ful to those in that field. For example, the book addresses topics such as the social context and politics of mental health funding; service structure and administration; who sets the mental health agenda; and the influence of insurance, governments, and research-focused organizations. Moral issues related to prioritization of the needs of the individual versus the needs of government, funding bodies, personal bankrolls, and corporations are discussed at several points in a fashion that provides for rich perspective with a tone of *parrhesia*, candidly laying bare some of the most difficult moral concerns of the discipline.

The book is not without other challenges. As I read, I wondered who the audience for the book really was and, at times, found the structure and content somewhat tedious. I found myself thinking that it reads like a doctoral dissertation, only to realize later that the text is based largely on the author's (2009) dissertation. The text is thick on detail but not fast on delivery. A clinician having limited time for continuing education would well be advised that the text is not a page-turner. Transforming a dissertation into a published monograph is not easy, in part because the audiences can be quite different. As a result, the book is useful for those who have, or are required to have, the time to devote to this text. Unfortunately, Gupta's text does not actually succeed in bridging that gap between academia and clinical practice that she identifies as a basic problem within the discipline.

Throughout the text, I was also distracted by vacillation between EBM and EBP. While Gupta defined the differences between these terms well, at times I found her discussing EBM, when I really was wondering more specifically about the implications for EBP.

Finally, I have some concerns about the scope of the text itself. Focusing specifically on psychiatry is reasonable, as this is the author's area of training and practice. However, Gupta has addressed a topic important to mental health, not just to psychiatry. As a result, the text contributes to the fragmentation of discourse in mental health that detracts from ethical and moral delivery of services to those in need. A considerable amount of thought and research comes from psychology, nursing, and other allied health disciplines. Psychiatrists would do best not to reinforce the intellectual silos within mental health, as this perpetuates the very problems Gupta discusses as being central to her field.

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Philosophy & Theology

BEING AS COMMUNION: A Metaphysics of Information by William Dembski. Surrey, UK: Ashgate, 2014. xvii + 218 pages. Paperback; $34.95. ISBN: 9780754638582.

William Dembski, author of *Being as Communion: A Metaphysics of Information*, holds a PhD in philosophy and another in mathematics. A Christian theist of broadly evangelical leanings, he is probably best known for his role in the emergence of the controversial intelligent design movement. His previous two books, *The Design Inference* (1998) and *No Free Lunch* (2002), develop and deploy an information-theoretic apparatus for identifying and analyzing patterns in nature whose origin and development, Dembski argues, materialism is constitutionally incapable of explaining. In these two books, he argues that materialist science only appears to account for the informational complexity of nature because it surreptitiously helps itself (as in a "free lunch") to an unconfessed teleology disguised as chance and necessity, thereby appearing to keep the world free of nonnatural sources of telic agency such as God or immanent teleology (which might require a "design inference"). His most recent book, the subject of this review, completes Dembski's trilogy on intelligent design by further expanding on and articulating the philosophical underpinnings of the two earlier books' themes. While he wrote *Being as Communion* to give us "a metaphysical picture of what the world must be like for intelligent design to be credible" (xiii), much of its content holds interest and value beyond the vicissitudes of the intelligent design research program itself, and therefore (despite its place in the trilogy) functions well as a "stand-alone" book for those new to Dembski's work.

The numerous philosophical, scientific, and theological ideas that find their way into these 200 or more pages of sophisticated critique, argumentation, and speculation cannot be adequately represented in a review of this size. My goal, therefore, will be merely to give the reader a sense of some of what this book offers in the way of topics and issues, and then conclude with a few brief comments on its accomplishment.

Dembski opens his book, setting the stage for what he will call his metaphysics of "informational realism," by drawing attention to a deep, yet largely ignored, tension between our present age of information and the West's underlying materialistic worldview: if we embrace materialism, which renders reality into nothing but massy particles agglomerated by nontelic material forces, then most of the things (information included) that we have valued throughout history (values included) "become dim reflections of their former selves," a disenchantment of reality which, when squarely faced, cannot but lead to "the ultimate dissolution of all human aspiration" (pp. 4–5). Dembski believes that his informational realism lays the basis for preserving the transcendent realities of human aspiration which materialism must render as mere appearances. In the final sentence of his book, Dembski concludes that "the information approach to reality takes the world as it is" (p. 203). And "the world as it is" gives itself to us already rife with minds, meanings, values, and purposes, none of which can be taken seriously for long by either materialism or a civilization beholden to materialism's atomistic and reductionistic strictures. Thus, what we find between the first and the last chapters of this book is an attempt not only to preserve the West's humanistic heritage but also to resituate it in the context of a metaphysics of information that establishes a fundamentally relational ontology capable of fostering unfettered scientific inquiry that is open to wherever evidence leads and is thus free to take "the world as it is." Dembski's two principal aims in this book are, therefore (1) to build a convincing case for the many explanatory and existential advantages of an infocentric paradigm switch that would replace the interaction of particles with the exchange of information as reality's most basic modality of operation, and (2) to supply the conceptual and theoretical sub-structure to support this rather radical move.

