

Optimizing Structure

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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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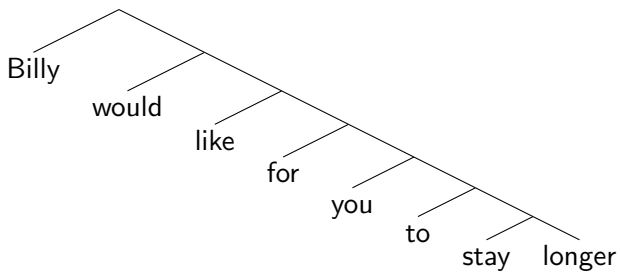
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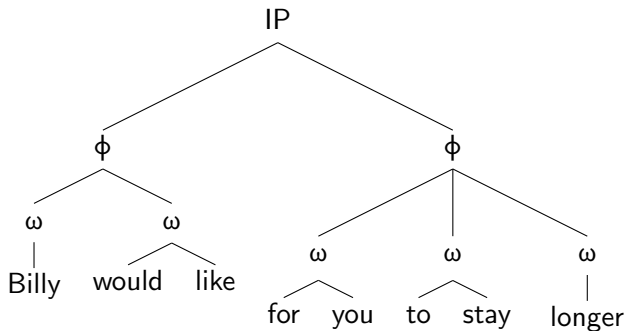
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- ▶ Semantic and phonological structure *want* to match in different languages, but because of their different constraints, they can't.
- ▶ Syntax/semantics is highly binary and is potentially infinitely recursive. Semantics likes to be structurally *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)



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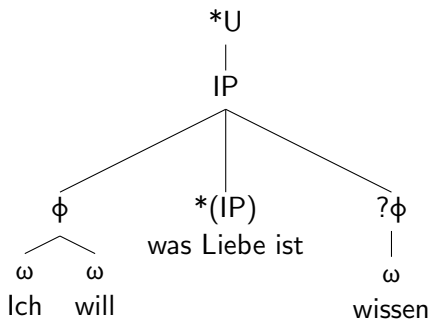
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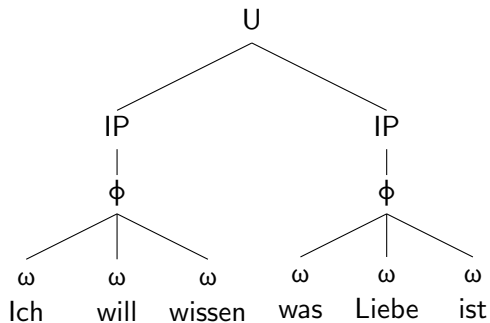
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 - (5) the surprised man
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- ▶ You never extrapose forward!
- ▶ This kind of backwards movement makes no sense with syntax mapping.

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 acknowledge 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.

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 - (10) * Who did Billy think that ate the apple?
- ▶ English IP must have a strong start.

References

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