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PARTNERSHIP IN CONVERSATION: A STUDY OF WORD SEARCH STRATEGIES

MARY L. OELSCHLAEGER
Department of Speech Pathology and Audiology, Northern Arizona University, Flagstaff, Arizona

JACK S. DAMICO
Department of Communication Disorders, University of Louisiana at Lafayette, Lafayette, Louisiana

Conversation analysis was used to investigate a conversational partner's strategies when assisting with the word searches of an aphasic person. The purpose was to identify and detail how such strategies were accomplished and to examine the implications of these strategies from a social and participatory perspective. Review of a large, authentic database resulted in identification of 38 videotaped conversation sequences characterized by the initiation of a word search by an aphasic speaker and the joining of this search by the conversation partner. Sequences were analyzed on a turn-by-turn basis to identify patterns of sequential organization based on similarities in contextual and functional features and to infer social implications. Results were that four conversation strategies were systematically used: guess, alternative guess, completion, and closing strategies. Each was accomplished collaboratively with specific interactional resources and techniques and were used differentially for social purposes. Implications for clinical practices involving training of conversation partners are discussed.

Educational Objectives: The reader will (1) view participatory word searches as interactional phenomena resulting from collaborative efforts of both the person with aphasia and their conversation partner and (2) recognize the need to incorporate training of *conversational partnership* in clinical management and develop ideas about clinical procedures for how strategies may be incorporated into everyday conversations.

KEY WORDS: Aphasia; Conversation; Partners; Word search

INTRODUCTION

Therapy for aphasia traditionally focuses on improving processing deficits and linguistic impairments (e.g., Brookshire, 1992; Darley, 1982; Porch, 1986). Although this is a valid goal, it is often not possible to return an individual to his or her premorbid communicative state. Consequently, to maxi-

Address correspondence to Mary L. Oelschlaeger, Ph.D., Department of Speech Pathology and Audiology, Northern Arizona University, P.O. Box 15045, Flagstaff, AZ 86011, Tel: (520) 523-2969; Fax: (520) 523-0034; E-mail: <mary.oelschlaeger@ nau.edu>.

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mize communicative success, therapy may also need to focus on making changes in the overall communicative contexts within which the individual with aphasia interacts. This expansion of the scope of aphasia intervention is consistent with recent calls for concern with functional outcomes (e.g., Holland, 1998) and with recognition of the importance of context in all forms of social interaction (e.g., Armstrong, 1993; Bateson, 1972; Damico, Simmons-Mackie, & Schweitzer, 1995; Duranti & Goodwin, 1992). Specifically, there is a growing focus on training communicative partners to compensate for the deficits noted in individuals with aphasia so that communicative success may be effectively reestablished or enhanced (e.g., Kagan & Gailey, 1993; Linebaugh, Margulies, Mackisack-Morin, 1984; Lyon, 1989).

A number a treatment protocols are designed to capitalize on the potential of communicative partners to promote communicative success when talking with a person with aphasia (Boles, 1997; Holland, 1991; Kagan, 1998; Lyon, 1997a, 1997b; Newhoff & Davis, 1978; Simmons, Kearns, & Potechin, 1987). Although each has its unique features, all of these protocols share the notion that communicative partners can be "trained"—through practice, modeling, counseling and education, or a combination thereof—to use communicative strategies that support the (re)establishment of communicative success despite the linguistic limitations of aphasic speakers.

Of paramount importance in the design of any therapy program that involves training communicative partners is to understand those strategies that promote communicative success. Currently, much of what is known about partner strategies is derived from theory and research on language processing in aphasia, study of the behavior of communication partners in structured communicative exchanges (e.g., referential, picture description, and barrier tasks) and experiences of clinicians. For example, the suggestion that partners of persons with aphasia use the communicative strategy of "slowing speech rate" (Boles, 1998; Kagan & Gailey, 1993) is based on research evidencing that individuals with aphasia benefit from reduction in speech rate (Weidner & Lasky, 1976), anecdotal individual's reports that "people talk too fast" (Rolnick & Hoops, 1969), and clinician observations (Kagan, 1998; Rosenbek, LaPointe, & Wertz, 1989).

