

Original Paper

Introduction to Psycholinguistics—A Review

Dr K. Balamurugan^{1*} & Dr S. Thirunavukkarasu²

¹ Bharathiyar College of Engineering & Technology, Karaikal, Pondicherry UT, India

² EGS Pillai College of Engg & Tech, Nagapattina, India

* Dr K. Balamurugan, Bharathiyar College of Engineering & Technology, Karaikal, Pondicherry UT, India

Received: April 17, 2018

Accepted: April 24, 2018

Online Published: May 10, 2018

doi:10.22158/sll.v2n2p110

URL: <http://dx.doi.org/10.22158/sll.v2n2p110>

Abstract

How the human mind constructs a thought and applies it into language is called psycholinguistics. The paper aims to flash a light on psycholinguistics for a beginner and tries to flash the area untouched so far on psycholinguistics, for a high end reader of the subject. Psycholinguistics or psychology of language is the study of the psychological and neurobiological factors that enable humans to acquire, use, comprehend and produce language. The paper discusses the origin of the subject, its growth and issues and issues to be clarified through research. Further it throws light it sprawling areas and its present day uses and utilities etc. The paper ends touching the behavioral tasks, neuro-maging, and language production errors.

1. Introduction

Psycholinguistics deals mainly with language understanding, production and acquisition. It is a part of cognitive science that comprises psychology, linguistics, anthropology, neuro-science and computer science. The neurology of language functioning is of current interest to psycholinguists, particularly to those studying sex differences, aphasia, language after congenital or acquired injury to the immature brain, and developmental disorders of language (dysphasia). Some psycholinguists have also extended their interests to experiments in nonhuman language learning (e.g., gorillas and chimpanzees) to discover if language as we know it is a uniquely human phenomenon.

2. Origin

The studies of relationship between behavior and cognitive characteristic of those who use language seem to be the origin of Psycholinguistics. Wilhelm Maximilian Wundt a German physician, physiologist, philosopher, and professor, in the 19th century derived psychology from biology and

philosophy and called himself psychologist.

The term psycholinguistics was coined in 1936 by Jacobo Robert Kantor in his book *An Objective Psychology of Grammar* and started being used among his team at Indiana University but its use finally became frequent thanks to the 1946 article “Language and psycholinguistics: a review”, by his student Nicholas Henry Pronko. It was used for the first time to talk about an interdisciplinary science “that could be coherent” as well as in the title of *Psycholinguistics: A survey of theory and research problems*, a 1954 book by Charles E Osgood and Thomas A. Sebeok.

3. What Is Psycholinguistics?

The study of language science that decodes how a human brain acquires language, processes it, comprehends it and gives feedback or produces language, is a psycholinguistics.

Psycholinguistics is an interdisciplinary field. Hence, it is approached from the areas of different backgrounds, such as psychology, cognitive science linguistics, and speech and language pathology. It further has subdivisions; such as Orthography, Phonology, Semantics, Syntax, etc.

4. Issues Going on

Psycholinguistics is concerned with the nature of the computations and processes that the brain undergoes to comprehend and produce language. For example, the Cohort Models (The **cohort model** in psycholinguistics and neurolinguistics is a **model** of lexical retrieval first proposed by William Marslen-Wilson in the late 1980s.) try to describe how words are retrieved from the mental lexicon when an individual hears or sees linguistic input. Recent research using new non invasive imaging techniques seek to shed light on just where certain language processes occur in the brain. There are a number of unanswered questions in psycholinguistics, such as whether the human ability to use syntax is based on innate mental structures or emerges from interaction with other humans, and whether some animals can be taught the syntax of human language.

Two other major subfields of psycholinguistics investigate first language acquisition the process by which infants acquire language, and second language acquisition. In addition, it is much more difficult for adults to acquire second language than it is for infants to learn their first language (bilingual infants are able to learn both of their native languages easily). Thus, sensitive periods may exist during which language can be learned readily. A great deal of research in psycholinguistics focuses on how this ability develops and diminishes over time. It also seems to be the case that the more languages one knows, the easier it is to learn more.

