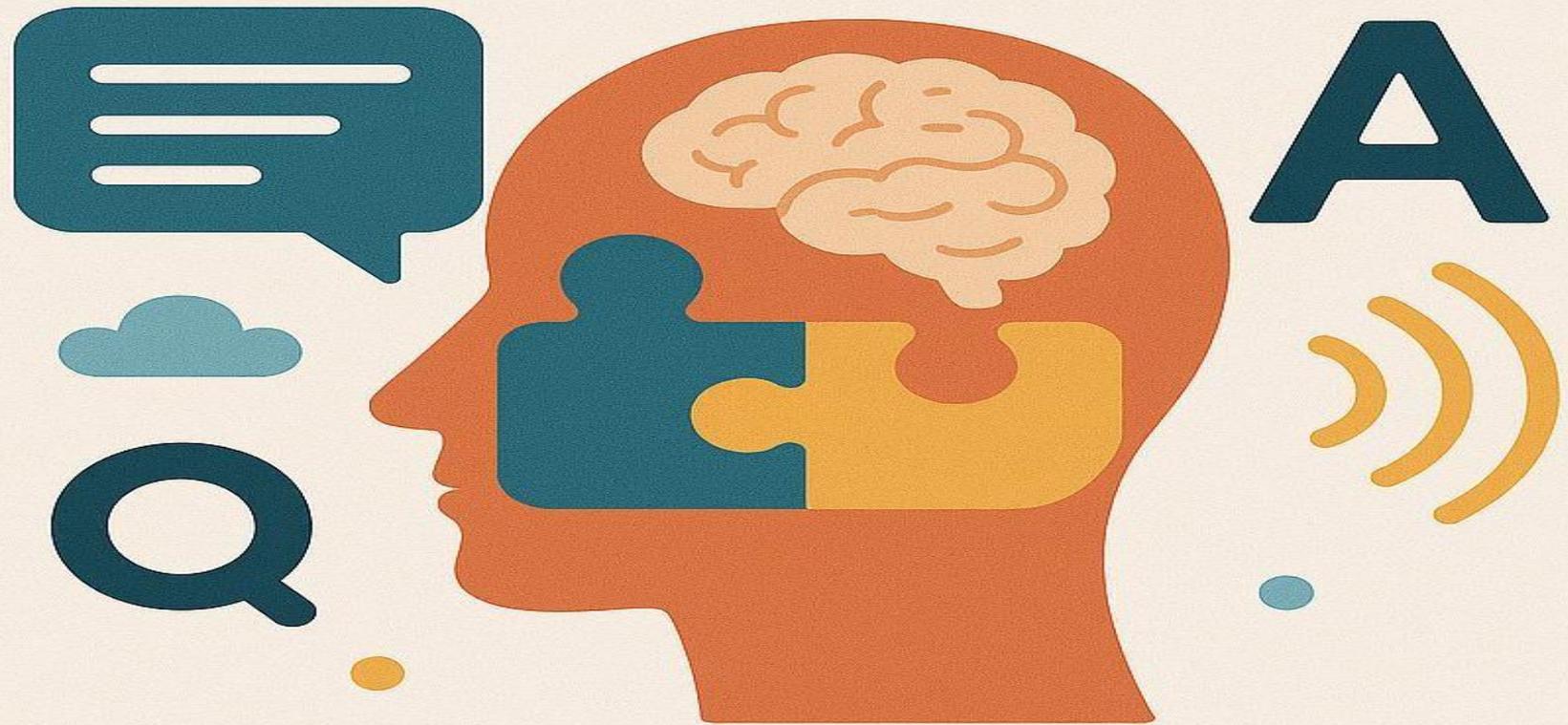




# Introduction to Psycholinguistics



Prof. Saliha Chelli



## **Learning objectives**

To provide students with a basic understanding of psycholinguistics laying the foundation for further study in language acquisition, comprehension, and production.



# 1. What is Psycholinguistics?

Psycholinguistics is the study of how the brain processes language. It focuses on how people understand, produce, and store language, and how our cognitive processes (like memory and attention) are involved in language use.

It blends psychology and linguistics, helping us better understand language disorders, language learning, and effective communication.



## 2. History of Psycholinguistics

Psycholinguistics is the study of how language is processed in the brain, combining insights from psychology, linguistics, and cognitive science.

It has evolved from **early philosophical ideas** about language and thought to modern research on language acquisition, production, and comprehension.

Key milestones include **Noam Chomsky's challenge to behaviorism in the 1950s**, the rise of **cognitive psychology**, and recent **advancements in brain imaging and computational models**.

Today, the field integrates **neuroscience**, **cognitive science**, and **artificial intelligence** to better understand how humans process and produce language.



## 3. Key Areas of Psycholinguistics

**1. Language Production:** This is the process of how we **produce language** when speaking or writing. It includes:

- **Formulating thoughts** into words.
- **Choosing the right words** (vocabulary).
- **Putting them together** into sentences (grammar).
- **Pronouncing the words** clearly.

For example, when you speak to someone, your brain has to quickly select words, construct sentences, and control your speech muscles.



**1. Language Comprehension:** This is how we **understand language** when listening or reading. It involves:

- **Recognizing words** (like reading a sign or hearing a word).
- **Understanding meaning** (grasping what the words or sentences mean).
- **Interpreting context** (understanding tone or mood in speech).

When you listen to someone speaking, your brain instantly processes the words and makes sense of the meaning behind them.

**2. Speech Perception:** This is how we **hear and interpret sounds** in language. Our brains convert sounds (like speech) into meaningful words.

For instance, when you hear someone say "cat," your brain recognizes the sound and connects it to the concept of a cat.

## 4. Language and Memory

Our memory plays a key role in how we store and recall language.

**Short-term memory** helps us remember what we just heard or read.

**Long-term memory** stores vocabulary, grammar rules, and experiences related to language use.



## 5. Important Concepts in Psycholinguistics

- 1. Word Recognition:** How quickly and accurately we recognize words when reading or listening. Some words are easier to recognize because they are used more often, while others might be harder because they are unusual or complex.
  - 2. Lexical Access:** This refers to how our brain quickly finds the meaning of a word when we hear or read it. It involves accessing a mental "dictionary" where all the words we know are stored
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## 1. Syntax and Sentence Structure

- Understanding how we arrange words in sentences (syntax) is important for both comprehension and production. For example, we know that in English, the sentence "I eat an apple" follows a certain structure, and changing that structure might lead to confusion ("Eat I apple an").

## 2. Bilingualism and Code-Switching

Psycholinguistics also studies how bilingual people switch between languages (called **code-switching**) and how the brain manages more than one language



## 6. Why is Psycholinguistics Important?

Psycholinguistics is important because it helps us **understand the complex relationship between language and the brain**, shedding light on how we acquire, produce, and comprehend language.

By studying these processes, psycholinguistics provides **valuable insights into how the brain functions, which can improve our understanding of cognitive processes like memory, attention, and learning.**

Additionally, it informs practical applications such as **language education, speech therapy, and artificial intelligence development.**

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- **Language Disorders:** It helps us understand language disorders like aphasia (when people have difficulty speaking or understanding language after brain damage) and dyslexia (difficulty reading).
  - **Language Acquisition:** Psycholinguistics is important for understanding how children learn language, whether it's their first language or a second one.
  - **Improving Communication:** Understanding how we process language can improve how we communicate, whether in therapy, education, or even in artificial intelligence like chatbots or voice recognition systems.



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