

that an evolutionary perspective can be empowering, primarily because knowledge of fact and truth allows a Christian to better carry out the ministry of Jesus in his/her life and in the world. Knowledge of the roots of our negative genetic urges (for example, the tendency to overeat) can empower us to overcome these urges through a combination of human choice and the grace of God. The final chapter discusses how the Christian church, girded with an appropriate integration of evolutionary knowledge and scriptural foundation, is best positioned to foster the virtues of the kingdom of God through community.

I liked this book, and I think it is definitely one for discussion and use in an adult Sunday school class. It does, however, avoid a number of awkward questions and issues. For example, why does it matter if our negative/positive tendencies are evolutionarily based? Wouldn't we, as Christians, act the same if they had some other origin? There is also an assumption by the author of a transcendent morality – but where does this come from? Are our morals likewise a product of evolution? If so, how does this square with biblical (and other) forms of revelation? And as far as the problem of death is concerned, isn't this a problem of sin in the world? Doesn't it mean that sin is present at the outset of creation?

That said, this is very much a positive contribution to the ongoing evolution/creation issue. Without denying our evolutionary origins, it calls us to transcend them as followers of Jesus. I am sure it will foster interesting discussions in many a church and Sunday school class.

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PERSONHOOD

ARE WE SLAVES TO OUR GENES? by Denis R. Alexander. New York: Cambridge University Press, 2020. 275 pages. Hardcover; \$99.99. ISBN: 9781108426336. Paperback; \$29.99. ISBN: 9781108445054. Ebook; \$24.00. ISBN: 1108426336.

A few weeks ago, news broke that the genetic testing giant 23andMe was going to become a publically traded company.¹ With an annual revenue of \$305 million in 2020 and a database of nearly 10 million human genomes, the company has become not only a consumer favorite for inexpensive at-home genetic testing, but its wealth of genetic knowledge has become a valued commodity for drug development companies. As a part of its marketing approach, 23andMe suggests the knowledge gained from their genetic analysis will help individuals to “know what makes you, you.” While not explicitly stated, this slogan and the company's quick rise to success follow a narrative that has become central in modern society—genes completely determine who we are.

Concerned that genetic determinism has taken an unwarranted place in western culture, Denis Alexander offers *Are We Slaves to Our Genes?* as a critique of this rising epistemology. Using an enormous compilation of modern genetic research, Alexander argues that the development of most human traits and behaviors is far more complex than what genetics can account for alone. Rather, current genetic research suggests that the development of a majority of human traits and behaviors is the result of a complex interaction between genes, the environment, and developmental timing; this includes the interaction between interrelated biological systems.

Alexander begins by making a case for the prevalence of genetic determinism in the modern cultural narrative. Using multiple current examples, he highlights how genetic determinism is both implicitly and explicitly woven into the presentation of scientific research, especially in pop culture. He then spends the next three chapters acquainting the reader with basic genetic principles. Along with a basic introduction, he provides current information on how genes and the environment interact during human development. He also offers a thoughtful analysis of current research and techniques for connecting human behavior with genetics. In these chapters, Alexander is careful to be both artful and delicate as he tries to strike a balance between making the information palatable for nonscientists, while still engaging for experts in the field. For either reader, the information presented in these chapters is foundational to understanding the genetic research and analysis presented in later sections of the book. The focus then shifts to providing detailed summaries and analyses of current genetic research on a number of culturally relevant topics.

In chapters 5, 6, and 7, he explores the relationship between genes and mental health, genetics and intelligence, and genes and personality, respectively. The analysis in chapter 7 also includes a look at a few well-known personality disorders. The correlations highlighted and the analyses provided are grounded in current psychological and genetic-based research. The examples used are relevant and interesting for scientists and nonscientists alike. In chapter 9, Alexander moves his attention to the genetics of food desire, weight, and the propensity for exercise. Again, he makes a strong case to show that genetic research does not support the narrative around genetic determinism for development of these traits and behaviors.

Alexander then decides to tackle the correlation between genes and three of the most controversial issues in current American society: religion, politics, and sexual orientation. On each of these contentious issues, he provides an extremely well-researched, thoughtful, and even-handed analysis that is grounded in scientific research, not opinion. The penultimate chapter provides an exquisite summary of the previous chapters

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that include additional rationale for his thesis. He then closes the work with a nod to some of the philosophical and religious discussions on genetic determinism. In this chapter, he also provides an interesting contrast between two current worldviews (Christianity and Transhumanism) as they relate to genetic determinism, free-will, morality, and human purpose. The chapter is logically constructed and provides additional compelling rationale against genetic determinism, especially for a non-Christian reader.

