A qualitative study of feedback in aphasia treatment
Nina Simmons-Mackie; Jack S Damico; Holly L Damico
American Journal of Speech - Language Pathology; Aug 1999; 8, 3; ProQuest Nursing & Allied Health Source
pg. 218

Research

A Qualitative Study of Feedback in Aphasia Treatment

Nina Simmons-Mackie
Southeastern Louisiana University, Hammond
Jack S. Damico
Holly L. Damico
University of Southwestern Louisiana, Lafayette

A qualitative research study was completed using ethnographic and conversation analysis methodologies to explore characteristics and functions of feedback in traditional aphasia treatment sessions. The investigators identified and described multiple functions of clinician feedback based on analysis of 15 aphasia treatment sessions. Feedback not only provided general motivation and shaped targeted language behavior, but also assisted in establishing the discourse structure of treatment and in managing important interactional aspects of the exchange. Understanding the multiple roles of feedback in treatment interactions might help clinicians improve the efficiency and effectiveness of aphasia treatment and assist in training student clinicians.

Key Words: aphasia, treatment, feedback, ethnography, discourse

A s with any social encounter, feedback is an integral feature of treatment for communication disorders. The influence of feedback on interactive social behaviors is well documented throughout the social sciences, suggesting that feedback is a pervasive and important feature of social interactions and learning (e.g., Bandura, 1978; Feuerstein, Rand, & Ryles, 1988; Goffman, 1967; McDermott & Gospodinoff, 1979; Mehler, 1979; Schefflen, 1973). As a social context, our treatment interactions are influenced by the content and manner of feedback with our clients. Further, the feedback that we receive from our clients influences how we monitor our own performance and modify our treatment efforts.

In the aphasia treatment literature, the importance of feedback has been recognized and discussed by numerous researchers and clinicians. Within this context, feedback has been defined as behavior that helps to modify communication by providing information regarding the adequacy or accuracy of a response and/or by providing general encouragement (e.g., Brookshire, 1992; Davis, 1993; Duffy, 1994; Katz, 1994). Brookshire (1973) identified two major categories of feedback in aphasia treatment activities: incentive feedback and information feedback. According to his classification scheme, incentive feedback includes rewarding or punishing stimuli—that is, incentives that elicit or eliminate behavior. Information feedback provides information about the performance of target responses. In aphasia treatment, feedback regarding specific language behavior typically consists of confirming the adequacy of a client's response or providing corrective feedback regarding inadequate responses. In addition, general encouragement and reassurance are common features of aphasia treatment (Brookshire, 1992). Thus, feedback might include reward, punishment, confirmation, or information following a response (Duffy, 1994). The aphasia literature loosely addresses issues such as the type, amount, and timing of feedback (Duffy, 1994). However, feedback is often characterized relative to the effect on specific target behaviors and relative to general motivational functions.

Brookshire (1992) has alluded to the possibility that feedback might serve additional roles in aphasia treatment. For example, he suggests that feedback might signal that the patient can get ready for the next response or help the clinician maintain the tempo of treatment. However, there has been no specific investigation of the roles of feedback in aphasia treatment. If feedback serves functions beyond those routinely identified, it is possible that such behavior could influence the effectiveness and efficiency of treatment. A clear understanding of the dynamics of feedback in aphasia treatment is imperative in ensuring that our treatment routines are beneficial. Therefore, this manuscript will present a detailed description of feedback in aphasia treatment based on a qualitative research investigation.

218 American Journal of Speech-Language Pathology • Vol. 8 • 218–230 • August 1999 • © American Speech-Language-Hearing Association
1058-0360/99/0803-0218 Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Method

This investigation used two qualitative research paradigms—ethnography and conversation analysis. Qualitative methods were well suited for this study because they allow researchers to identify lawful or systematic behaviors that cut across a range of natural settings and subjects (see Simmons-Mackie & Damico, in press, and Damico, Oelschlaeger, & Simmons-Mackie, in press, for detailed explanations of these qualitative research paradigms).

The study of feedback evolved out of a broad-based ethnographic study of aphasia treatment. The authors were interested in describing “what goes on” in traditional aphasia treatment without employing preconceived categories, hypotheses, or professional biases. Therefore, ethnography was employed to study the complex social interactions within natural treatment contexts. Ethnography is a qualitative research tradition widely used in the social sciences, particularly anthropology. The methodology allows the researcher to “discover” social and cultural meanings from the perspectives of the participants being studied and to describe complex social events in rich detail. Although ethnography is relatively new to aphasiologists, ethnographic methods have been used to describe and understand naturally occurring compensatory behaviors in aphasia (e.g., Simmons, 1993) and elucidate the perspectives of people with aphasia (e.g., Parr, Byng, Gilpin, & Ireland, 1997). Studying aphasia treatment interactions using ethnographic methods allowed the researchers to discover patterns of interaction and derive categories and definitions of behavior from the data rather than testing a predetermined hypothesis or identifying a priori categories of behavior. Furthermore, ethnography allowed for the study of aphasia treatment as a social event within the natural context without the need to artificially control the setting and event. Thus, unexpected behaviors or patterns not described in the literature could be identified. During the broad-based research program describing aphasia treatment, the authors became interested in the complex interactions associated with feedback, and the investigation was narrowed to focus on developing a detailed, rich description of feedback. As mentioned, no a priori definitions or categories of feedback were employed. Thus, ethnographic methods allowed for the discovery of feedback patterns from the data.

