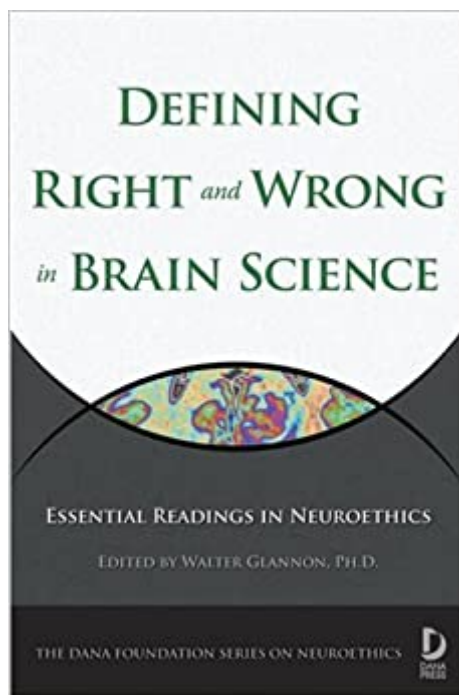


The book was found

# Defining Right And Wrong In Brain Science: Essential Readings In Neuroethics (Dana Foundation Series On Neuroethics)



## Synopsis

Where is the line between instinct and free will in humans? How far can technology and medicine go to manipulate the brain? With every new discovery about the human mind, more and more questions emerge about the boundaries of consciousness, responsibility, and how far neuroscience research can go. The fledgling field of neuroethics has sought answers to these questions since the first formal neuroethics conference was held in 2002. This groundbreaking volume collects the expert and authoritative writings published since then that have laid the groundwork for this rapidly expanding debate. *Defining Right and Wrong in Brain Science* traverses the breadth of neuroethics, exploring six broad areas—including free will, moral responsibility, and legal responsibility; psychopharmacology; and brain injury and brain death—in thirty provocative articles. The scientific and ethical consequences of neuroscience research and technology are plumbed by leading thinkers and scientists, from Antonio Damasio's *The Neural Basics of Social Behavior: Ethical Implications* to *Monitoring and Manipulating Brain Function* by Martha J. Farah and Paul Root Wolpe. These and other in-depth chapters articulate the thought-provoking questions that emerge with every new scientific discovery and propose solutions that mediate between the freedom of scientific endeavor and the boundaries of ethical responsibility. As science races toward a future that is marked by startling new possibilities for our bodies and minds, *Defining Right and Wrong in Brain Science* is the definitive assessment of the ethical criteria guiding neuroscientists today.

## Book Information

Paperback: 350 pages

Publisher: Dana Press; 1 edition (August 20, 2007)

Language: English

ISBN-10: 1932594256

ISBN-13: 978-1932594256

Product Dimensions: 5.4 x 1.1 x 8 inches

Shipping Weight: 1.5 pounds

Average Customer Review: 5.0 out of 5 stars 2 customer reviews

Best Sellers Rank: #171,029 in Books (See Top 100 in Books) #136 in Books > Textbooks > Medicine & Health Sciences > Administration & Policy > Ethics #164 in Books > Textbooks > Medicine & Health Sciences > Medicine > Basic Sciences > Neuroscience #177 in Books > Textbooks > Medicine & Health Sciences > Medicine > Clinical > Neurology

## Customer Reviews

“The ethical implications of neuroscience are truly novel, since the ability to intervene in the brain in many ways is a recent phenomenon.” “From the Introduction by Walter Glannon” (Walter Glannon 2007-02-13) “Walter Glannon’s book, *Defining Right and Wrong in Brain Science: Essential Readings in Neuroethics*, captures well the debates that have engaged neuroethics and provides a thorough introduction to the field. . . . The essays show a clear awareness of the socially-situated nature of the ethical implications of our increasingly sophisticated understanding of the brain. It is an excellent overview of the current state of neuroethics.”--*Journal of Ethics in Mental Health* (Chris Kaposy *Journal of Ethics in Mental Health* 2008-04-01)

Walter Glannon holds the Canada Research Chair in Biomedical Ethics and Ethical Theory at the University of Calgary in Alberta. He is the author of numerous papers and books, including *Bioethics and the Brain*, *Biomedical Ethics*, and *Genes and Future People*.

Due to the rapid advances in experimental techniques for studying processes in the human brain, the ability to alter neuronal processes real-time, and the understanding of how the brain organizes information it is becoming apparent that there are pressing ethical issues that will have to be addressed in the years ahead. These issues center on the possibility of direct intervention into the human brain, either using psychopharmacological drugs, electronic technology, or even genetically engineered viruses. Such interventions could have as their goals the curing of Alzheimer’s disease (or the delaying of its onset), the improvement of memory, or the enhancement of cognitive abilities. These efforts are admirable, and must be pursued diligently, but as in all areas of science and medicine, caution is necessary, since the potential for deliberate or inadvertent abuse is very real. But these same advances also shed considerable light on one of the most important problems in human experience: that of finding moral and ethical standards that are not based solely on philosophical rhetoric but instead respect the real capabilities and potential of human beings. This book, which is a collection of articles that have appeared before in either books or scientific journals, addresses the first concern, which is properly called now the ‘ethics of neuroscience.’ But it also addresses the second, namely of whether indeed one can find a ‘neuroscience of ethics’, which is an ethical theory or formulation that is firmly rooted in the science of the brain. It is very exciting to contemplate that such a theory is within our grasp, not only because brain science is fascinating in and of itself, but also because ethical standards and morality have not found a realistic foundation as of yet, despite the efforts of theologians and philosophers. Along the lines of a neuroscience of

