

David Sloan Wilson, Does Altruism Exist? Culture, Genes, and the Welfare of Others (New Haven, CT: Yale University Press), 180 pages. ISBN: 9780300219883. Paperback \$27.50.

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In addressing his titular question, Does Altruism Exist? David Sloan Wilson provides a succinct account of how altruism can evolve despite altruistic action being costly in terms of evolutionary fitness at the individual level. The answer, he argues, is contained in multilevel selection theory. However, this book also has a more ambitious agenda: proposing that this same approach can and should be used to radically rethink existing theories of human social, political, and economic life. Wilson illustrates several areas in which this evolutionary logic has been successfully applied (e.g., the scientific study of religion, education policy) and gestures toward other areas that could benefit from considering this approach (e.g., economics, international relations). In brief, this short book provides an accessible introduction to the debates surrounding altruism while raising important questions to help frame future research about the broader implications of evolutionary theory for social science.

The 10 chapters of the book can be divided neatly into halves. The first half lays out Wilson's core theoretical arguments with regard to the study of altruism, and the second half focuses on applications of this theory in five specific domains. Wilson begins by introducing the reader to multilevel selection theory through the study of altruism. Wilson's argument relies heavily on the distinction between psychological altruism (having altruistic feelings and motives) and altruism in action (engaging in behaviors that benefit others at some cost to oneself regardless of motive). He argues that focusing on altruistic behaviors is more important for understanding the evolutionary origins of altruism because it is altruistic outcomes — rather than motives — that impact fitness, and fitness is the mechanism for natural selection.

In summarizing the debates of the past several decades surrounding the evolution of altruistic behaviors, Wilson lays out his case for multilevel selection

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Correspondence: Aleksander Ksiazkiewicz, Department of Political Science, University of Illinois at Urbana-Champaign, 420 David Kinley Hall MC-713, 1407 W Gregory Drive, Urbana IL, 61801. Email: *aleksks@illinois.edu* theory. This approach argues that natural selection occurs not only at the level of the individual but also at the level of the group. Some traits (such as altruism) may be maladaptive at the individual level but adaptive at the group level (i.e., groups of altruists outperform groups of non-altruists), and thus they may evolve in the population because of group-level selection under specific circumstances. Among these circumstances are intergroup competition (without which selfishness always dominates because it maximizes individual fitness within groups) and a moderate level of dispersion or mixing between groups (with many isolated groups, selfishness always dominates within each group; with too high a level of intergroup mixing, the population itself becomes one large group, in which case selfishness dominates once again).

Moreover, moving up a level of analysis, multilevel selection theory allows for processes of cultural evolution through intergroup competition. As with convergent evolution in the biological literature, in which different species solve the same functional problem by different pathways, Wilson argues that different cultural norms and institutions may evolve to solve the same functional problems (e.g., encouraging altruism in action) through different sets of mechanisms. Wilson links this argument to the pathbreaking work of Elinor Ostrom on resolving common-pool resource problems,¹ in which Ostrom argues that different communities solve common-pool resource problems by using different institutional structures, but all of these institutions share common aims (e.g., preventing overuse).

Perhaps the most thought-provoking section in the first half of the book comes when Wilson turns his eye to philosophy of science. He argues that several ostensible competitors with multilevel selection theory have "a way of transmuting altruism into selfishness" (p. 32) to get out of the dilemma of explaining the evolution of altruism. He puts evolutionary game theory, selfish gene theory, and inclusive fitness theory or kin selection theory in this camp. Nonetheless, Wilson views these approaches not as competing Kuhnian paradigms but rather as ultimately compatible perspectives for describing the same phenomenon when one adopts a multilevel selection perspective. He argues that although accounting for group-level selection is necessary for understanding the evolution of altruism, the alternative perspectives offered by these theories still have value insofar as they highlight particular consequences or features of the evolution of altruism through group selection. Wilson concludes this discussion with a reflection on theoretical equivalence. "In my opinion,

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the concept of equivalence should be part of the basic training of all scientists ... Scientists should routinely perform 'equivalence checks' to determine whether different paradigms invoke different processes, such that one can be right and the other wrong, or whether they merely reflect different accounting methods (or perspectives, or languages) that invoke the same processes. The amount of time and effort saved avoiding pointless controversy would be colossal" (p. 44).

Unfortunately, the arguments made in support of Wilson's synthesis of these competing perspectives suffer from the absence of the detailed explanations of each approach present in one of Wilson's prior books.² Nonetheless, the first half of the book is a useful refresher on the debates surrounding the evolution of altruism and serves as a thought-provoking introduction to those who are interested in further exploring the altruism literature.

