

Auditory Comprehension Revisited -- I Only Have Ears For You  
A Discussion Session

R. Brookshire, Moderator  
Veterans Administration Medical Center, Minneapolis, Minnesota

The discussion on auditory comprehension considered several questions:

1. Is auditory comprehension a "central factor" which underlies all language abilities, or is it one of several separate, but inter-related, component skills?
2. Can "auditory comprehension" itself be broken down into a number of component skills? If so, what are they?
3. How well do existing tests measure "auditory comprehension?" Are there tests designed for other populations (e.g., children) that might be appropriate for aphasic adults?
4. How can we arrive at estimates of "functional ability" vis-a-vis "auditory comprehension?"
5. What treatment techniques are appropriate for working on "auditory comprehension?" Do separate techniques exist for different varieties of comprehension deficit?

We first considered whether or not it was feasible or desirable to break auditory comprehension into components. The group expressed some sentiment for the desirability of attacking auditory comprehension by a "bottom up" approach, in which one moved from perceptual level processes to cognitive level processes, or from simple processes to complex processes. There was considerable discussion regarding whether or not disorders existed at the perceptual level. The major evidence that was cited in support of such perceptual level auditory deficits were those which suggested that aphasic individuals have difficulty in resolving or discriminating auditory events which occur within short intervals. One participant suggested that there is some evidence that suggests that one might be able to trade time for intensity. That is, deficits in temporal resolution might possibly be overcome by increasing the intensity of the stimuli presented. Several of the participants suggested that temporal resolution is probably not very important in comprehension of speech and cited evidence that suggested that comprehension of speech is not dependent upon resolution or discrimination of events which occur at extremely rapid rates. It was suggested that a reasonable research question might involve exploring the relationships between aphasic persons' ability to resolve quickly-occurring auditory stimuli and their ability to understand spoken language.

The discussion then turned to a discussion of the relative merits of breaking auditory comprehension into components versus a more "pragmatic" approach to the problem. There seemed to be general consensus that investigators need to move toward "real-life" tasks and situations as soon as possible. However, there was some disagreement regarding how rapidly this could or should take place.

We then discussed the possibility that one might be able to treat disorders of temporal resolution in aphasic patients. One of the participants

described several studies in which pauses had been placed within spoken messages with a resultant improvement in performance for aphasic patients hearing those messages. The duration of the pauses were then gradually decreased in order to teach the subject to respond to the messages with shorter and shorter pauses, and finally with no pause at all. This led to a discussion regarding the importance of retention span in daily life comprehension. One of the participants noted that the average length of utterances in daily life conversation is less than five words, and questioned whether one should work on building retention span beyond that level. Another participant suggested that it might be worthwhile to work on retention of longer units in order to provide the patient with some "pad" or reserve ability that he or she could use in difficult listening situations. The question of what is required in daily life listening led to a discussion of the degree to which tests for auditory comprehension may reflect an individual's daily life language comprehension abilities. One of the participants described research which showed that correlations between Token Test scores and comprehension of transitive active sentences were moderate to low, and suggested that the Token Test might not provide a legitimate measure of aphasic person's daily life comprehension abilities.

Discussion then progressed to the question of whether the materials used in treating language comprehension deficits should be functional in the patient's daily-life activities. There appeared to be general consensus that functionality was a desirable, but not imperative, characteristic of materials used in treatment. One of the participants mentioned that a significant part of some treatment for comprehension disorders might involve teaching the patient strategies by which the patient can get speakers to modify his or her speech to more closely match the capabilities of the patient's auditory language processing system. According to one participant, it is possible to teach patients to ask speakers to speak more slowly, repeat key parts of messages, or provide linguistic or contextual redundancy, so that the aphasic person is better able to comprehend what the speaker is saying.

The final portion of the discussion centered about whether or not one should teach aphasic persons always to listen for details in spoken messages. One of the participants suggested that it may be more important that the patient gets the general sense or the "gist" of the message rather than the details. Another participant described studies of lipreading adults in which it was found that the best lipreaders were those who could quickly synthesize component parts of the message into a general meaning and characteristically did not listen for the details of the message. It was suggested by one participant that normal listeners rarely listen intently throughout spoken discourse, but tend to form hypotheses about what the speaker is going to say and attend closely to what the speaker actually is saying only when those hypotheses are disconfirmed. At this point the time allotted to the discussion had expired, and the participants (reluctantly) ended the discussion.