

According to Smith, the answer to why religion matters lies not in what it is, but rather in what it can do, that is, in its causal capacities to influence how individuals live and how the world operates. He lists eighteen powers that religion can generate under the categories of identity, community, meaning, expression and experience, social control, and legitimacy. None of them are unique to religion, and all of them are secondary, derivative, and dependent, like the branches and leaves of a tree relative to its roots and trunk. In another, fully elaborated list, Smith then outlines the ways religion impacts the social world beyond the individual. To illustrate these points, Smith provides a fascinating extended example of Engaged Buddhism.

As to how religion works, Smith proposes a simple mental process: "the human making of causal attributions to superhuman powers" (p. 136). Case studies of miracles, ordinary "religious experiences," and the fundamentalist attribution of the terrorist attacks of September 11, 2001, to "the retributive anger of God for America's contemporary apostasy and sins" (p. 156) beg the question of how religious practitioners interpret and evaluate superhuman causal influence. Distinct perceived outcomes that religious practices were meant to activate include the superhuman powers delivering what was sought, the powers providing a superior alternative to what was sought, the powers remaining nonresponsive and silent, the powers failing to produce what was sought, or the powers rejecting the practitioners who sought them. The social psychological literature on attribution theory and cognitive biases is vast, and Smith defines 23 of the latter and their possible religious applications, including psychological placebo effects and their sociological analogue: If people define situations as real, they are real in their consequences.

Beyond the questions in the subtitle, Smith also asks why humans presumably are the only species on earth to be religious in the first place. His answer "lies in humans' unique possession of a complicated combination of natural capacities and limitations" (p. 5). More boldly, Smith references "a large body of recent research in the cognitive science of religion" about biologically grounded genetic and neurological traits which show that religion is "a natural and fairly effortless way for people to think about and live in the world" (p. 5). People are motivated by their "objective interest in realizing six natural, 'basic goods' of human personhood [which realize] their proper natural end (telos) of *eudaimonia* (happy flourishing)" (p. 205), goods he elaborated in *To Flourish or Destruct*.

"Doing religion" depends on exercising at least ten specific human capacities that he elaborated in *What Is a Person?* "Eliminate any one of them and the practice of religion would not be possible" (p. 209). Thus, contrary to much Western social thought in recent centuries, Smith maintains that religion is not unnatural, irra-

tional, and abnormal. We are *Moral, Believing Animals* whose self-consciousness and self-transcendence drive us beyond ourselves. Indeed, "it may actually be religious unbelievers and secularists who need more sociological explaining than religious practitioners" (p. 233).

Smith therefore concludes, in concert with twenty-first century consensus, that twentieth-century secularization theories are incorrect, though not completely wrong or useless. "Properly appropriated, they offer valuable insights into social causal mechanisms that decrease religious belief and practices" (p. 5). Critical realism apprehends the nuance and complexity of how mechanisms such as modernity's religious pluralism can either weaken or strengthen religion depending on social conditions. "Exactly which causal mechanisms operate under what social conditions to produce differing religious outcomes we cannot predict according to some general law of social life" (p. 260).

Like the examination of the human side of religion in the sociology of religion generally, the net effect on readers is likely to question their (ir)religious practices. They have surely been unmasked, though not debunked. As Smith asserts, social science can only expose religion for what it is, how it works, and why it matters. It cannot verify or falsify religious truth claims. To whatever superhuman powers we give our allegiance, we still need an explanation for all the other religions. When those religions have been carefully explained (away?), perhaps we will then be willing to turn the analytic lens back on our own religious practices. The payoff is to separate out the human from the superhuman, the bio-psycho-social-cultural from the truly spiritual, a reward of great personal value. Christian Smith is a superb guide to the human side.

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TECHNOLOGY

THE HEART OF THE MACHINE: Our Future in a World of Artificial Intelligence by Richard Yonck. New York: Arcade, 2017. 328 pages, references, index. Hardcover; \$25.99. ISBN: 9781628727333.

Calling a customer service line where an automated program happily routes us to the appropriate human agent is becoming commonplace. What we may not understand, however, is how these systems are becoming better able to identify and respond not just to the words we say, but to the emotions behind those words. As computers become more and more advanced, it is no surprise that they are becoming more "emotionally intelligent." What is less understood is how these innovations will change us and, ultimately, how they will change humanity.