Designing treatment based on inferential knowledge is constructive but it is also problematic (Damico, 1990; Damico & Damico, 1997; LeDorze & Brassard, 1995; Oxenham, Sheard, & Adams, 1995). Specifically, such an approach raises the possibility that the communicative strategy selected for training may not meet the demands of the dynamic and complex interactions outside the therapy context. As a consequence, generalization of strategy use to nontherapy settings may not occur (Simmons, 1993). As Simmons-Mackie and Damico (1997a) noted in their discussion of compensatory strategies, "It is not uncommon to train a particular strategy in therapy and then observe that this carefully trained compensation does not carry over to communicative situations outside of the therapy session" (p. 761).

To ensure that treatment involving training of communicative partners has "real life" relevance, it is necessary to understand what communicative partners do in *everyday language interactions* to promote communicative success. The importance of such an understanding is accentuated by the current interest in clinical aphasiology on social approaches to aphasia management. These approaches emphasize the reduction of the social consequences of aphasia and the promotion of communication within authentic contexts as a primary treatment goal (Simmons-Mackie, 1998).

Everyday language occurs in many forms and includes various types of discourse (e.g., narrative, procedural, conversation). Particularly relevant to the social lives of persons with aphasia and their communicative partners is an individual's participation in conversation. Conversation is recognized as the primary means of socialization (McDermott & Tylbor, 1983; Sacks, 1992) and is described by Kagan and Gailey (1993) as essential for maintaining psychosocial well-being. Further, because conversation results from the collaborative interactions of participants (Sacks, 1992; Sacks, Schegloff, & Jefferson, 1974), it has the inherent potential for those partners—as active coconstructors of the conversation—to use strategies to enhance participation. Consequently, a greater understanding of conversation strategies as naturally occurring phenomenon would foster the clinical development of partner training in ways that are in keeping with the clinical goal of improving the social lives of person with aphasia.

The study of communicative partner strategies spans 20 years (Linebaugh, Marguiles, & Mackisack, 1985; Linebaugh, Pryor, & Margulies, 1983; Newhoff & Davis, 1978, for example), and some investigators examine naturally occurring conversation (e.g., Ferguson, 1992, 1994; Gerber & Gurland, 1989; Goodwin, 1995; Laakso & Klippi, 1999; Lindsay & Wilkinson, 1999; Lubinski, Duchan, & Weitzner-Lin, 1980; Milroy & Perkins, 1992; Oelschlaeger, 1999; Oelschlaeger & Damico, 1998b; Wilkinson, 1995). These researchers note that conversation partners can and do use specific strategies and that these strategies have an impact on the participation of aphasic persons.

Although the above studies identify several conversation strategies, more detailed information is needed regarding how such strategies are actually accomplished and their social implications. That is, the research to date supports the practice of clinician's offering suggestions (e.g., "try guessing when word finding difficulty occurs") to conversation partners about what they can do to advance conversation. But how partners are to incorporate these strategies into their ongoing talk to promote conversation success is less well understood.

This study was conducted to enrich clinician's knowledge about the strategies used in naturally occurring conversation. It had two purposes: (a) to identify and provide details about how collaborative conversation strategies specific to word searches were accomplished and (b) to discuss the potential implications of these strategies from a social and participatory perspective.

METHOD

This study was similar to our previous research in terms of research design, participant selection, date collection, and analytic tools (Oelschlaeger, 1999; Oelschlaeger & Damico, 1998a, 1998b). Unique to this research was the targeted phenomena under study—the strategies a conversation partner used when participating in word searches. An earlier work (Oelschlaeger, 1999) examined how an aphasic person collaborated with his spouse by inviting her to participate in his word searches and how she was able to use interactional resources to do so. In this study, we examined the same data set but focused on the actual strategies used to accomplish the word searches and the impact such strategies had on participation and social identification of participants. Taken together, these two studies should provide sufficient data to describe explicitly the successful collaborations that assist the individual with aphasia in overcoming the causal linguistic impairments.

