PSYCHOLINGUISTICS: LANGUAGE PROCESSES AND LINGUISTIC KNOWLEDGE

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Abstract

The article deals with the basics of psycholinguistics. The author analyses the study of how individuals comprehend, produce, and acquire language. The author shows the social rules involved in language use and the brain mechanisms associated with language.

Key words: psycholinguistics, language processes, knowledge, means, social behavior, science.

Аннотация

В статье рассматриваются основы психолингвистики. Автор анализирует изучение того, как индивидуумы осваивают, предявляют, и приобретают язык. Автор показывает социальные правила вовлечения использования языка и соединения мозговых механизмов с языком.

Ключевые слова: психолонгвистика, процессы языка, знание, средства, социальное поведение, наука.

We'll write how people use language. Few things play as central a role in our everyday lives as language. It is our most important tool in communicating our thoughts and feelings to each other. Infants cry and laugh, and their facial expressions surely give their parents some notion of the kinds of emotions they are experiencing, but it is not until children are able to articulate speech that we gain much understanding of their private thoughts.

As we grow, language comes to serve other functions as well. Most young people develop jargon that is more meaningful to those of the same age than to older or younger individuals. Such specialized language serves to bind us more closely with our peers while at the same time excluding those who are not our peers. Language becomes a badge of sorts, a means of identifying whether a person is within a sucial group. Similar processes are at work in gender and social class differences in language use.

Over time, for many of us language becomes not merely a means to an end but an end in itself. We come to love words and word play. So we turn to writing poetry or short stories. Or to playing word games, such as anagrams and crossword puzzles. Or to reading novels on a lazy summer afternoon. A tool that is vital for communicating our basic needs and wants has also become a source of leisurely pleasure.

The diversity of how we use language is daunting for psychologists who wish to study language. How can something so widespread and far-reaching as language be examined psychologically? An important consideration is that although language is intrinsically a social phenomenon, psychology is principally the study of individuals. The psychology of language deals with the mental processes that are involved in language use. Three sets of processes are of primary interest: language comprehension (how we perceive and understand speech and written language), language production (how we construct ah utterance, from idea to completed sentence), and language acquisition (how children acquire language).

The psychological study of language is called psycholinguistics.

Psycholinguistics is part of the emerging field of study called cognitive science. Cognitive science is an interdisciplinary venture that draws upon the insights of

psychologists; linguists, computer scientists, neuroscientists, and philosophers to study the mind and mental processes [3; 4]. Some of the topics that have been studied by cognitive scientists include problem solving, memory, imagery, and language. Anyone who is seriously interested in any of these topics must be prepared to cross disciplinary lines, for the topics do not belong to any one field of study but rather are treated in distinctive and yet complementary ways by various disciplines.

As the name implies, psycholinguistics is principally an integration of the fields of psychology and linguistics. Linguistics is the branch of science that studies the origin, structure, and use of language. Like most interdisciplinary fields, however, psycholinguistics has a rich heritage that includes contributions from diverse intellectual traditions. These contrasting approaches have often led to controversies in how to best think of or study language processes. For now, let us begin our survey of psycholinguistics by examining some of its central themes.

At its heart, psycholinguistic work consists of two questions. One is, What knowledge of language is needed for us to use language? In a sense, we must know a language to use it, but we are not always fully aware of this knowledge. A distinction may be drawn between tacit knowledge and explicit knowledge. Tacit knowledge refers to the knowledge of how to perform various acts, whereas explicit knowledge refers to the knowledge of the processes or mechanisms used in these acts. We sometimes know how to do something without knowing how we do it. For instance, a baseball pitcher might know how to throw a baseball 90 miles an hour but might have little or no explicit knowledge of the muscle groups that are involved in this act. Similarly, we may distinguish between knowing how to speak and knowing what processes are involved in producing speech. Generally speaking, much of our linguistic knowledge is tacit rather than explicit.

Four broad areas of language knowledge may be distinguished. Semantics deals with the meanings of sentences and words. Syntax involves the grammatical arrangement of words within the sentence. Phonology concerns the system of sounds in a language. Pragmatics entails the social rules involved in language use.

It is not ordinarily productive to ask people explicitly what they know about these aspects of language. We infer linguistic knowledge from observable behavior.

The other primary psycholinguistic question is, What cognitive processes are involved in the ordinary use of language? By "ordinary use of language," I mean such things as understanding a lecture, reading a book, writing a letter, and holding a conversation. By cognitive processes, I mean processes such as perception, memory, and thinking. Although we do few things as often or as easily as speaking and listening, we will find that considerable cognitive processing is going on during those activities.

