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5. LANGUAGE AND DEMENTIA: SOCIOLINGUISTIC ASPECTS[1]

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This review of sociolinguistic aspects of language and dementia focuses on studies that (1) examine naturally occurring language with attention to variation that relates to speakers' cognitive or sociocultural attributes or to dimensions of the communicative context, (2) provide a nuanced understanding of individuals with dementia or contexts of communication that may illuminate sociolinguistic analyses, or (3) call for sociolinguistic investigations to clarify or provide additional evidence for a particular finding outside of linguistics. Structured from the global to the local levels, the review begins with literature that frames the study of language and dementia from the societal or cultural perspective, focusing on public discourse relating to dementia and Alzheimer's disease. Studies that shed light on social activities and physical environments are addressed next as possible influences on the shape of the discourse. Finally, investigations of verbal and nonverbal aspects of discourse produced by and with individuals with dementia are reviewed. Ideas for future research are outlined along with a call for increased cross-disciplinary cooperation among researchers who work at the intersection of language, dementia, and society.

Introduction

Twenty years ago, when work on the intersection of language and dementia was in its relative infancy, Bayles and Kaszniak (1987, p. 175) recommended that systematic study of the conversational abilities of dementia patients supplement more typical research within the experimental paradigm, not only because the loss of such abilities was thought to be an early marker of dementia, but also because such studies could help researchers find out how patients used language in everyday life.

The past two decades have seen an energetic and creative response to that call, although, given its importance, perhaps to a lesser degree than one might expect. The majority of work on language and dementia continues to be carried out from a neurolinguistic or psycholinguistic perspective (see Kempler & Goral, 2008, this issue). To my knowledge, the publication of my revised doctoral dissertation, *Conversations with an Alzheimer's Patient: An Interactional Sociolinguistic Study*, was the first in the wave of studies to depart from the dominant clinical paradigm with

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its experimentally elicited language data and to focus on social interaction. In Hamilton (1994a), I analyzed the language of open-ended, naturally occurring, and meaningful conversations I had with an individual with Alzheimer's disease over 4.5 years in her nursing home. This study was an attempt to understand not only how communicative abilities and disabilities were related to each other and how they changed over time, but also, importantly, how these were influenced by both preemptive and reactive communicative behaviors on the part of the conversational partner. Ramanathan (1995, 1997) and Ramanathan-Abbott (1995) then extended this focus on interactional effects to examine how narratives told by speakers with Alzheimer's disease were shaped according to differences in audience and setting.

In subsequent work, I incorporated notions of face (Goffman, 1967), linguistic politeness (Brown & Levinson, 1987), and positioning theory (Davies & Harre, 1990) to investigate the social construction of identities in oral (Hamilton, 1996, 2008) and written (Hamilton, 2000) communication by individuals with Alzheimer's disease, linking this work to studies that discuss the health consequences of communicative practices involving older adults (see Giles, Coupland, & Wiemann, 1990; Ryan, Giles, Bartolucci, & Henwood, 1986). In all of this work, Alzheimer's disease is approached as a human issue within multiple linguistic and social contexts, rather than exclusively as a slowly progressive disease of the brain.

Focusing attention on the most recent scholarship on language and dementia, note that the motivation for sociolinguistic research comes from what Leibing (2006, p. 242 ff.) calls the "personhood movement" in Alzheimer's studies (cf. Kitwood, 1997), in which "personhood" refers to "the person within—the reflexive, immaterial, communicable essence of a person that is located deep within the body, but that is sometimes veiled by symptoms" (Leibing, p. 243). This shift away from the more pervasive medical model of dementia is reflected in its emphasis on the "capacities of the feeling person and not only on his or her losses" (Leibing, p. 255), as well as on a redefinition of memory as "interactive and not individualized" (Leibing, p. 255). Not surprisingly, this shift toward a focus on personhood has been accompanied by a heightened interest in applying the findings of basic research to help individuals with dementia and those who care for them, for example, by enhancing communication and raising self-esteem. In fact, it could be argued that most studies reviewed here were motivated by the observation that "relatively little can be done to arrest the underlying brain disease, [but] much can be done to promote health and wellbeing" (Downs, Clare, & Mackenzie, 2006, p. 248), resulting in a focus on the identification of active coping strategies and the enhancement of social environments for the individual with dementia.

To differentiate the scope of literature reviewed here from that reviewed by Kempler and Goral (2008) in this issue, I focus on studies that (1) examine naturally occurring language (i.e., not language produced within clinical or experimental contexts in response to standardized instruments) with attention to variation within that language that relates to speakers' cognitive or sociocultural attributes (e.g., severity of the disease, first or second language, race, ethnicity, socioeconomic status, and sex) or to contextual dimensions of the language (e.g., interlocutors, physical

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setting, and social activity); (2) provide a rich understanding of speakers with dementia or contexts of communication that can illuminate sociolinguistic analyses; or (3) call for sociolinguistic investigations to clarify or provide additional evidence for a particular finding outside of linguistics.

This review is structured from the global to the local levels; that is, I begin with literature that frames the study of language and dementia from the societal or cultural perspective, focusing on public discourse surrounding dementia and Alzheimer's disease. I then focus in on contextual dimensions of specific interactions in society, first examining the influences of the type of activity in which participants are engaging and then turning to the shaping influence of the physical environment. The following section zeroes in on aspects of the communication itself, discussing findings related to verbal communication before turning to those related to nonverbal communication. The review closes with implications for future research into sociolinguistic aspects of language and dementia.

Public Discourse: Framing of Dementia and Consequences for Interaction

Snyder (2006) reported the following exchange within a support group meeting for individuals with Alzheimer's disease.

> L: *Once you have that label [Alzheimer's], it changes the way people communicate with you. Everyone treats you with ..uh.. you know, they don't want to. . .*
> K: *Upset you.*
> L: *Yeah, upset you or anything like that. You're just treated differently.* (p. 267)

Why would it be the case that people communicate differently with individuals who have "that label" of Alzheimer's disease? Johnstone (2002, p. 227) proposed an answer when she highlighted the relationship between what speakers perceive to be "real, natural or true about the world" and their discourse practices, exploring how elements of ideology "shape what people do with talk, what they do not do, how they interpret discourse."

