What do linguists do?

- They look for systematic patterns in a body of data.
- They do not tell us how we should speak (descriptive grammars/linguists do).
- Build formal models of grammar (codified abstractions).
  - Language is a combinatorial 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 not because we are given any 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?

- Introspection
- Observation (corpora)
- Companion
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 behavioral 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

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

<table>
<thead>
<tr>
<th>Old English</th>
<th>Modistae</th>
<th>Modern Greek</th>
</tr>
</thead>
<tbody>
<tr>
<td>b -&gt; p</td>
<td>β' -&gt; β</td>
<td>π' -&gt; τ</td>
</tr>
<tr>
<td>d -&gt; t</td>
<td>δ' -&gt; δ</td>
<td>τ' -&gt; η</td>
</tr>
<tr>
<td>g -&gt; k</td>
<td>γ' -&gt; γ</td>
<td>κ' -&gt; ξ</td>
</tr>
<tr>
<td>h -&gt; x</td>
<td>υ' -&gt; υ</td>
<td>ξ' -&gt; ξ</td>
</tr>
</tbody>
</table>

- Stoics
  - relationship between reality, thought and language using
    formal logic
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 (principle) and parole (use)
  - language as a social product deposited in the minds of individuals and occurring in minds or in societies, both are very intangible!
- Prague circle
  - Tulehsky, Jakobson, phonemes and distinctive features
Sapir & Boas

- interested in non-indo-european languages (in North America), variety is prized, language is a window into the soul (Boas)
- Kwakiutl 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 logic positivism into linguistics, let’s call Chomsky’s fame came at ‘defying’ students of Bloomfield’s tradition (by rejecting behaviorism and bringing back mentalism)
- greater impact on Lyotard due to methodical, handbook nature of Sapir’s Language while Sapir’s essay is terse, but huge
- clear departure from sociology, anthropology, psychology
- behaviorism: issue: mental stuff (and matter 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 and form a corpus of language (language to the discipline of linguistics: vocabulary, grammar, syntax, morphology, etc.); linguistics
- linguistics is primarily a 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 behaviorism (hence became a revolution) by attacking and dismantling behaviorism, positivism and descriptive mandate
Reaction to Chomsky

- Varied!
- Primarily, need to bring context in
  - Generative semantics (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 role 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