

Book review

Steven A. Peterson and Albert Somit, *Handbook of Biology and Politics* (Cheltenham: Edward Elgar, 2017), 544 pages. ISBN: 9781783476268. Hardcover \$283.50.

Jordan Mansell, *University of Oxford*

In the *Handbook of Biology and Politics*, Steven A. Peterson and Albert Somit seek to introduce the field of biopolitics to a wider social science audience and reestablish questions about the “nature of human nature” in the domain of politics and political science (p. 147). Timely in its release, this book gathers an impressive array of established scholars from a cross section of political science disciplines to critically engage with the implications of new scientific understandings for the study of politics. Ambitious in its scope and challenging in its ideas, the text raises questions about the ultimate enterprise of social science research through a meaningful engagement with current research and methods. One of the central themes of this discussion is that biological traits and processes make essential contributions to human behavior and therefore are necessary components of larger academic discussions of the social sciences. To paraphrase Peterson and Somit, what is the function of human nature and society, and what implications does this have for the study of politics?

The text is organized around 30 chapters, which are divided into five parts: (I) Introduction, (II) Biological Approaches to Politics, (III) Biology and the Field of Political Science, (IV) Biopolitics, and (V) Reflections on Biology and Politics. Part I provides a brief account of the history of research on biology and politics, tracing the discipline through its roots in ancient Greek philosophy and early medicine to the modern discipline and the addition of biology and politics as a research committee of the International Political Science Association in 1972 and of the American Political Science Association in 1980. Chapter 4 provides an important clarification concerning the usage of “biopolitics” as a term in Continental philosophy.

Parts II and III focus on the methods and approaches used in biopolitics research, such as twin study designs (Aleksander Ksiazkiewicz and Amanda Friesen), neuroscientific studies (Robert H. Blank), and evolutionary theory (Michael Bang Petersen). Besides providing a methodological review the chapters, Parts II and III

highlight the potential for these approaches to further theoretical and empirical development of the political sciences.

Part IV, which consists of nine chapters, focuses on critical engagement with topics directly linked to research in the life sciences, including biosocial research, bioengineering and genetic modification, health policy, democratic institutions, and climate change. Part V is a final reflection by the editors on the current trajectory of political science as a discipline. More than a comprehensive introduction to the field of biopolitics, this book critically engages with the theoretical development of the political sciences in light of research from the life and evolutionary sciences and includes several significant discussions of the major research issues in several prominent fields.

For example, in their chapter on “Biology and International Relations,” John M. Friend and Bradley A. Thayer make a compelling argument for the inclusion of evolutionary thinking on behavior in the study of international relations. Framed within a discussion of deterrence theory, Friend and Thayer underscore how violations of rational decision-making, a fundamental problem for traditional deterrence theory, are easily understood within the context of an evolutionary psychology. Traditional deterrence theory, they note, relies on an “existential” approach in which uncertainty and mutual vulnerability promote deterrence based on actors’ rational calculus of the costs of mutual destruction (p. 168).¹ However, as Friend and Thayer note, research from the life sciences “tells us that the universal assumptions of rationality are irredeemably flawed” as a consequence of the biases and heuristics with which human beings actually make decisions (p. 168). Research demonstrates that under conditions of ambiguity and uncertainty, individuals, rather than being rational decision makers, become more, not less, likely to rely on emotional decision-making, as these conditions prime “fear-induced” risk-seeking behavior in humans.^{2,3} However, rather than an outright rejection of the deterrence model, Friend and Thayer argue that what is required is an evolution of thinking in deterrence theory, which understands risk-seeking behaviors or defensive aggression as a consequence of “emotionally biased choices” based on our adaptive psychology and not an error in rational judgment (p. 169). In the remainder of their chapter, Friend and Thayer further develop their thesis by discussing how evolutionary thinking is capable of elucidating the causes of a range of social phenomena such as nationalism and ethnic conflict or terrorist motivations.

doi: 10.1017/pls.2018.2

Correspondence: Jordan Mansell, DPhil., Linacre College, University of Oxford. Email: jordan.mansell@linacre.ox.ac.uk