The second research paradigm employed in this study was conversation analysis. Conversation analysis involves the formal description of interaction in order to discover the natural organization and function of social actions (e.g., Goodwin & Heritage, 1990; Psathas, 1995, Sacks, Schegloff, & Jefferson, 1974). Utterances and sequences of utterances are analyzed and patterns are identified that help explain how communicators accomplish social goals. For example, the seminal conversation analysis research of Sacks et al. (1974) described the structural mechanisms for turn-taking in conversation; this research has markedly influenced our understanding of the give and take of interactive communication. Conversation analysis was adopted in the present study as a microlevel analysis in order to identify specific structural mechanisms that constitute feedback behaviors and to contribute to a detailed understanding of how feedback influences treatment interactions.

Participants, Settings, and Treatment Tasks

In order to study feedback in a variety of treatment encounters, descriptive data were drawn from 15 different aphasia treatment sessions. These sessions involved 6 different speech-language pathologists and 11 different clients. Clients were selected based on agreement to participate, diagnosis of aphasia, and enrollment in speech-language treatment. Demographic characteristics of clients are shown in Table 1. Clinicians were all female Caucasian speech-language pathologists certified by the American Speech-Language-Hearing Association. Each was trained at a different institution and demonstrated from 5 to 15 years of

<table>
<thead>
<tr>
<th>TABLE 1. Attributes of participants with aphasia.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client #</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Aphasia</td>
</tr>
<tr>
<td>AOS</td>
</tr>
<tr>
<td>Dysarthria</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>Etiology</td>
</tr>
<tr>
<td>MPO</td>
</tr>
<tr>
<td>Hemi.</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>BDAE</td>
</tr>
<tr>
<td>MLU</td>
</tr>
</tbody>
</table>

Note. AOS = apraxia of speech; C = Caucasian, AA = African American; MPO = months postonset; Hemi = hemiparesis or hemiplegia; BDAE = rating of spontaneous speech on the Boston Diagnostic Aphasia Exam (Goodglass & Kaplan, 1983); MLU = mean length of utterance in connected speech; ND = not done.
experience in adult aphasia management. Ages of clinicians ranged from 26 to 45 years.

Treatment contexts included outpatient, inpatient, and home health settings in three different metropolitan areas. On the whole, treatment conformed to textbook descriptions of stimulation treatment, compensatory training, and functional intervention approaches; treatment principles appeared consistent with those espoused in the aphasia literature (Aten, 1994; Brookshire, 1992; Davis, 1993; Duffy, 1994; Holland, 1991; Porch, 1994). Treatment activities included didactic stimulation tasks (e.g., word-finding hierarchy) and generous use of facilitators such as written cues, association cues, and automatic speech tasks (e.g., counting). Training in compensatory strategies included activities such as direct teaching of gestural signs and drawing pictures to convey ideas. Functional activities included specific tasks of daily living (e.g., writing checks) as well as practice in communicating ideas through any available modality. Treatment tasks are listed in Appendix A.

Data Collection

A variety of data collection sources were employed in order to study communication as it naturally occurred without artificially restricting or eliminating the complex variables characteristic of social interactions (Damico, Simmons-Mackie, & Schweitzer, 1995). Data collection included videotapes of aphasia treatment (3 hours, 45 minutes), participant observation of aphasia treatment (7 hours, 48 minutes), audiotaped ethnographic interviews with treatment participants (6 hours, 10 minutes), and review of treatment case records. Videotapes of treatment and audiotapes of interviews were orthographically transcribed. Participant observation involved direct observation of treatment sessions by an investigator and documentation of observations in detailed, objectively worded observational notes (Agar, 1986; Spradley, 1980). Ethnographic interviewing employed a specific, informant-driven interview approach that accessed the perspectives of the informants, and avoided investigator bias (Agar, 1996; Spradley, 1979; Westby, 1990). In addition, a methodological technique called “laminating” was employed (Agar, 1986; Goffman, 1974); this technique allowed participants, informants, or focus groups to review collected data and provide their perspectives and interpretations; thus, data regarding a specific event was “layered” on other data for verification and added detail.

Data Analysis: Ethnography

Consistent with ethnographic methods, data were reviewed initially to identify patterns of interest and to organize the data into broad semantic relationship categories (Simmons-Mackie & Damico, in press; Spradley, 1980). For example, observations formed natural groupings (such as “routine interactive sequences” or “physical characteristics of treatment”). This open-ended approach to data collection and analysis avoided imposing preconceived categories or a priori definitions; thus, the data directed the cycle of analysis and allowed for discovery. The cycle of analysis narrowed to identify subgroups of categories. For example, feedback was identified as one aspect of “routine interactive sequences.” Recurrent or unexpected observations were noted. Thus, a subtype of feedback called “feedback mismatch” (i.e., a client error followed by a reward such as “good”) was identified as a behavior of interest for further analysis. In this manner, a number of categories were broadly described, then subjected to increasingly detailed analysis across contexts and informants. This cyclical method of analysis, typical of ethnographic research, resulted in a volume of descriptive information forming a detailed picture of the communication event known as intervention and exposing several categories of feedback behavior that occurred across all samples.

Data Analysis: Conversation Analysis

In order to obtain a more fine-grained analysis of the structural organization and functional significance of the identified feedback behaviors, conversation analysis was conducted on two of the aphasia treatment videotapes. The two treatment videotapes totaled 67 minutes and involved a woman with Broca’s aphasia (Subject #2) and an experienced speech-language pathologist. Treatment tasks included following spoken commands, verbal picture descriptions, and written picture descriptions. The videotapes were transcribed using a transcription system employed in earlier conversation analysis research (Jefferson, 1973). This transcription system includes orthographic transcription overlaid with notational devices. The notations used in transcriptions are included in Appendix B.

