

## THE ROLE OF THE LINGUIST IN LANGUAGE THERAPY OF APHASIC PATIENTS

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Over a long period of time, the study of language disorders in aphasic patients has remained the almost exclusive domain of neurologists and aphasiologists. However, since as early as the beginning of the twentieth century, linguists have been called upon to cooperate in the study of aphasia. As a matter of fact, Pick, who became most famous for his study on agrammatic disturbances, by the early 1920's began already stressing the important role of the linguist in aphasia research. In our day, the designation "patholinguist" has been created to characterize those linguists who focus their attention on language disturbances and utilize their skills and knowledge in a clinical setting rather than in the classroom or in the language laboratory.

A close examination of the various tasks to be accomplished in language therapy reveals that the linguist seems to be most adequately equipped to perform functions which so far have been left to speech pathologists, logopedists, or phoniatrists. The present study attempts to highlight current practices in language therapy and to delineate areas in which the contributions of the linguist seem to be of vital importance. The following discussion pays particular attention to several recent works pertinent to the topic such as Leischner's 1979 study of aphasia and language development disturbances and Peuser's 1978 introduction to patholinguistics.

Language therapy is provided for children as well as for adults. Regarding therapy for children, Eisenson's Aphasia in children, 1972, provides detailed information on therapeutic approaches. Among the topics Eisenson discusses are the following: the Hyperactive Child, Establishing Representational Behavior, Establishing and Developing Language in Congenitally Aphasic Children, and the Child with Expressive Disturbances. What becomes apparent throughout Eisenson's discussion is the need for a thoroughly linguistic competence by the therapist, who has to be able to accurately diagnose problems in the areas of speech production and sound discrimination and to design efficient remedial programs.

The rehabilitation of the adult aphasic encompasses several areas of intervention and rehabilitation, including medical

treatment, physical therapy, and psychological and sociological counseling. From a patholinguistic point of view, the most important part of the rehabilitation program is speech and language therapy. One fundamental principle of language therapy requires that the patient be treated as a holistic entity. Thus, not only all language deficits but any other symptom of brain pathology have to be treated as well. Language therapy primarily focuses on impairments of productive and receptive skills as well as on disturbances of body schema and impairments of calculation. But other parieto-occipital deficits are treated too, namely by means of occupational therapy. The entire language rehabilitation program usually is composed of both individual and group therapy.

Individual treatment is the most important part of language therapy because it can be adapted most easily to the specific needs of each individual patient. In regards to different methods of treatment, several authors have presented their findings in various studies. More recently, Darley 1977, has given a retrospective view on aphasia therapy. Earlier, Darley 1972, had addressed himself to the question of treatment of aphasia and classified therapy methods in the following fashion:

1. Stimulation methods: They try to get the interrupted language processes going again by utilizing broadly conceived stimulations which imitate real life situations. Among these methods Darley counts those of Wepman 1951, and Schuell 1965. In these methods, the intuition and empathy of the therapist play a particularly important role. To the linguist working in applied linguistics, such strategies also have proven advantageous. Particularly in second language acquisition, the importance of real life situations has been duly stressed, and the "direct method", ardently debated by linguists, seems to be the non plus ultra of such an approach.

2. Programmed methods: They propose learning programs which have been developed according to certain principles. These principles are strictly observed during the learning sessions and allow for progress to be easily measured.

A thorough analysis of the present state of the art in programmed instruction has been provided by Costello 1977. The author not only describes past studies on programmed instruction but also explains the major components of such a program. Of particular interest to the linguist is Costello's plea for developing new programs and refining existing programs: "We are in need of procedures which allow the refinement and fine-tuning of a program so that it reaches maximum effectiveness with minimum time expenditure"(1977:25-26).

A method that has gained most notoriety is the so-called "deblocking method" developed by Weigl 1961. Its principal aim is to evoke a function which the patient can no longer perform by first employing a different modality which is still available to him as a facilitative stimulus. In this fashion, a previously barred avenue to a particular function can be deblocked.

Another well-known method is the preventive method promoted by Bejn 1969. This method is supposed to prevent the development of an agrammatism during the resolution period of a total aphasia. Its main goal is to prevent early -- in the initial stages of the disease process -- the establishment of undesirable fixations of pathological mechanisms such as speech automatisms or a telegraphic style.

It seems almost unbelievable that the problem of agrammatism, although central in language acquisition, has so far not received more attention among linguists. As Goodglass 1976, has pointed out, it was primarily aphasiologists and psychologists such as Isserlin, Kleist, and Goldstein, who continued Pick's pioneering work on agrammatism. According to Goodglass, "Jakobson (1956) is the first linguist to have written extensively on aphasia and to have contributed influential ideas on the nature of agrammatism. Like Luria, Jakobson points to a fundamental opposition between two components of language -- the paradigmatic and the syntagmatic. The former relates to the evocation of verbal symbols for specific referents; ...the latter refers to the sequential aspect of language, manifested in grammatical relationships." (Goodglass 1976: 241).

A noteworthy result of the systematic study of the syntax and semantics of aphasic speech has been provided by Zurif and Caramazza 1976. These authors observed that the name of an object that is manipulable and accessible to several sensory modalities (e.g. stone) can be remembered more easily than the name of an object that is accessible to only one modality and can not be manipulated (e.g. cloud).

Some therapists, for example Gereb and Vargha 1959, strongly recommend singing therapy. Keith and Aronson 1975, have reported a case where singing was used as therapy for apraxia of speech and aphasia. More recently, the use of "Melodic Intonation Therapy" has been described by Sparks *et al.* 1974. The authors explain that their program involves sung intonation of propositional sentences in such a fashion that the intoned pattern resembles the normal prosodic pattern of the sentence when it is spoken.

Of particular interest to the neurolinguist who is studying cerebral representation of speech mechanisms is the explanation of the authors concerning the effectiveness of their method. "It is suggested that both dominance for music and existence of less developed language areas in the right hemisphere are perhaps being used to support the damaged left hemisphere which continues to be language-dominant." (Sparks et al. 1974: 314).

As can be seen from the foregoing discussion, the areas are many in which the contribution of the linguist can advance our knowledge and understanding of language mechanisms in language impaired patients. The distinction between agrammatism and paragrammatism, the question of personal grammar versus standard grammar, and the phenomenon of disruption of grammar -- central in the diagnosis and therapy of aphasic patients, -- are topics deserving the attention of the neurolinguist and psycholinguist. The designing and refinement of remedial programs are tasks most pertinent to researchers working in applied linguistics. It can be hoped therefore that in the U.S., as is already the case in many European countries, linguists, as patholinguists, will get more involved not only in theoretical investigations of language disturbances but also in the practical application of therapeutic methods and strategies, to be implemented in rehabilitation programs for language impaired persons.

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