While the text includes several discussions of the application of biological principles to the study of politics, other contributions focus on the advantages of adapting a consilience approach to research methods. For example, Werner J. Patzelt presents a thought-provoking discussion of the application of principles of taxonomy from the biological sciences to the study of comparative politics. Inspired by Philippe Schmitter's 2009 paper on the need for comparative politics to "embrace the complex interdependence" of the contemporary world, Patzelt asks how comparative politics can develop concepts capable of meeting the two conditions outlined by Schmitter: (1) to develop a comparative classification system that can control for similarities while also identifying differences and (2) to develop a nomothetic language that goes beyond the limitations of variables to capture actual "patterns" of behavior (p. 53).⁴ Patzelt is motivated by larger concerns within the discipline, such as the trend away from research investigating "propositions about how or why the world is as it is"⁵ and the need to construct lenses capable of meaningful comparison between objects that are not reliant on research bias or arbitrary assignment. Patzelt's solution is to utilize the concepts of homology, analogy, homo-analogy, and homodynamic from the study of morphology as the basis for political comparison (p. 186). Patzelt argues that these concepts, which, while linked to the study of morphology, are not inherently biological themselves, "denote different forms of similarity" and are "fully independent of any content oriented theory" (p. 187). Importantly, as concepts that denote different forms of similarity, these concepts allow researchers to make meaningful comparisons between a variety of different objects that capture the interest of the research question while also being impartially applicable to the objects under comparison.

Similar to Patzelt's discussion of the methodological development of comparative politics, Michael Bang Petersen presents an inspiring argument about the value of integrating evolutionary psychological approaches into political psychology. Petersen asks how political psychology should contend with a multitude of competing and inconsistent research hypotheses. Reflecting on Karl Popper's 1959 statement that the only rule of hypothesis development is to "let your imagination run wild,"⁶ Petersen he asks a prudent question: "if anything goes," how do you choose "which hypotheses to pursue and which to abandon" and which sources from which to draw to make these conclusions? (p. 125). Consistent with Popper's original intention, Petersen argues that while the publication record remains the best candidate for hypothesis development, the record

of a single discipline is often restricted by confirmation biases, failed replications, and overdetermination that limit a researcher's ability to make accurate inferences about the causes of a given phenomenon.

Petersen's claim reflects a broader consideration about the value of consilience and the hierarchy of the sciences, that research knowledge cannot be restrained to one's own discipline but must reflect the large corpus of scientific inquiry. Petersen asks, is a hypothesis in politics consistent with the work of economics, sociology, psychology, neuroscience, biology, and evolution? If so, then we have strong theoretical reasons for believing it is true, and if not, what is the justification for ignoring valuable resources and information? In the remainder of his chapter, Petersen develops a thesis to overcome the "bridging problem" between disciplines so that political scientists may incorporate research from evolutionary theory to the study of politics allowing for the "triangulation" of research hypothesis (p. 126).

Overall, the *Handbook* provides a thorough introduction to the study of biopolitics; however, it does have several limitations. Several chapters have reviews of the twin studies and neuroscientific approaches to politics, which are unnecessary in light of the excellent reviews provided by Ksiazkiewicz and Friesen on "Genes and Politics," and by Blank on "The Brain and Politics" (pp. 85–105, 106–124). While unneeded, these discussions are understandable given the status of genetic and neuroscientific studies as early pillars of the discipline. Ultimately, the largest weakness of this text is its current price: at around \$300, this is an expensive addition to the library. For established scholars who are already familiar with the discipline, this cost maybe a bit discouraging, as the goal of this text is provide a thorough introduction of the field for political science rather than to present emerging challenges and questions for political biology itself. However, as a reference guide for the theories and methods of political biology, or as a guide to the challenges and critiques raised by political biology against the existing approaches in politics sciences, this text is indispensable.

In summary, this book provides a comprehensive introduction to the history, methods, and debates around biopolitics. For those unfamiliar with this area of research, this book is an appropriate starting point for the larger issues and motivations associated with the inclusion of research from the life and evolutionary science to the study of politics. For scholars already familiar with biopolitics research, the text provides a nuanced set of discussions of issues from current research practices to the empirical and theoretical trajectories of the political sciences.

Book review

As a teaching resource, this text is recommended for introductory undergraduate courses on biology and politics or for graduate courses if paired with supplemental readings. Furthermore, as several chapters in this text make substantive arguments about the current approaches, methods, and assumptions of political science research, I also recommend this text as a supplementary reading for graduate courses on research methods.

References

1. M. Bundy, "Existential deterrence and its consequences," *The Security Gamble: Deterrence Dilemmas in the Nuclear Age*, D. Maclean, ed. (Totowa, NJ: Rowman and Allanheld, 1984), p. 14.
2. C. F. Camerer, G. Loewenstein, and D. Prelec, "Neuroeconomics: Why economics needs brains," *Scandinavian Journal of Economics*, 2004, 106(3): 555–579.
3. J. LeDoux, *The Emotional Brain: The Mysterious Underpinnings of Emotional Life* (New York: Simon and Schuster, 1998).
4. P. C. Schmitter, "The nature and future of comparative politics," *European Political Science Review*, 2009, 1(1): 33–61.
5. G. L. Munck and R. Snyder, "Debating the direction of comparative politics: An analysis of leading journals," *Comparative Political Studies*, 2007, 40(1): 5–31.
6. K. R. Popper, *The Logic of Scientific Discovery* (New York: New York, 1959).