

Journal of Neurotherapy: Investigations in Neuromodulation, Neurofeedback and Applied Neuroscience

A Review of "Freedom and Neurobiology: Reflections on Free Will, Language, and Political Power. Neuroscience and Philosophy: Brain, Mind, and Language."

Adrian S. Warren PhD, LPC^a ^a Department of Counseling, University of Texas, San Antonio, TX 78207 Published online: 25 Nov 2010.

To cite this article: Adrian S. Warren PhD, LPC (2010) A Review of "Freedom and Neurobiology: Reflections on Free Will, Language, and Political Power. Neuroscience and Philosophy: Brain, Mind, and Language.", Journal of Neurotherapy: Investigations in Neuromodulation, Neurofeedback and Applied Neuroscience, 14:4, 312-314, DOI: 10.1080/10874208.2010.523342

To link to this article: <u>http://dx.doi.org/10.1080/10874208.2010.523342</u>

PLEASE SCROLL DOWN FOR ARTICLE

© International Society for Neurofeedback and Research (ISNR), all rights reserved. This article (the "Article") may be accessed online from ISNR at no charge. The Article may be viewed online, stored in electronic or physical form, or archived for research, teaching, and private study purposes. The Article may be archived in public libraries or university libraries at the direction of said public library or university library. Any other reproduction of the Article for redistribution, sale, resale, loan, sublicensing, systematic supply, or other distribution, including both physical and electronic reproduction for such purposes, is expressly forbidden. Preparing or reproducing derivative works of this article is expressly forbidden. ISNR makes no representation or warranty as to the accuracy or completeness of any content in the Article. From 1995 to 2013 the *Journal of Neurotherapy* was the official publication of ISNR (www. Isnr.org); on April 27, 2016 ISNR acquired the journal from Taylor & Francis Group, LLC. In 2014, ISNR established its official open-access journal *NeuroRegulation* (ISSN: 2373-0587; <u>www.neuroregulation.org</u>).

THIS OPEN-ACCESS CONTENT MADE POSSIBLE BY THESE GENEROUS SPONSORS



Journal of Neurotherapy, 14:312–314, 2010 Copyright © 2010 ISNR. All rights reserved. ISSN: 1087-4208 print/1530-017X online DOI: 10.1080/10874208.2010.523342

BOOK REVIEWS

FREEDOM AND NEUROBIOLOGY: REFLECTIONS ON FREE WILL, LAN-GUAGE, AND POLITICAL POWER. John R. Searle. Columbia University Press, New York, 2007, 113 pages, ISBN: 978-0-231-13753-9.

NEUROSCIENCE AND PHILOSOPHY: BRAIN, MIND, AND LANGUAGE. Maxwell Bennett, Daniel Dennett, Peter Hacker, and John Searle. *Columbia University Press, New York, 2007, 215 pages, ISBN:* 978-0-231-14045-4.

When I was first asked to review these two books I jumped at the chance. The confluence of philosophy and clinical science was right up my alley. Although the more I read, the more excited I got about the postulations of Searle, and the argument/counterarguments of Bennett, Dennett, Hacker, and Searle, I also got successively more trepidatious about the prospect of critically reviewing these giants. What do I, a green PhD with a degree in counseling and a bare handful of courses in neuroscience, have to say regarding four of the foremost scholars in the field? After discussing my worries with Randy Lyle, however, I began to realize that I am *exactly* the reviewer these books need. As a junior researcher and clinician, I can represent the next generation in Neurophilosophers. Therefore, the focus of this review is more on how these books can influence my colleagues, peers, and students than what senior clinicians and master philosophers can tweeze from the pages.

Searle's (2007) Freedom and Neurobiology: Reflections on Free Will, Language, and Political Power should be required reading for all PhD programs and anyone with a serious interest in clinical neuroscience. The introduction alone constituted a primer in the basic assumptions and "facts" of philosophy. Searle argues that all philosophical deliberation (and I would further argue all clinical practice) focuses on one or more of the following eight realms and the interdependencies of them: consciousness, intentionality, language, rationality, free will, society and institutions, politics, and ethics.

The next major section of the book paints the current status of the free will argument. Searle prefaces his discussion of free will in the brain by outlining how consciousness can move the body and the nature of causality. He then discusses in depth the nature of action potentials in the neural network and formulates two hypotheses about free will. Either free will does not exist and all human actions and interactions are a function of deterministic preprogramming and neuronal firing or free will is a natural outcome of quantumly indeterminate consciousness. He goes on to argue that although the first hypothesis is neater and follows current biological presuppositions, it is truly untenable; merely exploring the nature of free will negates a predetermination argument. He further acknowledges that the second hypothesis is messy and will not be understood, let alone proven or disproven, until we fully understand the quantum nature of the universe.

