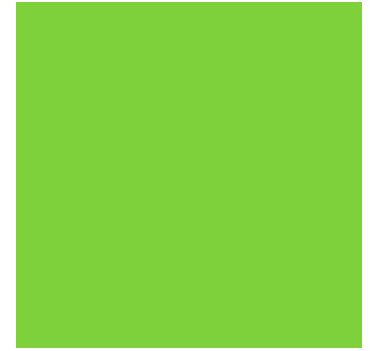# Theoretical Linguistics

Short review

What do linguists do?

- They look for systematic patterns in a body of data

- They do not tell us how we should speak (prescriptive grammars/linguists do)

- **Build formal models of grammar (codified abstractions)**

  - Language is a combinatory system with multiple levels of representation

 - A set of abstract units and a set of operations (e.g. rules) with these units

What do linguists do? (cont'd)

- It (generative grammar) is concerned with the biological basis for the acquisition, representation and use of human language and the universal principles which constrain the class of all languages. It seeks to construct a scientific theory that is explicit and explanatory (Fromkin, p. 6)

- (Noam Chomsky): we are all born knowing (tacitly) certain things about how human language is put together (UG). This is how we manage to acquire this very complex system, without relevant instruction; we have a head start. Linguistics is the study of the aspects of the human mind that allow us to acquire and use language.
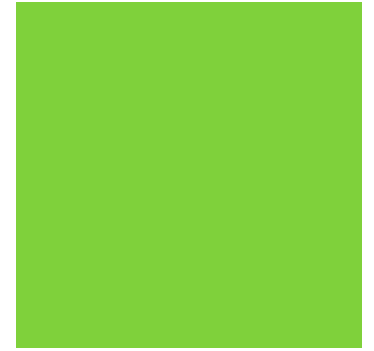
Why do they do it?

- To figure out what kind of knowledge is language

- Inform/interact with other disciplines
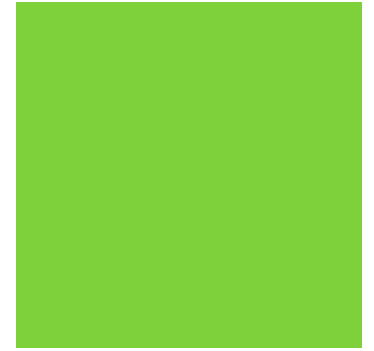
- Applications (e.g. Watson)
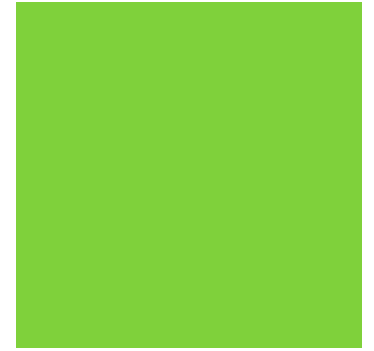
How do they do it?

- Instrospection

- Observation (corpora)

- Comparison

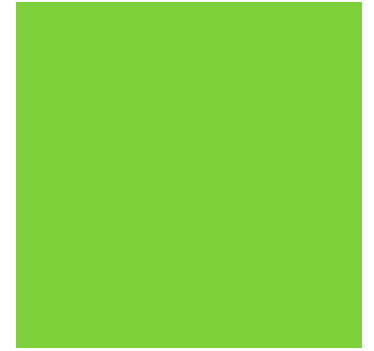# Language is…

- Productive (has Discrete infinity
  - Every human language has an unlimited number of sentences (words)

- Compositional
  - New forms (sentences, words) are understood by recognizing the meanings of their basic parts and how they are combined

- Creative
  - Dutch painting example
  - Not a behaviorist stimulus control

Language is … (cont'd)

- Biological (??)
  - Williams syndrome: low IQ, but good language skills
  - aphasia: there are various kinds of aphasia, but for some of them only language is affected.

- Uniquely human
  - General cognitive learning mechanism (partly shared with animals) or innate UG
  - Snowball, Delphins

Historical developments

- Stoics
  - signifier vs. signified (and abstraction that comes with it)

- Modistae
  - relationship between reality, thought and language using formal logic

- Historical (diachronic, comparative) linguistics

- William Jones: Sanskrit, Latin, Greek are all descendants of a common, no longer existing language

- Grimm's law

	French	English
*p > f	pied	foot
*t > θ:	trois	three
*k > h:	cœur	heart
*d > t:	dent	tooth (< tanθ)
*g > k:	grain	corn
*bh > b:	frère (from *bhráter)	brother

Historical developments Structuralism

- Saussure
    - defined language as the object of linguistics
    - differentiated diachronic and synchronic (i.e. within a generation) and argued that the structural synchronic properties are more important than how language changes and develops
    - langue (principles) and parole (use)
    - Language is a social product deposited in the minds of individuals => language could naturally occur only in minds or in societies, both are very intangible!

- Prague circle
   - Trubetskoy, Jakobson, phonemes and distinctive features

Sapir & Boas

- interest in non-indo-european languages (in North America), variety is prized, language is a window into the soul (Boas)

- Kwakwala verb-marking by speaker's authority (saw the actions, heard about it, or dreamt it)

- Sapir similar to Saussure in seeking formal patterns and abstractions (i.e. he was a 'mentalist'), differs from him mostly in appreciating variation stemming from Amerindian tradition

Bloomfield & behaviorism

- brought behaviorism and logical positivism into linguistics, lot's of Chomsky's fame came at 'defying' students of Bloomfield's tradition (by rejecting behaviorism and bringing back mentalism)
- greater impact on lx than Sapir due to methodical, handbook nature of his Language while Sapir's essay is passionate but much less practical
- clear departure from sociology, anthropology, psychology
- Behaviorism: leave mental stuff (and matters closer to meaning side of the continuum) to psychology, avoid introspection as a non-verifiable method
- heavily tilted for the signified side of continuum, providing methodology to get from a corpus of unknown language to the structure (phonemes, morphemes, sentences, and not much more)
- linguistic is primarily a taxonomic and descriptive science (like zoology, geology) leaving mental things (learning, knowing, using language) to behaviorism

Chomsky
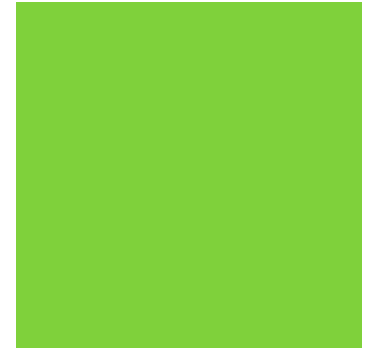
- bringing meaning, thought, mind back to lx (reaction to Bloomfield)
- transformation-generative grammar to model the knowledge of language using mathematical concepts
- started as a natural extension of Bloomfield in the field of syntax using new method/tool of transformations, and continued as replacement and rejection of some basic tenets of B's theory (hence became a revolution) by attacking and dismantling behaviorism, positivism and descriptive mandate

Reaction to Chomsky

- Varied!

- Primarily, need to bring context in
  - Generative semanticists (Lakoff)
  - Social aspects (e.g. Halliday)
    - LX is overspecialized, oversimplified, underapplied, too 'introverted' concentrated too much on internal aspect, forgetting social and contextual ones.
    - LX needs to become more social, taking into account the context and social situation and roles of the language users and embrace the variability connected to this step. It should be more in touch with ordinary people's needs (education, rhetoric, politics, law, translation, …)

Concepts

- Synchronic/diachronic

- Mentalism/empiricism

- Universal grammar

- Competence (langue)/performance (parole)

- Logical problem of language acquisition