agentic self and PD would have been more interesting (i.e., numerous other books are available regarding basic neuropsychiatric impairments and treatments for PD), but none present a new conceptualization of an agentic self for consideration. Focusing on one area or the other would have made sense, but combining them leads for a somewhat disjointed presentation.

## Novelty

The primary strength of the book is its ability to make the reader think about PD related impairments in a new light. The book is novel in its supposition that PD impairments are related to disorder of the agentic self, which has four basic properties: 1) intentionality; 2) forethought; 3) self-reactiveness; and 4) self-reflectiveness. In general, the agentic self acts with intention of future goals, which Dr. McNamara hypothesizes has six basic serial cognitive causal operations: 1) identifies values; 2) prioritizes them into long term goals; 3) decides which goals to pursue; 4) develops plans to attain those goals; 5) initiates goal pursuit by inhibiting valuation and responding on impulse alone; and 6) monitors and adjusts such plans. Problems in any one of these causal operators, which Dr. McNamara proposes all have neurologic foundations, and particularly the fifth one, lead to the common PD impairments such as apathy, lack of initiation, depression, anxiety, and personality changes (e.g., novelty seeking). The chapters on the agentic self are thought provoking and may prove to be worthwhile when planning future and specific research in this area.

Besides the competing emphasis on the neuropsychiatry of PD and the agentic self, another weakness relates to the book's attempt to differentiate between the agentic self and the "minimal self" (a less planful but more impulsive self). To bolster the conceptualization of an agentic self, it would also have been helpful for a chapter to discuss how other brain disorders/injuries, and not just PD, would affect the agentic self and its related impairments for other disorders (maybe such a book is in the works?). For example, do psychiatric disorders associated with depletion of dopamine or dysfunctional basal ganglia, frontal lobes, and substantia nigra lead to similar impairments (and not just in PD). In addition, it would have been interesting for him to compare his model of the agentic self with other more commonly accepted neurologic models of the self which are based on research that has demonstrated that the right hemisphere injury, and particularly right parietal lobe dysfunction, are associated with "disorders of the self" (Feinberg, 2001; Feinberg & Keenan, 2005). Specifically, after reading his book questions arise as to whether or not impairments in the agentic self are related to anosagnosia, left sided neglect, Capgras syndrome, for example, and how so? Comparing and contrasting his model of the agentic self to other conceptualizations of the self would help bolster his argument that an agentic self exists.

As to whether or not to read the book, the answer depends on one's interest. If one is solely interested in learning the basic neuropsychiatric causes, impairments, and treatments of PD, as the title of the book suggests, then this book is not for you and other common texts will meet your needs. However, if one is interested in considering a novel model of the self for understanding the manner in which individuals with PD demonstrate common cognitive, personality, and mood impairments, then this is likely to be a rewarding and intellectually stimulating book.

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# The Ultimate Compendium of Classical Neuropsychological Syndromes

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*Clinical Neuropsychology, Fifth Edition*. (2011). Kenneth M. Heilman & Edward Valenstein (Eds.), New York: Oxford University Press, 720 pp., $99.00 (HB).

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The fifth edition of Heilman and Valenstein's *Clinical Neuropsychology* draws on the knowledge of area experts to provide a comprehensive, up-to-date review of the classical neuropsychological syndromes. This book follows its previous edition in its basic organization and content but adds updated material and illustrations, and a new chapter on creativity. Its 18 chapters cover all the major neurobehavioral syndromes, focusing on the clinical presentation, neuroanatomical correlates, and assessment of these syndromes. Prevalent theories are presented to help understand the cognitive mechanisms involved in these syndromes. This book is one of the most comprehensive and well-written reviews on this topic and is a must have for clinicians, researchers, and students interested in brain-behavioral relationships.

The first chapter, written by the editors, takes the reader on a brief historical journey through the evolution of our understanding of brain-behavioral relationships. It presents a broad overview of the conceptual approaches and methods used to study brain-behavioral relationships as well as a very basic neuroanatomy review.

