

Introduction to Psycholinguistics

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The scientific study of how language is acquired, processed, understood, and produced by the human mind.

1. What Is Psycholinguistics?

Aspect	Description
Definition	Intersection of psychology and linguistics that investigates mental mechanisms underlying language use.
Core Questions	• How do we comprehend spoken and written language? • How are words and sentences produced? • How is language learned and stored? • What brain structures support linguistic functions?
Key Disciplines Involved	Cognitive psychology, neurolinguistics, developmental psychology, computational modeling, anthropology.

2. Major Subfields

Subfield	Focus	Typical Methods
Language Acquisition	How children (and adults) acquire a first or additional language.	Longitudinal observations, naturalistic recordings, experimental training.
Language Comprehension	Real-time processing of spoken/written input.	Eye-tracking, self-paced reading, ERP (event-related potentials), fMRI.
Language Production	Planning and articulation of speech or writing.	Speech onset latency, picture-naming tasks, articulatory phonetics.
Neurolinguistics	Brain-language relationships; effects of brain damage.	Lesion studies, neuroimaging, transcranial magnetic stimulation (TMS).
Bilingualism & Multilingualism	Interaction of multiple language systems in the mind.	Code-switching analysis, proficiency testing, cognitive control tasks.

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Subfield	Focus	Typical Methods
Computational Psycholinguistics	Formal models that simulate human language behavior.	Connectionist networks, Bayesian models, parsing algorithms.

3. Fundamental Concepts

Concept	Explanation	Example
Mental Lexicon	Mental “dictionary” containing word forms, meanings, and usage information.	Retrieval of “apple” when seeing a picture of fruit.
Lexical Access	Process of selecting the appropriate word from the mental lexicon.	Hearing “dog” ? activation of phonological, semantic, and syntactic representations.
Parsing	Building hierarchical structure of a sentence during comprehension.	Interpreting “The cat that chased the mouse was hungry.”
Garden?Path Sentences	Sentences that lead the parser down an incorrect initial interpretation.	“The horse raced past the barn fell.”
Syntactic Priming	Repeating a syntactic structure increases the likelihood of using it again.	After hearing “The boy gave the girl a book,” speakers are more likely to produce similar double?object constructions.
Working Memory	Limited?capacity system that temporarily holds linguistic information.	Keeping the first clause of a complex sentence while processing the second.
Critical Period Hypothesis	Proposed window (roughly birth to puberty) during which language acquisition occurs most naturally.	Difficulty achieving native?like accent when learning a second language after adolescence.

4. Classic Experiments

Study	Aim	Method	Key Finding
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Miller & Gibbon (1960) – Word?Fragment Completion	Test lexical access speed.	Participants complete word fragments (e.g., “c_t”).	Faster completion for high?frequency words.
Marslen?Watkins (1978) – Speech Perception	Determine how listeners use context.	Lexical decision on words in noise with varying context.	Contextual cues speed up word recognition.
Levelt (1989) – Picture Naming			