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PSYCHOLINGUISTICS: HOW THE MIND UNDERSTANDS AND PRODUCES LANGUAGE

Linguistics, the scientific study of language, encompasses various branches including syntax, phonetics, semantics, and pragmatics. Among these, psycholinguistics occupies a unique position as it bridges linguistics with psychology and cognitive science. It focuses on the mental and neurological mechanisms that make language possible [1, p. 1252]. Understanding how individuals process language in real time provides valuable insights into both linguistic structure and cognitive function. Linguistics seeks to understand the structure, function, and evolution of human language. While traditional branches of linguistics—such as phonetics, morphology, syntax, and semantics—focus on describing the formal features of language, psycholinguistics explores how these features are processed in the human mind. It addresses key questions such as how language is comprehended and produced in real time, and how it is mentally represented and stored [1, p. 1253].

Psycholinguistics operates at the intersection of linguistics, psychology, neuroscience, and cognitive science. By examining the mental processes underlying language use, it helps linguists develop more accurate and empirically grounded theories about language function. For instance, insights from psycholinguistics shed light on how people understand sentences incrementally, how memory and attention affect speech production, and how bilinguals manage multiple linguistic systems [2, p. 7].

Building on this foundational understanding, we can now examine the two central aspects of psycholinguistics: language comprehension and language production. These processes illustrate how the mind actively interprets incoming linguistic input and generates meaningful speech or text. By studying comprehension, we explore how listeners and readers recognize words, parse sentences, and integrate context and prior knowledge. Meanwhile, examining production reveals how speakers select words, structure sentences, and plan articulation in real time. Together, these two domains provide a comprehensive view of how language operates within the human mind, linking cognitive mechanisms to observable linguistic behavior [2, pp. 6–9].

Language comprehension and production involve complex cognitive mechanisms that allow fluent language users to understand and generate speech or text. Comprehension of spoken words requires listeners to segment a continuous acoustic signal into discrete units, recognizing words despite variations in pronunciation, reductions, and contextual modifications (e.g., going to becomes gonna). Listeners rely on both bottom-up processes, such as acoustic and phonetic cues, and top-down processes, including prior knowledge and context, to rapidly identify words and integrate them into meaningful sentences. Printed word recognition similarly depends on orthographic knowledge, familiarity, and frequency of exposure, with the mental lexicon providing fast access to semantic, syntactic, and phonological information. Comprehension of sentences and discourse involves parsing, resolving ambiguities, and using contextual knowledge to maintain coherence, with modular and interactive models describing how information from multiple sources is integrated in real time [2, p. 8].

Language production begins with a conceptual plan or intention that the speaker wishes to express. Words are retrieved from the mental lexicon and organized into syntactic structures,

followed by phonological encoding and articulation. Speech errors reveal the stages and interactions of these processes, highlighting both modular and interactive components. Written production involves similar mechanisms, including lexical retrieval, syntactic planning, and motor control for spelling or handwriting, with additional attention to coherence and structure in extended text. Frequency and familiarity influence retrieval speed, while planning ensures grammatical and semantic accuracy. Connectionist and dual-route models explain how both novel and familiar items are processed, demonstrating probabilistic rather than all-or-none processing in comprehension and production [2, p. 7].

Human language processing involves complex cognitive mechanisms that allow us both to interpret input and to generate output. Language comprehension requires the listener or reader to decode linguistic signals—sounds or text—recognize words, and then integrate meaning with context and prior knowledge. This involves recognizing units like phonemes and words, accessing semantic information, and merging this information to build mental representations of sentences and discourse that carry intended meaning. Crucial processes include word recognition, syntactic parsing, and semantic interpretation, which together enable the mind to transform sensory input into meaningful ideas [2, p. 6].

Producing language engages similar mental mechanisms in reverse: the speaker begins with a concept or idea they wish to communicate, then selects appropriate words and organizes them into grammatically coherent structures, encodes them phonologically or in written form, and finally executes motor actions for articulation or writing. These processes involve memory, attention, motor planning, and cognitive control, demonstrating that language production is not simply a motor act but a deeply integrated cognitive activity [2, p. 7].

Modern perspectives in psycholinguistics suggest that comprehension and production are deeply interrelated, with some theories proposing shared cognitive and predictive mechanisms that allow language users to anticipate upcoming words and structures, aiding both understanding and generation of language [2, p. 9].

REFERENCES

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