Revision Strategies in Aphasia (Abstract)

Marilyn Newhoff San Diego State University, San Diego, California

John D. Tonkovich Veterans Administration Medical Center, Dacatur, Georgia

> Susan L. Schwartz University of Michigan, Ann Arbor, Michigan

Elaine K. Burgess Newport Language, Speech, Audiology Center Inc., Morro Bay, California

In recent years, as a result of developments in the area of language pragmatics, there has been a need for providing a more complete account of the dimensions of communicative effectiveness in the aphasic population. The present investigation was undertaken in an attempt to describe aphasic adults' conversational strategies in one particular type of communicative interaction -- that which involves communication failure. In other words, what do aphasic adults do when they say something and their listener indicates that the message was not understood? While it can be assumed that aphasic individuals are confronted with the need to recode information, there were no empirical data to verify that aphasic patients do, in fact, recode information in this particular communicative context. Based on the work of Gallagher (1977), whose study of revision behavior in children served as an impetus for this investigation, the following questions were posed: 1) When the aphasic individual perceives that his or her message was not received by the listener, is the original message repeated? 2) Does the aphasic individual revise the structure of the original message? 3) If revisions occur, what is their nature? 4) When revisions occur, are they systematic? 5) Do revisions vary as a result of aphasia type or severity? 6) How do aphasic persons' responses to communicative failure compare with those of nonaphasic adults?

Two groups of subjects participated in this study. Group I, the Experimental Group, was comprised of 15 individuals (two females, 13 males) with aphasia secondary to cerebrovascular accident. All aphasic subjects were at least six months post-onset and ranged in age from 58 to 83 years, with a mean age of 69. The Western Aphasia Battery (Kertesz, 1979) was administered to each subject in this group to ascertain aphasia type and severity. A wide range of aphasia severity typified this group. Test profiles indicated that eight subjects exhibited language characteristics consistent with a diagnosis of anomic aphasia, three with Broca aphasia, three with conduction aphasia, and one with Wernicke aphasia. Group II, the Control Group, consisted of 15 subjects matched for age and sex to the experimental subjects of Group I. All subjects in Group II had negative neurological histories.

Each subject participated in an experimental session which lasted from 60 to 70 minutes, and each session was designed to resemble normal conversation. At two-minute intervals, and during a natural pause boundary in the subject's speech, the investigator feigned a lack of comprehension and suggested the subject's communicative failure with one of the following

interruptive probes: 1) What? 2) What did you say? or 3) Hmmm? This procedure continued until 30 interruptions had occurred. All sessions were audio-tape-recorded and analyzed.

Analysis of the data involved comparing subjects' pre-interruptive comments with their immediate post-interruptive statements. Revisions were assigned to the following categories, repetition, partial repetition, semantic revision, syntactic revision, phonological revision, information addition, information deletion, self-correction, unrelated, or other. Frequency counts were made of the number of occurrences of each revision category per subject, and totaled per group.

Aphasic subjects differed significantly from nonaphasic subjects in the revision strategies that they used. The six most impaired aphasic subjects differed significantly from the six least impaired aphasic subjects. Aphasic subjects used significantly more exact repetitions and phonologic revisions, and significantly fewer syntactic revisions, information additions, and information deletions than the nonaphasic subjects did. Rank orders for frequency of occurrence of revision categories were similar for the aphasic and nonaphasic groups.

Although aphasic individuals may not have access to normal semantic and syntactic linguistic tools of communication, these experimental findings lend support to the notion that their knowledge of discourse rules, at least insofar as revision behavior is concerned, remains intact. Through their experience with communicative failure, chronic aphasic individuals appear to develop strategies which serve to improve communicative endeavors.