SETTING THE STAGE:
Constituents, Meaning, and Architecture: The Big Picture
4-6 January 2016
LANGUAGE AS AN INSTINCT

- Darwin: “an instinctive tendency to acquire an art”...but not confined to humans [The Language Instinct, p. 7]
- Pinker, building on William James: “The workings of language are as far from our awareness as the rationale for egg-laying is from the fly’s.” [p.8]
- Chomsky’s fundamental contribution to the intellectual study of language was to challenge the idea that language should be examined within the context of behaviorism.
  - Humans aren’t mice in a maze when it comes to language.
“...grammatical sophistication used to be nurtured in the schools, but sagging educational standards and the debasements of popular culture have led to a frightening decline in the ability of the average person to construct a grammatical sentence.”[The Language Instinct, p.5]

“A preschooler’s tacit knowledge of grammar is more sophisticated than the thickest style manual or the most state-of-the-art computer language system, and the same applies to all healthy human beings, even the notorious syntax-fracturing professional athlete and the, you know, like, inarticulate teenage skateboarder.” [The Language Instinct, p.6]
Evidence of the Instinct...

- **Poverty of the input**
  - Children absolutely do not hear every sentence that they produce.
  - Deaf children create signed languages.
  - Children “fill in” missing grammatical information.
    - The transition from pidgins to creoles.

- **Rapid acquisition**
  - E.g. - By 3.5, children use the -s agreement marker correctly 95% of the time. [*The Language Instinct* p.33]
  - It’s just as difficult to acquire sign languages after the critical period as it is to acquire spoken languages.
A unicorn that is eating a flower is in the garden.
- Children correctly produce *Is a unicorn that is eating a flower in the garden?*
- Children don’t form the question *Is a unicorn that eating a flower is in the garden?*
  - An innate sense of constituency

Estimates vary greatly about the number of fluent speakers. [Tallerman, Ch.1, EX 38]

It may harm your defence if you do not mention when questioned something which you may later rely on in court. [EX 41]

What was that guy who retired last month’s name? [EX 55b]
BUT...STRUCTURE ISN’T ALWAYS SO CLEAR. FOR INSTANCE, DO DITRANSITIVE PAIRS HAVE THE SAME OR DIFFERENT DEEP STRUCTURES?

(i) a. Ali sent the letter to Hasan.
   b. Ali sent Hasan the letter.

(ii) Indonesian
       Ali send-past letter the to Hasan.
       ‘Ali sent the letter to Hasan.’
       Ali send-past-promise Hasan letter the
       ‘Ali sent Hasan the letter.’
       [Tallerman, Chapter 1, EX 9&10]

- The b sentence in Indonesian has a morpheme which indicates that some movement operation has taken place, so maybe b is derived from a.
Icelandic

(i) Ritarinn sendi samningana til lögfræðinga.
   secretary.the.nom sent.3sg contracts.the.acc to lawyers.the.acc
   ‘The secretary sent the contracts to the lawyers.’

(ii) Ritarinn sendi lögfræðingunum samningana.
   secretary.the.nom sent.3sg lawyers.the.dat contracts.the.acc
   ‘The secretary sent the lawyers the contracts.’

- No marker on the verb. The case on the “indirect” object changes.

- English doesn’t have morphological markers on the nouns or the verb. The words look the same in both constructions.
a. The Key Components

Phrase Structure Rules

Lexicon

Deep Structure

Transformations

Surface Structure

b. How Things Fit Together

Syntax

Morphology

Semantics

Phonology

Semantic Interpretation
...our trees will get increasingly complicated, we still want to adhere to an important concept.

The Law of Compositionality: If the meaning of a collection of formatives, \( \alpha \), is derivable from the meanings of those formatives then \( \alpha \)'s meaning is compositional. The meaning of sentences is compositional. [Johnson 2011, Ch2, EX 6]

[Idioms are an exception. These are briefly discussed at the beginning of Johnson, Ch.2.]
1. The angry football fans ordered those lousy temporary referees to reverse the call.

2. Who has the duplicitous politician convinced his underling to steal money from?

3. Should the couple plan to buy an expensive condo in downtown Minneapolis when they have freed their assets?

4. Which associate do you think embezzled money from the firm?

5. The rude children should have been taught how to eat at a restaurant.

6. Cherlon plans to buy several pairs of shoes when she is in DC.

7. The interviewer appears to have read every book by that author.

8. The reading that the professor has assigned will teach the students what the important aspects of syntactic theory are.

9. Consumers rarely use the coupons that come with the weekend newspaper.

10. The bossy traveler told the bellhop where to put the luggage.

11. The association that decided to honor the controversial actress was dismantled by the oversight board.

12. Those students seem to be good representatives of what the value of a liberal arts education is.
The positions of heads and phrases can be switched. For instance, in a verb-final language, we want the verb to come after the object in the VP. Likewise, the position of the bar-level can be switched as well.

At this point, the position that probably has the least obvious function is the specifier. The specifier position provides a place for phrases of various types. A phrase can either be initially placed in the specifier or can move there.

- There is LOTS of movement to specifier positions! We’ll get there...
In essence, the X-Bar model facilitates (a weaker stance) or makes possible (a stronger stance) the acquisition process by severely constraining the range of possible grammars.

