Ethics

CREATION ETHICS: Reproduction, Genetics, and Quality of Life by David DeGrazia. New York: Oxford University Press, 2014. 234 pages. Paperback; $26.95. ISBN: 9780190232443.

Creation Ethics provides a broad perspective on the challenging topics of reproduction, genetics, and the quality of life. The author, David DeGrazia, carefully inspects various viewpoints on controversial reproduction issues, such as prenatal moral status, along with the implications these conclusions pose. Throughout the text, he remains open to examining a variety of views on the topics, and provides his own perspective on these issues, often incorporating arguments from multiple perspectives.

After an introduction, chapter two presents the author's tripartite framework, from which he argues in favor of abortion and embryonic research. The first point in his argument is the biological view of human identity. DeGrazia claims that human persons come into existence when the organism is born, and their identity remains throughout their lifetime. He discusses other points at which arguments are made for the beginning of human personhood, such as conception, the 16-cell stage, and two weeks post-gestation. The second part of his framework questions sentience, or the ability to perceive feelings. DeGrazia states that the potential for sentience is enough for someone to have moral status, and argues that this begins in the third trimester. The third part of his framework is the TRIA (Time Relative Interest Account), which states that when looking at the harm from death, one should evaluate the value of the future life along with the psychological connection of the one who dies with the possibility of their future. He therefore maintains his support of abortion and embryonic research by arguing that death would not be a great harm to a fetus, because it does not have psychological connection with their future.

Chapter three focuses on human identity and human nature in the context of genetic enhancement. After genetic enhancements, a person's narrative identity (how they characterize themselves) might change, but their numeric identity (their quantitative person) will not. The chapter concludes by asking what risks genetic enhancements could have on humanity. He notes that, at the extreme, genetic enhancement could create a group of people so advanced they would either enslave or obliterate the unenhanced human population. He argues there is nothing inherently wrong with advancements that could eventually surpass humanity; nonetheless, there should be moderate regulation of genetic enhancements.

Chapter four looks at the challenge of reprogenetics which involves using reproductive and genetic technologies to modify and select embryos for enhancement (p. 96). There are three primary types of interventions on fetuses, embryos, and gametes: prenatal genetic diagnosis (PGD), prenatal genetic therapy (PGT), and prenatal genetic enhancement (PGE) (p. 96). One of the main arguments against PGE is that genetic enhancements could change a person's genome so significantly that they are no longer the same numeric person. To counter this, DeGrazia presents a Robustness Thesis that claims that once someone comes into existence that person will always be numerically the same. Nevertheless, he does believe genetic enhancements could promote stereotypes, and therefore government funding should not be allotted for such research.

Chapter five addresses the question of whether it "wrongs someone to bring him into existence and, if so, how can we coherently explain the nature of the wrong" (p. 139). DeGrazia presents the claim that in standard wrongful life cases, such as completely debilitating disabilities, procreation is wrong. In cases with imposition of harm, procreation is strongly wrong. However, in cases with simply exposure to harm, procreation is weakly wrong (p. 155). Through this description, he makes the important distinction between imposing harm and exposing a child to harm.

DeGrazia opens chapter six with the difficult question of what parents owe their children. He determines parents owe their children a life worth living, one in which their basic needs are met. He applies this to having children who parents know will have disabilities. He examines three situations: (1) same-individual choices wherein the parent has a child with disabilities or has the same child without disability, (2) different-number choices in which a child will be born with a disadvantage, or not born at all, and (3) same-number choices which leads to the nonidentity problem where parents could have a child with disability, or they could choose to abort or delay conception and have a different child (p. 164). To address the nonidentity challenge, DeGrazia notes that it is important to disregard the notion that every form of wrongdoing harms someone. In these situations, he states, there are many cases of victimless harm.

The final chapter of the book asks what obligations we have to future generations. DeGrazia concludes that our obligations to future generations are based on justice, and we should not think of the interests of

future generations as less important than our current interests, just because of temporal distance.

