



The aphasic patient: a program for auditory comprehension and language training

Clinician's edition

Offering a program designed to effect the return of the stroke patient's language, this book and its accompanying Patient's Edition will improve the patient's comprehension of spoken language as it is used in the course of daily activities and will elicit verbal responses and formulations of his own based upon this understanding. This Clinician's Edition includes a discussion of visual matching with guidelines and examples; an explanation of cue delivery for nonverbal and verbal responses and formulations; procedures for inspiring auditory rehearsal and retention; and a basic set of illustrated referents for single words and sentences.

WILLIAM P. BAER, Ph.D.

Chief, Audiology and
Speech Pathology Service
Veterans Administration Hospital
Columbia, Missouri

CHARLES C THOMAS • PUBLISHER

Springfield • Illinois • U.S.A.

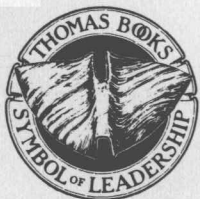
// The aphasic patient:
a program for
auditory comprehension
and language training //

Clinician's edition

By

WILLIAM P. BAER, Ph.D.

*Chief, Audiology and Speech Pathology Service
Veterans Administration Hospital
Columbia, Missouri*



CHARLES C THOMAS • PUBLISHER

Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by
CHARLES C THOMAS • PUBLISHER
Bannerstone House
301-327 East Lawrence Avenue, Springfield, Illinois, U.S.A.

This book is protected by copyright. No part of it
may be reproduced in any manner without written
permission from the publisher.

1976, by CHARLES C THOMAS • PUBLISHER
ISBN 0-398-03567-9
Library of Congress Catalog Card Number: 76-18110

*With THOMAS BOOKS careful attention is given to all details of
manufacturing and design. It is the Publisher's desire to present books that are
satisfactory as to their physical qualities and artistic possibilities and
appropriate for their particular use. THOMAS BOOKS will be true to those
laws of quality that assure a good name and good will.*

Library of Congress Cataloging in Publication Data

Baer, William P
The aphasic patient.

1. Aphasia. 2. Stroke patients—Rehabilitation.

I. Title.

RC425.B33 616.8'552 76-18110
ISBN 0-398-03567-9

Printed in the United States of America
R-11

Acknowledgment

Grateful acknowledgement is made to Samuel M. Smith, Chief, Medical Media Production Service, and to his staff at the Veterans Administration Hospital, Columbia, Missouri. The author is especially appreciative to Abraham Kupfer, Medical Illustrator, for his illustrations of the author's photographs.

Contents

	<i>Page</i>
<i>Acknowledgment</i>	v
<i>Chapter</i>	
1 INTRODUCTION	3
2 ORGANIZATION OF THE PICTURE REFERENTS	5
3 THE TRAINING PROCEDURES	7
4 VOCABULARY PICTURE GUIDE	9
5 SEQUENCE PICTURE GUIDE	13

The aphasic patient: a program for auditory comprehension and language training

1

Introduction of the

picture referents

THIS is a program to assist language-impaired patients improve their understanding of spoken language. The depicted items and activities are particularly appropriate for the hospitalized patient. When such a patient is admitted for treatment and rehabilitation services, he needs to understand the spoken questions and statements of the therapists, nurses and physicians. While he may be unable to respond verbally to these questions and statements, the general expectation of the staff is that the patient at least understand and participate in his overall habilitation.

Many dysphasic patients have an impairment in attending, receiving, comprehending and retaining what is said to them. These patients no longer respond quickly to minimal verbal cues in the presence of many alternatives. They require more information, fewer alternative referents and more time to effect comprehension. This program can be used by the speech pathologist to aid the hospitalized patient understand the people, objects and activities surrounding him in his new environment.

This program gives major emphasis to facilitating comprehension of spoken speech directed to the patient. We want the patient, first of all, to understand what is said to him, and then to signal his understanding by identifying the visual representation of the message. Only then does the author feel the patient will be able to engage in the

subsequent task of making verbal responses. It is the author's impression that much of the early struggling behavior of patients while speaking results from a task perseveration. The patient is attempting to alternate two difficult tasks — listening and speaking. If so, then the patient should first demonstrate to himself that he is familiar with what is being talked about and do so by nonverbal means before trying to verbalize his understanding. The training involves teaching the patient to retain the spoken cue by rehearsing it, either covertly or overtly, until he can effect its meaning.

The program also deals with activities which the patient is experiencing daily. The portrayed items and activities of the program are also highly familiar to the speech pathologist who works in a hospital. Language treatment based upon a set of referents common to both persons facilitates comprehension.