What kinds of ideologies may be at work here? I have already mentioned differences in perspective within the scholarly community working on language and dementia. In this sense, Cohen (2006, pp. 7–8) juxtaposed what he termed the "total biologization of senility" (where internal disease processes inform all discussions of changes in late life) with the "personhood" turns in clinical practice and social science research mentioned earlier. But clearly I am not concerned solely with scholarly debates; the general public is immersed in public discourse that shapes its views of people with dementia—and this public discourse is indeed what can vary across cultures, societies, and institutions.

Downs et al. (2006) outlined four explanatory models or belief systems about the cause of dementia that circulate in the public sphere, each of which has

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implications for the individual with dementia as well as for an understanding of the therapeutic efforts required to provide support. Of these belief systems, Downs et al. (p. 244) claimed that the "neuropsychiatric" model, in which the focus is on the underlying brain disease, dominates Western discussions (but see Ridge, Makoni, & Ridge, 2003, for a South African perspective). In this model, psychosocial aspects of dementia are neglected because "intellect and reasoning are valued above relational and aesthetic aspects." This connects very clearly to Post's (1998, p. 72) notion of the "hypercognitive culture" (cited in Sabat, 2001, p. 320), which values cognition over other dimensions of life. Post maintained that hypercognitive cultures diminish individuals with dementia by "reducing their moral status or by neglecting the emotional, relational, aesthetic, and spiritual aspects of well being that are open to [these individuals], even in the advanced stages of the disease."

In their useful, multifaceted textbook, *Approaches to Discourse Analysis in Dementia*, Guendouzi and Muller (2006, p. 146 ff.) highlighted the importance of critical discourse analysis (cf. Fairclough 1989, 1995) in examining the linguistic choices made within media discourse related to dementia. They claimed that such analyses of Western cultural texts reveal "hegemonic discourse practices" that represent dementia as "loss of self" and the individual with dementia as an "empty shell" (see also Kontos, 2006, p. 195). Guendouzi and Muller stated that these public discourses find their way into language used by individuals in Alzheimer's support groups (and more generally as well).

Snyder (2006, p. 268) made the explicit connection between negative media images and effects on person-to-person communication, stating that "socially constructed fictions such as 'the loss of the self,' 'empty shell,' and the prospect of 'a long goodbye'" can affect communication in both subtle and dramatic ways. She introduced Vaihinger's "as if" philosophy (Vaihinger, 1924) into her argument that conversational partners can choose between communicating with people with dementia "as if" their self is diminished or "as if" there is still a "self trying to be recognized." In the former case, it is less likely that interlocutors will be able to "hear the intact messages that are expressions of . . . personal identity."

Sabat (2006, p. 297) made a similar point from the perspective of positioning theory (Davies & Harre, 1990). In what Sabat termed "malignant positioning," an individual's actions are attributed to dementia and not seen as possible *intentional* acts on the part of the person (e.g., when the source of an unwillingness to participate in an assisted living center's bingo game is not understood as possibly being related to an individual's lifelong dislike of bingo). Sabat argued that such malignant positioning can be counteracted when conversational partners see the person with dementia as "much more than a patient—as a person who can have a variety of valued social identities." The linguistic details of such moment-to-moment shifts in positioning can be found in Hamilton (1996).

In fact, it is this critical two-way relationship between interlocutors' conversational actions (e.g., positioning, communicating "as if," etc.) and communicative behaviors and levels of self-esteem of the individual with dementia

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that is at the heart of the sociolinguistic perspective on this issue. When the experience of living with dementia is understood as the result of dialectical interplay between brain disease and psychosocial factors (Downs et al., 2006), it becomes important to extend outward beyond specific analyses of individuals' linguistic production and comprehension to encompass relevant aspects of the social context of this language use. In the following two sections, I borrow the term "talk-in-interaction" from the field of conversation analysis (cf. ten Have, 1999) to focus attention on the fact that communication can best be understood in relation to its surrounding interactional contexts. I begin by highlighting the "interaction" part of the term, first discussing the activity of which the talk is a part followed by aspects of the physical environment of such talk. I then turn to the "talk" part of the term, discussing verbal aspects of communication followed by nonverbal aspects.

Talk-In-Interaction: Focus on Interactional Contexts

Over the years, studies of language and dementia have typically examined language elicited by standardized testing within a clinical setting or as part of interviews or conversations with a researcher. Because differences inherent in interactional contexts have been shown to result in differences in language produced and comprehended, some researchers have identified different contextual features as being at least partially responsible for contradictory findings across studies (see Light, 1993; Melvold, Au, Obler, & Albert, 1994). McLean (2006, pp. 167–168), for example, suggested that some discouraging assessments may result from the artificial experimental conditions under which language was produced as well as from the power differential this creates between subject and researcher. In addition to these contextual differences related to activity and purpose, Ramanathan (1997) identified the relationship between conversational partners as an influential factor on language used by individuals with dementia.

In an attempt to provide interested sociolinguists with sufficient opportunities to study similarities and differences in language used by individuals with dementia across different contexts, I have recommended (cf. Hamilton 2005, pp. 237–238) the systematic recording of interactions that go beyond the typical extended conversations and interviews to include those with a wider range of purposes and interlocutors. To that end, some recent work has focused on activities in which individuals with dementia are engaged with interlocutors other than researchers or clinicians. Additional work has problematized aspects of the physical context of the communication, including both the built environment and the function of inanimate objects. These two areas of the interactional context are reviewed in turn.

Focus on Activity

In their longitudinal study of elderly in Taiwan, Glei et al. (2005) found that voluntary participation in social activities (such as playing games; doing volunteer work; and participating in religious groups, business associations, or political groups) has a greater impact on the maintenance of cognitive function than do regular

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interactions with family members and friends. In a response to this study, Gallacher, Bayer, and Ben-Shlomo (2005, p.1) called for more detailed investigations that would "unpack the social engagement 'black box'" and identify the relative importance of various characteristics of these social activities. Although a great deal more work needs to be done in this area, several studies suggest relevant dimensions.

Not surprisingly, perhaps, activities examined in studies of dementia frequently relate in some way to memory. Some activities for individuals in the relatively early stages of dementia are designed with an *explicit* focus on memory, either through conversations encouraging personal reminiscence or in the form of memory games. Basting (2006, p.193) suggested that this encouragement to remember the past may be triggered by assumptions on the part of caregivers that people with dementia have "no meaningful present." In her study of a day care center for Swedish speakers in Finland, Lindholm (in press) discussed face-threatening aspects of the moment-to-moment management of what she called the "interactional noncompetence" displayed within the context of a memory game based on Swedish proverbs. During the game, a nurse read the first part of a proverb aloud, creating a slot that the individual with dementia was supposed to fill by producing the second part of the proverb. The transcript excerpts of these interactions suggest that the individuals viewed this activity as less of a game than a memory test.