Chapter 2, by Caplan, focuses on aphasic syndromes. It provides a succinct description of the classical aphasic syndromes and contains a useful table that summarizes the basic features, hypothetical deficit, and classical lesion location associated with each syndrome. The author identifies the limitations and problems of using this taxonomy in describing aphasic presentations and discusses new approaches to understanding language and aphasia with emphasis on a psycholinguistic approach to classification. Chapters 3 and 4 build on this chapter by presenting a well-written, in-depth review of specific psycholinguistic functions and how aphasic symptoms can be explained at this level. Chapter 3, by Nadeau and Kendall, covers phonology, semantics, and lexical semantics while Chapter 4, by Caplan, covers syntactic aspects of language disorders. These chapters provide the reader with a strong foundation to move beyond the overly simplistic aphasia taxonomy toward a more detailed analysis of aphasic symptoms as they relate to specific psycholinguistic functions.

Acquired dyslexia and agraphia are covered in detail in the next two chapters of the book. These chapters provide detailed descriptions of the defining features, anatomical correlates, underlying pathophysiology, and theorized causal mechanisms of these syndromes. The authors accomplish this in an organized and cogent fashion with useful illustrations and clinical examples. Chapter 5, by Coslett, is organized into peripheral and central dyslexias and covers neglect dyslexia, attentional dyslexia, pure alexia or alexia without agraphia, and deep, surface, and phonological dyslexia. An information processing model of reading is described to provide a useful framework for understanding the neuropsychological mechanisms involved in these reading disorders. There is also a brief summary of the role of the right hemisphere in reading. Chapter 6, by Ullrich and Roeltgen, covers phonological, lexical (surface), and deep agraphia. The authors discuss these syndromes in terms of several neuropsychological models of writing and spelling. Both of these chapters provide some useful guidelines for assessing these syndromes.

Chapter 7, by Farah and Epstein, reviews disorders of visual processing. It covers topics such as visual field defects and cortical blindness, and disorders of color processing and motion perception. Higher level visual spatial processes and disorders are also reviewed, including discussion of the "what" and "where" systems, and disorders of spatial navigation, topography, and mental imagery.

Denburg and Tranel provide an excellent, updated review of acalculia and disturbances of the body schemas in Chapter 8. They summarize a large, complex body of literature examining the anatomical correlates of these conditions, drawing from the lesion and functional imaging literature. This chapter provides a thorough description of the various forms of acalculia and body schema disturbances, including autotopagnosia, finger agnosia, and right-left disorientation. The authors offer a detailed discussion on the neuropsychological evaluation of these different disorders.

Chapter 9, by Adair and Barrett, provides a high-quality review of anosognosia for hemiparesis, focusing on its clinical characteristics, anatomic correlates, and several theories on the mechanisms of this disorder. The authors update their review of the literature by introducing some recent functional imaging studies. They no longer include discussion of anosognosia for visual deficits, amnesia, dementia, or aphasia. These topics are briefly covered, to some degree, in other chapters.

Heilman and Gonzalez-Rothi cover the apraxias in Chapter 10. They present an excellent summary of the different forms of limb apraxia, including limb-kinetic, ideomotor, disconnection, conduction, ideational and conceptual apraxia. Each form of apraxia is discussed in terms of its defining clinical features, anatomical correlates, and theorized pathophysiology. The authors also provide a brief discussion on the common causes and recovery and treatment of apraxia.

The agnosias are comprehensively reviewed in detail in Chapter 11, by Bauer. The author sets the stage for discussing the various forms of agnosia by first reviewing several relevant models of object recognition. The rest of the chapter focuses on defining the clinical characteristics and anatomical correlates of the various forms of visual, auditory, and somatosensory agnosia. The author provides a useful but brief overview on the assessment of agnosia.

Chapter 12, by Heilman, Watson, and Valenstein, presents a thorough review of the different types of neglect, including sensory, spatial, and motor neglect in their various forms. Asomatognosia and representational neglect are also reviewed. The authors discuss in detail the clinical features and methods of evaluating these disorders. The second section of this chapter provides a comprehensive review of the anatomy and neuropsychological mechanisms underlying the various neglect disorders. The chapter ends with a detailed discussion of the recovery of function and treatment of neglect.

Chapter 13, by Zaidel, Jacoboni, Berman, Zaidel, and Bogen, provides a beautifully organized and exhaustive review of the literature on callosal syndromes. The authors review the acute and chronic neuropsychological effects of commissurotomy, including discussion of the wide range of sensory, motor, and cognitive changes seen in split-brain patients. They also review methodological and theoretical contributions of callosal syndromes to our understanding of normal hemispheric specialization. The chapter ends with an interesting discussion on dual consciousness in split-brain patients.

