1 ▢ **Linguistic Principles**
Basic Grammatical concepts
Insights from sign language
Transformational Grammar
Issues in Grammatical Theory

2 ▢ **Word order**
- SVO: English
  The boy chased the girl.
  The girl chased the boy.
- SOV: Japanese
- Flexible word order: Russian
  Viktor celuet Lenu.
  Viktor Lenu celuet.
  Lenu Viktor celuet.
  Lenu celuet Viktor

3 ▢ **Duality of patterning**
- Phonemes and phones
  /p/ [pʰ] pot [p] spot
- Distinctive feature
  /p/ /b/ voicing
  port plort pbort
  These distinctive features have psychological validity.
  All languages have a set of rules for combining one level to the other.

4 ▢ **Morphology**
- Morpheme
- Free morpheme
- Bound morpheme
- Major grammatical morphemes in English: number, person, tense, aspect

5 ▢ **Phrase structure**
- (The young swimmer) (accepted (the silver medal.))

6 ▢ **Linguistic productivity**
- Our ability to create and comprehend novel utterances.
- Recursive rule
- The child thinks that man left.
- The woman knows the child thinks the man left.

7 ▢ **Insights from sign language**
- Signs are expressed in visual or spatial form.
- American Sign Language is sharply distinguished from manual forms of English that translate English into signs.
- ASL is independent of English and derived from French Sign Language.

8 ▢ **Differences between signed and spoken language**
⌷ Spoken

- Arbitrariness
- sequential

2 - Signed
- Iconicity→ arbitrary
- simutaneous

9 Similarities between signed and spoken languages

- Duality of patterning
- Three parameters of signs:
1. Hand configuration
2. Place of articulation
3. Movement
- Morphology
- Linguistic productivity
- Phrase structure

10 Significance of Sign Language

- Language production—unimpeded by respiratory activity
- Language acquisition
- Link between language and the brain could be different in speech versus sign

11 Transformational grammar

- Language and grammar
- Definition of language

Language--infinite set of well-formed sentences

Grammar—a formal device with a finite set of rules that generate the sentences in the language

12 Evaluation of grammars

- Observational adequacy
-- specify what is and what is not an acceptable sequence in the language
- Descriptive adequacy
--specify the relationships between various sequences
- Explanatory adequacy
--explain the role of linguistic universals in language acquisition

13 Deep and surface structure

- Flying planes can be dangerous.
- John is easy to please.
- John is eager to please.
- Arlene played the tuba.
- The tuba was played by Arlene.

14 Transformation rules

- Particle-movement transformation
- John called up the woman.
- John called the woman up.
- John called up the interesting woman.

- John called the interesting woman up.
- John called up the woman with the curly hair.
- John called the woman with the curly hair up.
- John called her up.
- *John called up her.

15 ▣ Psychological Reality of grammar

- Derivational theory of complexity, DTC
- Surface structure was the starting point for comprehension and the deep structure was the ending point; the roles are reversed in production.
- If so, the distance between surface and deep structure would be an accurate index of the psychological complexity of the sentence.

16 ▣

- Early studies were supportive.
- A variety of studies showed that negative sentences were more difficult to comprehend.
- But these sentences differ in meaning as well as transformational complexity.
- Later studies directly contradicted DTC.
- The boy was bitten.
- The boy was bitten by the wolf.

17 ▣

- Most recent work has been more favorable to the hypothesis that linguistic theory has psychological reality.
- The nurse who was stationed on the seventh floor [trace] invited the chauffeur to go dancing this evening.
- Comprehenders reactivate the moved noun (nurse) when its trace was encountered.
- Participants respond rapidly when words semantically related to the moved noun were presented in the trace position.
- Responses were slower either before or after the trace position.

18 ▣ Lexical vs. structural approaches

- Transformational grammar
- Lexical-functional grammar
- Greater emphasis is placed on individual items.
- A lexical entry includes its meaning, its spelling, its pronunciation, the syntactic characteristics, various forms of the word, different kinds of sentences into which each form would fit.

19 ▣

- Cognitive speaking, the retrieval of items from our mental dictionary is relatively easy.
- This seems to provide a potentially more plausible explanation for the nearly effortless manner in which we comprehend sentences in our daily life.

20 ▣ Faculty of language

- Faculty of language in the broad sense (FLB): systems that support the ability to acquire a language
- Faculty of language in the narrow sense (FLN): recursion and is the only uniquely human component of the faculty of language
- Pinker and Jackendoff (2005): many aspects of grammar are not recursive, including phonology and morphology, etc.

21 Is language innate?

- Deaf children whose parents do not know sign languages develop their own.
- Children are born with the parameters and with the value of the parameters.
- What they must learn, from experience, is which value is present in their native language.