In contrast, Snyder (2006), Basting (2006), and Kontos (2006) all discussed activities that downplay the focus on memory, since "individuals' own self esteem can be battered within therapies that focus on reminiscence or reality orientation, or even in personal interactions with family members and friends who insist on memory work" (Kontos). For example, in relatively early stages of dementia, when individuals affected can recognize a gap between what they can remember and what they *should* be able to remember, support groups can be an important activity to counteract attempts by personal or professional caregivers to "maintain positions grounded in 'reality'" (Snyder, p. 266). Support groups that focus on coping strategies, finding meaningful activities, and struggling with change and autonomy allow "affirming, engaged discourse that is rarely afforded people with dementia as they attempt to navigate mainstream life." Within this activity, speakers are free from judgmental responses by conversational partners who may be frustrated with what they view as fictional or repetitious talk coming from those with dementia.

For individuals in the moderate stages of dementia, the language and memory challenges associated with reminiscence, proverb games, and support groups may be too great, leading to frustration and shame. Basting (2006) described the TimeSlips Project, a program she developed in response to this dilemma. This project, which shifts focus from memories of the past to creativity in the here and now, can "open up channels of communication with people with ADRD [Alzheimer's disease and related disorders] and offer both client and caregiver the potential for growth"(Basting, p. 194). Rather than expecting individuals to come up with stories from their past, facilitators hand out a visual image to each member of a small group and ask many open-ended questions of group members, with the resulting creative story being based on all members' responses. This process provides an "avenue for

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self-expression that frees [individuals with dementia] from the demands of memory and rational language" (Basting, p. 193).

Finally, when the stage of dementia is even more advanced, Kontos (2006) emphasized the importance of routine activities in helping to maintain a sense of normalcy in life. In her ethnographic study of an Alzheimer's support unit of an Orthodox Jewish home for the aged in Canada, Kontos explored the notion of selfhood in the face of what she called "severe cognitive impairment." She beautifully illustrated "the body's concrete, spatial, and prereflective directedness toward the lived world" (p. 203) in a series of powerful and poignant vignettes that understand automatically performed activities in the nursing home (e.g., Jewish rituals) as "active presence of the past in the body itself" (p. 209). From this perspective, the construction of self need not be reliant on language per se, but can be "enacted in the actual movements of the body." Kontos argued, furthermore, that this embodied selfhood goes beyond historical rituals to include residents' mastery of their social world through "the rhythm of ongoing interactions of daily life."

Focus on Physical Context

In addition to the focus on the shaping contextual influence of the activity type, other scholars have pointed to the relevance of the physical context, including the built environment of, for example, nursing homes and assisted living centers, as well as inanimate objects in the physical surroundings. In an intriguing study of seven Alzheimer's special care units, Zeisel et al. (2003) found associations between behavioral health measures and particular environmental design features of those units. For example, as reported by nurse observers, individuals with Alzheimer's disease displayed less anxiety and aggression in special care units that appeared more residential and less institutional and allowed for more privacy and personalization of rooms. Importantly, the amount of variability among common spaces in a facility was negatively correlated with social withdrawal, the variable that is centered most on communication; that is, residents with Alzheimer's disease were observed to initiate more interactions, respond more to social contacts, pay more attention to things around them, and help other residents more when the common spaces of the facility did not all look the same. From an ethnographic approach, Chatterji (2006, p. 227) concurred with Zeisel et al. about the importance of the lived environment, although given her ethnographic perspective, she understood decisions regarding public and private spaces as being related to cultural values (such as autonomy and independence) that are central to the constitution of self and to participation in social life.

As far as I know, no sociolinguistic studies per se focus on the interrelationship of physical context and language (but see Scollon & Scollon, 2003, for a useful theoretical framework) used by individuals with dementia, although studies from neighboring fields make the case that issues of place and space are important areas for future linguistic analyses. Other motivation for such studies comes from early examinations of individuals with dementia that identified what some scholars term "context-boundedness" (Appell, Kertesz, & Fisman, 1982; Obler,

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1981), an individual's reduced ability to free him- or herself cognitively from the immediate temporal and spatial context. In Hamilton (2008) this context-boundedness was evidenced by the vast majority (85%) of communication that referred not to memories of displaced times and places or to abstract thoughts but to people, objects, and actions within the immediate physical environment of the conversation. The balance of talk that did refer to the past was clearly triggered by inanimate objects in the here and now.

Following Kitwood's (1990, 1997) argument that memory should not be understood as inhering solely in individuals, Leibing (2006) raised the possibility of external extensions to memory, both in other persons, where family members and friends can become part of an extended or interpersonal memory (see also Ramanathan, 1997, on scaffolding) and in inanimate objects that become humanized in their integration into personhood. The importance of greeting cards, photographs, and other such personal holders of memory cannot be overestimated in their role as conversational triggers (see also McLean, 2006, p. 163). Such objects can also assist in constructions of self-identity, as observed by Oppenheimer (2006, p. 202): "When a person can no longer describe to the visiting psychiatrist who they are or have been, their home—its atmosphere and the objects in it—can help to do so."

Talk-In-Interaction: Focus on Communication

This section focuses on the tip of the inverted triangle, that is, on the communication—both verbal and nonverbal—that occurs within the some kind of interactional context (third section) and is potentially shaped by public discourse surrounding dementia (fourth section). In Hamilton (2005), I used the metaphors of the *prism*, the *soliloquy*, the *couch*, and the *dance* to highlight four prevalent approaches to the analysis of communication as it relates to dementia. To summarize, the *prism* symbolizes the focus of some researchers on the disembodied display of a variety of linguistic and communicative phenomena that characterize the breakdown that typically occurs as the dementia progresses. From this perspective, selected linguistic or discursive phenomena are analyzed apart from other linguistic or social phenomena, with no specification of a relationship to the speaker or the context of talk beyond possible subsequent straightforward correlations. The *soliloquy* represents work that focuses its analytical attention on the investigation of how individuals with dementia integrate the individual linguistic and communicative phenomena identified by the *prism* approach into a whole discourse. In this approach, linguistic phenomena are analyzed not as separate phonological, morphological, syntactic, semantic, pragmatic, and lexical phenomena, but instead are examined in light of the larger discourse in which they occur—and which they help to construct.