Since it is difficult for the patient to cope with unanticipated conversational topics, the patient requires a structure, i.e. a limitation in the number of ways one can respond. Even the *fluent* dysphasic's remarks will be more appropriate if he is limited to a topic. This program will help to define and focus the treatment. How difficult the receptive training will be depends upon the complexity or simplicity of the spoken cues employed.

2

Organization of the picture referents

THE CLINICIAN'S EDITION

THIS copy contains thirty vocabulary pages and thirty sequence pages. The vocabulary page always appears first and is followed by a related sequence page. With few exceptions the vocabulary pages have four individual and separate pictures. These four items are then utilized to represent an activity in three pictured stages. All sequence pages contain three pictures arranged to convey the future, present and past tense of some activity.

Thus, the vocabulary pages present single items or lexical referents while the sequence pages incorporate these items to establish referents for syntactical language. The vocabulary and sequence pages are not mutually exclusive. Pairing the two allows one to use the sequence pictures also as lexical referents and the vocabulary pictures for syntactical referents. How this can be accomplished will be more fully developed in the *Guides* section.

The thirty sequence pages are arranged to reflect continuity from one activity to another. Thus, the first activity of *sleeping* is followed by *dressing, getting into a wheelchair, shaving, washing, etc.*

THE PATIENT'S EDITION

This copy contains the same thirty vocabulary and thirty sequence pages which appear in the clinician's copy. However, note the inclusion of three additional vocabulary pages and two additional sequence pages per each vocabulary-sequence pair. These pages are rearrangements of the pictures on a given vocabulary and sequence page. Their inclusion is for the purpose of minimizing the tendency of some patients to respond to the picture's location on the page as opposed to the picture's content.

3

The training procedures

THE PATIENT'S task, simply stated, is to match what he hears to what he sees. Failure to match correctly may lead one to conclude that the patient did not understand the spoken message. Another consideration, however, is that the patient did not see the picture which would fit the message. A patient who is not making a visual search or comparison of the pictures will make errors. Some patients will have to be trained to look at each picture on the page before making a selection. A pretraining activity of visual matching is helpful to this end.

VISUAL MATCHING TRAINING

The clinician's and the patient's copies should both be used. Point to one of the pictures on the first vocabulary page, for example, *clock*. Then point to the picture of *clock* in the patient's manual. Indicate to the patient to do the same. Repeat the action of pointing to the *clock* in your manual, but after doing so, turn to the first rearranged copy of the vocabulary pictures in the patient's manual. Indicate that he should locate *clock* on this and other rearranged vocabulary pages. Throughout the procedure, one (or more) of the pictures in the clinician's manual is designated as the target and is to be matched to the same picture in the patient's manual, even though its location on the page varies.

Some patients match with fewer errors when all pictures but the target picture are covered. This prevents the patient from forgetting which picture he is to match as he shifts his gaze from one manual to the next. Less impaired patients are able to tolerate the interference of other pictures on the page and can retain the target. There are patients, too, who stare at a page but do not inspect the pictures as one would think they should. For these patients, placing an 8 by 10½ sheet of bond paper (or 2 if necessary) to cover the vocabulary page slightly fades the pictures so that the patient leans forward and attends more closely than before. This reaction probably indicates that a patient will attend to the pictures if given sufficient reason to do so. Contrary to the dictates of one's training, a good visual clarity to the picture may make for inattention.

AUDITORY REHEARSAL TRAINING

Training in auditory rehearsal begins once the patient has demonstrated his awareness of the individual pictures through matching them. For most listeners an auditory rehearsal of the speaker's words is an automatic and effortless act. Unless there is distraction or if the speaker's message is lengthy and complex, the typical listener may be unaware of replaying the speaker's phrases and sentences.

When a message is important to us we tend to resist and indeed become annoyed by distraction. Distraction can be viewed as anything that interferes with or prevents the listener's auditory rehearsal. Some listeners, for example, shadow the speaker's mouth movements when difficult listening conditions prevail or when the topic is unfamiliar. But the rehearsal need not be overt. For example, while reading a newspaper I am aware of my wife's voice, but I assume she is talking to the children. Not until I hear my name at the end of her comment am I aware she was talking to me. A few seconds delay, but I am usually able to capture her full statement and respond to it.

Sometimes when an attempt to rehearse an earlier thought fails, we may engage another modality to facilitate its return. Remembering why one descended the basement stairs may temporarily be forgotten until the person literally retraces his or her steps. Then too, forgetting what one was about to say may be retrieved if he returns

to his spoken statement preceding the memory lapse. Another person may try to assist but could aggravate one's lapse if his suggestions prevent an auditory rehearsal.

