

January 19 – February 2, 2010

WEEKS 1–3: UG, GRAMMATICAL CONSTRAINTS & POS

UNIVERSAL GRAMMAR (UG)

(1) *Innateness Hypothesis*

Innate principles (a) emerge early, (b) are universal, and (c) appear without decisive evidence from the environment; a large number of linguistic principles are innate.

Language Acquisition Device (**LAD**) / Universal Grammar (**UG**) / Language Faculty (**FL**)
human language faculty (**HFL**); faculty of language in the broad/narrow sense (**FLB/FLN**)

GRAMMATICAL CONSTRAINTS

- LAD: learning a grammar = learning which sentences **associate** with which meanings

(2) <sentence, meaning>

- PLD in **real-life** situations (but what about abstract nouns?)

(3) There is an Indian blanket on the couch.

- **ambiguity** (and many, many other examples; see also early IBL classes)

(4) a. We fed her chicken McNuggets. b. We fed her some. c. We fed it some.

- constraints on **form** (e.g. the pattern of *wanna*-constructions)

(5) *sentence

(6) a. English: <sentence₁> b. Shmenglish: <sentence₁, sentence₂>

- constraints on **meaning** (e.g. binding theory)

(7) <sentence, {meaning₁, *meaning₂}>

(8) a. English: <sentence, {meaning₁, *meaning₂}> b. Shmenglish: <sentence, {meaning₁, meaning₂}>

- importance & constraints on **context** (e.g. antecedents, quantifiers, etc.)

(9) a. child: <discourse sequence, {meaning₁, meaning₂}> b. adult: <discourse sequence, meaning₁>

POVERTY OF/OFF THE STIMULUS (POS/POTS)

People attain knowledge of the structure of their language for which *no* evidence is available in the data to which they are exposed to as children. (Hornstein & Lightfoot 1981: 9)

- (A) All native speakers know some particular aspect of their language, call it property P.
 (B) Knowledge of property P could not have been learned on the basis of the PLD.
 (C) Knowledge of property P must be innately specified, i.e. as part of UG.
 (viz. the famous syllogism leading to *All men are mortal*; cf. Socrates / Aristotle, then Frege)

- innateness of **constraints**:

- premise (A) is *not contested* (but the form may be; cf. Fodor & Crain 1987), while
- premise (B) hinges on the claim that there is no information in the environment corresponding to linguistic constraints
- this leads to the role of *negative evidence* (or *negative data* or *negative feedback*)

- negative evidence may be available but in more subtle forms: negative judgements about hypothetical sentences; more realistically: first children violate a constraint on form, then parents provide corrective feedback (fail to understand, negative evidence)

[W]hen parents are sensitive to the grammaticality of children's speech at all, the contingency between their behavior and that of their children is noisy, indiscriminate, and inconsistent from child to child and age to age. (Pinker 1990: 217)

Data:

patterns of *wanna*-constructions (hint: PRO...)

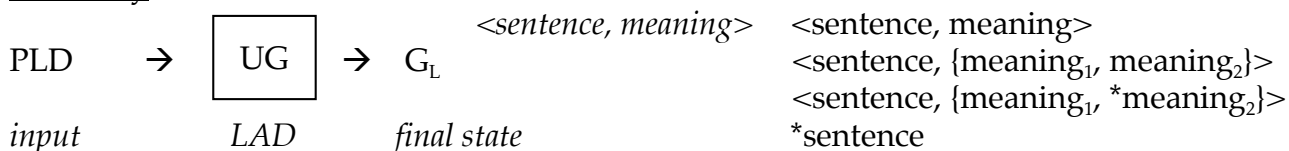
- (10) a. Who does Arnold **wanna** / **want to** make breakfast for?
 b. Who does Arnold ***wanna** / **want to** make breakfast?

Principle C (antecedent of names and pronouns)

- (11) a. **He**_{i/k} danced while the Ninja Turtle_i ate pizza.
 b. While **he**_{i/k} danced the Ninja Turtle_i ate pizza.

Principles B and A (and context)

- (12) a. No_i mouse came to Simba_j's party. **He**_{i/j/k} was upset.
 b. Papa Bear_i is covering **him**_{i/k}.

Summary:**References**

- Fodor, J.A. & S. Crain. 1987. Simplicity and generality of rules in language acquisition. In B. MacWhinney (ed.), *Mechanisms of Language Acquisition*. Hillsdale, NJ: Lawrence Erlbaum.
 Hornstein, N. & D. Lightfoot. 1981. *Explanation in Linguistics*. London: Longman.
 Pinker, S. 1990. Language acquisition. In D.N. Osherson & H. Lasnik (eds.), *Language: An Invitation to Cognitive Science*, vol. I. Cambridge, MA: MIT Press.