The *couch*—referring to the stereotypical couch found in a psychiatrist's office—represents work that focuses on personal meaning-making, sense-making, and identity construction carried out by individuals with dementia. This approach examines ways in which language is used to display the (potentially) changing identity of the person with dementia or, alternatively, ways in which breakdowns in language over time are responded to by the individual in terms of meaning and self.

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And, finally, the *dance* represents work that focuses its attention on the interaction between language users and the ways in which interlocutors influence each other—both socially and linguistically. In this approach, which highlights the interactions as process rather than as product, researchers examine moment-to-moment turns or moves that display interlocutors' meaning-making and relationship building as these emerge across the interaction. This is crucially different from the discourse approach characterized by the soliloquy, which focuses exclusively on the language produced by the individual with Alzheimer's disease. In the dance, the interdependence between or among partners is accentuated.

Focus on Verbal Communication

With reference to the metaphors in the preceding section, the *dance* is represented by Ryan, Spykerman, and Anas (2005) and Pope and Ripich (2005). Ryan et al. examined 50 audiorecorded and transcribed conversations spanning 4 years with a single individual with dementia who lived in nursing home special care unit. Because these conversations were all held with experienced communicators whose sole purpose was to have a conversation, and not, for example, to carry out other nursing home–related tasks, Ryan et al. aimed to characterize "conversation as care" by identifying transcript examples that promoted personhood in Kitwood's (1990, 1997) sense, where the conversational partner continued to show interest in the person and his life story, preferences, emotions, and needs. Ryan et al. revealed strategies that could be used by healthy conversational partners to facilitate conversations with individuals affected by dementia, such as providing proper nouns (rather than pronouns) and longer pauses to allow formulation of responses. The importance of being able to participate in successful conversations is emphasized by the term, the "warmth of reciprocity," used by Ryan et al. (p. 33) to describe these activities.

Working in the much underexplored area at the intersection of race, gender, and dementia, Pope and Ripich (2005) provided provocative observations regarding topic introduction and maintenance, as well as the impact of institutional speaking practices that may limit the potential for social interaction or response to cues based on common gender or ethnicity. Although they were able to examine only same and differing gender pairs (individual with dementia and caregiver or interviewer) within monoracial African American and European American encounters, contrasts in permissible topics and speaking strategies strongly suggest the importance of further investigations in this area, including expansion into interracial communication—both within groups of individuals with dementia and between caregivers and those receiving their care.

The *soliloquy* is represented by Hamilton (2008), in a study that examined the intersection of narrative, identity, and memory in five tape-recorded conversations over 4.5 years involving an individual with moderate to severe dementia. In this work, I focused first on a set of 204 clauses that referred to the past, differentiating clauses that were part of conversational narratives (56, or 27%) from independent clauses I termed "narrative traces" (148, or 73%). I then identified and examined the linguistic construction of the storyworlds in 15 short conversational narratives comprising the

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56 narrative clauses, including reference to people, objects, activities, states, time, and space. Frequency lists of lexical items and phrases provided evidence that the abilities to use these linguistic building blocks to construct vivid, meaningful storyworlds were highly diminished. These problems began with relatively infrequent references and were exacerbated by the weak semantic nature of those references that were actually made (overwhelmingly including large numbers of personal pronouns and lexical items such as *people, part, thing, place, do, get, make, put, then, when, in, on*, and *over*). I argued that these problems had consequences not only for the coherence of the narratives as texts but also for the discursive construction of the narrator's identity as well.

The *prism* approach is represented by Maclagan and Mason (2005) in their analyses of conversational cohesion, lexical richness, and word class within 50 spontaneous conversations involving one institutionalized individual over 4 years with four different interviewers. The researchers expected that word class and lexical richness would decline over time, but that many features of cohesion would not. Counter to expectations, both the word class analysis (nouns, pronouns, verbs, and adjectives) and the lexical richness showed "fairly wide swings between interviews," indicating that communicatively the speaker appeared to have "good days and bad ones" rather than a "downhill slide through time" (p. 158). The authors argued that the large day-to-day variability within the language of a single person "highlights the difficulties involved in obtaining valid analyses of the language of subjects with Alzheimer's disease" (p. 163) and should cause researchers to interpret results with great caution.

This *prism* approach is also represented by March, Wales, and Pattison[2] (2006) and Davis and Bernstein (2005) in their very different examinations of the "empty" speech also identified in the preceding studies. In their experimental investigation of spatial deixis (e.g., *here, this*), person deixis (e.g., *I, he*), and noun use by 26 speakers with mild to moderate Alzheimer's disease and 26 demographically matched healthy elderly in response to four discourse tasks (description of a single picture, narrative description of sequential pictures, cartoon, and route description in shared vs. unshared contexts), March et al. postulated that speakers with Alzheimer's disease would rely on the communicative context more often (i.e., producing fewer nouns but higher rates of deixis) than the healthy elderly in their attempts to compensate for specific difficulties in naming. They found that the Alzheimer's speakers produced significantly fewer nouns only in the single picture task, used significantly more inappropriate spatial deixis when the context was not shared between speakers (unshared map task), and showed a reduced person deictic use in the unshared map task and in the narrative description of sequential pictures. As a result of these findings, March et al. called for the inclusion of multiple tasks in any future study of discourse production related to dementia; future examinations of the relationship between the severity of Alzheimer's disease and the use of nouns and deixis within less structured discourse types, such as conversation; and future examinations that focus on the perspective-taking ability in deictic use.

