## The role of nonverbal information in dialogues involving persons with aphasia – two case examples

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The paper aims to describe the enhanced role of nonverbal/nonvocal information in the process of establishing mutual information in dialogs involving aphasic persons.

Interactions with aphasic persons contain what is usually called "extended repair sequences", containing features such as trouble source, establishment of problem, establishing framework for co-participation, hint and guess phase and prolonged confirmation phase (Goodwin 1995, Laakso and Klippi 1999). These features are often described as phases, but can also occur as fairly mixed elements. It is possible to look at long repair sequences as mainly containing one extended repair or a series of related repairs. Long repair sequences have, for example, been studied by Goodwin 1995, Laakso, 1992, 1997, Ferguson 1994, Milroy and Perkins 1992 and Perkins 1993.

This type of sequences provides extreme examples of how mutual information is constructed using both verbal and nonverbal/nonvocal means. Nonverbal/nonvocal communication in interactions involving persons with aphasia has been described in studies by, among others, Larkins and Webster 1981, Feyereisen 1983, 1988, Ahlsén 19985, 1990, Smith 1987, Le May et al. 1988 and Hadar 1991. point studies to the These fact nonverbal/nonvocal communication is a possible compensatory strategy and that it is used more by persons with aphasia and their interlocutors than in corresponding conversations with only non-aphasic persons.

The present study aims to describe how nonverbal/nonvocal communication is used in dialogs with an aphasic participant, and what role it plays in the build-up of mutual information.

Two interactions involving long repair sequences were analyzed. The two interactions were (i) a conversation between a woman with conduction aphasia and severe anomia and a speech therapist about the aphasic woman's occupation, and (ii) a conversation between a woman with Broca's aphasia and anomia and a speech therapist about where the aphasic woman were going when they met the day before.

The analysis was made contribution by contribution with respect to verbal and nonverbal/nonvocal features. Each contribution was analyzed considering comprehension/interpretation of the previous utterance as well as production/expression and evoking subsequent reactions in the interlocutor.

The general framework for analysis is that of activity based communication analysis (Allwood 1984, 1995, Ahlsén 1995) which relates the verbal and nonverbal/nonvocal behavior to relevant background factors pertaining to the activity at hand and the background of the participants and shows how information is progressively built-up by the interaction of background factors with observable behavior.

The role of nonverbal/nonverbal communication is especially treated with respect to production and comprehension of each of the following communicative functions:

- (i) reference
- (ii) communicative acts
- (iii) sequentiality
- (iv) feedback

The ways in which the role of nonverbal/nonvocal communication is crucial for building mutual information in this context is demonstrated by examples and discussed.

## REFERENCES

Ahlsén, E. 1985. Discourse Patterns in Aphasia. Gothenburg Monographs in Linguistics 5. Göteborg University, Department of Linguistics.

Ahlsén, E, 1991. Body communication as compensation for speech in a Wernicke's aphasic – a longitudinal study. *Journal of Communication Disorders* 24, 1-12.

Ahlsén, E. 1995. An activity based approach to aphasia. *Gothenburg Papers in Theoretical Linguistics* 77. Göteborg University, Department of Linguistics

Allwood, J. 1984. On relevance in spoken interaction. In S. Bäckman and G. Kjellmer (eds.)

- Papers on Language and Literature, Acta Universitatis Gothoburgiensis, 18-35.
- Allwood, J. 1995. An activity based approach to pragmatics. *Gothenburg Papers in Theoretical Linguistics* 76. Göteborg University, Department of Linguistics.
- Ferguson, A. 1994. The influence of aphasia, familiarity and activity on conversational repair. *Aphasiology* 8, 143-157.
- Feyereisen. P. 1983. Manual activity during speaking in aphasic subjects. *International Journal of Psychology* 18, 545-556.
- Feyereisen, P., Barter, M., Goosens, M.. & Clerebaut, N. 1988. Gestures and speech in referential communication by aphasic subjects: channel use and efficiency. *Aphasiology* 2, 21-32.
- Goodwin, C. 1995. Co-constructing meaning in conversations with an aphasic man. *Research on Language and Social Interaction* 28, 233-260.
- Hadar, U. 1991. Speech-related body movement in aphasia: period analysis of upper arms and head meovement. *Brain and Language* 42, 339-366.
- Klippi, A. 1996. Conversation as an Achivement oin Aphasics. Studia Fennica Linguistica 6. Helsinki, Soumalaisen Kirjallisuuden Seura.
- Laakso, M. 1992. Interactional features of aphasia therapy conversation. In R. Aulanko & M.

- Lehtihalmes (eds.) *Studies in Logopedics and Phonetics* 3. Publications of the Department of Phonetics. University of Helsinki, Series B: Phonetics, Logopedics and Speech Communication 4.
- Laakso, M. 1997. Self-initiated repair by fluent aphasic speakers in conversation. Studia Fennica Linguistica 8. Helsinki, Soumalaisen Kirjallisuuden Seura.
- Larkins, P. & Webster, E. 1981. The use of gestures in dyads consisting of an aphasic and a nonaphasic adult. In R. Brookshire (ed.) *Clinical Aphasiology Conference Proceedings*, Minneapolis: BRK Publishers, 120-126.
- Le May, A., David, R. & Thomas, A. 1988. The use of spontaneous gestures by aphasic patients. *Aphasiology* 2, 137-145.
- Perkins, L. 1993. The Impact of Cognitive Neuropsychological Impairments on Conversational Ability in Aphasia. Unpublished PhD Thesis. University f Newcastle-upon-Tyne, Department of Speech.
- Milroy, L. & Perkins, L. 1992. Repair strategies in aphasic discourse: towards a collaborative model. *Clinical Linguistics and Phonetics* 6, 27-40.
- Smith, L. 1987b. Fluency and severity of aphasia and non-verbal competency. *Aphasiology* 1, 291-295.