



Welcome to
LINGUISTICS

LECTURE 1

- The course
- Linguistics
- Language

INTRODUCTION TO THE COURSE

- goals
- textbook
- teaching plan
- assessment
- can do and can not do

GOALS OF THIS COURSE

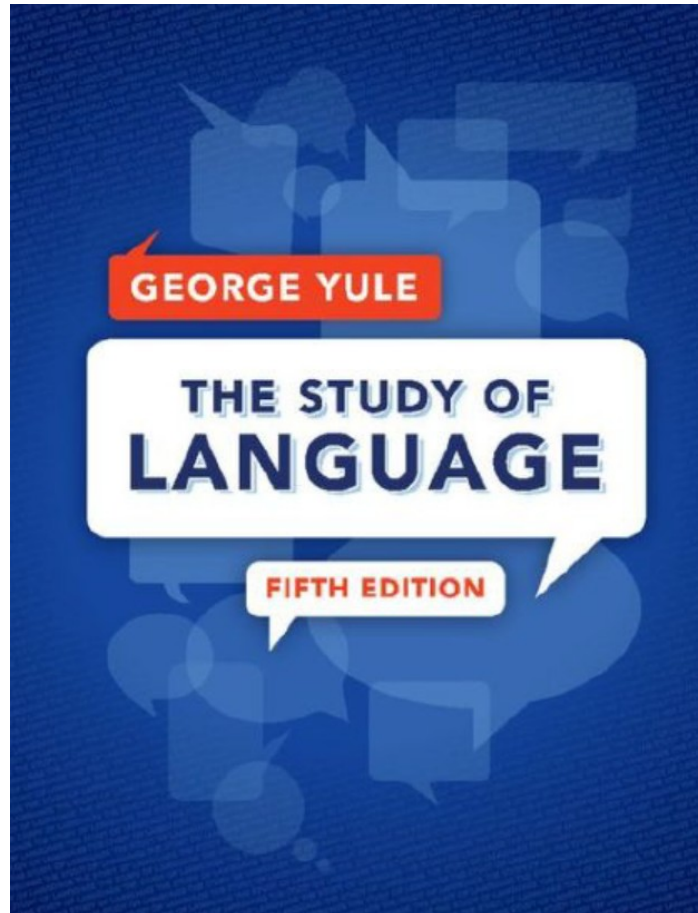
- This is an introductory course to linguistics. [first course]
- This course has three major goals.
- 1. providing you an opportunity to learn about topics in the field of linguistics (a more specific goal)
 - topics about structure, meaning, use, acquisition of language and its relations to brain, culture, society
 - basic concepts
 - influential theories
 - fundamental questions

} General understanding of linguistics
- 2. illustrating how scientists go about studying language (a more general goal)

} Ways, approaches, techniques, paradigms used to study language
- 3. motivating you to do linguistics (an optional goal)

} passion

TEXTBOOK



- Introductory
- No requirement for prior knowledge
- Comprehensive
- Reading online

TEACHING PLAN

- **Origin and features of language**

- 1 The origins of language
- 2 Animals and human language

- **Structure and meaning of language**

- 3 The sounds of language
- 4 The sound patterns of language
- 5 Word formation
- 6 Morphology
- 7 Grammar
- 8 Syntax
- 9 Semantics

- **Use of language**

- 10 Pragmatics
- 11 Discourse analysis

- **Acquisition of language**

- 13 First language acquisition
- 14 Second language acquisition/learning

- **Relations with brain, society and culture**

- 12 Language and the brain
- 18 Language and regional variation
- 19 Language and social variation
- 20 Language and culture

COURSE ASSESSMENT

- **Grades in this course will be based on:**
- **Class participation (10%):** your attendance, your contribution to discussions on class, etc.
- **A midterm (25%):** approximately 5-10 short essay questions
- **A final (25%):** approximately 5-10 short essay questions
- **A class project (40%):** This is an opportunity for you to explore an interesting topic/question of your choice that is relevant to the course and about which you would like to learn more.
 - start as early as possible
 - schedule a meeting with me/my TA at any period of the project: proposal, midway report, final report, etc.
 - due at the end of the semester
 - a report: a 5 page paper (at least)
 - a poster/oral presentation

COURSE PROJECT SAMPLES

- Vocabulary learning during treadmill running
- First language reading education and second language proficiency
- Patterns in the use of fractions and decimals: An AI Perspective
- Use of the word *far-right* in NOW corpus
- Machine learning and poetry

WHAT YOU CAN DO AND CAN NOT DO

- 1. Sit and answer my question.
- 2. Stop me by raising your hand if you have any question.
- 3. Never copy others' work.