By investigating the multiple uses of lexical items *thing* and *that* within spontaneous conversations over the course of 2 years with a single speaker at the

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moderate to moderately severe stage of dementia, Davis and Bernstein (2005) argued for the importance of context in any analysis of "empty" language. Their instructive fine-grained analysis shows that the word thing was used either to substitute for a discrete, countable, and currently visible object or in a colloquial and formulaic phrase (e.g., *There ain't no such thing*) used for emphasis or humor. Their analysis of *that* indicates that, while the speaker continued to use that deictically (to refer to a visible object), anaphorically (to refer to something the interlocutor just said), and as part of formulaic phrases (e.g., *That's the way it goes!*), comprehension of later uses was problematic because the referents appeared to be "only in the speaker's mind" (p. 72). Functional analyses indicated that these lexical items were useful on the social level as well as on the more expected informational level (reference); indeed social, rapport-sustaining functions took on heightened importance as communicative abilities on the information level declined. These observations, in addition to those of Hamilton (2008), Maclagan and Mason (2005), and March et al. (2006) argue that coding of "empty" language as part of a semantic richness analysis may well be too simplistic and needs to be carried out with an understanding of the discursive, social, and physical environments.

Focus on Nonverbal Communication

Turning now to aspects of communication that contain no propositional or verbal content, such as gesture, intonation contours, and laughter, recent work shows fascinating new connections to the role of automaticity discussed in Hamilton (1994a), where the more automatic a language feature or task has become over the experiences of a lifetime, the greater the likelihood an individual will be able to (continue to) use it appropriately. Because verbal communication tends to decline over time in dementia, building on automaticity is promising, in terms both of caregiver response and speaker resources for communication and identity construction. This relatively automatic communication can be nonverbal but vocal, such as intonation contours and laughter, or nonverbal and nonvocal, such as gestures and ways of moving the body.

Even when speech is incoherent and void of linguistic meaning, automaticity is displayed in the smooth and appropriate exchanges of turns-at-talk that consist of intonation contours that can (apparently) be recognized, repeated, and/or responded to. Kontos (2006) described the following interaction as two individuals with dementia were about to eat breakfast at two different tables in a long-term care facility's dining room.

Abe: [sat down] *Bupalupah!* [shouting]
Anna: [twisted around in her chair to be able to look at Abe]
Abe: [eyes wider, smiling] *Brrrrrrr!* [shouting with rising to falling pitch]
Anna: *Brrrrrrr!* [imitating volume and intonation contour]
Abe: *Bah!* [shouting, then pausing while looking at Anna]
Anna: *Shah!*
Abe: *Bah!*
Anna: *Shah!* [turned back around in her chair with her back to Abe]

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Abe: *Bupalupah!* [shouting]
Anna: [raised one arm about her head, lowered it in a swift motion; both then began to eat breakfast] (Kontos, 2006, pp. 206–207)

Kontos (2006) claimed that this exchange illustrates Merleau-Ponty's (1964, p. 7) argument that "communication dwells in corporeality or, more specifically, in the body's capacity to gesture." Importantly, the speakers continued to exhibit intersubjectivity and displayed aspects of self-identity through their bodily posture and the repetition of syllables, volume, pitch, and intonation contours.

Following studies in aphasiology that have focused attention on the employment of nonverbal behaviors to supplement verbalization (Simmons-Mackie & Damico, 1997) and based on her observations of elderly Swedish speakers in a Finnish day care center, Lindholm (in press) investigated how individuals with dementia used laughter in sequences that appeared to be problematic. By carefully analyzing the placement of laughter within the proverb games already described, as well as the nurses' responses to this laughter, Lindholm was able to show the importance of laughter in managing face threats linked to language and memory problems. In her study, individuals with dementia used laughter in sequences that appear to be problematic, either in terms of production or comprehension. In some cases, this nonverbal behavior supplemented verbalization in the form of explicit comments on difficulties or initiation of repair; in other cases, the laughter stood alone. Because the nurses did not usually laugh in response (and therefore seemed to understand that the laughter was managing face problems and not signaling joy or humor), Lindholm claimed that laughter was used successfully by these speakers to demonstrate their inability to carry out the task requested of them.

Moving from vocal to nonvocal communication, a number of scholars point to the importance of body language, for the individual with dementia as well as for the healthy conversational partner. In the former case, nonverbal and nonvocal behaviors acquired and used over a lifetime are intimately connected to the display of the individual's identity or sense of self. In the latter case, these behaviors can be important and comforting resources in the relative absence of verbal communication. To illustrate, Ignatieff (1999) wrote the following about his mother: "It [my mother's disease] changed my view of what a person is. . .. It taught me, for example, to be less sentimental about memory as a carrier of human continuity. My mother had no memory whatever, but she was the same person. There were continuities." Some of these continuities can be discovered by a "heightened awareness of body language" (Chatterji, 2006, p. 218) that may include a focus on tone of voice, facial gestures, mime (Snyder 2006, p. 260), and even muscle memory (Kontos, 2006). Importantly, this focus on the nonverbal allows individuals with dementia to communicate emotions such as anger, joy, and empathy in response to interpersonal interactions even when they are unable to communicate propositional content.

In her moving descriptions of individuals in a long-term care facility, Kontos (2006) highlighted the fact that muscle memory enables certain actions or gestures by

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these individuals to "give off" (cf. Goffman, 1959, for the distinction between information "given" and information "given off") social meaning even in the very latest stages of dementia. Kontos described a woman who was unable to feed herself but who still attempted to take care of her physical appearance:

> As a health care aid was feeding her, cereal dribbled from Molly's mouth and coursed down her chin. When the aide tried to give her another spoonful, Molly wrinkled her forehead and gently pushed the woman's hand away. Molly then lifted her bib to her mouth to wipe away the cereal. It was only after her chin was clean that she accepted another spoonful . . . [later] reaching her wavering hand to the back of her neck, she struggled to pull something from underneath her bib. Extending her arm appeared to cause her pain and discomfort, yet she persisted. She eventually revealed a string of pearls that she was wearing and that had been covered by her bib. She allowed the pearls to pass through her long, slender, perfectly manicured fingers, placing the necklace ever so delicately atop her bib. (Kontos, 2006, pp. 197–198)

Kontos (2006, p. 206) maintained that each of these movements was "inextricably movement and embodied selfhood," that is, that these muscle movements to clean off her chin and to display her pearl necklace worked to construct Molly's self-identity. These movements allowed Molly to highlight a more positive aspect of herself as she attempted to manage her identity in the fact of incontinence, helplessness, and dementia. Observations of this sort are available to attentive and attuned conversational partners and may serve as meaningful evidence of the "continuities" self-described by Ignatieff (1999).

