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**A REVIEW OF THE BOOK BY M. G. KHRAKOVSKAYA
“APHASIA. AGNOSIA. APRAXIA. REHABILITATION
TECHNIQUES” (2017)**

Abstract. A review of the book by M. G. Khrakovskaya *Afaziya. Agnoziya. Apraksiya. Metodiki vosstanovleniya* [Aphasia. Agnosia. Apraxia. Rehabilitation Techniques]. SPb.: Nestor-Istoriya, 2017, 309 pp.

“Aphasia. Agnosia. Apraxia. Rehabilitation Techniques” by M.G. Khrakovskaya appeared in print in 2017. The author is a speech and rehabilitation therapist, a neuropsychologist with over 50 years of practical clinical and scholarly experience and a PhD in Psychology. She has also authored special courses *Aphasiology* and *Neuropsychology in Practical Speech Therapy* for undergraduate students of special pedagogy faculties and for participants of advanced training courses. Ms. Khrakovskaya was the initiator and, since 1989, has been supervisor of the on-going St. Petersburg Workshop “Neuropsychology and Speech Therapy. Theory and Practice”.

The monograph opens with a review of various aspects and modern trends of rehabilitation practices in both Russia and worldwide (Chapter I), and then goes on to present the author’s own research results and guidelines in methods of teaching: *Writing Skills Rehabilitation* (Chapter II); *Specifics of Thinking Disorders and Rehabilitation in Patients with Aphasia* (Chapter III); *An Original Approach to Speech System Rehabilitation in Patients with Semantic Aphasia* (Chapter IV); *Calculation Abilities Rehabilitation in Patients with Acalculia* (Chapter V); and *Gnostic Functions Rehabilitation in Patients with Occipitoparietal Focal Lesions* (Chapter VI). The author also shares her original experience of the development and application of a specific method for quantitative assessment of neuropsychological examination results of focal brain lesion patients. The original assessment system, suggested by the author, is skillfully combined with a set of diagnostic tests for examining aphasia, agnosia, and various types of apraxia patients in consistency with A. Luria’s approach. This opens up a way to measure the severity of a disorder both based on individual symptoms of a syndrome and on the syndrome in its totality, as well as to gauge positive changes in the

structure of the damage throughout the therapy. The authored techniques in methodology make it possible to activate the deficient functional system as a whole by capitalizing on its relatively unaffected segments instead of concentrating on restoration of the damaged segment, as is traditional for other rehabilitation training methods. This involves activation of the properties established and automated in adults and specific features pertaining to each of the targeted psychological functions — writing, calculation, mentation, and speech in patients with semantic aphasia. All the proposed techniques imply “by-passing” the central defect in order to address the relatively intact or easier recoverable psychological function levels. The rehabilitation methods are aimed at creating, and capitalizing on, conditions wherein the affected functions are activated by means of patients gradually progressing from simpler to increasingly more complicated tasks. These “gentle” techniques have helped a majority of the author’s patients to restore their speech and other psychological functions and return to normal professional activities.

Keywords: aphasia; agnosia; apraxia; logopedics; higher psychological functions; neuropsychology; aphasiology; restoration of higher psychological functions; authored methods; review.

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The book “Aphasia. Agnosia. Apraxia. Rehabilitation Techniques” by M.G. Khrakovskaya appeared in print in 2017. The author is a speech and rehabilitation therapist, a neuropsychologist with over 50 years of practical clinical and scholarly experience and a PhD in Psychology. She has also authored special courses *Aphasiology* and *Neuropsychology in Practical Speech Therapy* for undergraduate students of special pedagogy facul-

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The safer morphological level of the linguistic system and the regularities of word building and word form derivation are used for rehabilitation of writing skills in cases of phonemic analysis disorders.

The technique of rehabilitation of thought disorder is designed in correspondence with the disorder mechanisms in various aphasia syndromes. On the one hand, special attention is paid to the restoration of the system of notions as verbal components of thinking and the ability to operate words in all diversity of their meanings, which is impaired in all aphasia syndromes. In posterior aphasia syndromes, in addition to rehabilitation of the verbal components of thinking, essential attention is paid to rehabilitation of the imagery components: ability of purposive analysis of directly perceived objects and situations, as well as visual images. In all cases of aphasia, work on rehabilitation of interaction between verbal and imagery components and planning and regulating role of speech in the process of thinking is involved.