In the nineteen chapters separating his first and last chapters, Dembski identifies, refines, and deploys the conceptual tools required to forge the theoretical underpinnings of his metaphysics of informational realism, taking the reader on a fast-paced, often high-altitude journey through a vast array of heady mathematical, scientific, and metaphysical passes, along with a few exhilarating detours to various theological precipices. In this short work, he manages to engage and develop a whole host of concepts and theories in terms of their bearing on his informational realism project. The reader will become familiar with various interpretations of quantum physics, information theory, and probability theory, along with a few recently developed mathematical postulates such as the "no free lunch" and "conservation of information" theorems, as well as topics in the biological sciences, such as neo-Darwinist and intelligent design accounts of biological complexity, natural selection, teleonomic vs. teleological laws, and genetic algorithms. In the light of his informational realism metaphysic, Dembski also illuminates for the reader a number of issues in metaphysics, such as determinism, contingency, necessity, causal closure, multiple realization of supervening properties, embodiment, immateriality, randomness, and panpsychism—and even a few momentous theological issues, such as divine concurrence, providence, free will, miracles, resurrection, and immortality.

Despite the occasional abstruse mathematical theorem and a steady flow of abstract conceptual notions, *Being as Communion* is a surprisingly enjoyable read, due largely to the many interesting issues covered, the plentiful use of examples, and the clarity of Dembski's prose. And for those already familiar with the intelligent design movement, this book does much to clear away some long-standing misconceptions that have diminished its appeal. The book as a whole, however, can be somewhat frustrating. The internal logic of the progression of chapters and topics is not readily discernible. There were a number of better ways Dembski could have built his argument and organized his book to enhance its cogency, increasing significantly the ease of informational uptake of the book's message.

Leaving aside issues of improving the book's form, I will offer in closing a couple of comments on its content—one commendatory, two critical. I liked the book's burden, which I took to be that of forging a metaphysics capable of grounding an informationally porous universe to recover, legitimate, and sustain creation's enchantments: those meanings, values, and purposes uniquely given to human intelligences that have been progressively dispatched into the realm of epiphenomena ever since the rise of early modern science.

I struggled, however, with Dembski's failure to clearly separate materialism from physicalism. Unlike materialism, physicalism has no essential connection to matter; physicalism is committed only to those entities the best physics of the day deems the most explanatorily basic. One can therefore be a nonmaterialist and a physicalist. In fact, I would say that most physicists are nonmaterialist physicalists (could a materialist coherently embrace quantum physics?). I think the real demon Dembski is out to slay is not materialism (whether metaphysical or merely methodological) but ateleological physicalism.

My second problem is not unrelated. Dembski could have done a better job of helping his reader understand how his informational realism differs, if it does, from a flat-out metaphysics of idealism. Given that he contends reality is "information all the way down" (p. 198), understands God's mind to be the original and ultimate imparter of information to reality (p. 187), and embraces a co-ontologizing relational ontology of information (p. 167), it seems to me that Dembski's metaphysics is better construed as one of informational antirealism. Perhaps Dembski's use of realism here is more rhetorical or strategic, allowing him to adopt the likes of naturalist-nonmaterialist-teleologist-realist Thomas Nagel into the intelligent design family.

If you are someone who is drawn to the latest meme of *information*, and you are a theist, then Dembski's book is a must read. However, even if you are like me and not so taken with that meme (I find it too skeletal a notion to carry the semantic weight of "communion" in his title), and even if you are not a theist, you are nonetheless likely to find lots in this book to expand your mind.

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TECHNOLOGY

THE INNOVATORS: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution by Walter Isaacson. New York: Simon & Schuster, 2014. 488 pages, index. Hardcover; $35.00. ISBN: 9781476708690.

Walter Isaacson, the former chairman of CNN and managing editor of *Time*, has previously written biographies of Steve Jobs and others. In this latest book, he presents a fascinating and very readable account of key people in the development of both computers and the Internet, from Ada Lovelace and Charles Babbage in the mid-1800s to the beginning of 2014. What makes the book especially enjoyable to read is his focus on the backgrounds of these people and how they collaborated to produce the digital world we know today.

A common belief is that innovation results from the creativity of great individuals. While acknowledging the role played by such individuals, Isaacson frequently points out that innovations are more often the result of collaboration involving people of diverse talents. In his Introduction, he asserts that "the tale of their teamwork is important because we do not often focus on how central that skill is to innovation" (p. 1), while in his final chapter, he summarizes the lessons learned from a study of the history of computing and the Internet. He notes, "First and foremost is that creativity is a collaborative process. Innovation comes from teams more often than from the lightbulb moments of lone geniuses" (p. 479).

Another central idea that permeates the book is the notion of human-machine symbiosis: human minds working with computers to excel at a task by combining the things that humans do especially well and computers do poorly if at all, and vice versa. As an illustration of this, he cites a chess tournament held in 2005:

> Players could work in teams with computers of their choice…But neither the best grandmaster nor the most powerful computer won. Symbiosis did…The final winner was not a grandmaster nor a state-of-the-art computer, nor even a combination of both, but two