Book Reviews

Richard Yonck, in his book entitled *The Heart of the Machine*, lays out a fascinating examination of the world of emotionally intelligent machines. He combines a thorough history of the innovative pathways that brought us to where we are now, a captivating tour through current and future applications of the technology, and a fairly disturbing look into the future of where intelligent machines may take us.

Yonck begins with an evolutionary description of emotions. He makes the case that cave men who had the ability to read the emotion of fellow cavemen would be better able to survive. He does a good job of explaining what emotions are, the role they play in a civil society, and the many ways they influence how we think and the decisions we make. He then proceeds to discuss how emotions can be “read.” Whether it be through micro facial expressions, small vocal variations, or changes in stride or posture, he lays an excellent foundation for helping the reader better understand the many different ways artificial intelligence programs work by gathering data that allows them to quantify and interpret the emotional state of the humans they are interacting with.

Yonck’s second section answers the “so what?” question by laying out the many ways artificial emotional intelligence is affecting us now and in the future. He provides one fascinating example after another, each one accompanied by enough history and science to give it context. He also avoids the pitfalls of Postman’s one-eyed prophet by discussing both the benefits and drawbacks of each innovation. Here are a few examples: computer programs that can sense how hard we hit the keypad—and then provide helpful advice based on our level of frustration; wristbands that can help autistic children interpret the emotions of people they are talking with; marketing programs that can adapt to consumers’ emotional state and provide ads that are more helpful, effective, or even manipulative; education programs that can sense the frustration or enthusiasm levels of a student and create appropriate individualized learning activities; programs that add an emotional component to the stark texts or Skype calls we make, helping friends in cyberspace understand how we are feeling or even helping them *feel* the same emotions; robots that provide customer service, elder care, and child care; brain chips that act as emotional prosthetics; operating systems that communicate what would appear to be warmth, humor, caring, anger, fear, and even love. For better or worse, each of these AI applications reads, interprets, and responds to human emotions. Each moves us closer to being unable to differentiate between person and machine, and maybe not really caring that much about the difference.

And that leads into the final section of *The Heart of the Machine*. Are machines that think *and* feel somehow more human? What makes something “human”? What

happens when machines become smarter and more powerful than all of humanity put together? Yonck begins this section by looking at how smart machines have been portrayed in movies and books. This chapter provides an insightful look at the various artistic portrayals of artificial intelligence and serves as an innocuous segue into the question of what makes something human. This, however, is where the book takes an unexpected and frustrating turn. Yonck spends a muddled chapter establishing a definition for “consciousness,” to help ascertain when a machine is no longer *just* a machine. He draws from philosophers to answer the question of consciousness but rejects the relevance of a discussion of the soul.

It is his last argument that becomes the most untenable. He presents three possible alternatives to a humanity that is forced to live with machines that are exponentially smarter and more powerful. They are the Terminator, the Matrix, and the cyborg outcomes. In the Terminator view, the machines wipe us out. In the Matrix view, the machines either use us or find a way to co-exist (unlikely from his point of view). He promotes the final possibility, the one in which humans and machines merge. Drawing on his evolutionary point of view, Yonck suggests the best way to survive in the future is to add machine elements to human bodies.

By integrating with us, artificial intelligence could actually gain advantage in a challenging environment, balancing out those processes by which machines excel with our own unique style of cognition. Each of us would coevolve in a manner that would become increasingly symbiotic. (p. 266)

Yonck’s conclusions are not surprising, considering his strict adherence to a biological and evolutionary point of view. It is unfortunate that he does not examine the interplay between emotions and the soul. When he defines human beings as little more than a concoction of cells, neurons, and chemicals, he misses an important discussion about how artificial emotional intelligence may actually be attacking our identities, our social interconnectedness, and ultimately our humanity. While he clearly cannot address all of the history, science, innovation, possible futures, and social, philosophical, and religious implications of artificial intelligence in one book, he left a clear hole when it comes to issues important to individuals who see humans as being created in the image of God and emotions as flowing from the deepest part of the soul.

That being said, this book is one that will be viewed as foundational to an emerging discipline. Yonck’s writing style is easy to read, his stories and examples are compelling, his science explanations are easy to understand, and he has introduced us to a technology that will undoubtedly be impacting us far into the future. I highly recommend this book to help us better under-

stand where our technology is taking us and how we might ultimately *feel* about it when we get there.

