be Lexical Rule

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

Which lexemes does it apply to?
Why is the output [FORM fin]?
Why is the output AGR non-1sing?
Why is the output [INV -]?

Those spelled be
*You got to $\varnothing$ good
*I Ø hungry.
*It ain't a flower show, $\varnothing$ it?

## How does this account for LDDs?

Silent be Lexical Rule

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

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


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## Reading Questions

- On page 456 , the book states that "No language or dialect is inherently 'good' or 'bad'." However, I wonder, can we say one language is more expressive than the other? Thus (better?)


## Reading Questions

- Have there been any recent events related to the controversy created by the Oakland school board's passing of that resolution in 1996? I imagine it is as divisive now as it was back then.


## Reading Questions

- I don't fully understand the mechanism of the Zero Copula Rule. The mother in (20) claims to have a finite verb head daughter, but in the tree for "he wild" in (21) does not have a verb.


## Reading Questions

- p.405: "We therefore depart from strict surfaceorientation only when faced with data that admit no other analysis." However, in this way, the silent copula analysis is both constraint-based and strongly lexicalist. When grammar engineering with HPSG, is there a "best-practices" for which tenet to adhere to most? EG, if you have a surface oriented analysis that does away with constraintism or lexicalism, or a deep analysis that maintains them, which route should one go?
- Why do we opt to use $\phi /$ silent words here to represent deletion, but not when representing gaps?


## Reading Questions

- Despite the fact that Labov's analysis leads to a number of false conclusions, I wonder if anyone has incorporated a successful deletion analysis for the AAVE zero copula.
Furthermore, are there any grammar frameworks in use today that support any form of deletion analysis?


## Reading Questions

- I'm super interested in the discussion on Pg. 458 that resists the possibility for phonological or phonetic processes that could (a) destructively modify representations of words or (b) decouple grammatical and semantic information from direct surface representations. It seems like this is directly at odds with the idea of having phonological processes at all. How does HPSG confront the idea of underlying/ surface phonetic forms of words given its commitment to linking syntactic and semantic features to forms that are "present in the sentence" (what I have heard referred to as 'surface forms'). Could phonological processes take the form of lexical rules? Is there a substantive difference between positing the Silent Be Lexical Rule and positing phonological deletion?


## Reading Questions

- Can the silent copula analysis account for the actual process happening in the missing of the copula in AAVE (from the perspective of historical linguistics)? Or do we just select the analysis most consistent with the known data to fit in our model of grammar?


## Reading Questions

- The ungrammatical examples in (22), such as "*I hungry" reminded me of a case in my use of English where I drop the copula in 2nd-person question utterances. For example:
- "You hungry?"
- "You all tired?" (I'm not sure I have actually asked that question without the initial "Are," but it feels grammatical)
- These would be ungrammatical for me:
- "*John hungry?" (maybe I would say that to a baby named John?)
- "*They coming?"
- "*You busy."
- How common is this phenomenon? If I were to describe it with a lexical rule, I think it would be a deletion rule restricted to INV+, 2nd person forms of the verb be as the indut.


## Reading Questions

- Has there been similar work with HPSG and other variations of American English, like whats shown in this chapter and AAVE?
- Following the introduction of AAVE specific forms of be it seems that a grammar that properly licenses AAVE will incorrectly license SAE sentences. Do we split grammars every time we add a dialect or is there some base english which can then be modified.


## Reading Questions

- I am confused about the notion of correctness of a sentence in general. I am not sure anymore if I evaluate a sentence's correctness based on whether I have heard enough similar sentences before or something else. For example sentences like Chris at home and I haven't a clue sound correct because I have heard similar sentences through movies and other media. This may also be because I can make a logical conclusion from these sentences. Can it may be the case that we judge a sentence to be grammatical if we can logically deduce some information from it?


## Reading Questions

- It seems the rules posited in this chapter aren't in the appendix. Does that mean this variation does not hold a place in our cumulative formulation of English grammar?


## Reading Questions

- p. $465^{\text {" }}$...we would not expect many words to share any one audible phonology". While it is indeed very intuitive since it would increase unnecessary ambiguity in communication, I am wondering why in Mandarin it is instead very common to have multiple characters sharing one audible phonology. For example, with "shi4", counting from the input method, I find 25 commonly used characters among 91 total characters associated with this phonological representation. From the only 3 tonal languages I'm familiar with, Mandarin, Taiwanese Hokkien, and Cantonese, neither seem to comply with the intuition mentioned above. Is this common to tonal languages in general? Or is it more specific to Mandarin and its linguistically related family of languages?


## Reading Questions

- Many times in this class Emily has said that we can find many ways to modify our grammar in order to account for the data. We've seen in this chapter, and earlier in the book, that we can add new specific lexical entries, add new lexical rules, and add new phrase structure rules, among other things. Are there any other examples of ways we can alter the grammar that is not discussed in the textbook? When confronted with a new language pattern that we have to adjust our grammar to handle, how can we decide which method to use? What should we be considering?


## Reading Questions

- After reading the entire chapter, I am wondering if the purpose of this chapter is to present a special case where we modify our HPSG system to adapt to that? It seems that we will modify our grammar constantly if more data is presented and more cases are studied. Is that correct? I am wondering if treating some features as binary is not the long - term solution if we want our HPSG system to be applicable for more cases.


## Reading Questions

- Chapter 15 discusses several ways to handle the omission of the copula in English, reaching the conclusion that the best approach is a lexical rule enabling us to produce a silent be. Is this the same approach you take in other languages where the copula is optional? Does this turn out to be the best approach in a substantial majority of languages?
- What would be possible analyses for copulaless languages? It seems the "silent copula" would not make sense if there is no concept of a copula to begin with.


## Reading Questions

- The Silent Be Lexical Rule seems that it would be fitted to AAVE and then, like the HSR and HCR restructuring problems we've had in homework before, have to be modified for other languages. It seems that each dialect or language would have its own set of rules and lexical entries to define it. How would we go about taking what we've learned so far and applying it outside of Standard English? When do we decide to make new rules, and when do we decide to modify and restructure the ones we already have?