In the final section of the book, Searle discusses the nature of social ontology and politics. Although this section is incredibly intriguing from a social justice perspective, it has little clinical application. I fully argue that a social justice imperative is necessary in every practice and laboratory (for the personal truly is the political); still, this chapter may have more academic than clinical applicability.

If Freedom and Neurobiology presented a rational, readable introduction to the topic of neurophilosophy, then Neuroscience and Philosophy: Brain, Mind, and Language salaciously blew open the doors on decades of academic rivalry-and was even more readable for its salacity. The book consists of six chapters. In the first two, Maxwell Bennett (a neuroscientist) and Peter Hacker (a philosopher) outline their arguments against the current establishment in neurophilosophy. These are followed by an impassioned rebuttal from Daniel Dennett (a philosopher) and a slightly less passionate-but immensely intriguing-rebuttal from John Searle (a philosopher). Bennett and Hacker then offer a counterrebuttal, and the book ends with a particularly insightful and invigorating conclusion by Daniel Robinson (also a philosopher).

Bennett and Hacker most vociferously denounce two common practices of neuroscientists and neurophilosophers: mereology and the use of *qualia*. Mereology is the attribution of characteristics of the "whole" to component "parts" (e.g., attributing aspects of consciousness or free will to a single neuron or even to more complete substructures of the brain). Qualia is the sensation of lived experience (e.g., how it "feels" to experience anger, cold, or pain). They proceed to argue that if such fallacies continue to be propagated and murkily misunderstood by the public, it is not some answers that will be wrong but rather some *questions* themselves, which should never be asked.

In the second chapter, Bennett outlines a concise, yet readably dense, review of brain structures and component parts. Without at least a fundamental grasp of cortical networks and neural interactions, any philosophy of neuroscience is a moot point. Although the 16 pages of this chapter are insufficient to either teach anyone basic neuroscience or fully plumb its depths, they are a perfect refresher for the clinical neurophilosopher.

Dennett begins his rebuttal with an agreement that language is imprecise and that those imprecisions are particularly insidious when discussing anything as complex as the brain. From there, however, he quickly begins to mount argument after argument against the points raised by Bennett and Hacker. Dennett is particularly incensed by what they term the "mereological fallacy," and although he agrees that because language *is* imprecise the fallacy occurs frequently in neuroscience, he challenges them to find a better way to define and discuss the brain or stop complaining about it.

Searle, also, begins his chapter with agreements; although his subsequent counterarguments are not as invective as Dennett's, their very subtlety may be more scathing. He makes the case that this impassioned *thesis* and *antithesis* is imperative for any type of "true" *synthesis* to culminate. His main points are that *mereology* may not, in fact, be a fallacy and that *qualia* are essential to understanding the brain and mind. His discussions on the location of pain and the embodiment of brains are particularly thought-provoking.

Bennett and Hacker then conclude with counterrebuttals to the points of Dennett and Searle. Throughout the reading of this book, neither side has a clear advantage. The arguments on both sides are so well founded that I find myself disagreeing with Bennett and Hacker that "nothing can be both black all over and white all over simultaneously." Finally, Robinson concludes the book with what can almost be called that *synthesis* I mentioned earlier. In fact, his contribution is so important to a balanced understanding of neurophilosophy that I take exception to the fact that he is not listed as an author and only as the introducer and concluder.

I never truly fancied myself an apologist for philosophy, but throughout the reading of these two books, my sense that philosophy must be regained to have a successful clinical practice was honed. Why do we need a philosophy of neuroscience to map the brain or hit F11 on the neurofeedback keyboard? I suppose we don't if we're satisfied to remain in some dichotomous Cartesian half-life of mind/body disconnection. Very few of us, though, would have pursued higher education or be reading JN if we were satisfied with an antiquated status quo. I'll be the first to admit that reading dense philosophical treatises may be a bit more of a stretch than my clinical brain is accustomed to, but as Robinson highlights at the end of Bennett et al., we still lack a unified paradigm of science and philosophy. We may never reach such a paradigm, but it is certain we will not if scientists refuse to philosophize and philosophers refuse to scientize.

> Adrian S. Warren, PhD, LPC Department of Counseling University of Texas San Antonio, TX 78207