Repeated cycling through the videotapes and transcripts were completed by both investigators in order to maximize transcript reliability and to identify the sequential organization of the discourse. Sequential organization was determined by identifying adjacency sequences. Adjacency sequences comprise a sequence of utterances that are relatively adjacent, are produced by different speakers, and are mutually dependent (Schegloff & Sacks, 1973). For example, a question followed by an answer is a type of adjacency unit. Using the adjacency sequences as a reference for feedback identification, every instance of feedback was highlighted. Each feedback instance was analyzed to determine discourse characteristics before, during, and after feedback. In addition, the modality, feedback content, placement within the discourse structure, and temporal characteristics were analyzed for each feedback instance. Based on this collection of descriptive data, patterns of interactive behavior were documented and subjected to detailed qualitative analysis (Erickson & Schultz, 1982; Schegloff, 1981). The result was a description of seven functional categories of feedback. In order to verify results of the conversation analysis, the original data pool (the remaining 13 treatment sessions) was revisited to determine if the defined feedback functions existed within these samples. In other words, every session was reanalyzed by cycling through the data, identifying each instance of feedback, and testing whether
the occurrence was consistent with one or more of the defined feedback categories. In this way, all functional categories were verified across treatment samples.

Results

The results yielded a detailed description of feedback in aphasia treatment as practiced in these 15 sessions. Feedback occurred across all of the sessions studied. What follows is a description of the feedback results. It should be noted that frequency counts are not provided since quantities are not necessarily relevant to understanding the discourse structure and function of feedback. In other words, a single occurrence of one type of feedback might influence the effectiveness or efficiency of treatment as much as multiple occurrences of another type of feedback. For example, research on learning a second language suggested that a single occurrence of negative affective feedback was often more powerful in influencing behavior and learning than multiple positive feedback experiences (Vigil & Oller, 1976). Furthermore, quantities do not aid in explaining the function of feedback behaviors; the emphasis in our research is on understanding the functions of feedback relative to the database studied. A summary of the primary results follows:

1. Feedback was multifunctional. The analysis of feedback revealed a variety of functions beyond simply confirming or correcting treatment responses. Most important, feedback contributed to the establishment of specific discourse routines (e.g., request-response-evaluation (RRE) sequences, correction subroutines, turn-latching, and activity closings). These discourse routines allowed the clinician to control or limit the types of interactions that occurred within the session in order to accomplish desired goals. Other functions of feedback were related to the management of the treatment interaction. In other words, the delivery of feedback by the clinician not only helped to structure the discourse but also fulfilled important treatment and interactive goals. Feedback helped to shape targeted behaviors, and the repertoire of subtly differentiated actions projected by variations in timing, placement, and intonation of feedback served several important discourse management functions. These additional functions included encouraging and boosting confidence, modifying or maintaining target communication behavior, soliciting cooperation and affiliation, establishing discourse tempo, communicating rules and attitudes, and consolidating social roles.

2. Individual feedback occurrences were often multifunctional. That is, more than one function or purpose was often fulfilled by a single feedback utterance. For example, a feedback utterance that corrected an error could also communicate a treatment rule (don’t get “off task”) and establish tempo by “hurrying” the client along.

3. Feedback involved more than verbal content. Various interactional cues and strategies such as prosody and body movements were used to enhance the effectiveness of the feedback provided.

4. There were few instances of blatantly negative evaluation such as “no that’s wrong.” Instead, feedback was typically either positive or “vague.” For example, to correct an error, a clinician might say “wait, watch me” rather than directly pointing out the error. This finding conforms to the principle of providing either positive feedback or facilitating accurate responses rather than focusing on errors (Duffy, 1994). However, it should be noted that the absence of clear negatives should not imply that clients perceived all feedback as positive.

5. Occurrence rates of direct treatment feedback were asymmetrical, with extremely high rates of clinician-delivered feedback and minimal instances of client-delivered feedback. For example, in one videotape the clinician produced 100 instances of evaluative feedback, whereas the client produced none.

6. The success of feedback was dependent on a collaborative effort between the clinician and the client. Although direct evaluative feedback was not typically produced by the client, specific (though subtle) acknowledgment and agreement with the feedback of the clinician was often required before treatment continued.

Functions of Feedback in Aphasia Treatment

The following sections will describe in detail primary research finding 1, above—the multiple functions of feedback in aphasia treatment. These functions include (a) establishing specific discourse routines, (b) encouraging and boosting confidence, (c) modifying or maintaining target communication behavior, (d) soliciting cooperation and affiliation, (e) establishing discourse tempo, (f) communicating rules and attitudes, and (g) consolidating social roles.

Feedback and the Establishment of Specific Discourse Routines

A major purpose of feedback during the reviewed aphasia treatment sessions was to assist in the establishment of specific discourse routines that enhanced the overall goals of treatment—aiding the individual with aphasia in reestablishing, to the extent possible, his or her ability to negotiate meaning and to interact with others (Milroy & Perkins, 1992; Silvasti, 1991). These routines enabled the clinician to control or limit the types of interactions that occurred within the treatment session. Feedback content, placement, and manner of delivery was varied to help create a desired structural discourse framework that clinicians believed would support treatment goals. In effect, feedback assisted in parsing the discourse into segments and framed the structure of the interaction. The data revealed that feedback helped structure four identified discourse routines, including RRE sequences, correction subroutines, turn-latching, and activity closings.