Research Design

The qualitative method of conversation analysis was used in this study. This method is extensively described in investigations of the conversations of ordinary (nonaphasic) speakers (e.g., Atkinson & Heritage, 1994; Sacks, 1992; Sacks et al., 1974) and aphasic speakers (for example, Goodwin, 1995; Oelschlaeger, 1999; Oelschlaeger & Damico, 1998a, 1998b; Perkins, 1995; Wilkinson, 1995, 1999).

The analytic objective of conversation analysis is examination of a focal conversational event to discover how it is systematically organized and accomplished by participants (Levinson, 1983). The basic analytic tool is a rich descriptive analysis of conversation sequences and the turns at talk within the sequences with findings inductively derived from these behavioral observations (Levinson, 1983). As in all varieties of qualitative research, extensive data collection, detailed description of the data collected, and various ways of comparing and contrasting these data serve to verify any findings (Atkinson & Heritage, 1994; Creswell, 1998; Damico, Simmons-Mackie, Oelschlaeger, Elman, & Armstrong, 1999).

Conversation Participants

The data set was obtained from a couple, Ed and M, selected for study based on informal observation of their conversational success. They were in their early 50s, had been married for 28 years, and had no children. Both worked outside the home, Ed as a draftsman and M as a secretary. At the time of this study, M's mother was living with them.

Ed had a single left cerebrovascular accident with residual right hemiplegia and aphasia 6 years before this study. His aphasia was characterized as moderately severe: his aphasia quotient derived from administration of the Western Aphasia Battery (Kertesz, 1982) was 46.6. He followed main ideas but misunderstood when the talk of others was too long, too linguistically complex, or when comprehension was dependent on a single word. He could convey his main ideas, but his talk was characterized by frequent and sometimes quite protracted word searches. M had no history of illness, disease, or deficit and was Ed's primary conversation partner.

Data Collection and Analysis

Eight naturally occurring conversations were videotaped in Ed and M's home and were subsequently transcribed. In recurrent review of conversations, 38 sequences were identified that were characterized by Ed's initiation of a word search, M's joining his search, and the termination of the search. Word searches were operationally defined by the presence of word search indicators and were considered terminated when Ed's or M's talk was no longer directed toward it. Interrater and intrarater reliability for identification of participatory word searches was noted as 88% and 100%, respectively (Oelschlaeger, 1999).

The joining of a word search by a conversation partner is reported in previous literature of aphasic and nonaphasic speakers (Goodwin & Goodwin, 1986; Oelschlaeger, 1999; Schegloff, Jefferson, & Sacks, 1977). Such a conversational event is commonly referred to as *self-initiated, other completed* repair in the literature of ordinary persons (Schegloff et al., 1977) and as a type of joint production (Oelschlaeger & Damico, 1998b; Sacks, 1992). For ease of expression, we refer to these phenomena as *participatory word searches.*

A prototypical illustration of a conversational sequence characterized by a participatory word search is presented in example 1.

Example 1 (conversation A). In this example, Ed was telling MG about the distance he had to travel from his home to work when he was in the military.

		x—gaze and hand to table------,,,--------M--------,,,----------lowers gaze/----------head
372	Ed:	Yeah. From here to one there, one mile, one (2.3) no (2.1) can't think of
		down, sits back-x
373		name of it
		x----------x
374	M:	Hour?

,,,---MG-x
375 Ed: Hour.

In the first line of this conversation segment, Ed initiates a search for a word as evidenced by the presence of word search indicators (Glosser, Wiener, & Kaplan, 1988; Goodwin, 1987; Goodwin & Goodwin, 1986). He pauses, revises, rejects, lowers gaze, and comments on his (in)ability. In the next turn, M joins his search by offering the word *hour*, formatted as a guess. Subsequently, in line 375, Ed repeats her offered word and terminates the search as he returns his gaze to MG, the recipient of his talk.

Table 1 summarizes information about conversational parameters related to length, place, participants, turns at talk, and frequency of participatory word searches.

Conversations ranged in length from 22 to 52 minutes, with an average length of 37 minutes. The two-party conversations totaled 149 minutes, with multiparty conversations totaling 117 minutes, resulting in a sum of 266 minutes. The combined number of turns at talk for all participants was 3561. As we have noted in previous reports (e.g., Oelschlaeger, 1999; Oelschlaeger & Damico, 1998a, 1998b), the number, length of conversations, amount of talk, and variations in time, place, and participants in these conversations contribute to verification of findings.