INTRODUCTION TO LINGUISTICS

- why linguistics?
- what is linguistics?
- history of linguistics
- questions addressed in linguistics

WHY LINGUISTICS? WHY STUDYING LANGUAGE?

- Language plays a central role in human's life.
 - communicating
 - doing things
 - loving words
 - what if no longer using language
- Language is unique.
- Language is more complex than it appears to be.
 - ease of acquiring and using a language
 - using language effortlessly \neq language is simple
 - multiplicity of languages: 6900+ languages,
 - 234 in Europe, 2,322 in Asia, 2,110 in Africa, 993 in the Americas, and 1,250 in the Pacific
 - why?
 - variation of language: constantly changing
 - flexibility/confusion of language
 - ...

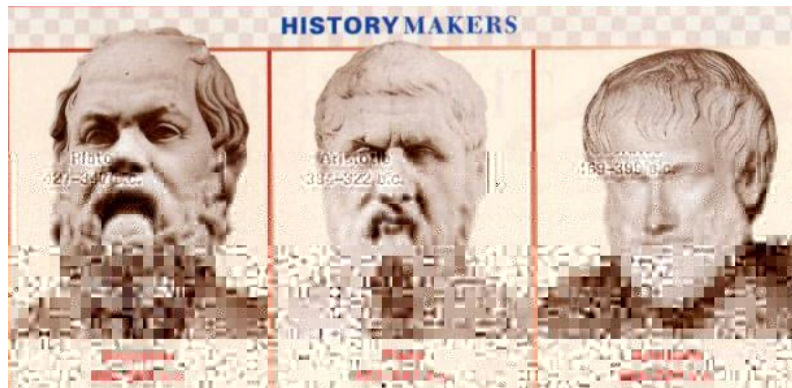
So the study of language (linguistics) is essential to understand human beings.

WHAT IS LINGUISTICS?

- Linguistics is the scientific study of language / linguistics is a language science.
- Two models of science
 - *the inductivist model*: objective observations → facts obtained from observations → laws and theories derived from facts (by the process of induction)
 - *the falsificationist model*: hypothesis formulation → data collection → hypothesis testing (to see if it is false)
- Linguistics fit the models and is thus a science.

HISTORY OF LINGUISTICS

- **Greek grammatical tradition: Socrates, Plato, Aristotle**
- the origin of language, parts of speech (grammatical categories), and the relation between language and thought, ...
- the relationship between words and their meanings: natural or conventional?



HISTORY OF LINGUISTICS

- Modern linguistics
 - beginning to develop in the early 19th century
 - focusing mainly on the similarities among different languages and reconstructing the ancestors
 - ancient German, ancient Latin, Proto-Indo-European
- Ferdinand de Saussure (1857-1913)
 - the starting point of modern linguistics
 - language is a system of signs
 - signifier (material form of a word)
 - signified (mental concept)
 - distinction between *langue* and *parole*
 - *langue*: the collective language system (language as a system)
 - *parole*: the individual linguistic act (language in use)



HISTORY OF LINGUISTICS

- **Leonard Bloomfield (1887-1949)**



- a more rigorous science

- *Language* (1933)

- focus of linguistics: observable phenomena, rather than abstract cognitive processes

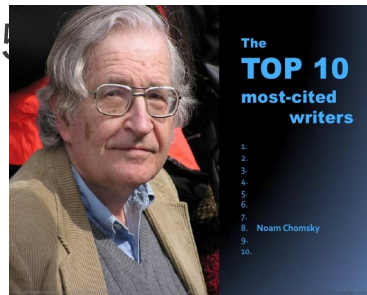
- further developed the methodologies of linguistic data collection and analysis

- **Noam Chomsky (1928-)**

- *Aspects of the Theory of Syntax* (1965)

- Language is innate.

