

Aphasic Subjects' Use of Within-Sentence Pause Time
in a Sentence Comprehension Task
(Abstract)

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This investigation was designed to determine why provision of within-sentence pause time facilitates aphasic subjects' comprehension; that is, whether within-sentence pause time facilitates performance by allowing aphasic subjects to use vocal or visual strategies during pauses. Twenty-four aphasic adults participated in the experiment, and all of them exhibited, on a pretest, improved auditory comprehension when pauses were inserted into sentences. Subjects were divided into two groups. The 12 subjects comprising the severe aphasic group were given Part I or Part II Token Test sentences; the 12 subjects in the mild aphasic group were given Part III or Part IV sentences.

Experimental sentences were delivered to subjects in two conditions. In No Pause Condition, sentences were presented without insertion of additional pause time. In Pause Condition, a single, four-second pause was inserted into each sentence. Three visual displays were employed. In Standard Display, subjects viewed the tokens while the sentences were presented. For Relocation Display, subjects viewed the tokens during the presentation of sentences, but the tokens were repositioned before subjects responded. In Nonvisual Display, subjects had no visual information available to them during the presentation of each command; tokens were displayed for the response immediately after the completion of each command. Vocal rehearsal of sentence parts was prevented (Non-rehearsal Activity) by requiring subjects to continuously whisper the syllable /pə/ throughout the presentation of each sentence. In Rehearsal Activity, subjects were not required to repeat the syllable during the sentence presentations.

Analysis of group data suggested the following conclusions. When pauses are inserted into sentences, aphasic persons' comprehension improves, and it appears that this improvement occurs because they employ visual and vocal strategies during within-sentence pauses. Furthermore, aphasic persons appear to employ both visual-spatial and visual encoding strategies during within-sentence pauses whenever they are permitted to do so. When sentences do not contain pauses, aphasic subjects appear not to use visual information to facilitate sentence comprehension to any great extent, but they do appear to utilize vocal strategies to facilitate comprehension of incoming sentences.

Inspection of individual data suggests that the effects of providing pauses within sentences may not be stable for all aphasic persons. In other words, when some aphasic subjects are given sentences which contain pauses, comprehension of those sentences on one occasion may improve, and on another

occasion, may not improve. This variability in the effects of within-sentence pause time on some aphasic subjects' performance does not appear to be attributable to time post injury, or to subjects' learning how to use pause time to facilitate their comprehension in the experiment. The variable effects of within-sentence pauses may have occurred because too small a sample of subjects' performance (i.e. performance on 10 sentences) was obtained. A more reliable estimate of the effects of within-sentence pause time might depend upon examining subjects' performance on large numbers of sentences, and in more than one experimental session. Most previous investigators who have examined the effects of providing additional time within sentences have evaluated subjects' performance on an average of about 10 sentences. Results of this study suggest that conclusions drawn about the effects of providing additional time within sentences, upon an individual subject's comprehension of those sentences may be inaccurate, if the conclusions are based on a small sample of that subject's performance. Consequently, the practice of obtaining such small samples of behavior from each subject should be discontinued.

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