Review of Patricia Beattie Jung and Aana Marie Vigen, eds. *God, Science, Sex, Gender: An Interdisciplinary Approach to Christian Ethics*, Urbana, Chicago and Springfield: University of Illinois Press 2010, 287 pp., ISBN 978-0-252-07724-1 \$30.00 (paper)

BETH ANNE ROBERTSON, CARLETON UNIVERSITY, CANADA

God, Science, Sex, Gender is an interdisciplinary discussion of the interrelationship between Christian faith, science, and sexuality. Originating from three symposia and a conference in 2007 at Loyola University in Chicago, this text incorporates the insights of not only theologians and ethicists, but also natural and social scientists, as well as several scholars of the humanities. The editors of the collection, Patricia Beattie Jung and Aana Marie Vigen, are trained in religion and ethics. Jung is a professor of Catholic Christian ethics and the Oubri A. Poppele Professor of Health and Welfare Ministries at St. Paul School of Theology in Kansas City. Vigen is an assistant professor of ethics at Loyola University, who specializes in health care and medical ethics. Although they freely admit that most of the theological discussion of the book is from a Catholic perspective, they argue that the insights provided are not exclusive to Catholicism, but speak to a broad Christian tradition. Together they posed the question 'what might happen if we were to expand a Christian ethical dialogue on human sexuality and gender beyond their usual parameters to include in an integral way natural and social scientists and scholars from disciplines in the humanities? (p. 4)'. Their book *God, Science, Sex, Gender* is the result. Rather than a singular thesis, Jung and Vigen offer a method for interdisciplinary dialogue so as to provide an insightful, informed and multi-faceted discussion of human sexuality.

God, Science, Sex, Gender is composed of three parts. Part 1 'Establishing Basepoints for Dialogue' is comprised of insights from a theologian, two sociologists, a philosopher and finally Jung – an ethicist and theologian. This section lays down the background and context of the contemporary debates surrounding Christian ethics and human sexuality. Jon Nilson, a professor of theology at

Loyola University discusses evolving Catholic doctrine and authority. His essay asserts that the inclusive leadership paradigm set out by Vatican II was never fully realized due to a lack of will on the part of Catholic leaders, and especially Pope John Paul II, to fully implement such a radical redistribution of Church authority. The second essay by Loyola University sociology professor Anne Figert complements this discussion by outlining boundary disputes between science and religion. Most especially, she presents three models of how the relationship of science and religion has been theorized, including the 'conflict model', the 'complementary model' and finally the 'complexity model'. Fred Kniss, a sociology professor and provost at Eastern Mennonite University, and a Loyola University affiliate research professor, lays out the issues involved in such debates within the context of Catholic and scientific authority structures discussed in the previous two sections. Loyola University professor emeritus Francis Catania examines how the theology of Thomas Aquinas and his mentor Albertus Magnus can be interpreted to leave room for a mutually beneficial relationship between science and religion, and in turn a more flexible model of sexual diversity. Finally, the last chapter by Jung outlines the development of Catholic teachings surrounding human sexuality, beginning from the teachings of the early church to early modern Catholicism and lastly current debates.

Part II of *God, Science, Sex, Gender*, entitled 'Reflecting on Human Sexual Diversity' attempts to address both the potential and limitations of scientific conceptions of sexual difference. This section is highly successful in achieving an interdisciplinary perspective. Its first two essays are written by biologists. The first by Joan Roughgarden, a professor of biological sciences and geophysics at Stanford University, is perhaps the most provocative piece of the entire collection. In this chapter, Roughgarden argues that Darwinian theories of 'sexual selection' is overlaid with biased and even blatantly inaccurate appraisals of sexual behaviour in animals and therefore needs to be replaced by a theory of 'social selection' (p. 97). 'Social selection' focuses less on mating and more on off-spring rearing systems that more effectively captures the diverse and complex social processes by which animals relate in order to survive. This essay is followed by the work of two more biologists: Terry Grande of Loyola University and Joel Brown of the University of Illinois. Although hesitant to denounce sexual selection as a model like Roughgarden, they argue that 'modern human sexuality is no longer evolutionary stable' as a product of the shifting relationships to the environment mediated by industrial and technological advances (p. 106). Pamela L. Caughie, a professor of literature at Loyola University, follows this argument by presenting her conception of 'passing' which she identifies as 'the dynamics of identity and identification – the social, cultural and psychological processes by which a subject comes to understand his or her identity in relation to others' (p. 146).

