



The role and importance of narrative in the evaluation of aphasia

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Defined as an acquired communication disorder caused either by stroke or by brain damage, aphasia affects millions of people worldwide by impairing speaking, writing, listening and writing. Aphasia has a huge impact on people's daily activities as they struggle to understand what they are being told to and to be understood by others. Numerous elicitation methods have been used in order to produce aphasic discourse that eventually is analyzed in order to be utilized in aphasia therapy. Picture naming, personal narrative, procedural discourse are only a few tasks that have successfully been implemented in aphasia rehabilitation. One of the most frequently used discourse investigation tasks is storytelling. Cinderella's story is widely used in aphasia therapy but researchers can adapt stories from their own culture and use them in investigating aphasic speech.

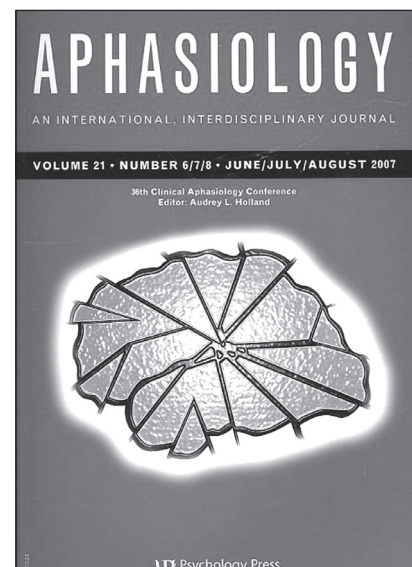
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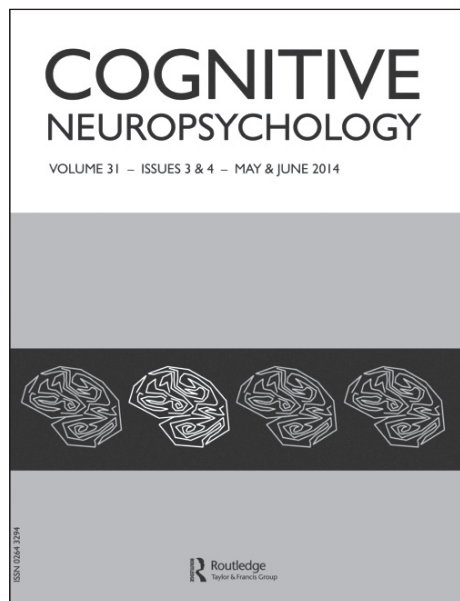


Introduction

Throughout the years people have always been interested in language, its functions and the way it is processed in everyday life. Linguists have used various methods in order to gather evidence regarding language and its role in people's lives. One of the most challenging and noteworthy work is the assessment of language impairments, especially aphasia, which has offered information as regards to language and its underlying functions. Evaluation of the phonological, grammatical and lexical skills together with the assessment of pragmatic and discourse ones represents the basis of a precise analysis of language disorders.

Questions concerning the use of grammatical and lexical resources in order to convey meaning and what kind of meaning are aphasic patients able to convey were taken into consideration when evaluating aphasic





speech. Alexandra Ciocîrlan and Radu Drăgulescu¹ emphasized that in the majority of cases, a speech error is not triggered by a single factor, it does not involve a single aspect of the communication path. These phenomena are determined by an entire set of linguistic, neuro-psychological, socio-cultural situations. A wide range of tests have been used in order to collect data highlighting lexical and grammatical patterns that are frequent in aphasic discourse.

People suffering from aphasia exhibit a wide variety of communication difficulties mainly at the discourse level. Scientists were primarily preoccupied helping aphasic patients regain their ability to communicate. In the majority of cases, sentence-level skills were the ones rehabilitation concentrated on but according to Linnik², lately, therapy has focused on coherence and the organization of ideas (skills that appear at the suprasentence level).

Aphasia, a well-known communication disorder, can be caused either by stroke or by a brain damage. It is an impairment that prevents people from comprehending what others tell them or producing spoken or written language.³ Starting from the nineteenth century, two basic aphasic syndromes have been recognized: Wernicke's aphasia and Broca's aphasia, followed by the discovery of new ones such as anomia, global and conduction aphasia etc. The majority of research conducted in recent years concentrated on the two main types of aphasia, namely Wernicke's aphasia (fluent aphasia) and Broca's aphasia (non-fluent aphasia).