Chapter 14 reviews the neuroanatomy of the frontal lobes and the neurobehavioral changes associated with damage to these regions. The authors, Damasio, Anderson, and Tranel, review a wide range of neurological and cognitive-behavioral effects of frontal lobe damage, including discussion of

potential effects on intelligence, attention and memory, speech and language, motor functioning, impulse control and decision-making, and emotion and social behavior.

Chapter 15, by Heilman, Blonder, Bowers, and Valenstein, covers emotional disorders associated with neurological diseases. The authors discuss this topic primarily from an anatomic approach, reviewing the effects of lateralized brain damage as well as more localized effects on emotion. Specific attention is paid to the role of the limbic system and basal ganglia in emotions and emotional disorders. The chapter ends with a brief discussion of pseudobulbar palsy.

Chapter 16 provides an impressive and comprehensive review of the amnesias. The authors, Bauer, Reckless, Kumar, and Valenstein, begin by defining the clinical characteristics of the amnestic syndrome and then discuss the assessment of memory and amnesia. They present an organized, detailed review of the anatomic localization of amnesia and then discuss theoretical accounts of amnesia. The authors provide a useful summary of the differences and similarities between the different forms of amnesia and make a compelling argument for a core amnestic syndrome rather than distinct types of amnesia. The chapter ends with some discussion on the various causes of amnesia, and treatment of memory disorders.

Chapter 17, by Knopman and Selnes, covers the neuropsychology of dementia. It provides a practical review on the clinical distinction between mild cognitive impairment and dementia and between genuine cognitive impairment and other factors, such as normal aging, low education, delirium, depression, and psychosis. The chapter contains useful epidemiological information on Mild Cognitive Impairment and dementia and a summary of known risk factors for dementia. The neuropsychological features of various neurodegenerative conditions are described and there is a brief discussion on the treatment of dementia. While seasoned neuropsychologists will have a good grasp of most of these topics, they will likely benefit from the detail offered in this chapter. Students and residents in neuropsychology and other health care providers will find this review especially beneficial.

Chapter 18 represents a new, refreshing addition to this text. This chapter, written by Drago, Miller, and Heilman, focuses on creativity. The authors review the concept of creativity and discuss some methods of assessing creativity. They review the role of different anatomical structures in creativity and discuss the potential effects of brain damage to these regions on creativity.

This book is an exceptional resource and is a must have textbook for neuropsychologists, behavioral neurologists, neuropsychiatrists, and cognitive neuroscience researchers. Even seasoned neuropsychologists will find this text an excellent reference. It makes an outstanding textbook for graduate and post-doctoral studies in neuropsychology and for neuropsychologists preparing for board certification. It is rare to find a text that captures all of these complex syndromes in one place and in such an understandable manner. The editors have assembled prominent experts in the field, who have made substantial contributions to the understanding of neuropsychological syndromes. All of the chapters are thoughtfully organized, well written and comprehensive in their coverage. They are filled with useful illustrations, tables, and references. The present work revises and extends on the information contained in its previous edition. Three chapters from the fourth edition were removed, including chapters on hallucinations, recovery and cognition, and pharmacotherapy of cognition; however, the authors incorporate these topics into other chapters where possible. The new chapter on creativity adds a new dimension to the book by covering an interesting area of study early in its development. The changes between the previous and current edition are refreshing but not ground breaking in their significance. This may not compel owners of the previous edition to update their library; however, if you don't already own the previous edition or are interested in keeping current on the latest updates, this book is, without a doubt, an essential addition to your library. I recommend this book without hesitation and can not wait to read the sixth edition when it comes out.

## A Comprehensive Reference for Autism Spectrum Disorders (ASDs)

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*The Neuropsychology of Autism,* Deborah A. Fein (Ed.). 2011. New York: Oxford University Press, 540 pp., $79.95 (HB).

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While the understanding of Autism Spectrum Disorders (ASDs) has grown over the years, there are still many unanswered questions. *The Neuropsychology of Autism* takes into account the definition and identification of ASDs, providing a neuropsychological perspective while incorporating findings in the areas of genetics, neurochemistry and neuroanatomy. This comprehensive volume provides information in key areas relevant to ASDs while also including in-depth information on various theoretical viewpoints to try and account for the complexity of diagnosing and providing intervention for this condition.

In Part I, *Fundamental Information about Autism Spectrum Disorders*, Chapter 1 covers the phenomenology of ASDs, providing a comprehensive overview with information