Participatory word searches ranged from a low of 1 in conversation F to a high of 9 in conversation A, with no consistent pattern of frequency related to length of conversation, conversational setting (i.e., group or dyad), or turns at talk for participants.

After identification, the sequential organization of the 38 conversational sequences evidencing participatory word searches was analyzed. Analysis fo-

Table 1. Conversation Length, Participants, Frequency of Turns at Talk, and Participatory Word Searches

	Turns at Talk for Each Participant				
Conversation	Ed	M	MG	MO	Participatory Word Searches
A (Group) 42 min	211	192	197		9
B (Dyad) 28 min	212	213			5
C (Group) 31 min	169	195	49	173	6
D (Dyad) 35 min	186	176			4
E (Group) 44 min	184	336	56	289	4
F (Dyad) 19 min	64	55			1
G (Group) 31 min	122	114			2
H (Dyad) 36 min	185	183			7
Total 266 min	1333	1464	302	462	38

cused on detailing the linguistic and paralinguistic features of each of the turns at talk in the sequence and determining how these features influenced the construction of the immediate and subsequent turn. The results were then compared and similarities in their contextual and functional features were used to identify patterns of organization.

RESULTS

Results of the conversation analysis of the 38 sequences in which M joined Ed's word search evidenced several conversation strategies systematically used by M. These conversation strategies were: guess, alternative guess, completion, and closing strategies.

Conversation Strategies

Guess strategy. A recurring pattern representative of the participatory word searches of this couple was a guess strategy as illustrated in example 2.

Example 2 (conversation A). Here, the conversation topic was videotaping. Ed was telling MG about how often he was videotaped by his speech and language pathologist when he was in aphasia therapy.

x----------mid distance gaze----------,,,-gaze down----------x
19 Ed: I'd say ten (2.3) uh (1.5) uh (1.8) uhm I can't think of the name of it
M: x--------Ed----------Nods x 4----------x

x----Ed---x
20 M: Times?
Ed: x-gaze down

x---MG-----x
21 Ed: Times.
M: x-nod----x

In this example, M's conversation strategy as a participant in Ed's word search is to offer a word to him as a guess. Evidence of how this strategy is accomplished is presented in the detailed examination of the organization of this conversational sequence.

x----------mid distance gaze----------,,,-gaze down----------x
19⇒ **Ed:** I'd say ten **(2.3) uh (1.5) uh (1.8) uhm I can't think of the name of it**
M: x---Ed----------Nods x 4----------x

In line 19, Ed initiates a word search as evidenced by word search indicators. While he is speaking, M monitors his talk: she continuously gazes at him and nods affirmatively as an indication to him that she understands and supports what he was saying. Her monitoring situates her to notice Ed's word search but she does not join his effort until she receives an indirect invitation (i.e., he abandons his effort to say the word as signaled by his metalanguage and downward gaze; see Oelschlaeger [1999] for a more extended discussion of invitations to participate). At this point, she joins his word search, as seen in line 20.

```
                x---------mid distance gaze-------,,,-gaze down----------------------------------------------------x
19      Ed:     I'd say ten (2.3) uh (1.5) uh (1.8) uhm I can't think of the name of it
        M:      x--------Ed----------------Nods x 4-----------------------------------------------------------------x

                x----------x
20⇒     M:      Times?
        Ed:     x-gaze down
```

Here she offers a candidate word as a guess. The fact that her guess occurs at this point in Ed's search and is syntactically and semantically coherent with Ed's utterance demonstrates again how she is actively monitoring his utterance. She uses her understanding of Ed's talk to define both the point in his utterance when she would join his search and to make a lexical choice in formulation of her guess. Her guess also exerts an influence on what happens next in the conversation. Specifically, her guess provides the organizational structure of a question and answer (Q & A) adjacency pair (Sacks, 1992; Schegloff et al., 1977). That is, when a question is asked, an answer is projected. Thus, when M offers a word as a guess, she selects Ed to take the next turn in the conversation, providing him with the opportunity to terminate the search if her guess is correct.

Ed then shows his understanding of the interactional technique of Q & A in line 21 when, immediately after M's guess, he repeats her word as an answer.

