

**Commentary on *Conversational Discourse and Cognitive Impairment: Implications for Alzheimer's Disease* by Orange and Purves**

***Commentaire sur Les échanges verbaux et les troubles cognitifs : implications au niveau de la maladie d'Alzheimer par Orange et Purves***

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One of the most uniquely human activities engaged in from early childhood through to death across cultures, is conversation. Our ability to engage in conversation depends on our underlying cognitive abilities. Orange and Purves review the literature on the impact of Alzheimer's Disease (AD) on discourse in general and conversation in particular, and the literature on AD and cognition. We have known that AD has an impact on conversational abilities and on cognitive abilities. However, rarely is there such a synthesis of research in the two areas that is both intriguing theoretically and useful for health professionals and caregivers. The impairment of conversational skills demonstrated by individuals with AD is more than an interesting artifact of the syndrome, and the authors take a large step toward reconciling the conversational manifestation with the underlying cognitive impairment.

The section entitled "Relationship Between Conversational Features and Cognitive Impairments in AD" is the heart of this article. Rather than attempt an exhaustive treatment of conversational features and cognitive impairments in AD, the authors examine three selected aspects of conversation that have been studied extensively: turn taking, topic manipulation, and conversational repair.

### **Turn Taking**

Orange and Purves correctly point out that when turn-taking skills have been found largely intact (Bayles & Tomoeda, 1994; Causino Lamar, Obler, Knoefel, & Albert, 1994), the studies have used quantitative analysis, rather than qualitative measures, such as collaborative turn-taking, turn-relinquishing, or use of turn-taking signals. Attention, memory, and "frontal lobe functions" are necessary to achieve turn-taking during conversation. For example, selective attention to turn-keeping and turn-relinquishing cues, and retrieval of information from episodic, semantic, and autobiographical memories are required.

What makes this article especially useful for the health practitioner is Orange and Purves' inclusion, throughout the article, of strategies for caregivers of individuals with AD which can minimize the impact of the cognitive impairment. For example, rather than rely on possibly impaired selective attention and memory deficits, the authors encourage the caregiver to make an explicit invitation for the AD individual to take a turn (e.g., "What do you think of \_\_\_\_\_?"). They cite the need for empirical study to support the use of such strategies.

### **Topic**

Difficulty with topic maintenance and topic shifting are discussed in the context of attention, episodic and semantic memory, and frontal lobe executive control functions. Again, Orange and Purves present strategies for conversational partners of AD individuals: restricting the range of topics; using requests that focus on recognition of information rather than its recall; stating explicitly when comments are related to those of a previous topic; or, stating explicitly when comments are unrelated to a previous topic. These strategies can help facilitate appropriate topic manipulation by individuals with AD.

### **Repair**

More frequent trouble sources and different repair strategies have been reported in individuals with AD (Hamilton, 1994; Orange, Lubinski, & Higginbotham, in press). The relationship between attention, memory, and frontal lobe-mediated functions in conversation repair is discussed. Again, specific strategies to facilitate effective conversational repair between the individual with AD and the conversational partner are offered. For example, guesses at meaning and production of specific requests for clarification may facilitate effective conversations.

## Examples of Strategies

The following examples are presented to clarify some of the strategies presented by Orange and Purves. (Note that "PRT" refers to the conversational partner.)

### Turn-Taking Strategies

Strategy: Explicitly invite the individual with AD to take a turn, using either nonverbal cues such as head nods, or verbal cues, such as tag questions or questions that cue the semantic content required in a response.

PRT: So Amy's birthday is coming soon.  
AD: (nods.)  
PRT: What should we get Amy for a birthday present? What do you think?

In the above example, a simpler question would have been "What should we get her?". However, the redundancy of using Amy's name again, and the reiteration of its being her birthday offers less of a memory challenge.

### Topic Strategies

Strategy: Use specific requests that focus on recognition of information rather than exclusively on its recall. (Current topic of conversation is the food in the nursing home.)

PRT: I understand the lunch entrée is chicken cacciatore.  
AD: I don't like it.  
PRT: No, you've never liked Italian food very much. What do they cook here that you do like?  
AD: Huh?  
PRT: They cook a lot of foods here. I've seen lasagna and chopped beef. Which ones do you like?

Again, the conversational partner could have simply repeated himself, but the addition of "lasagna and chopped beef" reminded the patient of the topic, lessening the cognitive demand.

### Repair Strategies

Strategy: Take advantage of the tendency of individuals with AD to circumlocute.

AD: I need one of the (unintelligible word) there.  
PRT: You need something. What did you say you needed?  
AD: One of those (unintelligible word) that you use in the thing.

PRT: Okay, this is something you use. What do you use it for?

AD: For writing, for writing.

PRT: Do you need a pencil?

As Orange and Purves suggest, the use of the above strategy can facilitate access, recall, and retrieval processes during conversations.

## Conclusions

Previous attempts to use family members or volunteers in treatment of patients with neurological impairment have been made (Kagan, 1995; Kagan & Gailey, 1993; Lesser, Bryan, Anderson, & Hilton, 1986; Lyon, 1989,1992). Lyon (1992), for example, discusses the use of community volunteers in the rehabilitation of individuals with aphasia, while Boles, in a case study (in preparation) uses a patient's sister-in-law as the therapy provider for an individual with aphasia. In the current article, however, Orange and Purves go a step further by focusing on strategies for conversational partners of individuals with AD and basing those strategies on research in cognitive psychology. The focus upon conversational partners is an important one, for it is the people interacting with individuals with AD who will shoulder much of the burden for facilitating effective communication.

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