Optimizing Structure

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Basics about language

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- Any utterable sentence has to be semantically interpretable and phonologically well-formed.
- This might seem trivial, but all languages have to appease both their phonological and semantic constraints.

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  - Even adverbs of different semantics have different, but specific homes across languages. (Cinque, 1999)
- Most of syntax reflects the fact that the "clausal spine" represents semantic structure, and the recursion and hierarchy of syntax models the recursion and hierarchy of semantics.

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- Prosodic phonology comes in constituents like syntax/semantics: phonological phrases (ϕ), intonational phrases (IP), prosodic words (ω), etc.
- There's a general tendency for languages to want to match up phonological phrases to syntactic/semantic constituents. (Selkirk, 1984, 2011)

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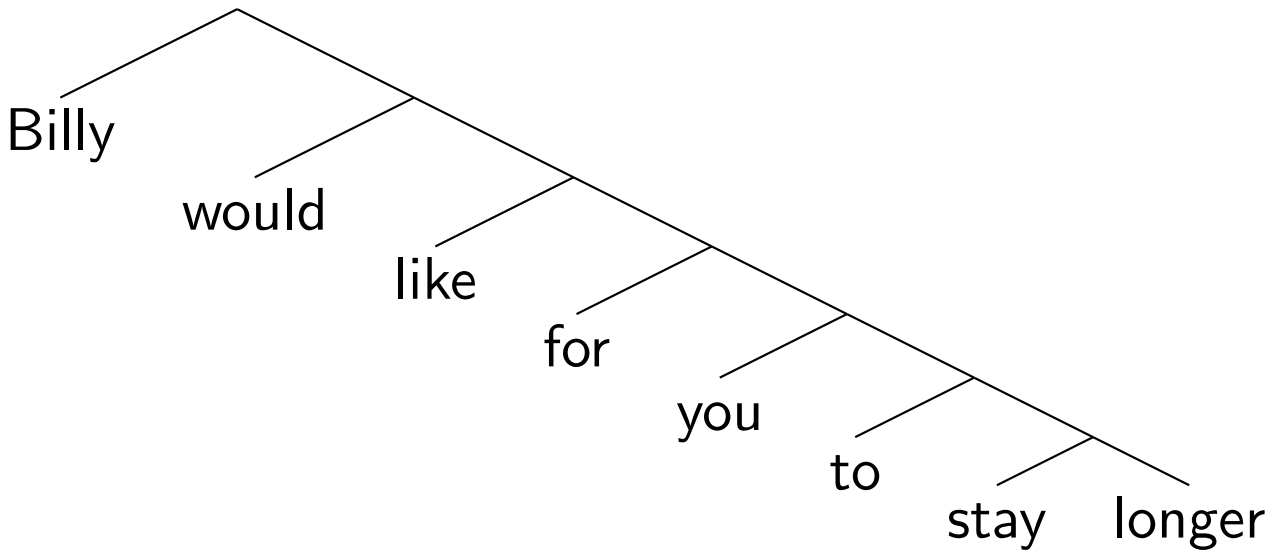
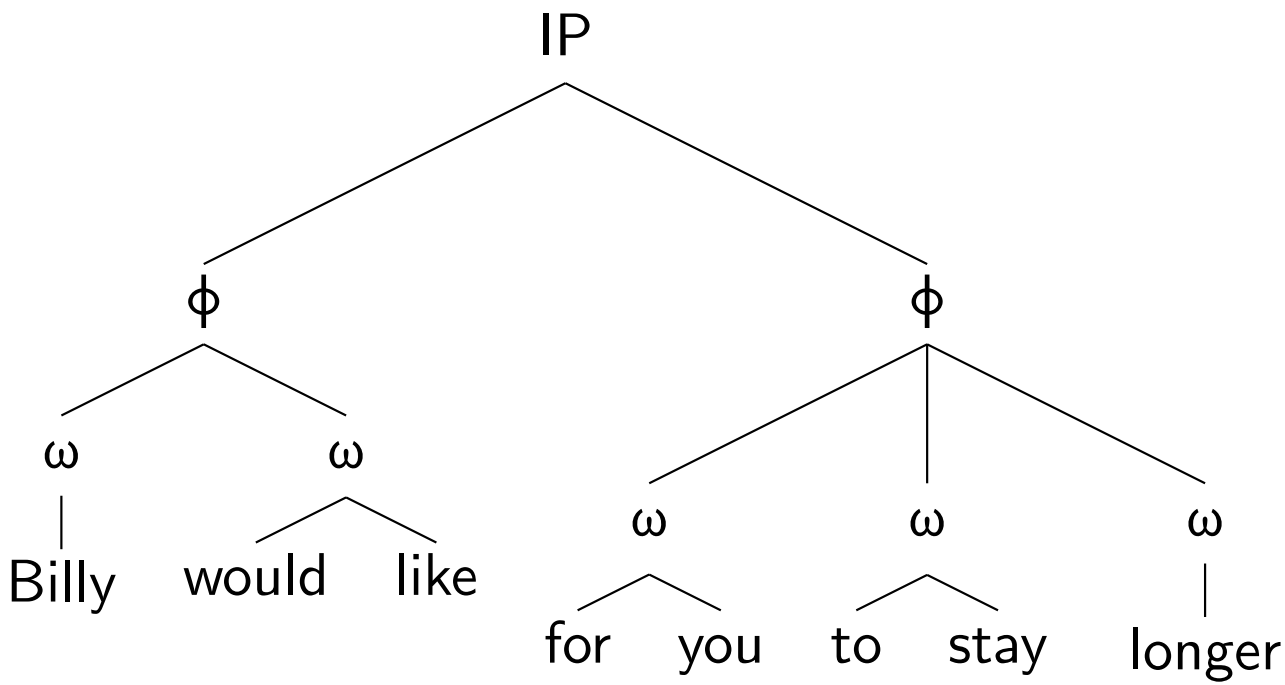
- Syntax/semantics is highly binary and is potentially infinitely recursive.Semantics likes to be structurally *deep*.
- Prosody/phonology prefers to be wider; it fills up all structural branches and can only go so deep. Phonology likes to be structurally *bushy*.