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20      M:      Times?

                x----MG----x
21⇒     Ed:     Times.
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In this case, his repetition confirms his agreement with M's offered guess (Oelschlaeger & Damico, 1998a). Simultaneously, he returns his direct gaze to the conversational recipient, MG. In this way, Ed indicates to M that the search is resolved and that he is returning to the conversational topic.

Alternative guess strategy. A second strategy used by M when she joins Ed's word searches is an alternative guess strategy. This strategy is character-

ized by the same basic Q & A organization of a single guess. However, this strategy is used when M's initial guess is rejected by Ed. Example 3 is prototypical of conversational sequences showing M's use of an alternative guess strategy.

Example 3. Ed, MG, and M are talking about the initial events surrounding Ed's stroke.

541	MG:	Then they realized, then they put you in the hospital.
542	M:	Uh huh.
543	Ed:	Yeah but then they did uh (1.2) the uh (1.9) uh what do you call it (2.1) the
544		uh-
545	M:	**MRI?**
546	Ed:	**No**.
547	M:	**Angioplasty?**
548	Ed:	**No.**
549	MG:	EEG?
550	Ed:	No (1.5) **The irr, no (tsk, tsk) srays, what do you call it?** (1.0)
551	M:	An **x-ray?**
552	Ed:	X-ray. And he says, 'oh look, he's got a
553	MG:	//Look there!!

In this sequence, Ed again initiates a word search. Here his word search indicators include the question, "What do you call it?" (line 543). M answers this question by offering "MRI" as a guess (line 545). But in his next turn, Ed rejects her guess with a "no" and at this point, M structures her continued participation in his search with an alternative guess strategy. She understands that her first guess is not the word Ed is seeking and elects to guess again. Problematically, Ed's "no" token, other than informing her of the error of her guess, provides little additional information that she can use to formulate her next guess, and she continues to rely on information provided by the conversational context and shared knowledge of "things that happened when Ed was in the hospital." She guesses "Angioplasty?" in line 547. Ed also rejects this guess. After M's two inaccurate guesses, Ed reenters the search. He attempts to say his intended word again (line 550).

550⇒	**Ed**:	**No (1.5) The irr, no (tsk, tsk) srays, what do you call it?**
551	M:	An x-ray?

His renewed effort to resolve the search himself demonstrates that Ed recognizes the threat to the flow of conversation and is uncertain about M's ability to provide an accurate answer. He is again unsuccessful in saying the desired

word. But his attempt (e.g., “srays”, line 550) provides M with enough phonologic information to formulate her next guess, “x-ray,” which is the word he was seeking.

Completion strategy. A third participatory word search strategy is a completion strategy. This strategy is also characterized by M’s offer of a word to Ed. However, it differs from others in that she formats her offer declaratively rather than as a question. As such, her offer is stated as fact rather than questioningly. A completion strategy is presented in example 4. Ed, M, and MG are talking about gardening, and Ed is telling MG what he and M had planted.

Example 4 (conversation C):

„„---M----------x
457 Ed: And there’s one more. There’s a**:::**
458 M: **Okra.**

„„---MG----------x
459 Ed: Okra, that’s it.

Before this sequence, Ed was talking to MG. However, at the beginning of line 457, he shifts his gaze toward M and in this way, identifies her as the recipient of his talk. The only indication of a word search is a sound stretch, followed by M’s offer of the word “Okra” stated with certainty. The verbal production outcome of this sequence is essentially the same as that of a guess strategy in that Ed repeats M’s word and continues talking. But the interactional organization is different. More specifically, a sound stretch is one of a number of indices of word searches. However, as Schegloff (1996) noted, sound stretches may occur independently of word searches. In such instances, they are *turn terminal items* that signal an opportunity for another participant to talk. Thus, sound stretches may simultaneously signal difficulty saying a word and provide an opportunity for another participant to take a turn at talk. Ed’s sound stretch gives M the choice either to treat his talk as indicative of a word search or as an offer of speakership. In this example, she does both. She offers a word that would resolve Ed’s search but, in doing so declaratively, she also completes his turn and in effect, assumes speakership. Unlike the guess strategy, she does not select Ed to speak next. Rather, by assuming speakership, she is in a position to continue talking. As it turns out, she does not continue speaking, but she could have done so if she had so desired.