The dysphasic patient no longer replays the speaker's utterances easily and quickly. Though the patient may realize that his understanding of spoken speech is not what it was, he often does not realize that auditory rehearsal is antecedent to the retention and understanding of the speaker's words. He must now make a special effort to rehearse and to continue the rehearsal until some meaning of the message occurs. Just as the patient frequently shifted his gaze back to the target picture he was matching during the visual training, he must be trained to auditorally backtrack to the spoken target. Rehearsal of the spoken cue can be overt or the patient can say the cue to himself. Either way, the desired auditory rehearsal has occurred if the patient selects the appropriate referent in response to the clinician's spoken cue.

4

Vocabulary picture guide

SECTION A CUES

Spoken Cues. (Refer to First Vocabulary Page Cues, Section A)

WHEN testing a patient, a formalized but limited number of cues are given to the patient for him to solve a problem. In teaching, however, cues should be provided freely and as needed to accomplish and further the patient's understanding of the problem.

Section A lists several cues for each referent and among them are the names of the pictured items. The words *man*, *clock*, *bed* and *pillow* are standard, frequently used and recognizable cues for most people, yet these name-cues may not help the patient select the correct referent. To work for the recognition of these words too early in treatment or to use these cues exclusively though the patient's performance shows them to be ineffective serves no therapeutic purpose. Continued practice with such cues may evoke frustration or a rote response from the patient. This is contrary to the intent of the training. The task is to get the patient to be responsive to a variety of spoken cues, and this is done by providing information, not withholding it.

Initially, any one spoken cue can be provided. If the patient makes no response or an incorrect choice, then it can be assumed that the given cue was ineffective. It did not provide the information needed for a correct identification. Continue to provide

spoken cues successively and for the same referent until a correct identification of the referent is made.

Once it is known which cues are effective and which are not, use the known cues to facilitate a recognition of the unknown cues. This is done by pairing an ineffective cue with one which is recognized, hence effective.

Clinician's spoken cue: "a clock" or "Where's the clock?"

Patient's response: points to, *bed* (ineffective cue)

Clinician's spoken cue: "Which one is round?"

Patient's response: points to *clock* (effective cue)

Clinician's response: "Where's the round clock?" later,
"Where's the clock?"

Linking spoken cues by analogy is typically invoked when a person wishes to *explain* something to another. The *explanation* is more effective and efficient if the speaker takes into account the listener's present understanding of the topic. This may be done by first asking a few questions to establish a common set of referents. Using the information given the speaker then proceeds to relate the new information with the old. This principle was applied in the above example.

To generalize these spoken cues to another visual context, use the corresponding sequence pictures.

Rehearsal

As long as cue-pairing facilitates recognition of a previously unfamiliar cue, there is little reason to alter this procedure. The procedure depends upon having at least one recognized cue to work with. But what if a patient does not recognize any of the cues, no matter how varied? Then instruct this patient to say the cue aloud while he searches for its referent. (The patient who is not able to repeat the cue aloud should be told to say it to himself until he can identify the referent.) With rehearsal it becomes apparent that not all cues are equally ineffective or unrecognized. Some are closer than others to a threshold of recognition.

Explain to the patient why cue rehearsal will aid him. Rehearsal makes for a retention of the spoken message. It keeps what is to be remembered paramount and less susceptible to distraction. Explain too that the meaning of the cue words may not occur as quickly as it once did. Although rehearsal takes time, it will help him to better understand what is said to him.

Explanations of this kind are more meaningful if given at the time when the patient shows dissatisfaction with the accuracy or the slowness of his performance. The patient may need to be worked through many such episodes before the value of rehearsal is demonstrated.

Rehearsal per se is no guarantee that the patient will respond appropriately to a spoken cue. Some patients may rehearse quickly and accurately but select the wrong referents. While rehearsal can be taught, interpretation cannot. These patients need to allow themselves more time for the rehearsed cues to evoke meaning. It takes time to interpret. Perhaps that is why some patients who are unable to respond verbally to spoken cues will respond to printed words. It is not the modality as such (auditory versus visual), but while reading the patients can take a good deal of time to interpret a printed word without the word disappearing.

Mode of Response

If talking is at all difficult for the patient, the preferred method of responding is pointing. Tell the patient he need not talk, only listen and point to the picture or items within the picture being talked about. Only after the patient develops some proficiency in pointing should a verbal response be considered.

The clinician may encounter a patient who from the outset attempts to name a pictured item, but with obvious difficulty. If successful he attempts another overt rehearsal. When unsuccessful he attempts a correction. But repeated attempts only lead him further afield. The clinician, too, may be tempted to intercede and offer suggestions concerning placement of articulators, visual cues, saying the word, etc. The suggestions may or may not be utilized by the patient. He is intent upon re-establishing the auditory aspect of his previously correct utterance. Assure this

patient that an overt rehearsal will occur more spontaneously if he temporarily accepts this somewhat passive role of silent rehearsal and pointing to the referent.

