

## 3<sup>rd</sup> Year Linguistics Courses

### 2<sup>nd</sup> Semester

#### Psycholinguistics

##### Definition

Psycholinguistics is the study of the mental processes and skills underlying the production and comprehension of language, and of the acquisition of these skills. Psycholinguists consider the skilled human language use as a complex information-processing system. Their aim is to account for the user's production, acquisition, and comprehension of language in terms of the various components of this system and their interactions.

**1- The Production of Language:** is commonly viewed as involving the following main component processes:

**a- Conceptualizing:** a conscious planning activity in which a communicative intention guides the construction of one or more messages (conceptual structures that can be formulated in the target language).

**b- Formulating:** generating natural language representations for messages. This involves two processes. First, grammatical encoding of the message into some grammatical form; this involves retrieving items from the mental lexicon and arranging them in a syntactic frame. Second, phonological encoding transforms this syntactic structure into a phonetic or articulatory plan.

**c- Articulating:** executing the articulatory plan as a sequence of articulatory gestures. The primary execution modes are the oral for spoken languages, and the manual for sign languages. The main secondary mode is writing. Language users are to some extent able to monitor and edit their own linguistic output, either before or after it is overtly articulated.

**2-Language Comprehension:** comprises at least the following component processes.

**a-Perceptual Decoding:** mapping linguistic input (connected speech, a stream of manual signs, or a string of printed words) onto some code that can be linguistically parsed.

**b-Parsing:** involves segmenting and recognizing words (phonological and morphological decoding, and accessing the mental lexicon), as well as assigning syntactic and semantic structure.

Psycholinguists have a vested interest in disorders of language, in particular Aphasia and Dyslexia. This is because malfunctions can reveal much about the architecture of the language processing system, and Interpreting: inferring the intended meaning by about the neurological implementation of natural language skills.

### **3-Language Acquisition Stages**

All infants pass through the same stages in the acquisition of a first language; but they progress at different rates. So, while a child's age in years and months is often cited, it is not a reliable indicator of development. Many accounts record development in terms of the phonological or linguistic content of the child's productions. The following stages are universal, the first two being prelinguistic:

**a-Cooing** (from 6 to 8 weeks). Gurgling moves on to vocalisation involving sounds which resemble vowels. The infant responds vocally to human speech.

**b-Babbling** (from 3 to 9 months). The infant produces consonant-vowel sequences which may resemble those of the target language. The child's later productions become imitative. The child imitates adult intonation patterns with some degree of accuracy.

**c-One-word stage** (from 10 to 18 Months). Sometimes termed holophrastic speech. The first words appear at about 1 year, and by 1 year and a half, the child may have a vocabulary of around 50 words, usually nouns. The child recognises the referential function of words, using them to name objects.

**d-Telegraphic stage** (from 2 to 2.5 years). Where the child's language is characterized by the absence of most function words. The two-word combinations exhibit a set of primitive semantic relationships (constituting a child grammar) of

which the earliest are usually naming (this), recurrence (more) and non-existence (no). At about the same time, the vocabulary spurt begins, with an increase of about six to ten words a day in the child's repertoire.

**c-Multi-word stage** (2.6 onwards). The child uses strings of three or more words, often based upon established two-word patterns. Adult syntactic patterns gradually become more prevalent.

## **Language Acquisition theories**

### **1- Behaviourism**

Behaviourism is a learning theory that is concerned mainly with the observable and objective components of behaviour. Its scope is not limited to humans because it deals with animals as well. Behaviourists relate learning to an observable and permanent change in behaviour. Behaviourism is based on the experiments performed by Pavlov on the conditioned-reflex, which consist of providing a stimulus to cause response. Behaviourists believe that learning takes place through habit formation. They also claim that we are born with a brain as a tabula rasa or blank slate, and the outside stimuli are the sources of all learning. Behaviourism deals only with the apparent or external environment that shapes behaviour.

### **2- Cognitivism**

Cognitivism is a theory of language learning dealing with human cognition. It views learning as an active mental process that cannot be limited to a stimulus-response and reinforcement. It is a process which requires the existence of a previous knowledge structure in order to process new information for learning. This view deals with human mental processes by stressing the act or process of knowing. Piaget (1936) believes that the aim behind the cognitive theory is to

understand how an infant can develop into an individual who has the ability to reason, think, and hypothesise through a number of mechanisms and processes.

### **3-Humanism**

Humanism rejects the theory, which considers people as objects and rational beings. Rather, it deals with the learner as an individual whose interests and goals should be taken into account. This theory encourages the learner to be responsible for his own learning by being intrinsically, rather than extrinsically; motivated.

Maslow's Hierarchy of Needs: Maslow is considered to be the father of humanistic psychology. In his hierarchy of needs, he divided the human needs into basic needs which come at the lowest level, then psychological needs, and finally self-actualisation or self- fulfilment needs. Maslow's (1987) hierarchy of needs consists of five levels where moving to higher levels in the hierarchy passes through satisfying the needs in the lower level. These needs were summarized as follows:

1. Level one Physiological needs: which comprise the biological needs necessary of human survival such as air, food, drink sleep etc.
2. Level two Safety needs: after satisfying the physiological needs, the needs for safety and security become urgent. They may be fulfilled by the family or the society to which the individual belongs.

3. Level three Love and belongings' needs: They include the need for interpersonal relationships, so receiving and giving affection and love become very important for the individual.

4. Level four Self-esteem needs: These needs involve the desire for self-esteem, independence, dignity, and respect from others.

5. Level five Self-actualization needs: they refer to self-fulfillment and realizing one's potential. This potential varies from one person to another. One may have the desire to become financially or academically successful. It is the highest level where talents, capacities and abilities are fully used and expressed. Learning can be considered as a form of self-actualization. Furthermore, the Humanistic view claims that any teacher's aim should be targeted towards the optimum growth of each learner.

#### **4-Constructivism**

Constructivism is a leaning theory based on considering learning as the construction of new ideas or concepts based upon the learner's current and past knowledge and experiences. Reflection on that knowledge and these experiences constitute the bases for learning to occur. In other words, the individual has a concrete experience on which he makes reflections, and the new knowledge is constructed as a result of these reflections. Consequently, constructivists believe that the learner learns best when he is actively engaged

by deriving meaning from his surrounding environment and discovering principles by himself. As for the teacher, he is considered as a facilitator the role of whom is to help the learner select and transform information, construct hypotheses and make decisions by creating the proper environment where the learner constructs meaning at his own pace. Two schools of thought emerged with constructivism: one is Social Constructivism and the second is Cognitive Constructivism.

**Social Constructivism** Based on the theory of Vygotsky, it claims that understanding culture and context are very important for constructing meaning. He introduced one key term which is the: 'Zone of Proximal Development' as: The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers. (Vygotsky, 1978: 86). This means that at a certain level, the learner needs guidance and assistance from the teacher to perform a specific task and this level is called the zone of proximal development. Scaffolding is a related term which refers to the activities provided by the teacher to help the student in the zone of proximal development.

**Cognitive Constructivism:** It emphasizes research and spontaneity in classroom activities that are challenging the learners. Here Bloom's Taxonomy

was suggested as comprising three components: cognitive, affective and psychomotor. Cognitive is related to mental skills: affective is the growth of emotional areas or attitudes and psychomotor has to do with manual or physical skills.