James Calcagno, a professor of anthropology at Loyola, complicates conceptions of sexuality even more by presenting various observations of primate relations, which reveal how rare monogamy is among mammals. Finally, Part II ends with an essay by Robert Di Vito, a professor of Old Testament at Loyola, which brings the discussion back to theology with an alternative and more sexually flexible exegesis of the Genesis creation story.

Part III of the book, 'Sexual Diversity and Christian Moral Theology' further contemplates sexual diversity and Christian ethics in light of the theological and scientific analyses of the previous two sections. It begins with

Stephen J. Pope, a professor of Christian ethics at Boston College, who directly engages Roughgarden's theory of 'social selection' to argue for the need to develop a more sexually inclusive Catholic spirituality. Frank Fennel, a professor of literature at Loyola continues with this theme of inclusivity by reflecting on Catholic clergy Gerald Hopkin's 1877 poem '*Pied Beauty*' and its celebration of difference in nature. Susan Ross, a theologian and ethicist of Loyola, complicates the masculinity of Christ in the chapter that follows, arguing that feminine metaphors of divinity respond more effectively to the needs of sexually diverse individuals. Rather fittingly, the last essay is a collaborative work by Jung and Roughgarden. This chapter summarizes their complementary scientific and theological perspectives, told largely through a biologically informed analysis of the sexually ambiguous Ethiopian eunuch who appears in the biblical book, Acts of the Apostles. Vigen concludes the book with a meditation on the interrelationship between both secular and spiritual understandings of human nature and ethics.

God, Science, Sex, Gender has many strengths and achieves much on the way toward an interdisciplinary discussion of gender and sexuality. Many of the authors do have a close connection to Loyola, which I believe is a potential drawback for a truly well-rounded discussion. Barring that, however, I think this book makes great strides towards bridging intellectual divides between science, religion, gender, sexuality and ethics. Beyond a few notable works, science, religion and sexuality are not frequently joined within the same conversation. This book provides a vision of increased dialogue between these diverse fields of study and thus makes a substantial contribution to not just an individual discipline, but the scholastic community of science, theology and the humanities as a whole.

My most substantial critique is the ambiguity of language, which ironically Jung and Vigen address in the introduction, but not as effectively or as comprehensively as such a multi-faceted collection calls for in my perspective. 'Morals' and 'Ethics' were frequently used terms that were finally defined by Vigen in her conclusion. However, considering the weight of these terms to not only this collection, but society in general, these definitions should have come much sooner. Also, the term 'nature' or 'natural' seemed to be very pivotal to the collection. To their credit, Jung and Vigen write of the fluidity of this term across disciplines in the introduction. However, such an analysis could have easily been extended into an entire chapter in order to effectively complicate understandings of 'nature' and 'natural' in more depth. In fact, such an essay could have substantially enhanced Part II of the book when the term was being used very frequently, but in exceptionally different ways by various authors. In my mind, this concept of *nature* highlights the significance of joining theologians, ethicists, natural and social scientists within the same discussion. Placing side by side such diverse methods of defining and employing 'nature' and 'natural' actually acts to complicate perceived sexual norms. When 'natural' processes of reproduction and off-spring are complicated by scholars such as Roughgarden, Grande, Brown and Calcagno for instance, what does that imply for conservative conceptions of 'sins against nature', supposed 'natural' sexuality, or rigid constructs of dimorphic male/female identity? Such questions are exactly what make this collection so compelling and important. But perhaps a more in depth discussion of nature will come with another book of this sort, as I for one truly hope that the dialogue this book begins across disciplines continues.