Creation of the method of speech rehabilitation in semantic aphasia embraces the whole complex of systemic disorders of verbal, optico-spatial and mental activity typical of this syndrome. Taking into account the fact that expressive speech of such patients remains relatively safe, though somewhat impoverished in terms of vocabulary and syntactic constructions, the author suggests using linguistic experience and stereotypes of speech associations as basic support units. The series of exercises worked out by the author restore the morphological word building and word form derivation models and actualize syntactic relations. To restore the functional meanings of grammatical morphemes (prefixes, inflexions, suffixes, etc.), the exercises employ word combinations automated in speech practice with their further inclusion in spatial and temporal constructions which, at the initial stages of work, have unequivocal correspondence to images, specifically visual ones, from the patient's life experience.

To overcome acalculia, the author uses numbers ordered in rigid spatial sequences which are regarded as a certain "bound" context fixing the relationships between the numbers both in the imagery and verbal aspect. Speech stereotypes, such as automated counting (ordinal and, later, tabular), serve as stepping stones for presenting a system

of exercises with their gradual complication, specifically increasing the number of operations, counting by groups, etc.

In the methods of visual gnosis rehabilitation, when the ability to control gaze direction is restored at the initial stages of rehabilitation, as well as in rehabilitation of the motor component of writing via training to produce graphic motor skills gearing, lower sensorimotor levels of functional system organization become the basic ones for the impaired organization levels.

All the proposed techniques imply "by-passing" the central defect in order to address the relatively intact or easier recoverable psychological function levels. The rehabilitation methods are aimed at creating, and capitalizing on, conditions wherein the affected functions are activated by means of patients gradually progressing from simpler to increasingly more complicated tasks. These "gentle" techniques have helped a majority of the author's patients to restore their speech and other psychological functions and return to normal professional activities.

We would like to say some words about the material composition and the style of the author of the monograph. The topic itself: "Aphasia. Agnosia. Apraxia." is classical, unfathomable and urgent. The area subtitled "Rehabilitation Techniques" is subdivided within

this global field of investigation. It should be noted that the content of the monograph fully coincides with the topic designated in the title.

The literature on the topic is reviewed exquisitely, logically and in detail, singling out the leading conceptions in the history of the science over the last decades of the 20th and the first decades of the 21st century, and providing analysis of contemporary research in aphasiology in various fields including the countries of Europe, America and Asia. The advantages of A. Luria's approach to the understanding of the mechanisms of disorders of speech, gnosis and praxis, the same as the necessity of designing rehabilitation program on the basis of this understanding, have been substantiated in a convincingly argumentative manner.

The book appeared just on time. Nothing similar in the volume of issues of rehabilitation work has been published over the last few decades. The book analyzes and generalizes not only home research and methods of rehabilitation but also foreign ones. And in a number of cases, the author provides extended reviews of works abroad presenting not only separate authors but whole scientific trends and schools of today.

The book is not only timely but also up-to-date. The author has an excellent command of new terms and notions from the adjacent sci-

ences, mainly from linguistics and neuropsychology. This, above all, allows the author to convince the reader in the relevance of a certain scientific approach or procedure.

The main part of the monograph – the methods of rehabilitation work, is written in full correspondence with the theoretical positions about the mechanisms of speech disorders and other psychological functions. The author presents solid scientific foundations for the suggested rehabilitation programs in different sections: oral speech, writing, counting, and verbal mental activity. M. G. Khrakovskaya, to her credit, is scientifically honest and considerate in her attitude to the authors of the previously published works which have been used, creatively continued and expanded (see, for example, references to V. V. Opperl'). Moreover, the author of the monograph under review managed to give a theoretical basis for many techniques suggested by other scholars and successfully used in practice without theoretical foundation.

Apart from a detailed description of the methods and concrete techniques, the book offers a vast array of didactic material which can be used by both the experienced logopedist and a beginner specialist in the field.

The book is written using a scientific academic style and clear-cut, comprehensible language. Each

sentence, each idea is unfolded and logically complete.

We believe that this is a serious scientific work, carried out in the best classical traditions, which will be read both by specialists in the theory of compensation of psychological functions and by practical neuro-rehabilitation therapists, including logopedists, neuropsychologists, and neurologists to their advantage. The significance of the work goes far beyond the boundaries of aphasiology. Logopedists, defectologists, psychologists, pedagogues working with children with alalia, general speech underdevelopment, dysgraphia, and dyslexia will find in the monograph information useful for them both in theoretical and in practical aspects. It is not by chance that the main scientific work by V. K. Orfinskaya, one of the giants of home logopedics, dealt with comparative analysis of aphasia and alalia. The monograph under review can also serve as a teaching guide for students of faculties of special pedagogy.

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