“If every language learner is equipped with this X’ Theory, then they will converge on more or less the same $G_L$ when presented with the information that being in the environment of speakers of L provides. If there are differences in the $G_L$s that learners converge on, these will trace back to different decisions these learners have made about the identity of W, X, Y, and Z or how their linear order is determined. If the rest of a model that incorporates these constraints is correct, then, it should allow any language learner to pick out a $G_L$ very close to the $G_L$ giving shape to the speech in that learner’s environment.” [Johnson, p.4]

The syntacticians’ task, then, is to figure out the minutiae that the X-Bar skeleton represents and to the best of our ability, use this model to account for a variety of phenomena.

- And, as we’ve discussed, while English is our base language, we’ll use cross-linguistic data to either make inferences about another language or to provide more concrete evidence in support of a hypothesis.
WHAT ARE THE XP CATEGORIES IN X-BAR THEORY?

- Noun Phrase
- Verb Phrase
- Adjective Phrase
- Adverb Phrase
- Prepositional Phrase

- Complementizer Phrase
- Tense Phrase/Inflectional Phrase

- NOTE: In the (Carnie) reading for Friday, the node TP is presented without much discussion. We’ll go over this more next week.

- Determiner Phrase [Yep, it’s real!]

FAMILIAR PHRASES

PERHAPS LESS FAMILIAR PHRASES
1. Students assume that professors read many books about very esoteric topics.
   - What’s the object of the verb assume?

2. Which Japanese restaurants in Reykjavík has Cherlon eaten at?
   - Yep, we strand prepositions all the time!
   - What moves where?

3. The lonely woman wrote a letter to the man in Boston with an iPad.
   - A fun sentence from 115 that illustrates structural ambiguities. 😊
4. Many foolish people hope to win the lottery.
5. The syntax professor appears to have particular contempt for this weather.
   - Think about the meaning here...
5. Many traffic accidents were avoided this morning by careful drivers.
   - Hmmm, what should we do about passives?
6. a. The bartender made her a fantastic cocktail.
   b. The bartender made her drunk.
   - These have very different structures.
...since we're talking about drunk people...

a. Prestarnir hittu biskupinn drukknir.
priests.the.Nom.masc.pl met bishop.the.Acc.masc.sg drunk.Nom.masc.pl

b. Prestarnir hittu biskupinn drukkinn.
priests.the.Nom.masc.pl met bishop.the.Acc.masc.sg drunk.Acc.masc.sg

c. Prestarnir fóru til biskupsins drukkins.
priests.the.Nom.masc.pl went to bishop.the.Gen.masc.sg drunk.Gen.masc.sg

...Icelandic makes it very clear. 😊
The Novel Form Argument

(8)  
   a. If enough information is introduced with a novel word to enable the individual learning that word to recognize its category, then
   b. The individual knows which arrangements it can grammatically combine in.
   c. Hence, it must be category membership to which these processes refer.

(9)  Many bloresnicks are grey.

(10)  
   a. It ran bloresnick the tree.
   b. He removed the long bloresnick
   c. She finds Sammy bloresnick.
   d. He made his face bloresnick.

If 9 is good, then only 10b is.

*From Johnson 2011, Chapter 2*
The morphology, distribution, and function of items tells us what category they belong to...generally...

(from *Through the Looking-Glass and What Alice Found There*, 1872)
The relationship between structure and meaning - Part 1

We’ll return to this relationship throughout the term.
“Grammatical” but uninterpretable.
- Category-selection (c-selection) succeeds.
- Semantic-selection (s-selection) fails.

Semantically anomalous sentences are constrained by the semantic selectional restrictions that heads place on their arguments.

Heads require that their arguments have particular semantic properties.

These properties are generally referred to as theta/thematic roles.
**Some Theta Roles**

- **Agent**
  The performer of an action.

- **Experiencer**
  Non-volitional participants of an action.

- **Theme/Patient**
  The person or thing that an action/activity is done to.

- **Source**
  The starting point for a movement or a transfer of possession.

- **Goal**
  The end point for a movement or a transfer of possession.

- **Location**
  The place where an action occurs.

- **Instrument**
  The thing used to accomplish an action.

- **Benefactor**
  The person or thing that benefits from someone else’s actions.

- **Proposition**
  A clausal argument.
SOMETIMES THETA ROLES MAP TO MORPHOLOGY

- Theta roles can interact with morphology.
- The case of a noun can depend on factors such as agentivity or volitionality.
- Here, the datives are experiencers.

Hindi-Urdu

Tusaar kʰuʃ huaa.
*Tushar,nom happy become
‘Tushar became happy.’

Tusaar-ko kʰuʃii huii.
*Tushar-dat happiness happen
‘Happiness happened to Tushar.’

Japanese

Sensei-ni eigo-ga wakaru.
teacher-dat English-nom understands
‘The teacher understands English.’

Mary-ga eigo-ga yoku dekiru.
Mary-nom English-nom well do.can.pres
‘Mary can speak English well.’
(a) Við teljum frambjóðendurna vera frambærilega
we.nom believe candidates.the.acc be pretty good.acc
‘We believe the candidates to be pretty good.’

(b) Einum dómara sýndist þessar athugasemdir vera óréttlátar.
one.dat judge.dat understood these comments.nom be unfair.nom
‘One judge understood these comments to be unfair.’

• Our friend Icelandic is sometimes/often murky. 😊