Request-Response-Evaluation Sequences. A pervasive treatment discourse routine that acted to structure and constrain treatment was the RRE sequence. The RRE sequence is a three-part adjacency structure that enables rigid control by the interventionist (Cazden, 1988; Duchan, 1993; Kovarsky & Duchan, 1997; Mehan, 1979; Panagos.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
response. In this way, the treatment effect of intervention was accomplished—to aid the client in overcoming his/her difficulty (Boyle & Perego, 1990; Damico & Damico, 1997; Ninio & Bruner, 1978; Norris & Hoffman, 1990). In this investigation, correction sequences manifested several formats—each requiring the employment of feedback. One type of correction sequence occurred when, instead of giving the expected response, the clients demonstrated “trouble” directly (e.g., “I don know”) and/or indirectly by pausing, shifting gaze, shrugging, or knitting brows. These trouble-indicating behaviors provided a slot for the clinician to intercede and provide help and feedback regarding task performance. Example 2 demonstrates such a correction sequence.

Example 2

In this example, the client had difficulty with the task and a correction sequence was initiated (lines 2–5). Although she attempted a response (lines 2–4), the client was uncertain and indicated this uncertainty with a pause, a qualifying statement and a gaze shift (lines 2–4). In actuality, she was requesting assistance. Once this was done, the original RRE was sidetracked and the correction sequence was employed. The clinician used feedback as both a confirmatory statement and as a way to close down the correction sequence and move back to the original RRE. Again, the feedback was essential to complete the correction sequence. Indeed, on those occasions when clinicians did not provide feedback regarding the client’s request for help, the interaction did not move forward smoothly until feedback was provided.

Another form of correction sequence occurred when clients performed the request incorrectly and the clinician intervened to correct the error as in Example 3:

Example 3

222 American Journal of Speech-Language Pathology • Vol. 8 • 218–230 • August 1999

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
In this example, the client did not request assistance. Rather, he provided a response that was not acceptable to the clinician. The clinician used the unacceptable response as the impetus for the correction sequence and verbalized the correct target response (line 3–4). Importantly, the corrective feedback was transmitted not only by the alerting signal, “listen,” and repetition of the target item, “toothbrush,” but also by a set of paralinguistic markers that acted to convey the idea of “unacceptability.” These markers included a distinct pause, a gaze shift, and a deliberate overemphasis and lengthening of the fricatives. As presented in the primary findings section (Finding 4), such interactive resources were often employed to convey feedback. The completion of the corrective feedback in line 4 also served to end the correction side sequence and allow the discourse to return to the final two parts of the RRE triad (lines 5 & 6).

**Continuer Latchings.** A third discourse routine requiring feedback involved adjacency units identified as continuers latchings. Continuers are acknowledgments by a listener (e.g., clinician) of the ongoing speaking role of the speaker (e.g., the client). For example, the clinician might nod her head as a client is responding in order to encourage the client to continue. Similar devices have been labeled backchannels and acknowledgment tokens (i.e., Laasko, 1997). The term continuer is used here because it indicates the functional significance of the device—to encourage the speaker to continue the turn. The term latching is used to indicate the ties of the continuer to the client’s utterance; the continuer is “latched on” to the utterance of the client, sometimes even occurring concurrently with the client’s response. Feedback continuers were both verbal (e.g., “mhm”) and nonverbal (e.g., nodding the head) and included both positive and neutral feedback to encourage the client to continue. Example 4 provides a demonstration of this treatment format (please note that this example skips from line 8 to line 30 since lines 9–29 are similar to lines 1–8):

**Example 4**

1. Client: (Writing: writes MA)
2. Clinician: Mhm. (quiet, leans over and gazes at the paper)
3. Client: (Continues writing MAN)
5. Client: (Continues writing MAN IS)
6. (Looks up)
7. Client: (Nodding yes) (gaze on paper)
8. 30 Client: (concludes writing—MAN IS BUYING BREAD) (stops, lifts her pencil, gazes at the clinician)
31 32 33 Clinician: (Looks up from paper, leans back)
34 Goon::d. You wrote the whole sentence.
35 The man is buying bread.

In this example, the feedback provided in lines 2, 3, 5, and 8 functioned as continuers. These continuers confirmed the ongoing adequate performance of the task and provided for new rounds of response-continuer adjacencies until the task was completed. The importance of nonverbal feedback was very salient here. For example, body lean, gaze, and nodding served as powerful cues to the ongoing adequacy of the client’s performance.

A shift out of the continuers-latching structure is apparent in line 30 as the client completes the written response. The shift from the response-continuer rounds and return to the closing segment of an RRE sequence is signaled by a change in feedback, including shifts in body position, orientation to the task, gaze, and verbalizations. Thus, the clinician marks task completion with final feedback in the form of a positive evaluation, “Good. You wrote the whole sentence” (lines 33–35). Cues such as body position and gaze, as well as the verbalizations of the clinician, served as indicators of clinician feedback versus the closing unit of RRE feedback. The clinician held her body position or orientation and attention to task space throughout the continuers sequences. At the conclusion of the task, both the clinician and client lean back and look up—acknowledgment of the end of the item and expectation of the evaluation phase of the RRE. Similar indicators of collison between the clinicians and the clients to acknowledge their individual and joint expectations and acceptance of the various forms and functions of feedback were evident throughout the data. Instances such as these lend impetus to the primary finding regarding the importance of collaboration during treatment.

**Closing Sequences.** The final discourse format that required feedback involved closing sequences at the end of a task or session. There were numerous examples of clinicians summarizing or concluding the task or session with general feedback statements about client performance. Often these statements served as “pre closings” (Schegloff & Sacks, 1973) or routines that built towards the termination of the session or activity. For example, clinicians made general evaluative comments such as “you did real well today” or “you worked hard on these” before making final remarks such as “see you on Monday” or “bye, have a good weekend.” The feedback prepared the client for the close of activities and smoothed the way for the end of the task or session as in Example 5.

