Overview

• Big picture
• Untangle this...
• More on Bouma, Malouf, & Sag
• Course evals
Big picture: Our model

- Describes a set of strings
- Associates semantic representations (and trees) with well-formed strings
- Is stated in terms of declarative constraints
- ... which are order-independent
- Locates most constraints ‘in the lexicon’
- Is stated in a precise fashion
Parts of our model

- Type hierarchy (lexical types, other types)
- Phrase structure rules
- Lexical rules
- Lexical entries
- Grammatical principles
- Initial symbol
Pause for reflection

• What have you learned about the nature of human language?

• What have you learned about how linguists think about language?

• How does this model/type of model differ from CFG?

• In what applications might CFG be sufficient?

• What applications might benefit from something linguistically more motivated?
Complicated example #1

• What phenomena are illustrated by this sentence?

• What rules or interesting lexical types are involved in our analysis of it?

• What tree structure does our grammar assign?

*It was explained to me that Kim left.*
It was explained to me that Kim left.
Complicated examples #2&3

I expect it to continue to surprise Kim that Sandy laughed.

I expect Kim to continue to be surprised that Sandy laughed.
I expect it to continue to surprise Kim that Sandy laughed.
I expect Kim to continue to be surprised that Sandy laughed.
Why not these?

*I expect it to continue to surprise Kim Sandy laughed.

*I expect there to continue to surprise Kim that Sandy laughed.

*I expect that Sandy laughed to Kim be surprised.
Complicated example #4

You all laughed, did you not?

*You all laughed, did not you?

You all laugheded, didn’t you?
you laughed

S

S

NP

you

VP

ADV

all

VP

laughed

V

did

NP

you

ADV

not
You all laughed didn't you
Complicated example #5

That Sandy could laugh so hard, Kim did not realize.

*That Sandy could laugh so hard, Kim realized not.

*Sandy could laugh so hard, Kim did not realize.

*That Sandy could laugh so hard, Kim did not realize it.
That Sandy could laugh Kim did not realize
Complicated example #6

Kim continues to be likely to be easy to talk to.

*Kim continue to be likely to be easy to talk to.

*Kim continues to be likely to is easy to talk to.

*Kim continues to Kim be likely to be easy to talk to.

*Kim continues to Kim be likely to be easy to talk to.
Kim continues to be likely to be easy to talk to.
Complicated example #7

That cake, Kim thought would be easy to eat.

*That cake, Kim thought would be easy to eat pie.

*That cake, Kim thought would be easy to eaten.

*Cupcake, Kim thought would be easy to eat.

*That cake, Kim thought that would be easy to eat.
That cake Kim thought would be easy to eat.
Overview

• Big picture
• Untangle this...
• More on Bouma, Malouf & Sag
• Course evals