



Formalism      Prosody      Generative Grammar  
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# Abstract representations

- What is real linguistic data?
- Equivalence classes
- Abstract notions/categories/rules



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# Prosodic structure

- mora syllable foot
- example: *anarchistic*



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# Inari Saami quantity

palo	'fear.ACC.SG'
pa o	'fear.NOM.SG'
kállá	'man.ACC.SG'
faalâm	'I offer'
kää lis	'man.NOM.SG'
fáállun	'on offer'



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# Inari Saami quantity

palo	'fear.ACC.SG'	short V	short C
pa o	'fear.NOM.SG'	short V	half-long C
kállá	'man.ACC.SG'	short V	long C
faalâm	'I offer'	long V	short C
kää lis	'man.NOM.SG'	long V	half-long C
fáállun	'on offer'	long V	long C



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# Inari Saami data

How I got myself in trouble and how Patrik Bye came to the rescue with his insights.



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# What is Generative Grammar?

- Narrow definition of Generative Grammar : Chomskyan frameworks in the narrow sense: Standard Theory, EST, Principles & Parameters (GB & MP) Sometimes referred to as “transformational-generative grammar”;
- More generally, Generative Grammar includes:
  - Minimalism (MP) and its predecessors
  - Lexical-Functional Grammar (LFG)
  - Relational Grammar (RG); Arc Pair Grammar
  - Head-Driven Phrase Structure Grammar (HPSG)
  - ...



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# Generative Grammar

Common underlying assumption:  
The theories and analyses should be formally (mathematically) precise



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# Generative Grammar

“I have always understood a generative grammar to be nothing more than an explicit grammar.” (Noam Chomsky, *The Minimalist Program*, chapter 2, p. 162, footnote 1)



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# Generative Grammar

“Generative grammar can be regarded as a kind of confluence of long-forgotten concerns of the study of language and mind, and new understanding provided by the formal sciences.” (Noam Chomsky, *The Minimalist Program*, p. 4)

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# Formalism

- Under this definition, generative grammar can be equated with formalist theories.
- Compare: *Functionalism*
- Just as with Generative Grammar, scholars differ on what they mean by Functionalism



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# Functionalism

- Talmy Givón (1995) *Functionalism and Grammar*, Preface:
- “All functionalist subscribe to at least one fundamental assumption *sine qua non*, the non-autonomy postulate: that language (and grammar) can be neither described nor explained adequately as an autonomous system”
  - “To understand what grammar is and how and why it comes to be this way one must make reference to the natural parameters that shape language and grammar: cognition and communication, the brain and language processing, social interaction and culture, change and variation, the brain and language processing.”

What parts of Givón’s statement do formalist disagree with? Agree?

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# Functionalism vs. formalism

- A lot of issues get tangled up in the debate that are orthogonal to the division.
- What’s universal?
  - What’s innate?
  - What role does syntactic phrase structure play?
  - Are there transformations?
  - Are abstract generalizations good? How abstract can they be?
- There are differing views within Formalism and with Functionalism on these points.







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LFG

# C-structure

- Concrete syntax
- Varies widely across languages
- Cross-linguistic differences
- Constrained by c-structure rules
- Constrained by X-bar theory



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LFG

# F-structure

- Abstract syntax
- Largely invariant across languages
- Cross-linguistic similarities
- Constrained by various principles, such as Completeness, Coherence, Uniqueness



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LFG

# Mapping c-structure – f-structure

- The mapping from c-structure to f-structure is not one-to-one (it is one-to-many), but it is monotonic (information-preserving)



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LFG

# Fragments

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LFG

## LFG and grammatical description

- Many linguists who work on the description of endangered languages adopt LFG as their formal framework
- Paul Kroeger (2007) "LFG as a framework for descriptive grammar".



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LFG

## Linguistic formalism and language description

- Analysis involves abstraction.
- Formal (abstract) analysis can help you understand data (e.g., Toivonen's confusion & Bye's feet)
- Formalism can provide you with a vocabulary for stating your generalizations
- Formalizing your generalization can make clear what predictions you make
- A precise formalization makes it easier to do cross-linguistic and cross-dialectal comparison
- A clear formal analysis renders the fruits of your hard work accessible to others.

