Development of a procedure for the evaluation of spouses' and persons with aphasia's contributions in an interview situation

There has been increasing interest in studying conversations between people with aphasia and their partners, aiming to comprehend the impact of aphasia on conversation and to describe the types and patterns of collaboration in dyads (e.g., Oelschlaeger & Damico, 1998; Simmons-Mackie, Kingston, & Schultz, 2004). However, aphasic persons' participation in group conversation in presence of their spouses has not been extensively studied. Nevertheless, group conversations are frequent, and therefore an interesting context for the study of how couples collaborate.

The aim of the present project was to develop a procedure to analyze conversations that would specifically address the contributions of non-aphasic spouses as well as the participation of the person with aphasia when the couple is in a conversation with a third party.

Method

Development of the procedure

Videos of three couples with aphasia in an interactive situation (described below) were employed. The participants were over 55, in good general health and lived with their spouse. The participants included: one person with moderate mixed aphasia, one with a moderate Wernicke's aphasia, and one with severe mixed aphasia. Each conversation was transcribed and analyzed qualitatively with Conversation Analysis (CA, Sacks, Schegloff, & Jefferson, 1974). This analysis aimed to characterize the contributions of the spouse when the aphasic person was speaking with the interviewer, the context in which spouses contributed, the reactions of people with aphasia and their participation following contributions. The observations and descriptions collected were grouped and some definitions of behaviours of interest were created. With regard to repairs, a comparative procedure based on Schegloff, Jefferson, and Sacks's (1977) model of repairs was carried out. For the "speaking for" behaviors, a comparison with the study of Croteau, Vychytil, Larfeuil, and Le Dorze (2004) was carried out. Definitions were operationalized, tested and refined on eleven other aphasic couples involved in the same interactive situation.

Definitions

A contribution of the spouse was defined as a conversational turn of the spouse which occurred when the person with aphasia was clearly discussing with the interviewer. These contributions were classified in three types ('speaking for', 'repair' and 'support'). A contribution was labelled 'speaking for' when the non-aphasic spouse expressed an opinion or where he/she added information to the conversation. 'Repairs' referred to efforts made to repair trouble in conversation (often called other repair) and supportive behaviors were advice from the spouse on how the person with aphasia should proceed to speak (e.g. 'do it more slowly') or verbalisations of spouse on what the person with aphasia is experiencing ('she has difficulty expressing herself'). Other behaviors which permitted to maintain the conversation (e.g. approbation or request for clarification) were not considered.

The 'repairs' were further described in six subtypes (revision, word suggestion, verification of hypotheses, corrections, redirecting to the topic and interviewer repair) 'Supports' were divided in three sub-types (elicitation of a verbal production, support to continue and acknowledgment of difficulties). Also, the contributions were considered in their context. More precisely, the contributions were qualified as solicited (verbally or not) or unsolicited by the person with aphasia. The reaction of the person with aphasia following the contributions of his/her spouse in terms of explicit approval, non-explicit approval, rejection and ambivalent reaction was described. Also, the impact of the contributions on the participation of the person with aphasia was qualified in comparison to the spouse participation (major, minor, equal and undetermined). Verbal and nonverbal information was used to qualify the participation.

Interactive situation

An interview format was used in which participants were asked their opinion on questions of potential interest for their age group. First, one participant picked a card on which one question was written and the interviewer, an experienced speech and language pathologist, asked it to him/her. When the interviewer judged that she knew the opinion of this participant, she asked the question to the other member of the couple. Once this last participant had answered the first question, she/he picked a second card, then the interviewer asked him/her the second major question and so forth. Interviews were videotaped at home for the couples employed to develop the procedure and in a room at the university for the results presented in the next section. Fifteen minute samples were analyzed with the next participants.

Participants

Eight French-speaking couples with one member suffering from aphasia are presented in Tables 1 and 2.

Reliability

Reliability was established by comparing the results of a trained independent observer with those of the second author in two of the eight conversations, which accounts for 32% of total contributions. Point by point reliability was 89% for the identification of contributions. Other reliability scores varied between 90% and 97%.

Tableau 1

Participant	Age (years)	Sex	Education (years)	Months post CVA	Type of aphasia ¹	Severity ²	Oral comprehension $(/47)^1$
1	83	W	11	30	Broca	2	38
2	63	М	20	45	Mixed	4	47
3	63	W	18	23	Mixed	2	28
4	62	М	11	14	Broca	4	47
5	57	М	11	8	Broca	1	43
6	67	М	7	65	Broca	3	43
7	63	М	11	90	Broca	2	42
8	83	М	5	23	Sub- cortical	4	47

Characteristics of the Participants with Aphasia

¹Based on responses on the *Protocole Montréal-Toulouse : Examen de l'aphasie (M1 Beta)* (Nespoulous et al., 1986). ²Based on the subjective scale of the "Boston Diagnostic Aphasia Evaluation" (Goodglass & Kaplan, 1983)

Table 2

Participant	Age (years)	Sex	Education (years)	Length of relationship (years)
S-1	86	М	20	63
S-2	58	W	13	40
S-3	62	М	9	29
S-4	62	W	10	37
S-5	56	W	11	34
S-6	65	W	7	46
S-7	64	W	16	43
S- 8	66	W	12	40
Mean	64	2M/6W	12	41

Results

The results presented in this section concern 'repairs' and 'speaking for' contributions. The results for 'support' and the different sub-types of 'repairs' are not presented because of their low frequency of occurrence.