Language deficits that arise because of brain damage are dealt with in the field of aphasiology. Studies in aphasiology can offer advances in therapy for individuals suffering from aphasia. It further explains how the brain processes language.

5. Theories

5.1 Behaviorist Theory

The behaviorist theory of language learning emphasizes that language learning is a process of habit formation. Language Learning involves a period of trial and error where the child tries and fails to use correct language until it succeeds. Infants also have human role models in their environment that provide the stimuli and rewards required for operant conditioning. For example, if a child starts babblings, which resembles appropriate words, then his or her babbling will be rewarded by a parent or loved one by positive reinforcement such as a smile or clap.

5.2 Innateness Theory

Noam Chomsky's innateness theory (or nativity theory) proposes that children have an inborn or innate faculty for language acquisition that is biologically determined. It seems that the human species has evolved a brain whose neural circuits contain linguistic information at birth and this natural predisposition to learn language is triggered by hearing speech. The child's brain is then able to interpret what she or he hears according to the underlying principles or structure it already contains.

5.3 Cognitive Theory

A child first becomes aware of a concept such as relative size and only afterward do they acquire the words and patterns to convey that concept. Essentially it is impossible for a young child to voice concepts that are unknown to them and therefore once a child learns about their environment then they can map language onto their prior experience. An infant's experience of a cat is that it meows, is furry and eats from a bowl in the kitchen; hence they develop the concept of cat first and then learn to map the word "kitty" onto that concept.

5.4 Social Interactionist Theory

Children can be influenced by their environment as well as the language input children receive from their care-givers. The child is a little linguist analyzing language from randomly encountered adult utterances. The interaction theory proposes that language exists for the purpose of communication and can only be learned in the context of interaction with adults and older children.

5.5 Usage Based Theory

The usage-based theory of language suggests that children initially build up their language through very concrete constructions based around individual words or frames on the basis of the speech they hear and use. The child learns language from their language experiences and a language structure emerges from language use. For instance, quotable quotes, catchy words are this category. Example நான் ஒரு தடவை சொன்னா நூறு தடவை சொன்னமாதிரி, என்ன கொடுமை சரவணன் இது! எனது உயிரினும் மேலான..., etc.

Constructions gradually become more general and more abstract during the third and fourth years of life and grammar emerges as the speakers of a language create linguistic constructions out of recurring sequences of symbols.

5.6 Optimality Theory

A constraint is a structural requirement that may be either satisfied or violated by an output form and a surface form. A constraint is considered optimal if it incurs the least serious violations of a set of constraints, taking into account their hierarchical ranking. In optimality theory, the essence of both language learning in general (learnability) and language acquisition (actual development children go through) entails the rankings of constraints from an initial state of the grammar to the language specific ranking of the target grammar.

Example; Thoothukudi became Tuticorin, Thiruvananthapuram became Tiruvandram and Sozhar Temple into Chola Temple so on. Changes occurred in Tamil letters. Changes in pronunciation like *Hai* into *Hi* from *Hahoi* then *Hullo*, *Hello*, *Hallo*.

6. Structure and Behavior

It gives room to think that the structure already set up in the human neuro system of brain to come out and to see its function effectively, it needs stimuli from outside. For that matter, the behavior, i.e, the practice the human does makes human perform well. Hence both the structure and the behavior are inter-related and interdependent. Sometimes it could also be seen that even practice could not give desired result that easy just because of problem with structure and structural related issues. For instance, in the case of prodigy, mathematician, Ramanujam without much practice, his outcome of mathematics went beyond limit. For every human move, if we feel, the neurotic order or disorder might be behind it. would it be sensible?

7. Conclusion

Language acquisition has been one of the central topics in cognitive science but has also been one of the most controversial. Languages are complex combinations of elegant principles and historical accidents, which is perhaps one of the reasons why there is no monolithic explanatory theory of language. There are a range of theories of language acquisition that have been created but most of these theories cannot agree on the role that both nature and nurture play in language acquisition

References

- Levelt, W. (2013). *History of Psycholinguistics: The pre-Chomskyan Era*. Oxford Scholarship online.
Retrieved from https://en.wikiversity.org/wiki/Psycholinguistics/Theories_and_Models_of_Language_Acquisition