Lecture 1

- The Language forms are Speech, writing, and signals.
- Language compound both Signal and meaning.
- Language is a form of Communication
- Prescriptive grammar is Showing how language should be used.
- Descriptive grammar is Showing how a certain language is actually used by its native speakers.
- Descriptive grammars document how a language is actually used by its native speakers.
- Linguistic <u>competence</u> is the actual use of linguistic knowledge.
- Linguistic competence provides a system for pairing sound and meaning.
- The ability of linking words with their meanings is Linguistic competence
- Linguistic performance is the use of knowledge.
- Linguistic competence is the how language is used.
- Linguistic performance is the actual production of the language.
- Error resulting from lock of knowledge of language (competence)
- Mistake resulting from lock of language (performance)

Lecture 2

- Language processing is subconscious, this means: It happens without the mental capacities being fully active.
- language processing is not observed physically.
- language processing is a mind-internal process
- Psycholinguists guess the hidden mental process (language process) by analyzing the observable behavior.
- language processing can be observe by Slips of the tongue and Vocabulary experiments, Timed-reading experiments , and Event-related potentials (observable behavior)
- Slips of the tongue is same as Spoonerisms
- Slips of the tongue involve Exchanging morphemes within a sentence
- From the slips of the tongue, the Psycholinguists realized that : The planning of speech before uttering it **and** Morphemes function independently from words during sentence planning.

Lecture 3

- The tip of the tongue : Remembering some details about a word, but not the word itself.
- How are vocabulary items (Lexical entries) organized in the min? according to their meaning and sound
- Lexical entries are grouped in the brain as a complex network of lexemes. , according to their sound and meaning.
- The brain recognized the words(Entries) as Group according to their meaning and sound

Lecture 4

- A lexical decision experiment is conducted by asking a native speaker
- The purpose of lexical decision experiments is looking for the Both Response latency and Response accuracy.
- Response latency is: The time it takes the respondent to complete a lexical decision task.
- Response accuracy is: The Accuracy of the respondent's answer
- Lexical decision and priming experiments are conducted to: Check peoples' access to lexical entries.

- Priming : the word is preceded by another stimulus. given a related word before the stimulus
- In priming experiment When the target is preceded by a related word the response is usually Quicker

Lecture 5

- Language is based in the biology of humans, because:………………………..
- Language is species specific
- There are universal aspects of language
- There is an age restriction for acquiring the first language(Critical period)
- Certain aspects of behavior and cognitive function for the system emerge only during Infancy
- Adaptation of the behavior of the growing individual to the behavior of other individuals around him
- Language development is triggered by the environment. This means the environment stimulates Language acquisition.

Lecture 6

- Neurolinguistics is the study of the representation of language in the brain
- Which hemisphere controls language? Left hemisphere
- What happens to language if there is a damage in the left hemisphere of the brain? It can lead to aphasia
- aphasia is language impairment following an injury in brain.
- The types of aphasia are Broca's aphasia and Wernicke's aphasia
- Broca's aphasia is also known as non-fluent aphasia
- Wernicke's aphasia is also known as fluent aphasia
- Broca's aphasia is located in the frontal lobe of the left hemisphere of the brain
- Wernicke's aphasia is located in the temporal lobe of the left hemisphere of the brain
- the brain's control of the body is Contra-lateral. This means The left hemisphere of the brain controls the right side of the body

Lecture 7

- Language Acquisition Device (LAD). It is a property of the child's brain that gives it a tendency for acquiring language.
- there is evidence that humans' sensitivity to language start even before birth
- Most children start to discriminate many phonemic contrasts in their First year of life.
- Infants start to babble in their first year of life. Babbling is produce consonant-vowel strings after the 6th month.
- the **holophrastic** stage is also known as the one-word stage of acquisition, it is Between 12 - 24 months.
- During Pre-school years, the child acquires an average of 4 to 8 new words every day
- Vocabulary spurt stage stare Immediately after The holophrastic stage (after 24 month)

Lecture 8

- People start to develop discourse ability and taking turns in conversations in their late childhood.
- the ability to perceive speech as a string of phonological units was in a later stage of language acquisition
- the similarities between first and second language acquisition is the stages of the acquisition of bound morphemes.
- There are limitations to Second Language Acquisition such as:
- Slower pace of acquisition, as compared to first language acquisition.
- Ultimate attainment . (stop)

Lecture 9

- The Planning stages of Speech Production contains…………………
- Accessing the lexicon (lexical retrieval)
- Building simple sentence structure
- Creating agreement relations
- Building complex structure
- Preparing a phonological representation
- Bilingual Speakers have two mode while they are speaking.
- (Unilingual and bilingual modes)
- Unilingual mode is consulting only one of the grammars leads to production in one of the two languages.