Table 3 shows that a mean of 15.13 contributions were produced by spouses. Half of these contributions were 'repairs' (Mean = 7.38) and the other half were 'speaking for' (Mean = 7.75). Most often, the contributions were unsolicited 'speaking for' (Mean = 7.12) and repairs (Mean = 5.13). However, repairs (Mean = 2.25) were more frequently solicited than 'speaking for' (Mean = 0.63). On the whole, spouses produced a mean of 12.3 unsolicited contributions.

Following their spouse's contributions, persons with aphasia explicitly approved the contribution half of the time (Mean = 7.5) or did not explicitly react (Mean = 4.75). In other words, it was uncommon that a person with aphasia rejected a contribution or had a ambivalent reaction following a contribution of his/her spouse.

Following a contribution of the spouse, the aphasic persons generally continued to be major participants in the conversation (Mean = 12.3). There were a few instances however where

the aphasic person decreased his/her participation in the conversation, especially after an unsolicited 'speaking for' contribution (Mean = 1.5).

Discussion

The procedure employed is representative of situations experienced by couples affected by aphasia, i.e. visiting a professional or entertaining a guest at home. Moreover, the methods of data collection and analysis appear applicable in clinical situations. In addition, the type of analysis, derived from both qualitative and quantitative traditions could be useful for measuring differences between couples and for testing efficacy of therapy.

Our results indicate that spouses are active in the interview situation when the aphasic person has the floor. On average they contribute once every minute in a manner which appears positive for the flow of conversation. In fact, aphasic persons most often approve what their spouse has contributed and continue to participate fully in the conversation after their spouses' contributions. However, some differences appear to be of interest. For example, unsolicited speaking for behaviors are the only behaviors on the part of the spouse that are followed by a decrease in participation in the conversation by the aphasic person. Moreover, the relatively large standard deviations indicate variability in the sample. This may signify that an individual analysis of couples will yield useful information. Further studies with more participants may alleviate this limitation and may help to study different sub-types of repairs and the support behaviors we had originally observed.

Table 3

Means and Standard Deviations for the Different Reactions and Types of Participation of People with Aphasia Following Solicited or Unsolicited 'Speaking for' Behaviours and 'Repairs' Produced by their Spouses (N = 8)

		Speaking for behaviours			Repairs			
		Unsolicited	Solicited	Total	Unsolicited	Solicited	Total	Total
Reaction	Explicit approvals	3.37 (2.4)	0.13 (0.4)	3.50 (2.2)	2.62 (2.7)	1.38 (1.7)	4.00 (3.5)	7.50 (4.9)
	Non-explicit approvals	2.87 (2.2)	0.13 (0.4)	3.00 (2.4)	1.38 (1.3)	0,37 (0.7)	1.75 (1.9)	4.75 (3.2)
	Rejects	0.50 (0.8)	0.25 (0.5)	0.75 (1.2)	0.50 (1.1)	0.38 (0.5)	0.88 (1.4)	1.63 (1.8)
	Ambivalent reactions	0.38 (1.1)	0.12 (0.4)	0.50 (1.4)	0.63 (1.4)	0.12 (0.4)	0.75 (1,49)	1.25 (1.8)
	Total	7.12 (4.5)	0.63 (0.9)	7.75 (5.0)	5.13 (4.9)	2.25 (2.3)	7.38 (6.4)	15.13 (7.8)
Participation	Major	5.12 (3.3)	0.38 (0.7)	5.50 (3.9)	4.62 (4.9)	2.13 (2.4)	6.75 (6.5)	12.25 (7.7)
	Minor	1.50 (1.1)	0.25 (0.5)	1.75 (1.3)	0.13 (0.4)	0.12 (0.4)	0.25 (0.5)	2.00 (1.3)
	Equal	0.50 (1.1)		0.50 (1.1)	0.25 (0.5)		0.25 (0.5)	0.75 (1.0)
	Undetermined				0.13 (0.4)		0.13 (0.4)	0.13 (0.4)
	Total	7.12 (4.5)	0.63 (0.9)	7.75 (5.0)	5.13 (4.9)	2.25 (2.3)	7.38 (6.4)	15.13 (7.8)

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