The Effect of Language on the Time Required to Convey a Message

Carden, Kyle

Language is the lens through which humans see the entire world. The purpose of this research project is to observe how the language in which a message is written impacts the time required for oral communication. The independent variable is a messages language, the dependent variable is the amount of time (in seconds) each message requires for speaking and the control is a collection of messages written in Latin. This research project tests thirty messages in Spanish, French, Italian, Latin, Romanian, and Portuguese to measure how long linguistic software requires to say these messages. Thirty messages were collected from the Bible, and linguistic software measured the length of each spoken message. The resulting data was utilized to perform five individual t-tests between Latin and each of the experimental languages. The average time for each language is: French: 7.4197, Italian: 9.0643, Latin: 8.0957, Portuguese: 9.1067, Romanian: 9.4833, and Spanish: 7.4203 (in seconds). Each of the t-tests yielded a P-value lower than .05, the alpha value, so the null hypothesis was rejected. The experimental hypothesis that a message's language does influence the time required for verbalization was supported. Therefore, the independent variable, a language, affects the dependent variable through its phonology, development, grammar, and syntax. Further research could explore how languages from different language families compare to observe how historical development, writing systems, and varying sentence constructions influence verbalization times.

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