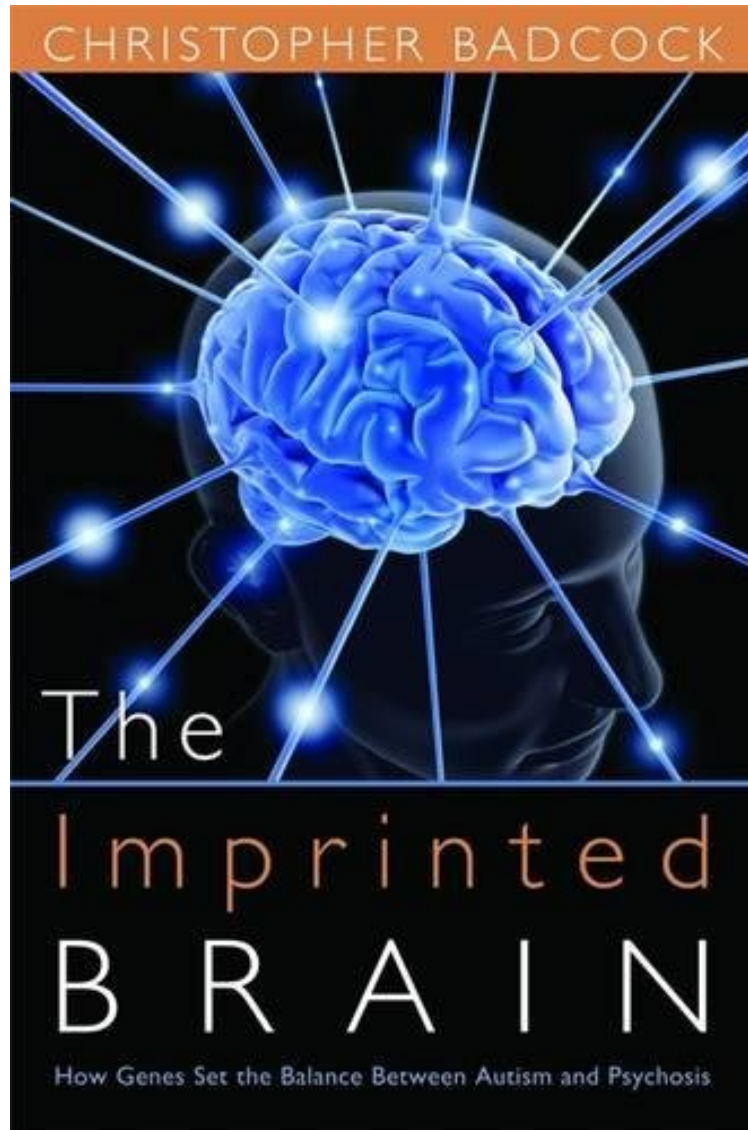


The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis

Christopher Badcock

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#423064 in Books Jessica Kingsley Publishers 2009-05-15 2009-05-15 Original language: English PDF # 1
9.30 x .90 x 6.10l, 1.10 #File Name: 1849050236240 pages | File size: 33.Mb

Christopher Badcock : The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis before purchasing it in order to gage whether or not it would be worth my time, and all praised The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis:

0 of 0 people found the following review helpful. Five StarsBy CustomerCan't wait to show this to psych residents!!!0
of 0 people found the following review helpful. Five StarsBy EVGgreat book15 of 15 people found the following

review helpful. Popper would be proud: bold and exciting theory (with predictions) about the connections between autism and psychosis.

By Nate This is a very exciting book that proposes a link between autism and psychosis. High functioning autistic individuals tend to exhibit mechanistic thinking, combined with "mind-blindness," or an inability to "read" other people. Sufferers of schizophrenia or manic depression or paranoia, and other psychotic disorders, by contrast, exhibit a kind of "hyper-mentalistic," that can be characterized as reading too much intention into situations. The symmetry between these disorders, that have usually been thought of as quite distinct, is something that begs an explanation and Badcock suggests that the "imprinted gene" theory that he helped develop may explain it. The book aims to do three important things: elaborate the symmetry that requires an explanation, propose a genetic and developmental basis for this symmetry, and explore the possible implications if this explanation turns out to be scientifically corroborated. It is, I think, important to note that the value of this book does not depend on whether the explanation he proposes ultimately turns out to be correct. The first four chapters alone in which he explores the symmetry between autism and psychosis are powerful and exciting: he presents a very convincing case that there is a connection here, and whether or not his hypothesis about the genetic basis of this connection turns out to be accurate, the demonstration alone that a connection exists is extremely exciting and raises a number of very interesting questions. (He does back up and illustrate his claims throughout with a number of studies and case descriptions.)

