PSYCHOLINGUISTICS: A VIEW

Hasibuddin

Department of Humanities Kashi Institute of Technology, Varanasi.

ABSTRACT

How mind and language are interrelated? How production, comprehension and process of a language take place? Psycholinguistics is the answer.

Keyword: Psycholinguistics, production, comprehension, brain

INTRODUCTION:

Psycholinguistics is interdisciplinary in nature and is studied by people in diverse fields, such as psychology, linguistics and cognitive science. Psycholinguistics or psychology of language is the study of the psychological and neurobiological factors that enable humans to acquire (language acquisition) FLA, i.e. First Language Acquisition is always acquired; use, i.e. learning, Second Language is mostly learnt, and understanding, i.e. process of language.

Preliminary attempts into psycholinguistics were mainly philosophical speculations, due mainly to a lack of organized data on how the human brain functioned. Contemporary research makes use of biology, neuroscience, cognitive science, and information theory to study how the brain processes language. There are a number of sub disciplines; for example, as non-invasive techniques for studying the neurological workings of the brain become more and more extensive, neurolinguistics has become a field in its own right.

Psycholinguistics covers the cognitive processes that make it possible to generate a grammatical and meaningful sentence out of vocabulary and grammatical structures, as well as the processes that make it possible to understand utterances, words, text, etc.

There are several subdivisions within psycholinguistics that are based on the components that make up human language. Psychologists and those linguists who reject the Chomskyan approach often view language learning from a very different perspective. Chomsky views language as a mental phenomenon, which is to say that it is part of our cognition. A core question has been what the initial conditions are when a human begins to acquire language. Hierarchy may be one such prior condition, meaning that a child will expect that all grammatical rules are hierarchically defined. This is not to say that this is something that is conscious to us, rather, we do it automatically and we don't even know it until we take a class in linguistics! But Chomsky holds that there is a finite space of possible human grammars and that a core task is to delineate this space. That will explain how language Received : November 2016 Accepted : December 2016

Address for correspondence

Dr. Hasibuddin

Department of Humanities, Associate Professor, Kashi Institute of Technology, Varanasi. Email:haseebuddin1@gmail.com Phone no:+91-9450536267

acquisition is possible once all the intricate facts about human languages are taken into account.

To the psychologist, language acquisition is a window on the operation of the human mind. The patterns of language emerge not from a unique instinct but from the operation of general processes of evolution and cognition. For researchers who accept this emergentist approach, the goal of language acquisition studies is to understand how regularities in linguistic form emerge from the operation of low-level physical, neural, and social processes. Before considering the current state of the dialog between the view of language as a hardwired instinct and the view of language as an emergent process, it will be useful to review a few basic facts about the shape of language acquisition and some of the methods that are used to study it.

Aphasia

Aphasia is a langauge disorder that results from damage or injury to language parts of the brain. It's more common in older adults, particularly those who have had a stroke. Aphasia gets in the way of a person's ability to use or understand words. Aphasia does not impair the person's intelligence. People who have aphasia may have difficulty speaking and finding the "right" words to complete their thoughts. They may also have problems understanding conversation, reading and comprehending written words, writing words, and using numbers.

Broca's Aphasia

Broca's aphasia is named after the French scientist, Paul Broca, who first related a set of deficits associated with this type of aphasia to localized brain damage. He did this in 1861, after caring for a patient who could only say the word "tan". Individuals with Broca's aphasia have trouble speaking fluently but their comprehension

(35)

can be relatively preserved. This type of aphasia is also known as non-fluent or expressive aphasia. Patients have difficulty producing grammatical sentences and their speech is limited mainly to short utterances of less than four words. Producing the right sounds or finding the right words is often a laborious process. Some persons have more difficulty using verbs than using nouns. A person with Broca's aphasia may understand speech relatively well, particularly when the grammatical structure of the spoken language is simple. However they may have harder times understanding sentences with more complex grammatical construct. For example the sentence "Mary gave John balloons" may be easy to understand but "The balloons were given to John by Mary" may pose a challenge when interpreting the meaning of who gave the balloons to whom.

Individuals with this type of aphasia may be able to read but be limited in writing. Broca's aphasia results from injury to speech and language brain areas such the left hemisphere inferior frontal gyrus, among others. Such damage is often a result of stroke but may also occur due to brain trauma. Like in other types of aphasia, intellectual and cognitive capabilities not related to speech and language may be fully preserved.

Wernicke's Aphasia

Wernicke's aphasia and Wernicke's area are named after the German neurologist Carl Wernicke who first related this specific type of speech deficit to damage in a left posterior temporal area of the brain. In this form of aphasia the ability to grasp the meaning of spoken words and sentences is impaired, while the ease of producing connected speech is not very affected. Therefore Wernicke's aphasia is also referred to as 'fluent aphasia' or 'receptive aphasia'.

