# SPEECH IN MODERN PSYCHOLINGUISTICS: CONTEMPORARY PERSPECTIVES AND SCIENTIFIC APPROACHES

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**Abstract:** Speech occupies a central position in modern psycholinguistics as both a cognitive process and a social phenomenon. Contemporary psycholinguistic research investigates how speech is produced, perceived, interpreted, and represented in the human mind. This article examines the role of speech in modern psycholinguistic science by analyzing current theoretical approaches to speech production, speech perception, language processing, inner speech, bilingual speech behavior, and technological applications. Drawing on cognitive psychology, neuroscience, linguistics, and artificial intelligence, the study explores how speech functions as a bridge between language structure and human cognition. The article also discusses the implications of recent experimental findings for language teaching, speech therapy, and digital communication. The findings demonstrate that speech is not only a means of communication but also a fundamental mechanism of mental organization and social interaction in contemporary psycholinguistic theory.
**Keywords:** psycholinguistics, speech, language processing, cognition, speech perception, speech production, bilingualism, inner speech

Modern psycholinguistics is an interdisciplinary field that studies the relationship between language and the human mind. Within this field, speech is considered one of the most complex and essential manifestations of language. Unlike written language, speech is immediate, dynamic, and deeply connected to cognitive and neural processes. It allows individuals to encode thoughts into linguistic forms and decode linguistic signals into meaningful concepts.

The study of speech in psycholinguistics has evolved significantly over the last century. Early linguistic theories focused primarily on language structure, while contemporary psycholinguistics emphasizes the mental processes involved in speech production and comprehension. Researchers now investigate how speech is generated in the brain, how listeners interpret spoken messages, and how social context influences verbal behavior.

The purpose of this article is to analyze the role of speech in modern psycholinguistic science and to demonstrate its significance in understanding language as a cognitive system.

Speech in psycholinguistics is understood as a mental and physiological activity through which language is realized in communication. It involves several simultaneous processes:

- conceptualization of ideas
- lexical selection
- grammatical organization
- phonological encoding
- articulation
- auditory monitoring

Speech therefore cannot be reduced to simple verbal output; it is a highly integrated psychological process involving perception, memory, and cognition.

Psycholinguists distinguish speech from language by considering language as an abstract system of rules and speech as the actual psychological implementation of that system in real time.

The foundations of speech research were established by scholars such as:

- Wilhelm Wundt

- Lev Vygotsky
- Jean Piaget
- Roman Jakobson

Today speech research combines:

- cognitive science
- neuroscience
- computational modeling
- social psychology

Listeners must:

- detect acoustic signals
- identify phonemes
- recognize words
- assign syntactic structure
- infer meaning

Modern research shows that speech perception involves both:

- bottom-up processing
- top-down processing

Context strongly influences comprehension. Advances in neuroimaging have transformed psycholinguistic speech research.

Important brain regions include:

- Broca's area
- Wernicke's area
- auditory cortex
- motor cortex

Studies show speech involves distributed neural networks rather than isolated brain centers.

Speech processing depends on coordination between:

- perception
- memory
- motor planning
- semantic interpretation

Inner speech refers to silent verbal thinking.

Modern psycholinguistics examines how inner speech contributes to:

- planning
- memory
- self-regulation
- problem solving

Vygotsky proposed that inner speech develops from external social speech.

Modern psycholinguistics increasingly studies bilingual speech.

Researchers investigate:

- code-switching
- accent transfer
- cross-linguistic interference
- language dominance

Speech errors provide valuable data about mental language processes.

Examples include:

- slips of the tongue
- word substitutions
- sound exchanges
- hesitation phenomena

Speech conveys emotion through:

- intonation
- rhythm

- pitch
- speed

Modern psycholinguistics contributes to understanding speech disorders.

These include:

- aphasia
- dysarthria
- stuttering
- apraxia of speech

Applications include:

- speech recognition
- voice assistants
- automatic translation
- speech synthesis

Artificial intelligence increasingly uses psycholinguistic models to simulate human speech. Modern technology has expanded the practical importance of psycholinguistic research. Psycholinguistic research has implications for teaching.

Speech-based approaches improve:

- pronunciation
- fluency
- listening comprehension
- interactional competence

Teachers can apply psycholinguistic insights to improve language instruction.

Current research focuses on:

- multimodal communication
- virtual interaction
- brain-computer interfaces
- speech and AI
- neuroplasticity in speech learning

These trends are reshaping the field.

Speech in modern psycholinguistics is viewed as:

- a cognitive process
- a neural function
- a social activity
- a developmental phenomenon

It connects language to the broader architecture of the mind.

Modern research shows speech cannot be understood solely through linguistic analysis; it requires interdisciplinary study.

Speech remains one of the most important subjects in modern psycholinguistic science. It provides a window into the relationship between language and mind, revealing how humans think, communicate, and interact.

Modern psycholinguistics demonstrates that speech is more than verbal expression. It is a sophisticated psychological process that integrates cognition, emotion, social interaction, and neurological activity.

Future research will continue to deepen understanding of speech and expand its applications in education, medicine, and technology.

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