Next Steps: Implications of the State of the Art on Future Research

From the preceding discussion, it should be clear that the intellectual environment is established for highly productive and informative sociolinguistic work at the intersection of language and dementia. Although the need for sociolinguistic work to complement the more prevalent work from neuro- and psycholinguistic perspectives has been known for over 20 years, relatively little work has followed foundational work by Hamilton (1994a, 1994b, 1996), Ramanathan (1995, 1997), and Ramanathan-Abbott (1995). Exciting contributions in neighboring fields, including anthropology, sociology, psychology, and philosophy, have set the stage for fine-grained sociolinguistic analyses to relate linguistic details to aspects of the interactional context or to provide insights into emergent discourse.

Identified gaps call out for additional studies of discourse related to dementia within other languages and cultures, with a focus on both public and private spheres, to facilitate an understanding of the role of cultural values and health beliefs in this area. Recordings and transcripts should be made of a greater variety of activities and physical contexts in which individuals with dementia participate to enable fine-grained sociolinguistic investigations. Sociolinguistic studies should be

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systematically designed with greater attention to variation among individuals so that we can begin to learn more about potential linguistic influences due to sex, first and second languages, professions, education levels, ethnicity, and so on. Because of the linguistic and discursive changes over time that accompany dementia and claims of high levels of day-to-day variability, it is imperative that increased numbers of longitudinal studies be designed and carried out, with an awareness of the heightened role of nonverbal communication to compensate for declining verbal abilities.

Finally, in all this work it is critical that sociolinguistic researchers reach out to the research being carried out within experimental contexts with standardized instruments to bridge the gap between sociological/anthropological perspectives and psycholinguistic/neurolinguistic ones (see also Rabinow, 2003, p. 18 ff., as cited in Leibing, 2006, p. 243). Such cross-disciplinary cooperation will open up the possibility of our understanding the range of abilities and disabilities in relationship to individual characteristics, activities, time, and space. This understanding, then, may help in the development and evaluation of treatments and therapies as we work toward solving the myriad mysteries that lie at the intersection of language, dementia, and society.

Notes

1. In this review I include literature that refers specifically to individuals with Alzheimer's disease, the most prevalent form of dementia, in addition to literature that refers to the general category of dementia.

2. Although this study was carried out within the experimental paradigm with use of standardized instruments, I include it here because of its unusual and important focus on contextual language use (deixis) and its call for conversational studies in further examinations of this topic.

ANNOTATED REFERENCES

Davis, B. H. (Ed.). (2005). *Alzheimer talk, text and context: Enhancing communication*. New York: Palgrave Macmillan.

Hughes, J., Louw, S. J., & Sabat, S. (Eds.). (2006). *Dementia: Mind, meaning and the person*. Oxford, England: Oxford University Press.

Leibing, A., & Cohen, L. (Eds.). (2006). *Thinking about dementia: Culture, loss, and the anthropology of senility*. New Brunswick, NJ: Rutgers University Press.

Scholars wishing to gain a good broad-based understanding from the social sciences on individuals with dementia as well as contexts of communication should read the work in all three of these interdisciplinary edited volumes. *Alzheimer Talk, Text and Context: Enhancing Communication*, edited by Davis (2005), is the most linguistic of the three in

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its focus. Sociolinguists, communication scientists, and social psychologists examined language in a range of naturally occurring conversations involving individuals with Alzheimer's disease found within the digital collection *Charlotte Narrative and Conversation Collection: Impaired Discourse*. This collection is expected to be housed beginning early 2009 as part of the National Institutes of Health (NIH)-supported Carolinas Collection at the Medical University of South Carolina. *Dementia: Mind, Meaning, and the Person*, edited by Hughes, Louw, and Sabat (2006), explores fundamental issues related to personal identity and dementia from the perspectives of psychiatry and philosophy. Although these arguments are not supported by linguistic analyses, they illuminate contemporary sociolinguistic scholarship on the interactional construction of identity through discourse. *Thinking about Dementia: Culture, Loss, and the Anthropology of Senility*, edited by Leibing and Cohen (2006), expands our understanding of relevant contexts through its provocative essays that explore cultural views of dementia based on ethnographic fieldwork carried out in the Netherlands, Japan, Brazil, Canada, and the United States.

Guendouzi, J., & Muller, N. (2006). *Approaches to discourse in dementia*. Mahwah, NJ: Erlbaum.

Although this is primarily a textbook to introduce various discourse analytic approaches to practitioners working with individuals with dementia, *Approaches to Discourse Analysis in Dementia* (Guendouzi & Muller, 2006) offers sociolinguists much to ponder on topics ranging from the ethnographic context of interviews, the presentation of self, topic management, turn-taking routines, repairs, repetitiveness, and the distribution of speech acts in conversation, in addition to a useful chapter on the practicalities of data collection and transcription for those just starting investigations based on conversational discourse. Working within what they call the "comparatively young, although by now well-established, tradition of qualitative research on communicative disorders," Guendouzi and Muller provided an overview of the main approaches and theories in discourse analysis, and, modeling the structure of their book on the seminal *Approaches to Discourse Analysis* (Schiffrin, 1994), they offered detailed and illuminating analyses of transcribed excerpts from recorded conversations with persons with dementia to show how the variety of approaches and theories can be applied to data from clinical contexts, and illustrate characteristics and challenges inherent in interactions within those with dementia. This book argues forcefully that communicative disorders need to be described, analyzed, and understood within the realm of authentic communicative events. The contextualized analyses of emergent discourse concern themselves primarily with the mutually perceived success or lack thereof of a communicative interaction rather than of the limitations of any single individual's communication. In addition to the numerous transcript excerpts found in the body of the text, readers may well benefit from the extended conversational transcripts numbering over 60 pages in the appendix.

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Hamilton, H. E. (1994a). *Conversations with an Alzheimer's patient: An interactional sociolinguistic study*. Cambridge, England: Cambridge University Press.

This is the first book-length longitudinal sociolinguistic examination of language and dementia and, as such, is frequently cited, along with Ramanathan (1997) and Sabat (2001), as a framing influence in studies of language use by individuals with dementia. In contrast to more traditional analyses of language and dementia carried out by psycholinguists, neurolinguists, and speech pathologists, with speech samples elicited in clinical settings, Hamilton used the perspective of interactional sociolinguistics to examine language in the life of a single woman with Alzheimer's disease spanning 4.5 years. The language of open-ended, naturally occurring conversations was investigated to determine how the affected individual's communicative abilities and disabilities were related to each other and how they changed over time, as well as how they were influenced by both preemptive and reactive communicative behaviors on the part of the healthy interlocutor. Frameworks used include taking the role of the other, automaticity, accommodation theory, and politeness theory. This humanistic and linguistically detailed examination of language loss highlights the importance of taking details about the conversational partners as well as the setting into account within the linguistic analysis. The conclusion outlines implications of the study for clinical application, research methodology, and linguistic theory.