People suffering from aphasia exhibit word finding difficulties and use circumlocutions or paraphasias in order to make themselves understood by replacing the words they are incapable of retrieving. In order to effectively accomplish narrative discourse, individuals need to access a wide range of words. This is why word-

finding skills are so important in carrying out discourse tasks.

Aphasia rehabilitation stresses the importance of language recuperation mainly on the discourse level. This is why discourse analysis has gained a special place in aphasia therapy. Discourse is crucial for people as they can communicate with each other, express their feelings and emotions, their fears or even desires. Speech-language therapies are used to help aphasic regain their ability to speak but these concentrate on single words or sentences⁴ while discourse is more intricate. According to Elizabeth Armstrong due to 'the lack of a unified theoretical base to study discourse in aphasia'⁵ and because of the diverse methodologies and quantities of data different findings have been obtained. Studies^{6,7,8} have underlined the clinical importance of narrative discourse analysis. Armstrong⁹ presents two different perspectives that have contributed to the understanding of aphasic discourse, *the formalist or structuralist approach*, which considers discourse as "a level of language above the sentence" and the *functionalist* one that deals with the way discourse is achieved. Language is seen as a dynamic cognitive system, which according to Glosser and Deser¹⁰ is composed of two dimensions: a micro- and a macrolinguistic one. The microlinguistic level is represented by the phonological, lexical and syntactic errors while the macrolinguistic one by coherence, meaning and context.¹¹

Storytelling and aphasia

Since 2007, an online database, namely AphasiaBank, has been set up by 25 aphasiologists in order to gather and analyze samples of aphasic and non-aphasic discourse in order to improve aphasia treatment. The principal aim of AphasiaBank was to validate a shared protocol including "two free speech elicitation tasks, four picture description tasks, one story narrative (Cinderella), and one procedural discourse task."¹² Since then, researchers have been using these protocols in their investigations of aphasic speech as, according to Fergadiotis & Wright¹³ each of these protocols helps semantic retrieval. As stated by Olness, Gyger & Thomas¹⁴ story narration renders significant data for clinicians but as it is time-consuming, it is underused in aphasia assessment. However, Boles and Bombard¹⁵ stated that a 5-minute sample is enough for researchers to obtain consistent information regarding aphasic patients' speaking skills providing that the specific data occurs not less than 3 times per minute. In their research Bird and Franklin¹⁶ analyzed the speech of fluent and non-fluent aphasic patients by using as an elicitation task the Cinderella story, selected for its popularity and usefulness to produce adequate data which, after being transcribed is subjected to analysis.



Researchers were also curious to find out whether the Cinderella story is biased for age and sex. Davida Fromm, Brian MacWhinney, Margaret Forbes and Audrey Holland¹⁷ investigated the speech of 98 aphasic patients in order to find out if women use a more diversified lexicon and utter more words than men and whether older people retell the story in a more complex manner than younger ones do. Eventually, they concluded that the Cinderella story is not gendered biased but male aphasics' vocabulary was more limited than females'. Regarding age, younger aphasics yielded more utterances than older ones.

By using the Cinderella story as an elicitation technique for the analysis of aphasic speech, researchers may gather information regarding patients' morphosyntactic, grammatical, semantic, lexical mistakes as well as mistakes produced at the sentence level.

Verbs, nouns, and adjectives represent the main categories of open-class words that carry the majority of meaning in discourse. Verbs are essential when forming sentences¹⁸ being more important than nouns. People with non-fluent aphasia (agrammatism) have a greater difficulty in producing verbs than those with fluent aphasia.¹⁹ MacWhinney et al.²⁰ undertook a research in which they identified several core verbs and nouns that may be important when retelling the Cinderella story. In her research, Emily Dillow²¹ investigated verb and noun production in case of people suffering from aphasia (anomic, conduction, Broca's and Wernicke's aphasia) and has come to the conclusion that aphasics produce fewer verbs than normal speakers do when retelling the Cinderella story. More, non-fluent aphasics produce considerably fewer verbs than fluent ones. Concerning nouns, agrammatic patients produce more nouns than verbs, while in case of fluent speakers the production of verbs is more elevated.²²

Rita Sloan Berndt et al.²³ used the Cinderella story to study *light verb* usage among aphasic individuals. They revealed that aphasics inclined to use light verbs when uttering sentences and constructions that did not require the use of verb inflections.