DeGrazia does not shy away from addressing difficult issues in this book. His arguments are clear and well supported. I appreciated that DeGrazia addresses arguments from opposing views, noting both their strengths and their weaknesses. This approach makes the book accessible to readers who do not agree with all of his conclusions. Many of the arguments presented throughout *Creation Ethics* lead to implications about what Christians believe on the highly emotional issues of abortion, embryonic research, and genetic modification. DeGrazia argues that abortion should be allowed, but also cedes, saying, "I believe that a broadly pro-life approach remains standing as a reasonable option" (p. 43). Therefore, pro-life or pro-choice Christians can read DeGrazia's book and find some arguments that will resonate with either perspective.

DeGrazia's writing style is heavily laden with philosophical and scientific terminology that readers need to be prepared to encounter. I would recommend this book to someone who is interested in learning more about philosophical questions of reproduction and who is familiar with or interested in learning more about reproductive technologies and philosophical arguments.

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History of Science

DEBATING DARWIN by Robert J. Richards and Michael Ruse. Chicago, IL: The University of Chicago Press, 2016. xvi + 267 pages, including bibliography, index, and 21 figures. Hardcover; $30.00. ISBN: 9780226384429.

The "debate" of the title of *Debating Darwin* is both intriguing and an enticement. What is the meaning of this brief title? The debate at hand is over the character of Darwin's intentions, argumentation, and self-understanding as a natural historian. The debate is prosecuted by Michael Ruse, who situates Darwin within the world of British empiricism, Paleyan Natural Theology, and nineteenth-century social progressivism, and by Robert J. Richards, who constructs a case for Darwin as an intellect profoundly influenced by continental European Romanticism and *Naturphilosophie*.

The formal schema of the book is indeed that of a debate. After a short introduction, Michael Ruse presents Darwin as a consummate nineteenth-century Briton (80 pp.). Next, Robert J. Richards documents the extensive influences of the Continent on Darwin the explorer and theory builder (67 pp.). Each then provides a reply to the other (25 pp. each). Finally, a joint Epilogue outlines the central areas of agreement and contention (30 pp.). The engagement is cordial, but unyielding.

Both authors rely on their respective multi-decadal, focused examination of nineteenth-century evolutionary science. Extensive notes provide introductions to their previous work as well as to that of other scholars. Both back their claims with relevant quotes from Darwin's correspondence, notebooks, diaries, and autobiography.

One of the beneficial results of the tight format of the initial chapters is the composition of a tidy and eminently readable short biography of Darwin. In order to build their respective cases, Ruse and Richards examine Darwin's family background, education, reading, scientific friends and correspondents, and expressed opinions. Of particular significance are Darwin's own statements regarding what he felt he had accomplished and what he felt others had missed in his arguments. The bifocal format yields a stereoscopic view of Darwin the scientist. I highly recommend this book if for no other reason than its utility as a concise Darwin biography.

But there is more. For one, we are introduced to the broader cast of characters who influenced Darwin. Ruse invokes William Paley, William Whewell, John Herschel, Charles Lyell, and (distantly) Adam Smith, among others. Richards points toward Alexander von Humboldt, as well as the German morphological systematization typified by Goethe and Carus and their English spokesman, Richard Owen. Alfred Russel Wallace is not neglected by either of our debaters.

Several conceptual issues yet besetting biological evolutionary theory were initially addressed by Darwin, Wallace, and their immediate successors. What is (are) the unit(s) under selection? To what extent are teleological explanations permitted for a science of organisms? Does the history of life demonstrate some sort of progress? To what degree are human sociality and religion influenced by our biological substrate and deep-time history? What is the role of chance in natural systems? In what sense does the discipline of evolutionary biology carry forward the atomistic-mechanistic program for the physical sciences begun in the seventeenth century? Does this mechanistic program really render God "irrelevant" (cf. Ruse, in his "reply to Richards," p. 178)? The authors outline the outworking of these problematic issues for our present situation, especially in the Epilogue. In the