Closing strategy. A fourth strategy is a closing strategy designed to terminate a word search before it is resolved. Specifically, M indicates that she understands the topic of the conversation and that this understanding is sufficient for the conversation to continue. Thus, a closing strategy involves M offering

a way to terminate without resolution and to move the conversation forward. A closing strategy is used when several of M's offers were repeatedly rejected by Ed. A conversation sequence displaying M's closing strategy is presented in example 5.

This conversation sequence occurs during a discussion of an upcoming business trip. Earlier in the conversation (line 254), Ed states that he needs authorization to go on this trip from a person "way up there" in his company. This leads to a series of turns dedicated to explicitly identifying this "way up there" person.

Example 5 (conversation B).

261	M:	Oh::: its not Foster.
262	Ed:	No no.
263	M:	Traholi?
		(1.6)
264	Ed:	No.
265	M:	Tom Traholi? No?
266	Ed:	It, it uh:::
267	**M:**	**The president or whatever its called**
268	Ed:	Well it, well he's a pres
269	**M:**	**//He's the local leader there**.
270	Ed:	Yeah

As noted in lines 261–265, M participates in the effort to identify more clearly the person at Ed's place of employment by offering several guesses of proper names (one repeated). All are rejected by Ed. As in example 3, he reenters the search (line 266). However, this time his effort does not include additional information that M might use to inform her next offer. Once again, his indication of a word search includes a sound stretch. Without additional information and with the opportunity to assume speakership provided by the sound stretch, M abandons her alternative guess strategy and shifts to a declarative production of a phrase (line 267).

266	Ed:	It, it uh:::
267⇒	**M:**	**The president or whatever it's called.**

In this phrase, her lexical choice of "president" paraphrases the descriptive characteristic of the person they are talking about (e.g., someone way up there) and "whatever its called" degrades the importance of knowing anything more about this individual (Goodwin & Goodwin, 1986). In this way, M lets Ed know that she knows what he is talking about and that the conversation can continue without resolution of the word search. That is, she shifts the direction of their talk away from word search resolution and goes back, via paraphrase,

to the point at which the conversation was diverted. In doing so, she puts the conversation back on its original track, permitting it to move forward again.

Despite M using a closing strategy, Ed's next turn shows that he does not accept her move to terminate the search. He attempts again in line 268 to talk about the individual in question. Yet again, Ed's effort includes no new information. Subsequently, M reasserts her closing strategy when she interrupts his speaking effort with a paraphrase of her previous turn.

268	Ed:	Well it, well he's pres
269⇒	**M:**	**//He's the local leader there.**
270	Ed:	Yeah

Ed, at this point, agrees with M (line 270). He accepts her move to terminate the search and the conversation continues.

Social Identification and Participation

To fulfill the purpose of this study, the effect of M's participatory word searches on conversational participation and social identification was analyzed. This involved focusing on how the organization of each strategy provided a participation framework that influenced both the design of the conversation and Ed's identification as a competent conversational partner.

The significance of this analysis is derived from the understanding that the end result of all of the strategies is effectively the same—the problem created by the word search is overcome and the conversation continues. This raises the question of why M would use more than one strategy. Because M was Ed's spouse, it could be assumed that she often knows what he is trying to say. The extent of her shared knowledge would argue for her preferential use of a completion or closing strategy as her contribution to Ed's word search. For example, rather than offer "times" as a guess indicating uncertainty in example 2, her knowledge of Ed's therapy would support her offer of this word declaratively. Yet even in this instance—when she clearly knows the word he is trying to say—she uses a guess strategy. Examination of the difference in conversational participation and social identification helps explain M's selective use of strategies.

Completion strategy. As noted previously, M's declarative offer of a word defines a completion strategy that essentially finishes Ed's turn. She does his talking for him and positions herself to continue speaking. Ed's participation is co-opted in that this strategy does not provide a framework for him to take the next turn at talk, either to show agreement or disagreement with her word search contribution. And, when M speaks for Ed, his social identification as a competent conversational participant is open to question. That is, by completing his turn for him, it may be perceived by others that Ed

is incapable of completing his own utterance. Stated another way, with the use of a completion strategy, M positions Ed to be socially perceived as linguistically handicapped.

