The Effect of Gesture on the Networks of the Brain That Coordinate for Language Understanding

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Abstract

The effects of gesture on language-understanding orchestrate brain networks are the subject of this paper.Additionally, anyone can use this writing to determine their level of comprehension and concentration.A person can remember a word or a thought with the assistance of brain networks, and gesture itself is a movement used to describe a word.The researcher for this study employs a qualitative approach to data collection by utilizing a questionnaire. This paper aims to explain how language and brain networks interact, particularly how people's gestures affect their ability to remember words.

Keywords: *Memory, language, gesture, Understanding, Brain networks*

INTRODUCTION

Humans have good memories (Qodriani & Wijana, 2020), but that they can only retain a certain amount of information (Mandasari & Oktaviani, 2018), which is welcomed and then remembered (Aminatun & Oktaviani, 2019). The Stimulus, which enters spontaneously (Gulö & Nainggolan, 2021), can be organized into a series (Oktaviani et al., 2020), or units, which are the most fundamental in short-term memory (Fadilah & Kuswoyo, 2021). A chunk can be a single number or letter (Puspita & Pranoto, 2021), or it can be organized into a larger unit (Puspita, 2021b), with multiple numbers or letters at once (E. Putri & Sari, 2020b). The number of items or pieces of information that can be recorded in chunks (Kardiansyah, 2021), depends on what they mean to the people who are concerned (Afrianto et al., 2021). Because it is so complicated to remember humans (Kardiansyah & Salam, 2021), the memory system capability of humans is actually something that cannot be fully understood (Suprayogi & Eko, 2020), or studied. As a result, we looked into how human memory might be affected by gesture because, we think gestures can help people remember things (Kasih, 2018). We are aware that a person's actions have the ability to convey a variety of emotions (N. R. Putri & Sari, 2021), and viewpoints, ranging from contempt and hostility to approval and affection (Amelia, 2021), sometimes in conjunction with their body language (Puspita & Amelia, 2020).

LITERATURE REVIEW

Orchestrate brain networks for language understanding provides a thorough introduction to psycholinguistic theory (Ayu & Sari, 2021), addresses the fundamental aspects of psycholinguistics (Qodriani, 2021), draws on a variety of real texts (Qodriani & Wijana, 2021), data, and examples, including a Radio Four interview (Amelia & Daud, 2020), an

essay written by a deaf writer, and the transcript of a therapy session addressing stuttering (E. Putri & Sari, 2020a), provides classic readings by the key names in the discipline (Suprayogi, Samanik, et al., 2021).

Gesture as a movement of the body or of any part of it" that is "expressive of thought or feeling" in contemporary English (Kardiansyah & Salam, 2020). Gesture is a method of communication in which a person moves their limbs unconsciously or directly to convey meaning (Wahyudin & Sari, 2018). Hands, face, or other body parts are used in gestures (Aminatun et al., 2021). When trying to remember something, most people use gestures (Suprayogi, Pranoto, et al., 2021). Gestures can help people remember things (Aminatun, 2021), whether it's words or emotions (Puspita, 2021a). It is possible to recall something, whether it be a thought or a feeling, by moving a limb, such as flicking a hand or making a random hand movement. Typically, gestures are used during presentations (Purwaningsih & Gulö, 2021).

Using gestures like snapping your fingers or tapping your shoes on the floor (Heaverly & EWK, 2020), or even smiling while taking a slow breath (Kuswoyo et al., 2021), can help you recall words or parts of a presentation that are difficult to remember at times (Qomariah & Sucipto, 2021). When they want to recall or express their thoughts or feelings, each person has a unique gesture (Kardiansyah, 2019). However, the objective remains the same: to assist them in recalling previously forgotten information (K. Sari & Pranoto, 2021).

Gesturing assumes a language-like form with structure at the word and sentence levels when asked to carry the entire burden of communication (Setiawan et al., n.d.). Gesture, on the other hand, takes on a different form when it is used in conjunction with speech—it becomes imagistic and analog.In spite of its structure (F. M. Sari & Putri, 2019), the motion that goes with discourse additionally conveys.Coders with the right training can extract significant information from gestures, which is not always the same as information from speech (Fithratullah, 2021). Therefore, gesturing can be used as a research tool to uncover speakers' unspoken thoughts (Samanik, 2018). Nonverbal behavior can provide additional, often ambiguous, cues in addition to the valuable communicative information provided by speech structure (EWK, 2018). Language comprehension is made easier by being able to see the speaker's face and hand movements.But how does the brain use these movements to get useful information (Al Falaq & Puspita, 2021). The phonological aspects of speech are revealed by the movements of the mouth (Fithratullah, 2019). Co-speech gestures, on the other hand, display semantic information that is pertinent to the intended message (Pranoto, 2021).

There is strong functional connectivity between areas of the cortex that are involved in motor planning and production and posterior areas that are thought to mediate the phonological aspects of speech perception when language comprehension is accompanied by observable facial movements, as was demonstrated. On the other hand, co-speech movements were found to be associated with strong tuning and functional connectivity between the motor planning and production areas and the anterior areas thought to mediate semantic aspects in language comprehension.

METHOD

This research employs a descriptive qualitative approach. The subject of this qualitative study is a questionnaire about the impact of gesture on orchestrate brain networks for language understanding, which was previously distributed. The focus of the issue is on how gestures affect how the brain builds a network for understanding language. Documents from observations and studies of the literature serve as the data sources.

RESULTS AND DISCUSSION

Some examples of words that are typically difficult for the majority of people to remember include specific terminology, words in foreign languages, and words whose pronunciation is similar to that of other words. This can help the brain more by using gestures to communicate.especially the part of the brain called the Hippocamus, which is in the temporal lobe of the brain and is responsible for recalling memories.

When someone is having trouble recalling words, gestures can be very helpful.Gestures encourage the brain to recall previously forgotten words indirectly. Gesturing assumes a language-like form with structure at the word and sentence levels when asked to carry the entire burden of communication. Gesture, on the other hand, takes on a different form when it is used in conjunction with speech—it becomes imagistic and analog.

The gesture that goes along with speech also communicates, despite its form. Gestures can be used by trained coders to extract important information that is not always the same as speech.As a result, gesturing can shed light on speakers' unspoken thoughts.

CONCLUSION

The study's conclusion is that people's memory of words is influenced by gestures and brain networks. Gestures are a powerful phenomenon that can be seen in people of all ages, occupations, and cultures.Even individuals who are born blind can make gestures. They benefit greatly from these gestures because they make it easy for them to recall words that they previously forgot or did not remember. Naturally, brain networks can speed up the process of recalling forgotten words by utilizing gestures. This can give the brain, especially the part of the brain called the Hippocamus, which is in the temporal lobe and is responsible for recalling memories, with the help of gestures.

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