**Example 5**

1. Clinician: All right. So you told me
2. woman, grocery, shop, talk
3. (counts on fingers for each word)
4. So you communicated those things
5. to me first, then we went back
6. and we filled in some other things
7. to complete the sentence.
8. That’s good.

In this example, the clinician used discourse markers, “all right. So.” (Schiffrin, 1987) to signal a shift from previous discourse. Body language including body lean, head position, and gaze also marked a transition from the main task into the closing. Then the clinician provided a summary account of the activity, followed by a general affirmation, “that’s good.” Such closing sequences or activity shifts would appear abrupt and possibly fail without closing feedback.

Simmons-Mackie et al.: Feedback in Aphasia Treatment 223

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Clearly, feedback plays an important role in structuring RRE sequences, correction sequences, continue latching, and closing sequences. Thus, feedback can establish the boundaries of segments, close activities, and signal the continuation of a task. Feedback helps bracket segments and establish the progress of the exchange, contributing to the clinician’s expectancies and knowledge of when and how to respond.

**Encourage and Boost Confidence**

The use of feedback to encourage and boost confidence is widely recognized in the aphasia literature (Brookshire, 1992). Such feedback constitutes positive statements that serve as general motivators. For example, a clinician’s summary statement at the end of a session, such as “you did real well today,” not only serves as a preclosing signal but also serves as general motivational feedback or encouragement. Similarly, summary statements at the beginning of a session, such as “you have really been working hard—I can see the improvement,” might boost confidence and improve motivation for the treatment session.

**Modify or Maintain Target Communication Behavior**

Feedback was often crafted to provide insight regarding the accuracy or adequacy of a response in order to mediate improved communication. This type of feedback ranged from confirmation of response adequacy such as “that’s right” to specific evaluative or corrective information such as “watch me. /m/.” Example 6 provides an illustration of confirming the adequacy of a response, and Example 7 is an example of providing corrective information:

**Example 6**

1 Clinician: What is this? (holds up picture)
2 Client: Chair.
3 Clinician: Good job.

**Example 7**

1 Clinician: That letter was correct.
2 Client: Yeah?
3 Clinician: Mhm. Yeah. The E comes before the N.

The use of feedback to directly modify target behavior is recognized as an integral part of treatment in the aphasia literature and serves as a primary mediational tool in improving communication (Brookshire, 1992; Duffy, 1994).

**Solicit Cooperation and Affiliation**

Feedback was often contrived by the clinician to maintain affiliation with the client via a positive, friendly atmosphere. Thus, the manner of delivery and/or amount of feedback were varied to bolster the client’s cooperation or participation in the activity. This type of feedback differed in manner and function from the previous category of encouraging and boosting confidence. Although this form of feedback included an element of encouragement, it was directed specifically at the collaboration between the clinician and client during an activity rather than at the client’s overall motivation and general confidence. Furthermore, this form of feedback was more subtle and masked within the interaction than the obvious, bold motivational feedback described earlier.

Affiliative feedback often followed negative reactions of the client, such as expressing concern over a task, and often included alterations in the intensity and amount of feedback, as noted in the following example:

**Example 8**

| 1 Clinician: Show me money and brush. |
| 2 Client: (Points to money and brush) |
| 3 Clinician: Mhm. Show me bed and phone. |
| 4 Client: (Points to bed and phone) |
| 5 Clinician: Good job. Show me cup and spoon. |
| 6 Client: (Points to cup and spoon) |
| 7 (shakes head no, holds hand out) |
| 8 I don know. |
| 9 Clinician: Mhm! OOOG:::D! You got it! Oka::y! |

During the task the clinician made requests (lines 1, 3, and 5), the client responded (lines 2 and 4) and the clinician provided confirmatory feedback (lines 3 and 5). After the client indicated trouble (line 7–8), the clinician confirmed the client’s accurate response (line 9), but did so in a markedly more positive tone (louder voice, vowel prolongations, and added verbal rewards) than in the previous run of feedback utterances. In part, this increased intensity served to override the client’s negative affective shift in lines 7 and 8 and reestablish the client’s positive cooperation—to get the client back on track. Thus, the feedback served dual roles: it confirmed a correct response, and the subtle alteration in manner helped in the management of the treatment session.

Another variation in feedback used to fortify cooperation and affiliation was the “veiled correction.” This involved disguising corrective feedback. For example, the clinician used a positive or neutral feedback word (mhm, okay) uttered with falling then rising intonation, followed by a slight pause and averted gaze. Although there was no direct mention of an error, the change in prosody and the timing variation communicated doubt regarding the adequacy of the response and prompted the client to try again. Thus, information regarding the error was communicated without a frank correction, thereby maintaining a positive atmosphere and allowing the client the “appearance” of self-correcting. Similarly, corrective feedback was sometimes implied within the clinician’s attempt to facilitate the correct response as follows:

**Example 9**

<table>
<thead>
<tr>
<th>Task: Produce gestural signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Clinician: Show me eat.</td>
</tr>
<tr>
<td>2 Client: (signs eat)</td>
</tr>
<tr>
<td>3 Clinician: (nods) Show me woman.</td>
</tr>
<tr>
<td>4 Client: (produces sign for man)</td>
</tr>
<tr>
<td>5 Clinician: Yea. man. Now watch me.</td>
</tr>
<tr>
<td>6 (demonstrates sign for woman) Woman.</td>
</tr>
</tbody>
</table>
In this example, information regarding an error was communicated with a positive cast. In fact, there is a hint of positive feedback for producing “man” (line 5). These veiled corrections conform with the politeness rules of interaction that dictate that we modify negatives or disagreements to allow both parties to preserve their identities. In other words, research demonstrates that behavior designed for face saving in conversation promotes affiliation and cooperation (Goffman, 1967; Lakoff, 1973; Tannen, 1984).

