

## Coherence of narratives in aphasia<sup>☆</sup>

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### Introduction

Coherence is a key construct by which discourse is defined. Understanding coherence represents a common goal of various discourse analyses (van Dijk, 1977). A discourse is said to be coherent when it hangs together as a unit or makes sense as a whole. A discourse may be coherently produced despite difficulties at lexical or syntactic levels. However, this is not always the case. For this reason, investigation of discourse coherence represents a promising approach to the analysis of aphasic discourse. Such analysis allows for examination of the relationship between sentence-level and discourse-level phenomena (Ulatowska & Olness, 1997).

The aspects of coherence investigated in this study are related inherently to the classic notions of narrative evaluation and narrative event line (Labov, 1972; Labov & Waletzky, 1967). These constructs have had widespread influence on the study of narrative across disciplines (Bamberg, 1997) and are relevant to the two aspects of coherence studied here. The first is thematic coherence, which is derived from the topic of a narrative. This coherence can be expressed as narrative evaluation. The second is temporal/causal coherence, which is built through the relations between actions on the narrative event line and is carried primarily by the verb.

### Methods

#### Subjects

Twelve African-American adults with aphasia (APH) of moderate severity (Western Aphasia Battery AQ range: 59.8–80.8) were selected for examination from a larger discourse investigation (Ulatowska et al., 2001). Individuals with a moderate severity of aphasia were chosen because they are generally able to produce narrative structure (i.e., setting, complication, and resolution), yet display lexical and syntactic deficits that may affect narrative coherence.

Twelve non-brain-injured (NBI) adults were selected from the larger discourse investigation, for comparison with the APH group. They were matched for gender to the APH group members. The NBI group was also selected to have produced narratives comparable in length to those produced by the APH participants.

Age of participants in the two groups ranged from 41 to 68 years for the APH group and 43 to 72 years for the NBI group. Education and socio-economic status of the two groups were also comparable.

#### Task

Participants were asked to relate a personal narrative of a frightening experience.

#### Narrative corpus

All narratives were told in the first person and the primary topic involved threats to personal safety. Narrative length for the APH subjects ranged from 4 to 29 propositions (mean: 13.4 propositions). Length for the NBI subjects ranged from 5 to 36 propositions (mean: 14.5 propositions).

#### Analysis

Analysis addressed two aspects of coherence:

- (1) Thematic coherence was addressed through identification of direct expressions of fear (e.g., *I was so scared*) and stated reactions to the fearful event (e.g., *To this day, I don't know how I survived it*). The distribution of these expressions across the narrative structure was noted.
- (2) Temporal/causal coherence was addressed through identification of the verbs on the main event line that constitute the temporal/causal backbone of the narrative. Their number and lexical choice were noted.

### Results

Eleven of the 12 APH individuals produced a narrative. Of the 11, one was not coherent secondary to severe reference problems and a poorly delineated event line, and was excluded from further analysis. The remaining 10 APH participants produced narratives, which displayed setting, complication, and resolution (narrative structure). The narratives of all 12 of the NBI participants also displayed narrative structure.

With respect to thematic coherence, APH participants used primarily direct expressions of fear. In contrast, NBI participants used both direct expressions of fear and stated reactions to the fearful event.

The two groups differed in the distribution of direct expressions of fear. Two of the 10 APH individuals included these expressions in more than one location in the narrative structure. In contrast, 8 of the 12 participants in the NBI group produced them in more than one

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location in the narrative structure, often at the beginning and the end of the narrative, framing the narrative with the theme. Distribution of these expressions across the narrative structure contributed to the thematic coherence on the topic of a frightening experience.

With respect to temporal/causal coherence, narratives of APH participants displayed a smaller number of verbs in the event line, as compared to the narratives of the NBI participants. The narratives of the APH participants displayed a less tight temporal/causal coherence of the main event line as compared to the narratives of the NBI participants.

### Discussion

This study makes a contribution toward an understanding of the relationship between sentence-level and discourse-level phenomena. Individuals with moderate aphasia can produce structured narratives with some level of coherence. However, narrative coherence is lessened by a reduction in the complexity and variety of devices that support this coherence. These findings apply to narratives on emotional topics and may not necessarily apply to narratives in general.

### References

- Bamberg, M. G. W. (Ed.). (1997). Oral versions of personal experience: Three decades of narrative analysis. [Special issue]. *Journal of Narrative and Life History*, 7.
- Labov, W. (1972). *Language in the inner city*. Philadelphia: University of Pennsylvania Press.
- Labov, W., & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts* (pp. 12–44). Seattle: University of Washington Press.
- Ulatowska, H. K., & Olness, G. S. (1997). Some observations on narratives by aphasics and their contributions to narrative theory. *Journal of Narrative and Life History*, 7, 259–264.
- Ulatowska, H. K., Olness, G. S., Wertz, R. T., Thompson, J. L., Keebler, M. W., Hill, C. L., & Auther, L. L. (2001). Comparison of language impairment, functional communication, and discourse measures in African-American aphasic and normal adults. *Aphasiology*, 15, 1007–1016.
- van Dijk, T. A. (1977). *Text and context: Explorations in the semantics and pragmatics of discourse*. London: Longman.