- Bilingual mode : In the same conversation, the speaker has access to both grammars and lexical items from both languages.
- code-switching is when the speaker's switching between two languages in one conversation
- Speech production has two main stages: Planning and Actual production
- Accessing the lexicon also called Lexical retrieval .
- A word can be retrieved by using meaning and sound
- The speaker selects the appropriate word to the conversation by retrieve A word. (lexical retrieval)
- Building simple sentence structure is also called Grammatical encoding.
- Building a linguistic structure for the intended meaning - Building simple sentence structure
- Creating agreement relations which means : Subject-verb agreement, Nouns-verbs agreement, and Pronouns- verbs agreement
- Creating complex, multi-clausal sentences will be **after** Creating agreement relations.

- The mental representation of a sentence that serves as input to the systems responsible for articulation. Preparing a phonological representation

- After the speech is planned, the brain gives instructions to speech organs (tongue, lungs, vocal tract) to produce speech. This is called actual production

Lecture 10

- Knowledge of the phonemic inventory of a language is necessary for Speech (perception and production)

- Why we called the perception system is constructive(Constructive speech perception)? because it uses additional information to the signal.

- Using the acoustic signal (i.e. phonemes) to understand speech. Is called Bottom-up processing

- Using contextual information to understand speech. Is called top-down processing

- Variations in duration, pitch, stress, and amplitude (loudness) can affect speech perception. Is called Suprasegmental information in the signal

- Orthography: It is the writing system of a language.

- phonology and Orthography play an important role in the perception of written texts .

Lecture 11

- Lexical decision experiments (lexical decision tasks and priming) are used to test The brain's access to lexical items.

- Known words are easier and faster to access than unknown words.

- Possible non-words are words which can be added to a language because they do not violate its phonotactic rules

- Impossible non-words words which cannot be added to a language because they violate its phonotactic rules

- Before lexical retrieval, *bound morphemes are Removed from the word they are bound to (morpheme stripping)*

- cohort is all other words that share an initial sequence of phonemes

- during perception The cohort model of lexical entries will be activated

- word's neighborhood consists of all the lexical items that are phonologically similar.

- A factor that affects retrieval times for words is called neighborhood density

Lecture 12

- The brains cuts the received auditory input into clauses. This is called Clause boundary
- Clause boundary (The clause as a processing unit) helps to understand auditory signal
- Clause boundary is: The location where a new clause begins

- Structural ambiguity is one sentence with more than one meaning.
- Usually, an ambiguous sentence can be disambiguated when it is putting into context.
- During the process of perception, the brain works like **a parser**
- **A parsing** : The mental process of building syntactic structure out of the linear set of words during listening to texts .
- The brain responds to morpho-syntactic violations differently
- the parser breaks down complex sentences to simpler sentences.
- Psycholinguistics, fillers are Constituents of a sentence which were moved around the sentence.

- a gaps : the space left after the constituents have been done to the sentence.
- The parser:
- Computes relations between words
- Prefers simple structures rather than complex structures
- Responds to morpho-syntactic violations differently

Lecture 13

- Information in the parser used to build structure are
- Lexical information
- Prosody information
- non-linguistic information
- The direct input to the parser is A set of words ordered linearly.
- Prosodic : The intonation and phrasing of a sentence.

Lecture 14

- Discourse : Sets of sentences that have some sort of connection to each other.
- The items or elements that helps to understand Discourse are :
    - its topic   - its Participants
    - its context,   - its function
- Working memory is short-term memory. plays a key role in sentence processing

- When stored in long-term memory:
- Information about the sentence structure are lost
- Meanings of many sentences are combined
- Inferences are added to representations of meaning
- An anaphoric reference is someone or something that has been mentioned earlier in a discourse .