The first picture the patient points to may be a tentative response. The patient may initially make a quick but incorrect identification. After the incorrect selection a reconsideration or further rehearsal by him may occur, and then he chooses the correct picture. It is important that the clinician not respond too quickly to his first choice and interfere with additional rehearsal and possible self-correction.

SECTION B CUES

Spoken Cues. (Refer to First Vocabulary Page Cues, Section B—1 and B—2)

Section B, Part 1 lists questions concerning the four vocabulary pictures. The questions are the type which elicit a yes or no response (auxiliary verb form). The first group of questions can be reformulations of the cues in Section A. For example, "Is this a man?" is based on "Where is the man?" The clinician first points to one of the pictures or some aspect of a picture and asks the question. How one pairs a spoken question and a referent will determine if the response is to be yes or no.

Part 2 questions may be more difficult for the patient. The yes/no distinction requires a differentiation of the words in the questions which may either sound alike or have some functional relationship to one another: man—woman; time—temperature; dirty—clean; eating—sleeping; etc.

Mode of Response

The patient is expected to agree or disagree with the question and he can do so verbally or nonverbally. A head nod or a yes may not satisfy the clinician that the patient is replying meaningfully. To assure that the patient is not guessing, check the patient's understanding of the question by asking a subsequent or backup question:

Clinician: (pointing to *clock*) "Is this what you sleep in?"
 Patient: Shakes head to indicate no.
 Clinician: "What do you sleep in?"
 Patient: Points to *bed*.

— — —or the following— — —

Clinician: "Do you sleep in a bed?"
 Patient: Nods head to indicate yes.
 Clinician: "Where is the bed?"
 Patient: Points to *bed*.

The patient may respond by pointing, replying yes/no or by naming the correct referent. Mixing of response modes is acceptable. The objective is for the patient to differentiate his agreement or disagreement with the question.

Some patients contradict their head nodding or shaking with the opposite verbal response. For example,

Clinician: "Is this a bed?" (pointing to *bed*)

Patient: Nods head affirmatively but says no.

The clinician should first verify the patient's understanding with another question, then attempt to bring the nonverbal and verbal responses into correspondence.

Clinician: "Where is the bed?"

Patient: Points to *bed*.

Clinician: Nodding affirmatively while saying, "Yes, it is a bed".

Patients who are beginning to answer questions with some verbalization in addition to pointing can be provided with either/or type questions similar to those questions in the second group of Section B.

Is this a man or a woman?

Is the clock square or round?

Does the bed have four legs or three?

Is the pillow white or blue?

Some patients will repeat the last word of the question, whether it is correct or not. It is obvious the patient is not comprehending though he is verbalizing. Challenge his response by demonstrating the incongruity of his selection. For example,

Clinician: "Is this a man or a woman?" (pointing to *man*)

Patient: "Woman."

Clinician: "Does that look like the body of a woman?" or
"Would you call him Dorothy?"

Avoid a sarcastic manner or attitude when challenging a patient's response. If the manner of challenging is not acceptable to the patient, he may justify his selection and resist considering an alternative.

SECTION C CUES

Spoken Cues. (Refer to First Vocabulary Page Cues, Section C)

Section C again deals with cues to be used with the four vocabulary pictures. Cues

in Section A and Section B, Part 1 were designed to differentiate one referent from another and lessen the confusion among them. Cues of Section C use two or more of the referents and bring them into some kind of relationship. To minimize interference it is recommended that two items be given in sequence such as man, bed; then man and bed; and finally The man went to bed.

Mode of Response

The patient again points to the appropriate items but this time in the order presented. Many patients will point only to the last item when two or more are presented. The last word heard may be the only one identified. Two approaches are offered to deal with this condition. One is to separate the items in the phrase or sentence by a pause and have the patient point to the first item before the clinician says the second:

Clinician: "The man and the bed."

Patient: Points to bed.

Clinician: "The man . . . (patient points to *man*)
and the bed" (points to *bed*)

The second approach is to maintain the normal speaking rate but to use backup questions to call attention to the items in the statement:

Clinician: "The man and the bed."

Patient: Points to bed.

Clinician: "That's right, the bed." "Who else and the bed?"

— — —or the following— — —

Clinician: "The man went to bed."

Patient: Points to or says "bed".

Clinician: "Right. The man went to bed."

Clinician: "Who went to bed?" (backup question)

Patient: Points to *man*.

Clinician: "Where did the man go?" (backup question)

Patient: Points to *bed*.