Ramanathan, V. (1997). *Alzheimer discourse: Some sociolinguistic dimensions*. Mahwah, NJ: Erlbaum.

Extending Hamilton (1994a), Ramanathan explored the interrelationships between memory and identity by examining the tape-recorded and transcribed life stories of 16 individuals with Alzheimer's disease gathered over a period of 5 years. This work is generally recognized, along with Hamilton (1994a), as seminal work in the sociolinguistic study of language and dementia. Following Gee (1991), Ramanathan began her analysis by segmenting the talk into stanzas to assess narrative well-formedness. She then identified those elements in the discourse that seem to encourage continuity and compares them with elements that seem to lead to discontinuity. A particular strength of this study is her comparison of one speaker's discourse in different settings (at home and at her day care center) with different audiences (Ramanathan and the speaker's husband), and across time (as the disease progresses). The book closes with an insightful discussion that ties her findings to Lubinski's framework of "learned helplessness" and recommends interventions to be used by caregivers to improve communication with individuals at the mild to moderate stages of Alzheimer's disease.

Sabat, S. R. (2001). *The experience of Alzheimer's disease: Life through a tangled veil*. Oxford, England: Blackwell.

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Along with Hamilton (1994a) and Ramanathan (1997), this book is frequently cited as a framing influence in studies of language use by individuals with dementia. Sabat provided a rich characterization of the nonmedical view of Alzheimer's disease by focusing on the experienced world, the intact abilities and the selfhood of people with Alzheimer's disease. Although Sabat is a psychologist and does not carry out linguistic analyses, this book contains a large number of transcribed excerpts of intriguing conversations Sabat had or observed over a number of years with a variety of individuals. These excerpts of the voices of those with dementia breathe life into Sabat's useful discussions of social constructionist theory and positioning theory (Harre & van Langenhove, 1999), as these theories are applied to the discursive practices within the "social world of persons" with dementia.

OTHER REFERENCES

Appell, J., Kertesz, A., & Fisman, M. (1982). A study of language functioning in Alzheimer patients. *Brain and Language*, 17, 73–91.

Basting, A. D. (2006). Creative storytelling and self-expression among people with dementia. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 180–194). New Brunswick, NJ: Rutgers University Press.

Bayles, K., & Kaszniak, A. (1987). *Communication and cognition in normal aging and dementia*. Boston: Little, Brown.

Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge, England: Cambridge University Press.

Chatterji, R. (2006). Normality and difference: Institutional classification and the constitution of subjectivity in a Dutch nursing home. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 218–239). New Brunswick, NJ: Rutgers University Press.

Cohen, L. (2006). Introduction: Thinking about dementia. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 1–19). New Brunswick, NJ: Rutgers University Press.

Davies, B., & Harre, R. (1990). Positioning: The discursive production of selves. *Journal for the Theory of Social Behaviour, 20*, 43–63.

Davis, B. H., & Bernstein, C. (2005). Talking in the here and now: Reference and politeness in Alzheimer conversation. In B. H. Davis (Ed.), *Alzheimer talk, text and context: Enhancing communication* (pp. 60–86). New York: Palgrave Macmillan.

Downs, M., Clare, L., & Mackenzie, J. (2006). Understandings of dementia: Exploratory models and their implications for the person with dementia and therapeutic effort. In J. C. Hughes, S. J. Louw, & S. R. Sabat (Eds.), *Dementia: Mind, meaning and the person* (pp. 235–258). Oxford, England: Oxford University Press.

Fairclough, N. (1989). *Language and power*. London: Longman.

Fairclough, N. (1995). *Media discourse*. London: Edward Arnold.

https://doi.org/10.1017/S0267190508080069 Published online by Cambridge University Press

Gallacher, J., Bayer, A., & Ben-Shlomo, Y. (2005). Commentary: Activity each day keeps dementia away: Does social interaction really preserve cognitive function? *International Journal of Epidemiology* [advance access May 23, 2005], 1–2.

Gee, J. P. (1991). A linguistic approach to narrative. *Journal of Narrative and Life History, 1*(1), 15–39.

Giles, H., Coupland, N., & Wiemann, J. M. (Eds.). (1990). *Communication, health and the elderly*. Manchester, England.: Manchester University Press.

Glei, D. A., Landa, D. A., Goldman, N., Chuang, Y.-L., Rodriguez, G., & Weinstein, M. (2005). Participating in social activities helps preserve cognitive function: An analysis of a longitudinal, population-based study of the elderly. *International Journal of Epidemiology* [advance access March 11, 2005], 1–8.

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday.

Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. New York: Anchor Books.

Hamilton, H. E. (1994b). Requests for clarification as evidence of pragmatic comprehension difficulty: The case of Alzheimer's disease. In R. L. Bloom, L. K. Obler, S. DeSanti, & J. S. Ehlich (Eds.), *Discourse analysis and applications: Studies in adult clinical populations* (pp. 185–199). New York: Erlbaum.

Hamilton, H. E. (1996). Intratextuality, intertextuality, and the construction of identity as patient in Alzheimer's disease. *Text, 16*(1), 61–90.

Hamilton, H. E. (2000). Dealing with declining health in old age: Identity construction in the Oppen family letter exchange. In J. Peyton, P. Griffin, W. Wolfram, & R. Fasold (Eds.), *Language in action: New studies of language in society* (pp. 599–610). Cresskill, NJ: Hampton Press.

Hamilton, H. E. (2005). Epilogue: The prism, the soliloquy, the couch, and the dance: The evolving study of language and Alzheimer's disease. In B. H. Davis (Ed.), *Alzheimer talk, text and context: Enhancing communication* (pp. 224–246). New York: Palgrave Macmillan.

Hamilton, H. E. (2008). Narrative as snapshot: Glimpses into the past in Alzheimer's disease. *Narrative Inquiry 18*(1), 53–82.

Harre, R., & van Langenhove, L. (Eds.). (1999). Positioning theory: Moral contexts of intentional action. Malden, MA: Blackwell Publishers.