So in the first few chapters he shows, in great detail, that the characteristics associated with both autistic spectrum disorders and what might be called "psychotic spectrum disorders" result from imbalances in two parallel but distinct modes of thought that are each essential to "normal" human development. On the one hand, there is "mechanistic" thinking that immerses itself in details and detects patterns, and that is essential for mathematical and scientific thought. On the other hand, there is "mentalistic" thinking, that absorbs itself in feelings, judgments and intentions, and that is essential for navigating the complex power struggles and cooperations of social life. High functioning autism (such as Asperger's syndrome) seems to result from an overdevelopment of the parts of the brain responsible for mechanistic thinking and an underdevelopment of mentalistic thinking that is not so severe as to be crippling, as it is for low functioning cases of autistic spectrum disorders. Schizophrenia shows up later than autism, largely because it amounts to an overdevelopment of mentalistic thought and the sense of self and awareness of others and intentions, judgments, and the like only become mature in adolescence: as he puts it you have to have a developed theory of mind before it can be expanded far beyond its legitimate scope into paranoia, schizophrenia and other forms of delusional thinking.

One thing that I found problematic in Badcock's account is that he treats "mechanistic" thinking and "mentalistic" thinking as if they are parallel and independent - and he does present research that suggests they are undergirded by distinct parts of the brain - but it can't be that simple. The ability to recognize things in their differences, and to relate them into patterns and synthesize that are all part of mechanistic understanding are faculties of mind that are no doubt presupposed at some level by any ability to be aware of other people. Likewise, some awareness of the difference between what happens because I will it and what happens of its own accord, which seems to be a component of "mentalistic" thinking, is surely also essential to successful "mechanistic" thought. Badcock's thesis seems to me to suffer from an inattentiveness to the "dialectical" relation between these two essential modes of thought. It might be, for example, that schizophrenics are not so much "hypermentalistic" as he puts it, but simply exhibit faulty mentalistic thinking precisely because of an underdeveloped capacity to make the kind of distinction and connections that are necessary for "mechanistic" thought. Reflections along these lines would not so much challenge that basic approach Badcock pursues here as offer important correctives and qualifiers. Still, this is fascinating material and well worth reading.

The rest of the book continues to be fascinating, though it is quite a bit more speculative. He looks at "selfish gene" theory and "gene imprinting" theory to suggest explanations for the complexities of the hereditary patterns of autistic and psychotic tendencies (that are certainly more complicated than what you might expect from Mendelian genetics). The story is complicated, and quite fascinating, but mostly focuses on the fact that how genes are expressed in the individual results from an interplay and conflict between the evolutionary imperatives of both males and females. The genes of the male organism have a "selfish" interest in individual survival (since male genes are only preserved when their specific offspring with various females survive), while the genes of the female organism have a "selfish" interest in cooperative survival (since the female has a genetic stake in all of her offspring). While the male's genes are best served by large offspring with strong survival instincts (undergirded by the limbic brain), the female takes a much greater risk in childbirth and so her genes are better served by smaller offspring with more adaptive and cooperative skills (undergirded by the neocortex). These competing tendencies, combined with the longer term evolutionary benefits of both mechanistic thinking and social thinking, serve the "normal" organism that exhibits both capacities, but occasionally produce extreme individuals whose imbalances can be compensated by special skills (high functioning) and others whose imbalances are so extreme as to be debilitating (low functioning).