- competence vs performance



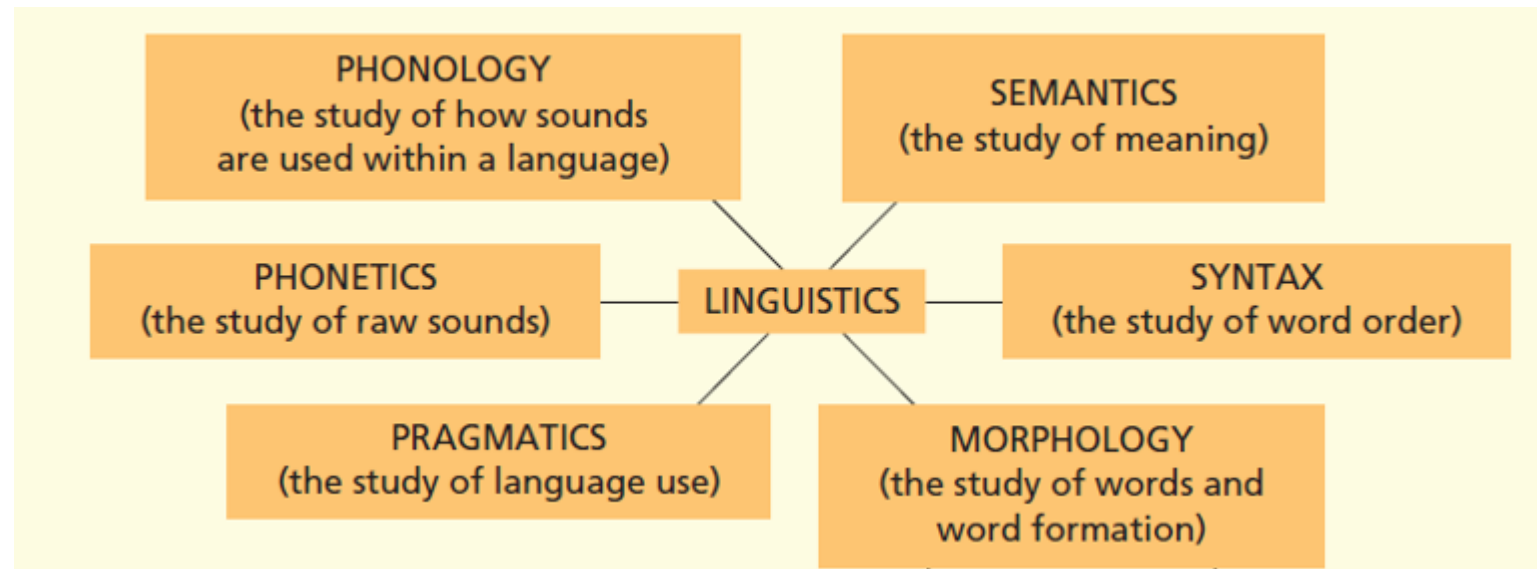
- **Today's linguistics**

- a wide range of approaches, methodologies

- an umbrella term

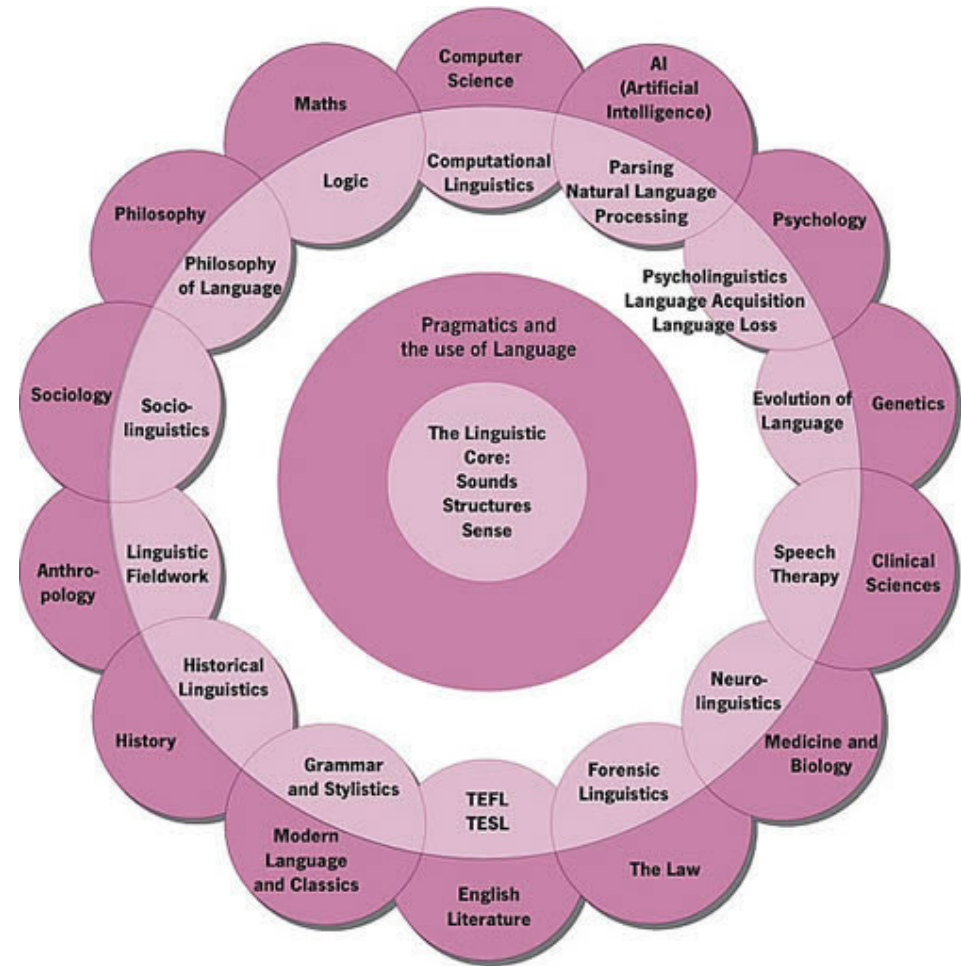
BRANCHES OF LINGUISTICS

- Basic sub-fields of linguistics
- Structure of language
- Phonetics
- Phonology
- Morphology
- Syntax
- **Meaning**
- Semantics
- **Use of language**
- Pragmatics



BRANCHES OF LINGUISTICS

- Many other disciplines also have enormous interests in language.
- naming some disciplines?
- Overlaps between linguistics and other disciplines.
- Interdisciplinary subjects



INTERDISCIPLINARY SUBJECTS

- Sociolinguistics, sociology of language (language and society)
- Psycholinguistics (psychological process of producing and interpreting language)
- Neurolinguistics (language and brain)
- Pathological linguistics (language disorder such as aphasia(失语症))
- Anthropological linguistics
- Computational linguistics
- Cognitive linguistics
- Contrastive linguistics
- Machine translation
- ...

QUESTIONS

- The primary goal of linguistics is to understand the nature of language in general by asking questions such as:
- What distinguishes human language from other animal/artificial communication systems? Or what distinguishes one human language from another?
- What features are common to all human languages?
- How is language related to other types of human behavior (e.g. thinking)? (color, space, time, number)
- How and why do languages change?
- How does language reflect society and culture?
- How do children acquire language(s)?
- ...

INTRODUCTION TO LANGUAGE

- common sense views of language
- views of language held by scientists

WHAT IS LANGUAGE?

- The object of linguistic inquiry is language, but what is language?
- What do you think language is?
 - a bunch of words, either spoken or written
 - a tool of communication
 - a way of expression
 - a vehicle for thought
 - ...
- Scientific inquiry of language requires a step beyond our common sense.

WHAT IS NOT LANGUAGE?