ethics, the most interesting article in the book is the one entitled 'Moral Cognition and its Neural Constituents' by William D. Casebeer. Recognizing that sound moral reasoning is essential for humans, his goal is to understand the manner in which ethical reasoning is performed in the human brain. It does not make sense to adhere to certain ethical standards or theories if the brain cannot process information in a manner that is required by these standards. There are many such ethical theories developed throughout human history, with varying degrees of popularity and definitely diverse in their views of proper conduct. Some of them have resulted in extreme violence on the part of their adherents; others have been benign and died out possibly out of sheer boredom. Each has its own perspective, but which one of them, if any, is actually compatible with how the human brain engages in moral cognition? This is an important question to answer, since blind adherence to a given set of ethical standards may result in cognitive dysfunction or dissonance. Whatever the proper systems of ethics is, it must be based on what is possible, with possibilities defined with respect to what the human brain is actually capable of, and what it has evolved to do. In his article, Casebeer outlines briefly some of the major moral theories in Western culture. These include rule utilitarianism, the Kantian categorical imperative, and the Aristotelian notion of eudaimonia. He also briefly addresses any concerns that neuroethics commits the naturalistic fallacy but refers the reader to the literature for more in-depth discussion. But the most interesting part of this article deals with which regions of the brain are correlated with moral emotions and abstract moral reasoning. Because of its role in decision making and planning, the prefrontal cortex is thought to play a role, but the author cautions against being too hasty to make definite conclusions until more data is collected. He claims that imaging and lesion studies seem to indicate that damage to the ventral and medial prefrontal cortex causes degradation in practical and moral decision-making. As more experimental data is acquired, and as the workings of the brain become better understood through reverse engineering, it will be very exciting to find out just what part(s) of the brain are primarily responsible for moral thought and to what degree moral reasoning patterns can be altered by psychopharmacological interventions or using some other techniques. These interventions may trouble the morally sensitive reader, and they should, for any attempts to alter brain chemistry should be undertaken only when an extreme level of confidence is acquired. But if for example an in-depth understanding of moral reasoning indicates which parts of the brain are responsible for violent behavior or tendencies for making war (and that these parts are not "entangled" with others in the brain), then humanity should use, with the greatest of care, the technologies available for altering these behaviors or tendencies. The scope and ramifications of using brain intervention to such a degree are awesome, but morally justified. It will require a global commitment that goes

across cultures and races, but a more morally sensitive world that abhors violence is infinitely more preferable to a world that does not.

good

[Download to continue reading...](#)

Defining Right and Wrong in Brain Science: Essential Readings in Neuroethics (Dana Foundation Series on Neuroethics) Happy Brain: 35 Tips to a Happy Brain: How to Boost Your Oxytocin, Dopamine, Endorphins, and Serotonin (Brain Power, Brain Function, Boost Endorphins, Brain Science, Brain Exercise, Train Your Brain) Defining Twilight: Vocabulary Workbook for Unlocking the SAT, ACT, GED, and SSAT (Defining Series) Defining Gravity (Defining Gravity Series Book 1) Neuroethics: An Introduction with Readings (Basic Bioethics) Foundation, Foundation and Empire, Second Foundation Defining Moments: When Managers Must Choose Between Right and Right Barking up the Wrong Tree: The Surprising Science Behind Why Everything You Know About Success Is (Mostly) Wrong The Conservative's Handbook: Defining the Right Position on Issues from A to Z What's Wrong With My Plant? (And How Do I Fix It?): A Visual Guide to Easy Diagnosis and Organic Remedies (Whatâ™s Wrong Series) What's Wrong With My Houseplant?: Save Your Indoor Plants With 100% Organic Solutions (Whatâ™s Wrong Series) Left Brain, Right Brain: Perspectives From Cognitive Neuroscience (Series of Books in Psychology) The New Wider World: Foundation Edition (Foundation Editions Series) Essential Oils: 50 Essential Oil Dog & Cat Recipes From My Essential Oil Private Collection: Proven Essential Oil Recipes That Work! (Essential Oil Pet Private Collection Book 1) Essential Oils: Essential Oil Recipe Book - 30 Proven Essential Oil Recipes ::: My Essential Oil Private Collection Vol. 1 (Private Collection Essential Oils) 100+ Word Fill In Puzzle Book For Adults: The French Style Brain Teaser Crossword Puzzles With Fill In Words Puzzles for Total Brain Workout! (A Total Brain Workout Series) (Volume 1) Is It Wrong to Try to Pick Up Girls in a Dungeon?, Vol. 8 - light novel (Is It Wrong to Pick Up Girls in a Dungeon?) Is It Wrong to Try to Pick Up Girls in a Dungeon?, Vol. 4 - light novel (Is It Wrong to Pick Up Girls in a Dungeon?) Is It Wrong to Try to Pick Up Girls in a Dungeon?, Vol. 2 - light novel (Is It Wrong to Pick Up Girls in a Dungeon?) Is It Wrong to Try to Pick Up Girls in a Dungeon?, Vol. 7 - light novel (Is It Wrong to Pick Up Girls in a Dungeon?)

Contact Us

DMCA

Privacy

FAQ & Help