Title:

The linguistic construction of interpersonal processes among people with dementia: A application of Systemic Functional Linguistics

Introduction

Positive social interactions and relationships have been shown to be important for persons with dementia, promoting the general sense of well-being for the person with dementia in long-term residential care facilities (Clare, Rowlands, Bruce, Surr, & Downs, 2008; Graneheim & Jansson, 2006; Hubbard, Tester, & Downs, 2003a; Surr, 2006). However, the impairments in language and communication associated with dementia can affect the ways in which people with dementia negotiate everyday interpersonal processes - the interactive processes from which relationships are constructed. A review of the literature indicates that research investigating the nature of interpersonal processes among people with dementia remains relatively undeveloped. As yet, there is a lack of systematic understanding of the nature of -interaction among people with dementia and also their relational perceptions of these interactions (However, see Hubbard, Tester, & Downs, 2003b; Wiersma & Pedlar, 2008; Williams & Roberts, 1995) This study proposes to address this research gap by investigating how people with dementia use linguistic resources to construct their roles and relationships with other people with dementia in a) their talk about others, and b) their talk with each others. This study is a dissertation in progress and is expected to be completed before the start of the conference.

Method

Participants

Following approval by the University Institutional Review board, five persons with dementia (four females, one male; age range between 80-90 years) were recruited from a local special care assisted living facility. All participants had a medically documented diagnosis of probable Alzheimer's dementia and were of general good health. All participants spoke English as their first language. To provide baseline measures of the level of cognitive and linguistic impairment, participants were tested on the Mini Mental State (MMSE) (Folstein, Folstein, & McHugh, 1975) and selected subtests of the Arizona Battery for Communication Disorders of Dementia (ABCD) (Bayles & Tomoeda, 1993). Classification of the severity of dementia was based on this testing. Descriptive data was extracted from the resident's medical records, including age, gender, race, hearing, and vision. Table 1 contains a summary of participant details.

8, 11	Age	Severity	Gender	Hearing	Vision
LT	89	Mod-Severe	F	Hearing aid on Left ear.	Wears glasses
DD	90	Mild	M	Poor hearing, refuses	Wears glasses
				hearing aids	
DR	80	Mod-Severe	F	Intact	Reading glasses,
		Did not complete			Blind in Left eye
		ABCD subtests			
OS	84	Mod-Severe	F	Intact	Wears glasses
SL	90	Refused all testing	F	Intact	Wears glasses

Procedure

The study collected 2 researcher-single participant sessions and also 2 researcher-group sessions for each participant. The researcher-single participant sessions addressed how people with dementia construct their roles and relationships in their talk *about* others and the researcher-group sessions addressed talk *with* others. All data collection sessions were audio-recorded. The researcher single-participant sessions comprised informal interviews between the researcher and the participant during which the researcher sought to gather information about the participants' experiences on living in residential care, interactions with other residents, their perceptions of other residents, and their roles and relations with other residents. Photographs of various residential activities and other residents, from an existing stock of photographs held by the care facility, were presented to prompt discussions. The researcher-group session comprised two participants, with the researcher present, engaging in naturalistic conversation. This was repeated for each participant so that each individual was recorded with two other different participants. *Analysis*

Recording of all sessions were transcribed by the first author. The transcripts were analyzed using Systemic Functional Linguistics (SFL) (Halliday & Matthiessen, 2004). In the SFL framework, language is viewed as a functional resource with three main functions. First, the ideational metafunction provides a model of language as representing human experience and meanings about the world. Next, there is an interpersonal metafunction in language which allows us to enact our personal and social relationships with other people around us. And finally, the textual metafunction relates to the construction of text and carries meaning about the message itself. The conversation transcripts are analyzed as follows:

- 1. Analysis of experiential metafunction of the participants' language as reflected in the choices within the Transitivity system
- 2. Analysis of the textual metafunction using a Thematic analysis.
- 3. Analyses of interpersonal metafunction
 - a) Analysis of the Appraisal system which is concerned with "evaluation, the kinds of attitudes that are negotiated in the text, the strength of the feeling involved, and the ways in which values are sourced and readers aligned" (Martin & Rose, 2003, p. 22). This will involve an analysis of the type of modal assessment and the domain of manifestation (e.g. clause nexus of projection, nominal group etc.) as related to the appraisal type (appreciation, affect, judgement, amplification). This will be done for both the individual-participant sessions and the group sessions.
 - b) Analysis of interpersonal speech functions used by the participants to negotiate the flow of their interaction and the realization of the speech functions used in choices of the Mood system.

Results

Preliminary results indicate that the grammatical tools (i.e. Mood system) that involve participants in interaction and reflect on role-selection are intact. However, systems of reference are impaired, which makes the co-construction of content more difficult for participants. In addition to the impairment of reference systems, there is a tendency towards topic perseveration (food, or money, or the like) in the participants talk about others as well as talk with others Together with a lack of orientation to current environment, topic perseverations frequently result in the conflation of participants' identity (self and others) with the experiential content available through that of the perseverated topic (which is frequently not oriented to reality). Further results and implications of the study will be discussed.

References

- Bayles, K. A., & Tomoeda, C. K. (1993). *Arizona battery for communication disorders of dementia*. Bellemont, AZ: Canyonlands.
- Clare, L., Rowlands, J., Bruce, E., Surr, C., & Downs, M. (2008). The experience of living with dementia in residential care: An interpretative phenomenological analysis. *The Gerontologist*, 48(6), 711-720.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). Mini-Mental State: A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, *12*(3), 189–198.
- Graneheim, U. H., & Jansson, L. (2006). The meaning of living with dementia and disturbing behaviour as narrated by three persons admitted to a residential home. *Journal of clinical nursing*, 15(11), 1397–1403.
- Halliday, M. A., & Matthiessen, C. M. (2004). *An introduction to functional grammar*. New York.
- Hubbard, G., Tester, S., & Downs, M. G. (2003a). Meaningful social interactions between older people in institutional care settings. *Ageing and Society*, 23(1), 99–114.
- Hubbard, G., Tester, S., & Downs, M. G. (2003b). Meaningful social interactions between older people in institutional care settings. *Ageing and Society*, 23(1), 99–114.
- Martin, J. R., & Rose, D. (2003). Working with discourse: Meaning beyond the clause. London: Continuum.
- Surr, C. A. (2006). Preservation of self in people with dementia living in residential care: A socio-biographical approach. *Social Science & Medicine*, 62(7), 1720–1730.
- Wiersma, E. C., & Pedlar, A. (2008). The nature of relationships in alternative dementia care environments. *Canadian Journal on Aging*, 21, 101-108.
- Williams, B., & Roberts, P. (1995). Friends in passing: Social interaction at an adult day care center. *International Journal of Aging and Human Development*, 41(1), 63-78.