- Language is distinct from writing, speech, communication and thought.
- Writing and speech
 - modes for transmitting linguistic information / physical forms of language
- Language is just one of the communication systems and can be used for other purposes (e.g., used aesthetically)
- Language is different from thoughts.
- Infants and nonhuman animals
- bilinguals, trilinguals, ... VS monolinguals

WHAT IT MEANS TO KNOW A LANGUAGE?

- To know what language is, scientists start out by asking what it means to know a language?
- implicit language knowledge
- a phenomenon: creativity/infiniteness of language
 - novel sentences
 - new words
 - *rewashable, unsystematic, babysit, ...*
 - sentences of infinite length
 - *This is the dog that worried the cat that killed the rat that ate the malt that lay in the house...*
- What does language's creativity/infiniteness mean?
- a mental system of rules and principles that allows us to speak (or write or sign) and understand

KNOWLEDGE OF LANGUAGE

- **1. knowledge of sounds and sound patterns**

- what sounds are in that language and what sounds are not, to know which sound starts a word and which ends a word, ...

- phonetics, phonology

(1) Classify the following words into three categories: English words, words that are not English but could be, or impossible English words.

	English word	Possible word	Impossible
<i>bnick</i>			
<i>brick</i>			
<i>blick</i>			
<i>btick</i>			
<i>botick</i>			
<i>trick</i>			
<i>tlick</i>			
<i>tnick</i>			
<i>nbid</i>			
<i>glind</i>			
<i>mgind</i>			

KNOWLEDGE OF LANGUAGE

- 2. knowledge of word structure and formation

- what words are in that language and what words are not,

- what words are well-formed and what are ill-formed,

- ...

- morphology

Ill-formed words	Well-formed words
carelessty	
kindty	
goed	
roomclass	
lordland	

(3) Fill in the blanks with forms of the nonsense words given.

a. *I have one wug, and you have two _____.*

b. *My car is old and grish. It drives really _____.*

c. *I like to tunick. I am _____ right now, and I _____ yesterday, too.*

KNOWLEDGE OF LANGUAGE

- 3. knowledge of the structure of phrases and sentences

- what phrases/sentences are well formed in that language and what sentences are ill formed.

Classify each of the sentences below in one of three categories:

- ...

- syntax

	Good	Nonsense	Impossible
<i>What house did you wonder who built?</i>			
<i>Colorless green ideas sleep furiously.</i>			
<i>Ideas colorless sleep green furiously.</i>			
<i>So, like, are you IMing him or what?</i>			
<i>Hamburgers some John devoured quickly they.</i>			
<i>Mary thinks I don't like herself.</i>			
<i>Happy paperclips usually write doughnuts out of the sky.</i>			
<i>There's many people I wanna talk to.</i>			
<i>The horse that is racing past the barn fell.</i>			
<i>The horse raced past the barn fell.</i>			
<i>Run children the school of out.</i>			

KNOWLEDGE OF LANGUAGE

- 4. knowledge of the relationship between form and meaning, between meanings
 - semantics
 - Relationship in these pairs of sentences
 - *The 11th G20 summit was held in Hangzhou.*
 - *The 11th G20 summit was held in China.*
 - *The 11th G20 summit was not held in Hangzhou.*
 - *The 11th G20 summit was held in China.*
 - *John no longer writes to Jane.*
 - John once wrote to Jane.

KNOWLEDGE OF LANGUAGE

- In a sense, one of linguistics' tasks is to **discover precisely speakers' language knowledge**.
- Other tasks include
 - describing and explaining how speakers use this knowledge to speak/write
 - pragmatics, ...
 - describing and explaining the acquisition and development of this knowledge
 - language acquisition, ...
 - describing and explaining its relation to brain, society and culture
 - ...

DIFFERENT VIEWS OF LANGUAGE

- **a collection of mental representations of rules**
 - a set of psychological objects
 - a mental organ
- **a system of conventional symbols**
 - each symbol has two parts: physical form and mental concept
 - symbols are conventional, arbitrary
 - values of the symbols are determined by their position in relation to all the other symbols in the language system
 - e.g., “send” vs “送”
- **a social activity**
 - interaction between language users
 - ...