1 Syntax as a Cognitive Science

Linguistics, Philosophy, Psychology, and Computer Science

Language differs us from other animate beings — There is no concrete evidence to the opposite.

2 Modelling Syntax

Generative Grammar and Descriptive Grammar

Generative is not such a good term to use, but it is now fixed.

Rules of Grammar

These rules may be a set of correspondences

\[ S \leftrightarrow NP + VP \]

S is a set, NP and VP are subsets of S

Contain or consist are valid terms here.

3 Syntax as Science — The Scientific Method

Gather and observe data

Make generalizations

Develop hypotheses

return
hypotheses = rules = theorems
prescriptive and descriptive rules
anaphora — an example

pronouns: person, ±First, number, case.

3.1 Sources of Data
Positive information and negative information
Grammatical judgments, semantic judgment, and the judgments of argument structure which is a liaison between semantics and syntax.

Intuition = subconscious knowledge. (not making guesses about things)

4 Where Do Rules Come from?

4.1 Learning vs. Acquisition
Acquire is subconscious acquisition of language
Learning is a conscientious attempt to acquire the rules of language

Innateness refers to any principle that might be built into our capacity for language—a very controversial topic.

4.2 Innateness: Language as an Instinct
Kids will acquire a language if there is any kind of language contact.

Brain damage may interfere with acquisition.

If so, then it is a universal (among human beings—we don’t know what Martians have for language if any at all).

4.3 The Logical Problem of Language Acquisition
Many sentences are unique — never uttered before.

The bald King of Southern France eloped with the quadriplegic Queen of Mesoptamia.
Recursion

A sentence can be indefinitely long—it has an end point.

Hence, language is creative.

4.4 Other Arguments for UG

4.5 Explaining Language Variation

5 Choosing about Theories of Syntax

Come from standard science, theory formation is based on three steps:

   Observationally adequate — must be able to account for all ungrammatical as well as all grammatical sentences in L. (corpus and noncorpus)

   Descriptively adequate — finding the best description to account for observation.

   Explanatorily adequate — an attempt to find all the universal principles that might exist to account description — this also includes how a child might acquire language. Universal grammar, if it exists, is the bottom line here.

Although we may choose one, it isn’t the only that is selected. In many cases, the selection is not made on intellectual grounds, but on political and personal grounds. Even if we weed these out, it is very difficult, virtually impossible, to know that one you have selected is the “ONE”. (sigh!).