Establish Discourse Tempo

Feedback delivery was varied on occasion to establish the timing or tempo of activities. For example, rapid, monotone reinforcement with gaze aversion might speed up the activity, whereas deliberate, slow feedback statements with eye contact tended to slow the client down or divert attention. The following example illustrates the use of feedback to signal haste.

Example 10

1 Client: (Completes writing “The woman is finishing”)
2 (lifts her pencil; shifts to gaze at the clinician)
3 Clinician: =Mhm okay good (uttered rapidly and quietly,
4 little intonation variation; no pausing; maintains posture)
5 Let’s start reading from the beginning (rapid, soft)
6 (continues gazing at the paper; still leaning forward)

In line 1, the client finishes her writing; she communicates that the task is complete with her gaze shift and movement (line 2). However, the clinician used feedback to communicate to the client that the task was not completed (the client must now read her written product). The feedback in line 3, “Mhm okay good,” began as soon as the client finished the task; in fact, it almost overlapped with the client’s writing. Also, the clinician did not alter her body position and maintained her gaze on the work space while uttering “Mhm okay good.” The feedback was uttered rapidly and quietly, with little intonational variation and no pause before the instruction that followed. The content of the feedback conveyed that the writing was adequate, whereas the lack of eye contact and contextualization cues prevented an interruption in the focus of attention and signaled that the task was still “in progress.” Finally, the rapid rate, the short interval between the client’s response and clinician’s feedback, and the tempo of the clinician’s behavior suggested a need for haste. In effect, the feedback provided several messages: the work is accurate, the work is not finished, and we need to hurry up.

Communicate Rules and Attitudes

Feedback content communicated clinician attitudes regarding appropriate treatment behavior, rules of interaction within treatment, and attitudes about communication. Although the rules of treatment interaction are rarely acknowledged, clinicians and their clients with aphasia seem to clearly apprehend expected interactive behaviors. For example, the clinician usually introduces the treatment tasks, asks questions, determines time lines for activities, and provides evaluations of client behavior, whereas the client with aphasia usually follows instructions, responds to questions, and complies with requests to perform (Silvast, 1991; Simmons, 1993; Wilcox & Davis, 1977). The rules of treatment are communicated to clients implicitly through the structure of treatment. Feedback is one of the primary means for increasing the client’s understanding of what types of behaviors are deemed appropriate or inappropriate in treatment. Following are two examples of subtle communication of treatment rules via feedback.

Example 11

Task: The client is instructed to describe a picture of a man waiting to cross a busy intersection. The client attempts to make a joke about the picture—that the man should sit down to wait for the traffic.

1 Client: (laughing, points to the picture) is man set, s sit
2 (points to her own chair, laughing)
3 Clinician: … uh Okay. The man’s walking and there is
4 a red light (gazes at picture).
5 Client: Yeah. (said quietly, frowns and drops shoulders)

Example 12

Task: Demonstrate gestures upon verbal command

1 Clinician: Show with your hand how you brush your teeth
2 Client: (Bares his gums in an exaggerated fashion, laughs—he has no teeth)
3 Clinician: Show with your hand
4 (lifts client’s hand and moves it towards his mouth)
5 Client: (Moves hand across mouth in a brushing motion,
6 frowning)
7 Clinician: Good job.

In both examples (from different clinicians and clients) the clinician redirected the client back to the specific task by modeling the correct response. The implied message was that joking does not constitute adequate task performance (joking is against the rules). Although no rule statement was made, the clinician communicated through corrective feedback that the client should respond to the stimulus with an expected answer. In each case, the rapid change in the client’s affective demeanor signaled that the behavior correction was comprehended.

Feedback content and style also communicated the clinician’s beliefs regarding communication. For example, one clinician rewarded simple sentence productions with a matter-of-fact “Mhm, good”; yet a lengthy sentence was
rewarded with “wow, great job” using increased volume, vowel prolongations, and a big smile. Although no statement was made that more words or longer sentences were the goal, differential feedback placed more value on this achievement. Following are additional examples:

**Example 13**
Task: Picture description using PACE treatment format (Davis & Wilcox, 1985).

1. Client: (successfully communicates contents of an action picture)
2. Clinician: Well, that is not perfect.
3. It is not proper English but it gets the idea across.

**Example 14**
Task: Picture description using PACE treatment format in which the client is allowed to choose any modality to get the idea across.

1. Client: (takes a picture from the stack)
2. (Raises eyebrows and laughs) I don't know.
3. (Picks up a pencil to write)
4. Clinician: Can you say something first?

In both examples, the clinician communicates a preferential focus on standard communication form (even though the task requires “successful,” not standard or accurate, communication). In the first example, the preference is for grammatical accuracy; the second, the preference is for verbal rather than graphic communication. Thus, the clinicians’ attitudes are subtly conveyed within the task through feedback. It should be noted that these examples appear blatantly negative or extreme when removed from context. Actually, the examples are “hidden” within the fast-paced exchanges of treatment. The treatment sessions from which they were extracted were considered successful and enjoyable sessions by the clinicians, clients, and observers during interview. It is only when subjected to microanalysis that the rapid give and take of treatment interaction reveals subtle attitudes framed within the discourse.

**Consolidate Social Roles**

Feedback served to reinforce the asymmetric roles characteristic of clinician-client situations. First, the frequency of clinician evaluative feedback and infrequency of client evaluative feedback implied a power distribution in which clinicians are expected to “judge” and clients are expected to “be judged.” Thus, the clinician’s role of expert, authority, or judge was reinforced by the preponderance of clinician evaluations. In the following example, humor highlights the incongruity of an unexpected client evaluation.