Guess strategy. In contrast, the participation framework and social identification of a guess strategy is quite different from a completion strategy. When she offers a word as a guess, Ed is selected as the next speaker. Thus, by asking a question, M socially identifies Ed as competent to understand the need to provide an answer and to be linguistically able to do so. Ed enhances his identification as a competent conversational partner with his answer turn. When he repeats M's word offer, he effectively "controls" the conversation. He re-establishes himself as speaker and determines when the word search is over. In other words, when M uses a guess strategy, Ed's turn remains incomplete until he acknowledges its completion. With M's guess, he holds up his end of the conversation *despite his word finding difficulty* and is treated as and acts as a competent speaker.

Closing strategy. Although the organizational structure of a closing strategy differs from a completion strategy, the participation framework is quite similar. With both strategies, Ed's participation is preempted, and the question of his social and linguistic competence is raised. But the strategies differ by degree of impact on Ed's social identity. With a closing strategy, the word search, although terminated, is not resolved. M withdraws her participation and directs the conversation away from the search. Thus, her actions socially position Ed as an individual who is not only incapable of saying what he wanted to say, he is additionally unable to provide the information resources necessary for her to continue to contribute to his word search and to direct the conversation. As such, Ed's social identification as an incompetent speaker is downgraded from that of a completion strategy.

DISCUSSION

This study provides evidence of a conversation partner's use of number of participatory word search strategies that are unique in their social actions and meaning. It extends previous research by examining how such strategies are accomplished in naturally occurring conversation. Basic to all observed strategies is that the organizational structure of each is dependent on the talk of both members of the aphasic–spouse dyad. At a minimum, three turns at talk are dedicated to a participatory word search with each turn designed in a specific way that influences the subsequent turn. For example, in the first turn, Ed makes his word finding difficulty visible as a word search and extends an invitation for M to participate in this search (Oelschlaeger, 1999). As he is speaking, she analyzes his talk and uses the information derived from this analysis as a resource to motivate and formulate her participation. After her participation, Ed provides feedback in the third turn that serves both of them in determining

how they are to continue. These findings support our contention and that of others (Ferguson, 1992; Gerber & Gurland, 1989; Milroy & Perkins, 1992) that such strategies are best understood in terms of their interactional basis.

Several implications for clinical management arising from these findings are apparent. One major implication is that clinical programs that include training of conversation partners should incorporate training of *conversational partnership*. From an interactional perspective, focusing on modifying the actions of only the ordinary speaker or only those of the person with aphasia is insufficient to achieve the desired treatment goal of capitalizing on conversation partners to promote communicative success. Additionally, an emphasis on partnership promotes the desirable social perception that partners are speaking **with**, not **for**, each other.

Additional implications relate to specific clinical practices. For example, findings suggest that detailed observation and discussion be used to determine how word searches are managed by conversational participants. Gerber and Gurland (1989), Holland (1991), and Simmons-Mackie and Damico (1997b) offer ideas about how such assessments may be performed. Treatment could include assisting partners to recognize the potential of participatory word searches to foster conversation and identifying the types of strategies that they may use. Any number of actions relevant to participatory word search strategies, such as attending to word search indicators, conversational techniques for inviting participation, mutual monitoring of talk, and the provision of information as a resource, may be taught. The participation framework and social identification of each strategy may also be made explicit. Each strategy should be explored with participants to determine what strategy works best for them and how they may incorporate a particular strategy at any time.

Evidence of the interactional basis of strategies speaks to the "intactness" of the pragmatic competencies of both persons with aphasia and ordinary speakers (Holland, 1991). This aphasic–spouse dyad converse like nonaphasic speakers in many ways. Their conversation is systematically and sequentially organized despite Ed's aphasia. The fact that participation and social identifications are dynamically established offers additional evidence of their collaborative sophistication. Of course, because only one couple was studied, no conclusions about generalizability of *specific* conversation strategies or intactness of pragmatic ability can be made. Nonetheless, observing that this couple works collaboratively to manage word searches supports the generalization that other couples may do so as well.