Anyone who dives in to *Are We Slaves to Our Genes?* will find it an engaging and thought-provoking read. Alexander summarizes and synthesizes an immense amount of current scientific research into a clear, concise, and palatable narrative. His chapter on genes and sexual orientation is one of the best and well-balanced compilations of current genetic research on the topic around. The chapter includes some current psychological research as well. For those with interest in this topic, the book is worth picking up just for that chapter. Whether the reader is a scientific novice with an interest in pop culture and genetic determinism or an expert in the field, Alexander does a masterful job walking the reader through the current genetic arguments to show that we are more complex than nature versus nurture.

Note

¹Alex Carchidi, “23andMe Is Going Public via a SPAC. Here’s What You Need to Know,” *The Motley Fool*, February 9, 2021, <https://www.fool.com/investing/2021/02/09/23andme-is-going-public-via-a-spac-heres-what-you/>.

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IN SEARCH OF THE SOUL: A Philosophical Essay by John Cottingham. Princeton, NJ: Princeton University Press, 2020. 174 pages. Hardcover; \$22.95. ISBN: 9780691174426.

There is a longing in the human soul for meaning, fullness, God. That is what philosopher John Cottingham claims in his marvelous philosophical essay, *In Search of the Soul*. The book historically traces speculation on the soul and its nature from Plato to Descartes to Daniel Dennett, but it is also an impassioned summons to heed the soul’s native orientation to the transcendent. It is noteworthy for its philosophical acumen, accessibility, and appreciation of literature’s contribution to the conversation. In the opening chapter alone, he alludes to Philip Pullman, Shakespeare, Wordsworth, and T.S. Eliot. For the purposes of this brief review, I shall concentrate on the philosophical heart of the book, chapter three, and end with a summary overview of the last two chapters.

In chapter three, Cottingham confronts two tendencies in contemporary discussion about the soul and its nature.

Today, discussion of the soul centers on the nature of consciousness. Consciousness poses a challenge to the impersonal, mechanistic, materialist consensus of science. So, while neurobiology may be adept at telling us what parts of the brain “light up” in experimental settings, there is an enormous explanatory gap between the registration of stimuli in hemispheres of the brain by an fMRI and the first-person experience of *qualia* such as the taste of cinnamon, the feel of corduroy, or the deep satisfaction in knowing that you are known. How do we integrate the elusive nature of consciousness within the impersonal, mechanistic picture of reality of the sciences? For some, such as Daniel Dennett, we don’t, and so we must belittle and discount it. Consciousness is, to use Dennett’s analogy, a “user-illusion” like the “click and drag icons” on our computers which bear no relation to its complicated micro-circuitry. The illusion (replete with audio accompaniment) is there only to “humor” our perceptual and cognitive apparatus and pertains to nothing real in the computer. Our “subjective qualitative awareness” is our user-illusion, the click and drag icon that is consciousness.

Cottingham’s response to Dennett is an ancient one. Socrates, in the *Phaedo*, once employed something like it when discussing the moral reasons for which he died. First, Dennett ontologically privileges the micro properties of the computer’s circuitry over the macro properties. That is, the printed circuit board is real, the icon is not. But, says Cottingham, this is utterly arbitrary and unjustified. Why not say that both micro and macro properties are equally real? The icon may be dependent upon the micro properties of the computer (like the soul in relation to the body), but that doesn’t mean it is ontologically dubious. The rich, meaning-laden world to which the icon appeals is just as real, though it can be accessed and understood only within the realm of the conceptual (p. 79). For Cottingham, Dennett’s materialist bias is showing: it is only real if it’s caught in my net. Therefore, he rejects the attempt to eliminate consciousness from the status of the real by reducing it to an illusory side-effect of the workings of the brain.

In addition to Dennett’s materialist reduction, there is another take on consciousness that Cottingham finds unsatisfactory: panpsychism. Panpsychism is, philosophically, at the opposite pole of the Darwinian account of consciousness in which it comes at the end of the process of evolutionary development (p. 80). Instead, panpsychism claims that consciousness is present, inchoately, from the very beginning in the simplest parts/particles. Following the insights of William James, Cottingham holds that panpsychism is “a kind of category mistake” in which properties more plausibly attributed to wholes (like persons) are implausibly ascribed to parts. In addition, though he may agree with panpsychism that consciousness is, somehow, intrinsic to matter – though a latecomer in evolutionary