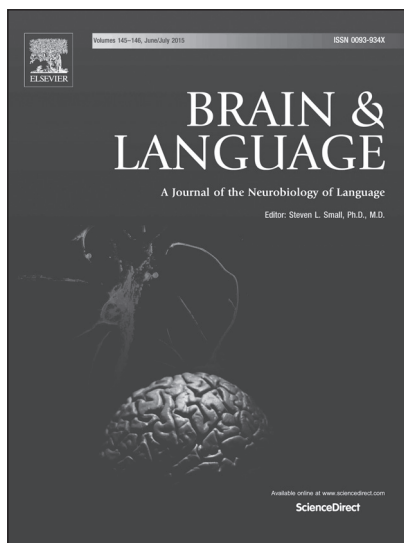
Along the years, a lot of research was carried out on noun and verb retrieval in aphasic patients, but little attention was attributed to adjectives, considered the third most important grammatical category in human language.²⁴ Aya Meltzer-Asscher and Cynthia K. Thompson²⁵ investigated the use of adjectives in agrammatic aphasic patients by using an elicitation technique the Cinderella story. Upon performing the investigation on 14 agrammatic aphasics and 14 control participants, they have determined that there is no difference between non-fluent aphasics and healthy individuals when it comes to adjective production. More, agrammatics produced more predicative adjectives in copular constructions than

attributive ones. As a final conclusion, they specified that adjectives are not impaired in non-fluent aphasic patients like verbs are and the fact that aphasics produced more predicative adjectives than attributive ones may mirror aphasics' ability to use 'predicative adjectives to compensate for verb deficits, [...] (e.g. saying 'Cinderella was sad' rather than 'Cinderella cried').'²⁶

Difficulties in sentence production were also analyzed by using the Cinderella story. As it is a complex, well-known fairytale considered to be an aid for aphasic patients to generate discourse, the Cinderella story can be used to analyze the methods included in sentence production in case of fluent and non-fluent aphasia. When retelling the Cinderella story aphasics tend to use repairs, repetitions and dissimilar utterances and to produce single phrases rather than complex ones.²⁷ Verbs were often omitted when producing sentences that highlight the true nature of other research such as the one carried out by Sally Byng & Maria Black's in which the authors have come to the same conclusion, specifically that 'they (agrammatic patients) tended to use more nouns than verbs.'²⁸ Errors in free and bound morpheme usage have also been observed in case of phrasal productions uttered by aphasics.

The above-mentioned research illustrates the possibility to use storytelling as an elicitation task to analyze aphasic speech. Researchers have used the Cinderella story in their research but other stories can also be applied in order to obtain valuable data. Gabriela Silveira and Letícia Lessa Mansur²⁹ made use of stories in their research to obtain indicators that are compulsory in diagnosing aphasia in case of speakers of Brazilian Portuguese. Besides the Cinderella story, they included in their research two other famous fairytales Snow White and the Seven Dwarfs and Little Red Riding Hood. They eventually concluded that all three stories can be used to analyze aphasic discourse in a clinical environment as all of them contained an equal number of propositions.

Up to this moment, little research has been carried out, from a linguistic standpoint, by Romanian linguists, concerning aphasia. The AphasiaBank online database contains numerous samples of aphasic speech but there is no Romanian one available for aphasic discourse analysis. The creation of a Romanian database and the translation of the protocols used in aphasia therapy is one of my main objectives, as part of my PhD study. The only difference is that I have included in my research, just as other authors did, an authentic Romanian fairytale more exactly, *The Goat and Her Three Kids* written by Ion Creangă. As it is a well-known story, is even included in Romanian textbooks, I believe it will be a useful aid to assess aphasic patients' speech and identify semantic, lexical, grammatical etc. disorders.



The aim of the article is to raise people's awareness of the importance and possibility of correctly assessing and treating aphasia with the help of narratives, specifically fairytales. In order to help aphasic individuals regain the life they once had, different fairytales can be employed as elicitation techniques in aphasia therapy. The only thing researchers have to be careful of in case they would like to obtain sufficient data, is to use fairytales that are representative of their culture.



Note

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