**Example 15**

1. Clinician: What do you call that? (shows picture)
2. Client: I uh...uh (gazes at picture)

**Example 16**

2. (Clinician and client both laugh heartily)

The humor arises from the highly unexpected role shift as the clinician performs the task and the client evaluates the performance. Corrective feedback regarding errors also strengthened the clinician’s role as a helper or fixer. The following sequence highlights this:

**Example 16**

1. Clinician: Show me bed and car
2. Patient: (points to bed and car)
4. Patient: (points to book and brush)
5. Clinician: Ahhhhh...I didn’t do very well making those hard, did I?

After several correct responses, the clinician jokingly suggests that she needed to make the tasks harder to get some errors (line 5). Inherent in maintaining the role of clinician is the ability to “push” the client’s processing system and keep the client functioning on the edge of competence. In other words, if the client does too well, and the clinician has no opportunity for facilitation or corrective feedback, then the clinician loses the role as helper. Thus, feedback serves to reinforce the roles of client and clinician within the social interaction of treatment.

**Discussion**

The results suggest that feedback is a multifunctional feature of treatment interaction. Feedback not only provided general motivation and shaped language behavior, as traditionally believed, but also managed important interactional aspects of the treatment exchange. Although these results might not reflect the actual structure and functions of feedback in all treatment sessions, the study sensitizes us to the complexity of feedback and potential for fulfilling a variety of purposes in our treatment interactions. The powerful role of feedback in managing and structuring the treatment session has implications for training student clinicians or improving one’s own treatment conduct. A better understanding of the multiple functions of feedback can help clinicians improve the efficiency of didactic, traditional sessions.

In addition to helping define aspects of treatment session management, the findings of this study help explicate several observed characteristics of traditional aphasia treatment. For example, previous research raised questions regarding apparent ambiguities in feedback delivered by clinicians. Brookshire and colleagues (Brookshire, Kreuger, & Nicholas, 1977; Brookshire & Nicholas, 1978) analyzed clinician feedback in treatment sessions and reported that 10% of unacceptable responses received no feedback, 11% of unacceptable responses received positive feedback, and 20% of responses received ambiguous feedback (both positive and negative). Such findings appear counterintuitive to traditional language intervention. However, it is likely that this finding relates to the feedback function of “affiliation.” That is, clinicians
mask negative feedback in order to promote cooperation and continued participation by the client. As Panagos (1995) notes, it is the clinician’s job to keep the session going. Therefore, feedback must be crafted not only to modify a current response, but also to maintain the clinician-client partnership over the entire session. Therefore, what appears to be inappropriate feedback might appropriately serve another purpose.

It has also been noted that clinicians sometimes project mixed messages regarding treatment goals (Simmons-Mackie, Damico, & Nelson, 1995). For example, an instruction to “gesture without talking” is followed by positive reinforcement of a verbal production—the feedback appears to contradict the goal. The finding that attitudes and beliefs are projected during feedback can help explain this apparent goal confusion; the clinician inadvertently rewards the favored response mode (as in Examples 13 and 14). During our research, clinicians were asked to view segments of their treatment interactions, and they were typically surprised by occurrences of such contradictory feedback or feedback mismatches. However, interviews revealed that clinicians had “mixed feelings” about some communication strategies. Perhaps, at heart, there is a desire for our clients to use standard communication modes and appear more “normal,” and this bias intrudes into treatment interactions. One might wonder about the effect of such attitude leakage within treatment, particularly when the attitudes reflect a subtle preference for standard or accurate communication. With a growing emphasis on social outcomes of treatment and empowerment of people with aphasia (Lyon, 1997; Parr, 1996; Parr & Byng, 1998; Pound, 1998; Simmons-Mackie, 1998), we must examine the subtle (and not so subtle) messages that are communicated within treatment interactions and their effects on communication confidence and social identity.

The literature also raises questions about the difficulty of obtaining generalized treatment gains for some compensations trained in aphasia treatment. For example, there are reports of clients who fail to use trained gestures and other augmentative systems outside of treatment (Bellaire, Georges, & Thompson, 1991; Coelho, 1991; Kraat, 1990). Perhaps variations in feedback help to “discriminate” treatment interactions from natural interactions. Thus, treatment and conversation are set apart by differing discourse structures, subtly undermining generalization.

Another observed characteristic of traditional aphasia treatment is its relatively rigid and asymmetric structure (Wilcox & Davis, 1977; Silvast, 1991). Our finding that feedback enculturated the client into the rules of didactic treatment interaction provides one explanation for how this structure is subtly negotiated. Accepting the client role involves participating in the routinized adjacency structures of treatment in which the client’s discourse is markedly constrained. In effect, the client is often restricted to the passive role of filling “response slots” that are bracketed by clinician-controlled requests and feedback. The rigid request-response-evaluation sequence is not unique to aphasia treatment. It appears to be a structure typical of teaching interactions and child language treatment (Bobkoff, 1982; Damico & Damico, 1997; Duchan, 1993; McTear & King, 1991; Mehan, 1979; Ripich, Hambecht, Panagos, & Prelock, 1984). The structure allows a teacher, parent, or clinician to mediate a response and provide corrective feedback. However, the RRE sequence is not typical of adult conversations. In fact, during nontreatment discourse, requests open several options to the speaking partner (Schiffrin, 1994). The partner might try to fulfill the request, refuse to fulfill the request, provide an “excuse” or accounting for failure to fulfill the request, or derailed the request (e.g., change the topic, divert with a joke). In aphasia treatment, requests open the RRE triad, which constrains the client’s options; the expected option is to attempt to fulfill the request. We might wonder if these constraints are entirely beneficial. Although feedback serves multiple functions in aphasia treatment, the structure of feedback limits the client to a relatively passive role in the construction of discourse. Does this passive discourse role prepare the client for the active, creative role of conversational participant? Could this rigid structure limit generalization to discourse that is more varied and in which responsibility for structuring the framework is shared? Although our data do not answer this question, a study by Hinckley and Craig (1992) is relevant. On a reverse picture description task, in which subjects commented on examiner’s picture descriptions, a subgroup of subjects with aphasia who had a higher intensity of speech-language treatment were less responsive than other subjects with aphasia or than controls without aphasia. The investigators found this result counterintuitive and suggested that perhaps the structure of aphasia treatment might reduce the conversational responsiveness of treated individuals. This result suggests that we must examine the possibility that treatment structure be loosened to enhance outcomes in aphasia.