For now, it will be helpful to consider various examples of language and language processes. The following examples are intended to illustrate how the aforementioned themes apply to specific situations as well as to convey some of the scope of psycholinguistic research.

Garden path sentences. What happens when we comprehend a sentence? We get a hint of what is involved when the process breaks down. For example: The novice accepted the deal before he had a chance to check his finances, which put him in a state of conflict when he realized he had a straight flush [1].

Indirect requests. Consider now a sentence such as:

Can you open the door?

An indirect request is more polite than a direct command such as sentence:

Open the door!

We know this, as it is part of our pragmatic knowledge of our language. Some of us know it better than others.

Indirect requests are an aspect of language that forces us to consider language in a social context. The study of the relationships between language and social behavior is called sociolinguistics. Sociolinguists remind us that language activities always take place in a social world. Sociologists and anthropologists study how language varies with social groupings, how it influences social interaction, and how it is used as an instrument of culture (as in the transmission of cultural traditions). All of these aspects are well beyond those of the psychologist, who is principally interested in the behavior of individuals. Yet even when studying individuals, it is necessary to recognize the social dimension of language.

Language in aphasia. Although our primary focus is on language processes in normal individuals, we can learn a great deal about language by studying individuals with impaired language functioning. An aphasia is a language disorder due to brain damage. One type of aphasia, called Wernicke's aphasia, involves a breakdown in semantics. For example: Before I was in the one here, I was over in the other one. My sister had the department in the other one [2].

Language in children. An area of considerable concern to psycholinguists is language acquisition. As difficult as it is to infer linguistic knowledge in adults, the problem is even more intractable with children. An example may help here. Imagine a young child, about 1 year old, interacting with her mother. Typically, children around this age produce one word at a time. When the mother leaves the room and then returns with the child's favorite doll, the child says doll, not mother. Later, when the mother is helping her with lunch, the child points at the milk and says more. Still later, when the child is struggling with her shoes and the mother asks her what she is doing, the simple response is off. What can we conclude from these observations?

For starters, the child might know, at least in a tacit manner, some of the rules of language to use words appropriately. We could infer that she uses more not as an isolated word or imitation but as a request that the mother bring the milk closer. Doll is less clear; the child might be making a comment on her environment by labeling a thing she finds interesting, or she may be requesting the doll. How do we determine what she is trying to say? One way is to see what happens if the mother does nothing. If the word were meant as a request, the child will probably become more insistent, perhaps by repeatedly pointing at the doll and saying doll; whereas if it were meant as a comment, the child's behavior should end with mother's mere acknowledgment of the object. Thus, the child may have learned certain pragmatic rules to guide her choice of words.

You may complain that this is reading a good deal, perhaps too much, into a single word. Granted, the inferences made about this stage of development are terribly difficult. Yet, although there is disagreement over exactly how much knowledge to attribute to young children, it appears that children know more than they say. Children somewhat older than the one in the example commonly express themselves with two words at a time, as in baby gone, by eliminating the closed-class or function words (prepositions, conjunctions, and so on) in favor of open-class or content words (nouns, verbs, adjectives). This pattern suggests that children have an intuitive understanding of these two grammatical classes, which is part of their syntactic knowledge.

An analysis of children's comprehension and production abilities cannot be divorced from the social context in which the child masters language. Parents may set up situations in which one word is sufficient for communication. With the adult's query What are you doing with your shoe? as the base, the child's simple, economical off is instantly comprehensible.

Parents do other things as well, such as simplifying their speech to children and teaching specific words.

Summary. Psycholinguistics is part of an interdisciplinary field known as cognitive science. Two primary psycholinguistic questions are What mental processes are involved in language use? and What linguistic knowledge is involved in language use? These questions reemerge in different forms in studies of adult language comprehension, the social use of language, language use in aphasia, and language in children.

Literature

1. Foss, D. J. & Jenkins, C. M. Some effects of context on the comprehension of ambiguous sentences. Journal of Verbal Learning and Verbal Behavior, 12, 1973, pp. 577 – 589.
2. Geschwind, N. Language and the brain. Scientific American, 1972, pp. 76 – 83.
3. Johnson – Laird, P. N. The computer and the mind: An introduction to cognitive science. Cambridge, MA:Harvard University Press, 1988.
4. Stillings, N. A., Wiesler, S. E., Chase, C. H., Feinstein, M. H., Garfield, J. L. & Rissland, E. L. Cognitive science: An introduction (2nd ed.). Cambridge, MA:MIT Press, 1995.

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