The second half of the book presents arguments that have the potential to be of interest to a much wider audience. Having established a theory of how altruism should be conceptualized and a theory of the evolution of altruistic behaviors, the second half of the book examines how an evolutionary approach can shed new light on social scientific theories of religion, economics, prosociality, "pathological altruism," and international politics (in Chapters 6–10, respectively). For example, in Chapter 6, Wilson explores how enduring religions increase aggregate fitness in groups. "Most enduring religions are impressively designed to motivate altruism at the level of action ... Yet religions typically do not draw upon altruism at the level of thoughts and feelings to motivate altruistic actions ... because [psychological altruism] inherently pits self- and other-regarding preferences against each other ... [rather than] portray[ing] all actions as win-win or lose-lose" (p. 89).

Although each of these chapters is interesting in its own right (both substantively and on account of the narrative sections about the research process), together these examples hint at how adopting an evolutionary perspective can reshape thinking on established social scientific questions. Wilson argues that we should not think of natural selection only at the individual level, nor only at the small-group level, but that there is a hierarchy of levels through which natural selection can occur both biologically and culturally. Drawing on a long-standing tradition of social thought, Wilson argues that societies themselves can be thought of as organisms. Just as cells self-organize into functional organs that fulfill a collective purpose (and as "selfish" cancerous cells may undermine that purpose), so, too, are societies functionally organized through a process of cultural evolution. There is nothing particularly novel in such a functionalist argument, but in combination with the mechanisms proposed by multilevel selection theory, this approach may recast some pressing social scientific questions in a new light.

Consider three novel examples of political science research that could benefit from taking Wilson's argument seriously. First, in the area of biology and politics, scholars repeatedly find that there are, on average, psychological and physiological (in addition to ideological and cultural) differences between liberals and conservatives, broadly construed. A multilevel selection framework provides a new way to think about this phenomenon, one akin to the balance of (behavioral) altruists and non-altruists. What are the effects on individual-level fitness of having an orientation in favor of or opposed to social change (or material equality or inequality)? What are the effects on group-level fitness of different attitudes? How might the mix of change-seeking and change-averse members affect group-level fitness (and political functioning)? Are there political beliefs that are detrimental at the individual level, but which may be beneficial at the group level?

Second, for scholars at the group level and in comparative politics, once we abstract away from individuals to competition between groups, multilevel selection theory may have implications for the study of political culture and how we conceive of the evolution of political norms and institutions. It may be fruitful to consider current controversies around the alleged degradation of political norms through the lens of multilevel selection theory. Perhaps politically civil actions in a society (e.g., reaching compromises among competing groups) are akin to altruism at the individual level - beneficial to the society as a whole (and in intersocietal competition) but costly for the intrasocietal groups that engage in them. By reframing political culture, multilevel selection theory may be able to provide new insights into the promotion of such collectively beneficial but individually costly actions.

Third, and of relevance to scholars of international relations, multilevel selection theory seemingly makes predictions regarding the circumstances under which states engage in altruism in action (e.g., acting against the national interest to promote the collective interests of an alliance). It suggests that this type of cooperation should occur under circumstances of intergroup (i.e., interalliance) competition with periodic mixing of alliances (see the discussion of dispersion above drawn from chapter two).

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Here we reach the dilemma that Wilson considers in the final chapter of his book when he applies multilevel selection theory to the international system as a whole. To explain altruism in action at any level, the multilevel selection model requires group competition and mixing of groups at a higher level. Wilson insightfully notes that these conditions are not met by the international system as a whole. It is perhaps unique in having no intergroup competition or mixing (i.e., there is only one Earth and no other planetary systems with which it can compete, so far as we know). As a result, altruism in action for problems of global concern, such as climate change, cannot evolve through natural selection precisely because (1) altruism is costly for individual states and (2) some of the elements of group-level selection are absent (i.e., intergroup competition and dispersion). In other words, selfishness and free-riding cannot be constrained through higher order competition at this level. Instead, Wilson proposes, optimistically, that successfully addressing problems of global concern requires deliberate institutional design. Because humans cannot count on natural selection to generate "planetary altruism," we must intentionally create institutions that foster planetary altruism in action by other means or pay the price.

In sum, this book provides a highly readable and informative introduction to debates around altruism and to multilevel selection theory. It is appropriate as a starting point for those unfamiliar with these debates, those who are interested in an update on where they currently stand, and, in particular, those looking for a fresh perspective on how to apply evolutionary theory to social science problems. I recommend this text for undergraduate courses with a unit on applying evolutionary thinking to social science questions or for graduate courses if paired with additional readings to elaborate further on particular topics. I also recommend it to scholars who are open to considering what implications evolutionary theory may have for how they conceptualize established questions in their own fields.

References

1. E. Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge: Cambridge University Press, 1990).

2. E. Sober and D. S. Wilson, Unto Others: The Evolution and Psychology of Unselfish Behavior (Cambridge, MA: Harvard University Press, 1998).