Catch-up/review
Overview

• Big picture

• Untangle this...

• By request: *put*, *wh*-questions
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.
*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?
Did you not laugh all?
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 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.
By request: *put*

• What is the status of the PP complement of *put*?
  
  *Sara put the cushion beside her/herself.*

  *Simon put the cushion under him/himself.*

• What is on its RESTR list?

• What is on its SPR list?
By request: *wh*- question

```
S
  NP
    Who
  V
    did
  NP
    Kim
  VP
    see
```
wh-questions again

S

NP  S
Who  V  NP  VP
  did  Kim  S
     V

S
NP  VP
Sandy  saw
wh- complications

- Subject-aux inversion required

- In matrix non-subject questions
  

- Pied piping

  *Who's brother's sister's kid did you meet?*

- ‘Subjacency’

  *Who read what? *What did who read?*

- the hell: *Who the hell reads what (*the hell)*
Relative clauses

S
   /\  
  NP  VP
    /\   /
   I  V  NP
     /\    /
    like D  NOM
       /\    /
      the  N  S
           /\  /
          book  S
             /
            S

NP  VP
   /\  
  Kim  wrote
Relative clauses

S
NP
D
the
N
cat
S
NP
NOM
that
S
VP
saw
I
slept
Overview

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• By request: *put, wh-questions*