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THEOLOGY

HUMAN ORIGINS AND THE IMAGE OF GOD: Essays in Honor of J. Wentzel van Huyssteen by Christopher Lilley and Daniel J. Pedersen, eds. Grand Rapids, MI: Eerdmans, 2017. 322 pages. Hardcover; \$60.00. ISBN: 9780802875143.

If you are looking for proof that you are not alone, here it is. Transdisciplinary work in theology and anthropology has been on the rise over the last few decades and Wentzel van Huyssteen has been at the forefront of bridge building. Humans may be the only species with religion, and Earth may be the only planet with intelligence, but our humanity is defined—in large part—by the interactions we have with the rest of creation.

In 2004, van Huyssteen delivered the Gifford Lectures at the University of Edinburgh. The series was entitled “Alone in the World? Human Uniqueness in Science and Theology” and resulted in a book by the same title (Eerdmans, 2006). Those lectures and a broader body of work by van Huyssteen have inspired a generation of scholars to engage more deeply in questions about what makes us human and how that differentiation came about historically. In the present volume, Lilley and Pederson present a collection of essays in honor of van Huyssteen, featuring prominent scholars working at the intersection of science and Christianity. For scholars, the book provides an excellent avenue into the literature. The general public will find it provocative, but occasionally difficult to read. Individual articles vary greatly in readability and level of jargon. If you can get past those challenges, the range and depth of thinking is impressive.

The book is organized into an opening section and three disciplinary heads: natural scientists, philosophers and historians, and theologians. The opening has a foreword by M. Craig Barnes and a preface by the editors, setting forth the intentions and import of the book. An introduction by Niels Henrik Gregersen provides a thorough, if rather technical, summary of van Huyssteen’s work. It emphasizes his commitment to relational epistemology and critical realism. By attending to how we come to conclusions in anthropology and theology, and by creating better communication between the disciplines, he opens a space for serious scholars to approach the material together, even when their standards and goals differ. All the works in the book demonstrate this level of care, not only for disciplinary standards, but for the significance of working beyond any one field. Van Huyssteen calls his methodology transversal postfoundationalism:

transversal because it respects boundaries but communicates across them, postfoundational because it denies the divide between modern foundationalism and post-modern coherentism.

Part one deals with anthropology and psychology, featuring chapters by Ian Tattersol, Ian Hodder, Justin Barrett and Tyler Greenway, Agustín Fuentes, and Richard Potts. Each one brings a scientific perspective to the question of what makes humans unique and how such traits arose. In addition to providing highlights of the historical record, they all emphasize the importance of relationships. Humans live and move and have our being in community. What makes us unique might not be inherent in individuals, so much as it is something attained interactively.

As an evolutionary biologist, I have some concern that claims of uniqueness—particularly with regard to agriculture—may be overstated. Ants, for example, breed fungi and aphids. No doubt such objections could be addressed if the essays were longer, but the limitations of format restrict the scope. Overall, I found the material fascinating and informative.

Part two deals with philosophy and history, primarily focusing on questions of ethics and aesthetics in human origins. Keith Ward usefully distinguishes between (biological) humans and (ethical) persons. Clearly the categories overlap, but they are constructed in different ways and it matters how we line the two up. Michael Ruse provides a provocative set of questions that highlight the ways evolution can challenge Christian thinking. Wesley Wildman and John Hedley Brooke also contribute.

Part three includes theological reflections. Each author comments on van Huyssteen’s methodology, how it does and does not work in practical settings. Celia Deane-Drummond provides a critique, asking whether it is clearly enough defined. David Ferguson defends it as an important way forward in theological anthropology. D. Etienne de Villiers compares it to Max Weber’s “ethic of responsibility.” Each in their own way, these authors deepen the discussion that van Huyssteen started. Michael Welker’s chapter, on the other hand, seems unconnected and out of place. The section and the book wrap up with a wonderful reflection by Dirk J. Smit on the concrete context of van Huyssteen’s thought in South African Christianity at the end of Apartheid. He draws the connection between our ideas of “self” and “alone” and how they interact with our ideas of “stranger,” reminding us that the discussions of humanity invariably have life or death consequences in how we treat our neighbor.

The book is well edited and thoughtfully organized, with useful contents, index, and short author biographies. Copy-editing is solid throughout, but flow and