There are a number of unanswered questions. First, there is the question of how other aphasic deficits, like auditory comprehension difficulty, are interactionally negotiated. Another question pertains to the conversation strategies used when aphasia is more severe. It is probable that persons with more severe aphasia would not rely as heavily as Ed and M on verbal language to construct their strategies. Goodwin's (1995) conversation analysis of interactions with a

severely aphasic man and Simmons' (1993) and Simmons-Mackie and Damico's (1996) report of the use of iterative utterances and gesture by a severely aphasic woman offer evidence in this regard.

The couple studied here seem particularly adept at managing word searches. It is unclear whether this is just idiosyncratic or whether other variables such as language sophistication or personal motivation are important to conversation strategies. Also, it is not known whether the strategies observed developed naturally as a consequence of the conversation challenges subsequent to aphasia or were used before Ed's stroke and are now expanded.

Finally, if the strategies noted in this study developed naturally, what is the clinical rationale for partner training of strategies? There is little evidence to date of how conversation strategies evolve, and such research would offer insights relating to the clinical relevance of such programs. However, common sense suggests that some partners must develop some strategies naturally, subsequent to aphasia. It does not follow that all of them do. Also, even if a strategy is acquired naturally, it may not be used to a couple's conversational advantage (Holland, 1991). The clinical contribution of this study (combined with Oelschlaeger's [1999] report) is the explication of how participatory word search strategies are accomplished in natural conversation. Clinicians should be able to use this information to determine whether conversational partners are using and capitalizing on strategies or may benefit from explicit training of strategies.

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CONTINUING EDUCATION

Partnership in Conversation: A Study of Word Search Strategies

QUESTIONS

1. Training of communicative partners is desired because:
   a. The aphasic person may not be able to return to their premorbid status

b. Conversation partners can use strategies to support communication
c. Conversation strategies develop naturally for all couples after the onset of aphasia
d. Two of the above
e. All of the above

2. Participatory word searches are defined as:
a. A self-initiated, self-completed word search
b. A self-initiated word search that is unresolved
c. A self-initiated word search that is resolved with the help of another speaker
d. Other initiated word search that is resolved with the help of the original speaker
e. None of the above

3. Each participatory word search strategy differed according to its:
a. Length and complexity
b. Amount of collaboration needed for word search resolution
c. Sequential organization
d. Conversational success
e. Dependence on information resources

4. With the use of a closing strategy,
a. Speakership is returned to the original speaker
b. The word search is resolved
c. The word search is terminated
d. Positive social identities are enhanced
e. Two of the above

5. Knowing how strategies evolve would assist in determining:
a. The interactional basis of strategies
b. The "naturalness" of strategy acquisition
c. How other aphasic deficits are managed
d. Authenticity of data
e. Use of nonverbal behavior to overcome deficits

APPENDIX A

Talk is transcribed using a simplified version of the Jefferson transcription system (Sacks, Schegloff, & Jefferson, 1974).

1. (#): a number in parentheses indicates elapsed time in seconds for pauses 1 second or more.
2. ? and . : punctuation markers are used for intonation. A question mark indicates rising intonation and a period indicates falling intonation.

3. : : a colon is used as a sound production marker, indicating that the prior syllable is prolonged.
4. - : a short dash indicates a ‘cut off’ of the prior word or sound.
5. (*): single pairs of parentheses with asterisk indicate the talk was unintelligible.
6. //: the double oblique indicates the point at which a current speaker’s talk is overlapped by the talk of another.

Transcription of Gaze and Gesture

Gaze and gesture transcription is based on a system described by Goodwin and Goodwin (1986).

1. Gaze of the listener is marked below the turn at talk. A line indicates that the listener is gazing toward the speaker.
2. Gaze of the speaker is marked above the turn at talk. A line indicates that the speaker is gazing toward the listener.
3. x : marks the beginning and end of the direction of gaze.
4. ,,, : indicates a shift of gaze from one direction to another.
5. Specific gaze direction is described orthographically through indication of the person or place of the direction of gaze (i.e., mid-distance, away, or initial of person).
6. Gesture of the speaker is described orthographically above the turn at talk.