Reading and writing are often severely impaired. As in other forms of aphasia, individuals can have completely preserved intellectual and cognitive capabilities unrelated to speech and language. Persons with Wernicke's aphasia can produce many words and they often speak using grammatically correct sentences with normal rate and prosody. However, often what they say doesn't make a lot of sense or they pepper their sentences with non-existent or irrelevant words. They may fail to realize that they are using the wrong words or using a non-existent word and often they are not fully aware that what they say doesn't make sense. Patients with this type of aphasia usually have profound language comprehension deficits, even for single words or simple sentences. This is because in Wernicke's aphasia individuals have damage in brain areas that are important for processing the meaning of words and spoken language. Such damage includes left posterior temporal regions of the brain, which is part of what is known as Wernicke's area, hence the name of the aphasia.

Developmental Psycholinguistics

Developmental psycholinguistics studies infants' and children's ability to learn language, usually with experimental or at least quantitative methods (as against naturalistic observations made by Jean Piaget in his research on the development of children).

Kids are learning language skills earlier than expected and by the age of 18 months understand enough of the lexicon of their own language to recognize how speakers use sounds to convey meaning. They also ignore sounds that don't play a significant role in speaking their native tongue, according to a study by a University of Pennsylvania psychologist. The study shows how important the child's first year is in acquiring language. By listening to their parents and learning words, children discover how speech in their language works, a process that is vital for gaining command of vocabulary and grammar. This is the first time scientists have shown that children as young as 18 months actively interpret the phonetic characteristics of their particular language when they learn words. Previously, scientists had speculated that this ability would emerge much later in life, once children had already amassed large vocabularies.

Previous research showed that at birth infants can distinguish most of the phonetic contrasts used by all the world's languages. This "universal" capacity shifts over the first year to a language-specific pattern in which infants retain or improve categorization of native-language sounds but fail to discriminate many non-native sounds. Eventually, they learn to ignore subtle speech distinctions that their language does not use.

This is why Japanese toddlers, like Japanese adults, cannot tell apart the English "r" and "l" sounds and why English speakers have trouble with certain French vowels because they all sound the same to non-native speakers due to language learning in infancy. The Penn study shows that even when two words sound very different, toddlers know whether to take this difference seriously or to chalk it up to random variation depending on how their language works.

"The results demonstrate that at 18 months children have an elementary understanding of the 'sound system' of their language and that knowledge guides their interpretation of the sounds they encounter," said Daniel Swingley, Assistant professor in the Department

pronounced in different ways. We might say, 'Is that your kiiiiiitty''' or, 'Show me the kitty.' In English, we're still talking about the same cat. But children have to figure this out. In other languages, like Japanese or Finnish, those two versions of "kitty" could mean completely different things. Our study showed that 18-month-olds have already learned this and apply that knowledge when learning new words."

Psychologists tested vowel duration ("kitty" versus "kiiiitty") in three experiments comparing Dutch- and English-learning 18-month-olds. Children were shown two different toys. With one toy, researchers repeated a word dozens of times, naming it a "tam." The other toy was named too, with the same label only with the vowel acoustically longer in duration ("taam").

Dutch children, learning a language that includes words differentiated by how long the vowel is pronounced, interpret the variations as meaningful and learn which word goes with each object. English speakers ignored the elongation of vowel sounds.

English learners did not somehow lack the cognitive power to learn both words. They can hear the difference between the words, and they succeed on words that really are different in English ("tam" vs. "tem"). The difference arose from the phonological generalizations children had already made from their brief experience with English: "tam" and "taam", like "kitty" and "kiiiitty", mean the same thing. Dutch children, on the other hand, interpreted vowel duration as lexically contrastive in keeping with the properties of their language.

CONCLUSION

Psycholinguistics is a part of Medical Sciences, as a person has language disorder, i.e. suffering from Aphasia, Dyslexia, and Agrammatism has to consult a Medical Practitioner.

REFERENCES:

- 1. CHOMSKY, NOAM.. Some Concepts and Consequences of the Theory of Government and Binding. Cambridge, MA: MIT Press. 1982;(423);12-24
- 2. LENNEBERG, ERIC H. Biological Foundations of Language. New York: Wiley. 1967;(32);1-14
- 3. PIAGET, JEAN.. *The Psychology of Intelligence*, Routledge. 1997;(3);54-76

- 4. PINKER, STEVEN. *The Language Instinct*. New York: Morrow. 1994;(6);67-86
- 5. YULE, GEORGE.. *The Study of Language*, Cambridge: CUP. 1997;(56);667-684