The final few chapters are the most speculative, but also perhaps the most intriguing. In addition to a novel theory of the nature of genius, Badcock offers a vision of a new kind of psychological theory that would be a successor to the dominant theories of the twentieth century: psychoanalysis with its extreme mentalistic bias, explaining everything in terms of consciousness and the "unconscious," and behaviorism with its extreme mechanistic bias, that explains away the mind and reduces all psychology to theories about observable

behavior. It does seem to get a bit personal towards the end, and there is a hint at what motivates the author's search for a "grand unified theory" of the mind, when he reveals that he underwent three years of psychoanalytic treatment with Anna Freud (daughter of Sigmund), and that it was mostly useless. Not "easy reading" - and readers who hope for a light reading summary of some new well-established field are likely to be put off by both the speculative dimension of this theory and the copious referencing of research. In any case, whether or not it's got all the details right, this is a bold and exciting program and any serious new proposal for a comprehensive approach to understanding people, whether in philosophy or psychology or sociology or anthropology, really will need to take into account the considerations that Badcock has laid out here.

The Imprinted Brain sets out a radical new theory of the mind and mental illness based on the recent discovery of genomic imprinting. Imprinted genes are those from one parent that, in that parent's interest, are expressed in an offspring rather than the diametrically opposed genes from the other parent. For example, a higher birth weight may represent the dominance of the father's genes in leading to a healthy child, whereas a lower birth weight is beneficial to the mother's immediate wellbeing, and the imprint of the mother's genes will result in a smaller baby. According to this view, a win for the father's genes may result in autism, whereas one for the mother's may result in psychosis. A state of equilibrium - normality - is the most likely outcome, with a no-win situation of balanced expression. Imprinted genes typically produce symptoms that are opposites of each other, and the author uses psychiatric case material to show how many of the symptoms of psychosis can be shown to be the mental mirror-images of those of autism. Combining psychiatry with insights from modern genetics and cognitive science, Christopher Badcock explains the fascinating imprinted brain theory to the reader in a thorough but accessible way. This new theory casts some intriguing new light on other topics as diverse as the nature of genius, the appeal of detective fiction, and the successes - and failures - of psychoanalysis. This thought-provoking book is a must-read for anyone with an interest in autism, psychiatry, cognitive science or psychology in general.

Deeply scholarly yet absorbing narrative, The Imprinted Brain will change the way we view the human brain and its functions, evolution, and disordering in mental illness. Badcock has drawn evolutionary biology together with genetics, psychology, psychiatry, and neuroscience to demonstrate, for the first time, how genomic conflicts play a central role in how the human brain works, and how the brain becomes dysregulated in social-brain disorders including autism and schizophrenia. --Dr. Bernard Crespi, winner of T. Dobzhansky Prize and E. O. Wilson Award, Evolutionary Biology
During the last 20 years Christopher Badcock has been one of the most creative interpreters of the new ways of thinking about genes, evolution and the human psyche. In The Imprinted Brain he breaks new ground by showing how imprinted genes, genes that act differently depending on whether they are inherited through the maternal or paternal line, can contribute to autism and psychoses. Both theoretical and empirical researchers will be stimulated by the arguments in his new book. --Charles Crawford, Emeritus Professor of Psychology, Simon Fraser University
The Imprinted Brain is a true tour de force, surveying the cutting-edge research in genomics and neuroscience and providing a fresh view on what it means to be male or female, "things people" or "people people," autistic or schizophrenic. You will never look at your parents the same way again! --Satoshi Kanazawa, Reader in Management at the London School of Economics and Political Science, 'The Scientific Fundamentalist', and coauthor of Why Beautiful People Have More Daughters
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I am deeply indebted to Greig and MacKay: they have demonstrated much better than I ever imagined possible one of the most remarkable possibilities suggested by the diametric model of mental illness. This is that a symptomatic form of psychotic cognition - homuncular thinking - becomes therapeutic when used by autistic children. (Psychology Today)
Christopher Badcock's The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis describes, refreshingly, a psychological theory of psychopathology. In this day and age, the idea seems almost radical...The central idea is novel and intriguing: Autism and schizophrenia, which people have long recognized as being related in some way, are in fact mirror images of each other. Badcock suggests that there are two broad domains of cognition that are usually so integrated as to appear seamless: cognition about inanimate objects and cognition about people, especially about people's minds. (PsycCRITIQUES)
Drawing on a range of evidence from genetics, evolutionary psychology, brain imaging and psychiatry, Christopher Badcock presents his ambitious theory on the aetiology of autism and