For those interested in moving away from the rigid structure of traditional treatment into more functional interactive treatment, identifying evaluative feedback sequences can signal teacher-centered discourse structure versus more natural interaction. For example, we might contrast the following “role-play” interactions:

### Example 17

**Task:** The client and a student are role-playing an interaction between a patient and a dietician at the hospital. The student is “playing” the dietician and the client is “playing” the patient. The clinician serves as a “coach.”

1. **Clinician:** What do you tell the dietician? (addressing client)
2. **Client:** I want…tea…
3. **Clinician:** Good. (looks at student) Oka::y.
4. **Student:** (Circles “tea” on menu)

### Example 18

1. **Clinician:** What do you tell the dietician? (addressing client)
2. **Client:** I want…tea…
3. **Student:** Oh. (Circles “tea” on menu)

In example 17, the clinician controls the interaction; the client’s response is embedded within an RRE format that is...
closed by the clinician’s utterance of “good” (line 3). Then the clinician actually invokes the student-dietician’s response with an implied request consisting of gaze and prolonged “okay” (line 3). Thus, the client’s utterance in example 17 does not carry the power of a true request (e.g., give me tea); rather, it is a response to the clinician’s question, then the clinician evaluates the response (“good”) and subtly makes a request of the student-dietician. In example 18, the student acts in direct response to the client’s request. Thus, the client’s utterance serves to initiate a request-response adjacency unit. When appropriate to the goals, such simple variations in discourse structure allow clients to engage in more varied discourse experiences within treatment. Activities that empower clients to help create and direct the line of talk might actually require limiting traditional feedback.

Conclusion

Although aphasiologists are well versed in the many variables that influence word- and sentence-level linguistic processing during treatment, we have less information regarding the discourse and interactive characteristics of treatment. Because these characteristics are apt to have a pervasive influence on a client’s overall communicative success, it is imperative that we better understand the complex dynamics of treatment as a unique form of social interaction. Qualitative analysis of the social dynamics of treatment offers a productive method of gathering relevant data in this regard. We believe that clarification of the multiple roles of feedback can help identify the precise characteristics of a well-managed treatment session. Furthermore, it is important that we examine the structure of treatment to ensure that it will promote outcome goals. Based on research in related fields (e.g., Bandura, 1978; Vigil & Oller, 1976) and on our own intuitions as clinicians and speakers, we can speculate on the potential impact of feedback on treatment outcomes. Thus, liberal use of feedback might be programmed in order to mediate specific responses, or feedback might be sacrificed when practice within more natural conversational discourse is targeted. However, further research is needed regarding outcomes associated with variations in feedback and the variables that influence feedback usage. A more thorough understanding of feedback, along with the social interactions of treatment, will ultimately enhance the effectiveness and efficiency of aphasia treatment.

References

Duchan, J. (1993, June). The IRE structure as viewed ethnographically. Presentation at the First International Round Table of Ethnography and Communication Disorders, Urbana, IL.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
conversation; Over-lapped tag-positioned address terms in closing sequences. Semiotica, 9, 47–96.


Lakoff, R. (1973). The logic of politeness, or minding your p’s and q’s. Papers from the Ninth Regional Meeting of the Chicago Linguistics Society, 292–305.


Received October 26, 1998

Accepted March 10, 1999

Contact author: Nina Simmons-Mackie, PhD, 59020 Highway 433, Slidell, LA 70460
Appendix A

Summary of Treatment Tasks

Pointing to objects named
Following one-step commands
Following two-step commands
Unison counting
Unison days of the week
Singing a familiar song
Unison production of one-syllable words
Repeating one-syllable words
Repeating words with a written cue
Repeating phrases
Verbal sentence completions
High association phrase completion (black and _____)
Naming objects with a cueing hierarchy
Answering questions with a one-word answer
Answering questions regarding biographical information
Describing pictures
Imitating gestures
Demonstrating gestures on command
Writing words to dictation
Writing biographical information
Writing a sentence given a spoken word
Writing picture descriptions
Drawing pictures to match a written word
Writing checks
Visual Action Therapy
Adaptation of Melodic Intonation Therapy
Promoting Aphasics Communicative Effectiveness (Davis & Wilcox, 1985)
  - Object naming
  - Describing action pictures

Appendix B

Transcript Notation

Bracket [ ]  The beginning of overlapping utterances.
Equal signs =  Utterances linked together or continuing one after another without interruption.
Colon :  Prolongation or extension of sound or syllable as in “goo::d”.
Series of periods ...  Signifies a pause in talk; more periods equal longer pauses.
Underline —  Signifies emphasis on the underlined utterance.
Capital letters NO  Indicates marked emphasis with increased loudness.
Single parentheses ()  Encloses a description of some phenomenon that is important to the talk such as gestures, paralinguistic cues, and setting factors.