Billy would like for you to stay longer. (synsem)



Billy would like for you to stay longer. (phonpros)



Extraposition

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(1) I want to know it.

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(2) I want to know what love is.

(3) Ich will es wissen.
I want it to know
"I want to know it"

(4) Ich will wissen was Liebe ist.
I want to know what love is
"I want to know what love is."

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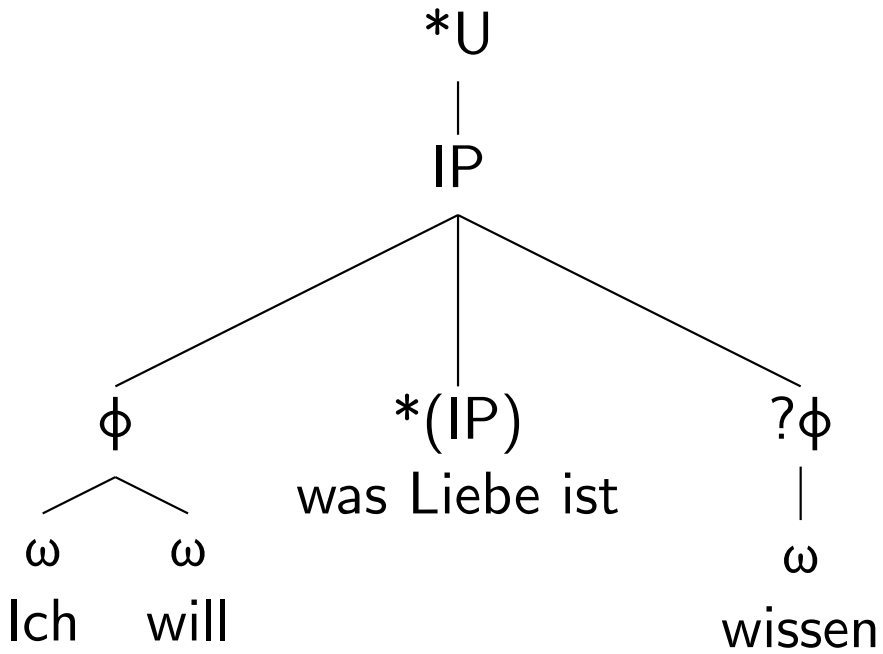
- Even languages like English do it other places:

  (5) the surprised man

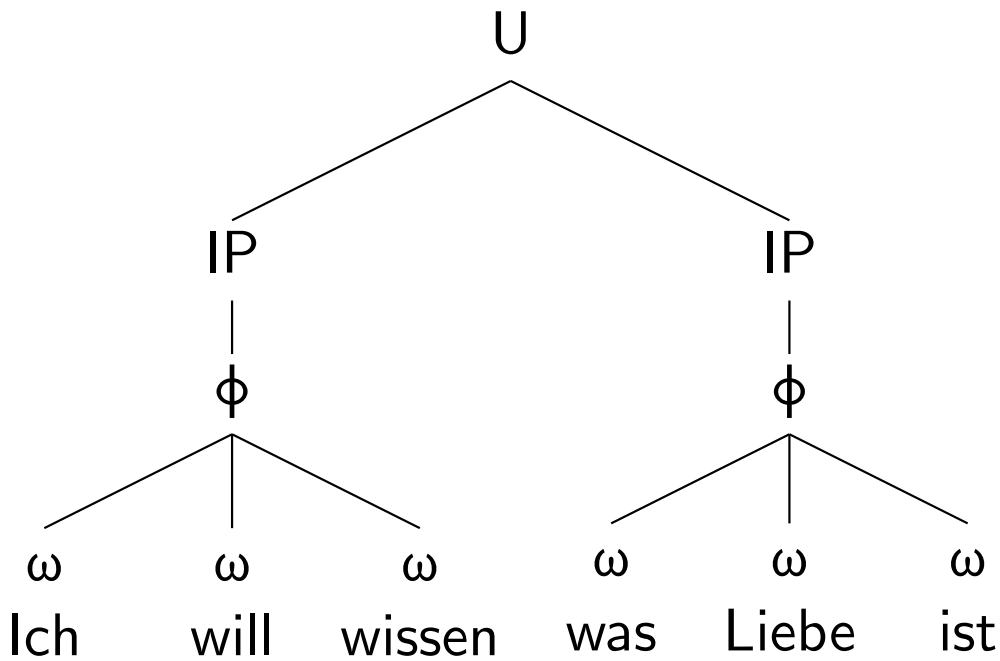
  (6) the man surprised by the party

- You never extrapose forward!
- This kind of backwards movement makes no sense with syntax mapping.

The unextraposed sentences are prosodically flawed



But extraposition allows a repair.



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- This means that the first elements in a phrase should take some kind of trochaic (initial) stress.
- If we acknoledge this as a general constraint, we can solve for a lot of little emergent problems in language.

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- The tense marker is "supposed" to be first, but is subject to prosodic inversion to give the sentence trochaic stress.
- The same is true in most all early Indo-European languages.
  - A huge class of unstressed clitics that can never occur utterance-initially.

that-*trace* effects

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(7) What did Billy think Adam ate?

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- English IP must have a strong start.

Wh-movement as phonology

- Richards (2010)

Optimal mapping

- Classical syntax viewed phonology as totally post-syntactic, but we've seen

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