Ignatieff, M. (1999). Berlin in autumn: The philosopher in old age. With comments by Robert Alter and Michael Andre Bernstein. Doreen B. Townsend Center Occasional Papers, no. 16.

Johnstone, B. (2002). *Discourse analysis*. London: Blackwell.

Kempler, D., & Goral, M. (2008). Language and dementia: Neuropsychological aspects. *Annual Review of Applied Linguistics, 28*, this issue.

Kitwood, T. (1990). The dialectics of dementia: With particular reference to Alzheimer's disease. *Ageing and Society, 10*, 177–196.

Kitwood, T. (1997). *Dementia reconsidered: The person comes first*. Philadelphia: Open University Press.

https://doi.org/10.1017/S0267190508080069 Published online by Cambridge University Press

Kontos, P. C. (2006). Embodied selfhood: An ethnographic exploration of Alzheimer's disease. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 195–217). New Brunswick, NJ: Rutgers University Press.

Leibing, A. (2006). Divided gazes: Alzheimer's disease, the person within, and death in life. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 240–268). New Brunswick, NJ: Rutgers University Press.

Light, L. (1993). Language change in old age. In G. Blanken, J. Dittmann, H. Grimm, J. C. Marshall, & C. W. Wallesch (Eds.), *Linguistic disorders and pathologies: An international handbook* (pp. 900–918). Berlin: Walter de Gruyter.

Lindholm, C. (in press). Laughter, communication problems, and dementia. *Communication and Medicine, 5*.

Maclagan, M., & Mason, P. (2005). Bad times and good times: Lexical variation over time in Robbie Walters' speech. In B. H. Davis (Ed.), *Alzheimer talk, text and context: Enhancing communication*, (pp.146–166). New York: Palgrave Macmillan.

March, E. G., Wales, R., & Pattison, P. (2006). The uses of nouns and deixis in discourse production in Alzheimer's disease. *Journal of Neurolinguistics, 19*, 311–340.

McLean, A. H. (2006). Coherence without facticity in dementia: The case of Mrs. Fine. In A. Leibing & L. Cohen (Eds.), *Thinking about dementia: Culture, loss, and the anthropology of senility* (pp. 157–179). New Brunswick, NJ: Rutgers University Press.

Melvold, J. L., Au, R., Obler, L. K., & Albert, M. L. (1994). Language during aging and dementia. In M. L. Albert & J. Knoefel (Eds.), *Clinical neurology of aging* (2nd ed., pp. 329–46). New York: Oxford University Press.

Merleau-Ponty, M. (1964). An unpublished text by Maurice Merleau-Ponty: A prospectus of his work. In J. Edie (Ed.), *The primacy of perception*. Evanston, IL: Northwestern University Press.

Obler, L. (1981). Review of *Le langage des dements* by Luce Irigaray. *Brain and Language 12*, 375–386.

Oppenheimer, C. (2006). I am, thou art: Personal identity in dementia. In J. C. Hughes, S. J. Louw, & S. R. Sabat (Eds.), *Dementia: Mind, meaning and the person* (pp. 193–204). Oxford, England: Oxford University Press.

Pope, C., & Ripich, D. N. (2005). Speak to me, listen to me: Ethnic and gender variations in talk and potential consequences in interactions for people with Alzheimer's disease. In B. H. Davis (Ed.), *Alzheimer talk, text and context: Enhancing communication* (pp. 37–59). New York: Palgrave Macmillan.

Post, S. G. (1998). The fear of forgetfulness: A grassroots approach to an ethics of Alzheimer's disease. *Journal of Clinical Ethics, 9*, 71–90.

Rabinow, P. (2003). *Anthropos today: Reflections on modern equipment*. Princeton, NJ: Princeton University Press.

Ramanathan, V. (1995). Narrative well-formedness in Alzheimer discourse: An interactional examination across settings. *Journal of Pragmatics, 23*, 395–419.

https://doi.org/10.1017/S0267190508080069 Published online by Cambridge University Press

Ramanathan-Abbott, V. (1995). Interactional differences in Alzheimer discourse. *Language in Society, 23*(1), 31–58.

Ridge, S. G. M., Makoni, S., & Ridge, E. (2003). "I want to be like a human again": Morbidity and retained ability in an Alzheimer sufferer. In S. Makoni & U. H. Meinhof (Eds.), *AILA Review: African and Applied Linguistics, 16*, 149–169.

Ryan, E. B., Spykerman, H., & Anas, A. P. 2005. Writers with dementia: The interplay among reading, writing, and personhood. In B. H. Davis (Ed.), *Alzheimer talk, text and context: Enhancing communication* (pp. 190–198). New York: Palgrave Macmillan.

Ryan, E. B., Giles, H., Bartolucci, G., & Henwood, K. (1986). Psycholinguistic and social psychological components of communication by and with the elderly. *Language and Communication, 6*, 1–24.

Sabat, S. R. (2006). Mind, meaning, and personhood in dementia: The effects of positioning. In J. C. Hughes, S. J. Louw, & S. R. Sabat (Eds.), *Dementia: Mind, meaning and the person* (pp. 287–302). Oxford, England: Oxford University Press.

Schiffrin, D. (1994). *Approaches to discourse analysis*. Cambridge, MA: Blackwell.

Scollon, R., & Scollon, S. W. (2003). *Discourses in place: Language in the material world*. London: Routledge.

Simmons-Mackie, N. N., & Damico, J. S. (1997). Reformulating the definition of compensatory strategies in aphasia. *Aphasiology, 11*(8), 761–781.

Snyder, L. (2006). Personhood and interpersonal communication in dementia. In J. C. Hughes, S. J. Louw, & S. R. Sabat (Eds.), *Dementia: Mind, meaning and the person* (pp. 259–276). Oxford, England: Oxford University Press.

ten Have, P. (1999). *Doing conversation analysis: A practical guide*. London: Sage.

Vaihinger, H. (1924). The philosophy of "as if" (C. K. Ogden, Trans.). New York: Harcourt, Brace.

Zeisel, J., Silverstein, N. M., Hyde, J., Levkoff, S., Lawton, M. P., & Holmes, W. (2003). Environmental correlates to behavioral health outcomes in Alzheimer's special care units. *Gerontologist, 43*(5), 697–711.

https://doi.org/10.1017/S0267190508080069 Published online by Cambridge University Press