schizophrenia and the interconnection between the two...The narrative is clear and engaging, with the chapters on autism especially vivid, filled with personal accounts from famous individuals with autism and Asperger's syndrome. (The British Journal of Psychiatry) Christopher Badcock's *The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis* is a welcome addition to the literature on autism where much of the debate as to origins remains open. This book, however, offers a radical new theory based on the discovery of genomic imprinting...The author does not limit himself and interestingly probes the nature of genius, the appeal of detective fiction and the successes (and failures) of psychoanalysis. (Young Minds) The major theme that Christopher Badcock puts forward in this book is that autism and psychosis are extremes on a single line of development...There is much of huge value in this book and there is much more to the author's case for the imprinted brain than there is room to mention here (including a fascinating explanation for why autism appears to be increasing and psychosis is declining). It is a compellingly readable work, full of valuable insights, and I heartily recommend it. (Human Givens Journal) Deeply scholarly yet absorbing narrative, *The Imprinted Brain* will change the way we view the human brain and its functions, evolution, and disordering in mental illness. Badcock has drawn evolutionary biology together with genetics, psychology, psychiatry, and neuroscience to demonstrate, for the first time, how genomic conflicts play a central role in how the human brain works, and how the brain becomes dysregulated in social-brain disorders including autism and schizophrenia. (Dr. Bernard Crespi, winner of T. Dobzhansky Prize and E. O. Wilson Award, *Evolutionary Biology*) During the last 20 years Christopher Badcock has been one of the most creative interpreters of the new ways of thinking about genes, evolution and the human psyche. In *The Imprinted Brain* he breaks new ground by showing how imprinted genes, genes that act differently depending on whether they are inherited through the maternal or paternal line, can contribute to autism and psychoses. Both theoretical and empirical researchers will be stimulated by the arguments in his new book. (Charles Crawford, Emeritus Professor of Psychology, Simon Fraser University) *The Imprinted Brain* is a true tour de force, surveying the cutting-edge research in genomics and neuroscience and providing a fresh view on what it means to be male or female, "things people" or "people people," autistic or schizophrenic. You will never look at your parents the same way again!. (Satoshi Kanazawa, Reader in Management at the London School of Economics and Political Science, 'The Scientific Fundamentalist', and coauthor of *Why Beautiful People Have More Daughters*) Dr. Badcock has written a fascinating book. His *Imprinted Brain* theory is already proving to be both testable and important. This is an up-to-date, clearly written, and well sourced presentation of that theory, the evidence that supports it and the implications that these may have both for how we understand mental illness and how we treat it. (Dr. Kenneth J. Aitken, clinical psychologist, LD-CAMHS Service, Glasgow, independent consultant, and author of *Dietary Interventions in Autism Spectrum Disorders*) For anyone with an academic interest in Asperger this book is to be highly recommended. For parents with a scientific background, and an interest in the theoretical, this is a stimulating and scholarly read. (Asteens) *The Imprinted Brain: How Genes Set the Balance Between Autism and Psychosis* examines what causes conditions like autism and schizophrenia and offers one of the most exciting contributions to modern psychiatric thinking since Freud. It blends science with psychology to offer insights on the genetic basis of mental disorders - and it proposes a theory for evolution that offers new light on spirituality, homosexuality, and more. Any library catering to psychiatrists must have this! (The Midwest Book)

About the Author Christopher Badcock was educated at Maidstone Grammar School and The London School of Economics, where he graduated with a First in Sociology and Social Anthropology. Seeking to find a sound evolutionary, genetic, and neuro-scientific basis for psychoanalysis, he realized that research into autism completely discredited Freud but suggested a completely new basis for understanding the mind and mental illness. With the help of the leading Canadian bio-scientist, Bernard Crespi, he was eventually able to consolidate these insights into the imprinted brain theory outlined here and published a number of co-authored papers on the subject. Christopher Badcock is the author of a dozen books, and today teaches courses on evolutionary psychology, genetics, and sociobiology at the London School of Economics. He lives in London.