



CHICAGO JOURNALS

Seeds, Science, and Struggle: The Global Politics of Transgenic Crops by Abby J. Kinchy
Seeds, Science, and Struggle: The Global Politics of Transgenic Crops by Abby J. Kinchy

Review by: Arthur Daemrlich

American Journal of Sociology, Vol. 119, No. 2 (September 2013), pp. 586-588

Published by: [The University of Chicago Press](#)

Stable URL: <http://www.jstor.org/stable/10.1086/671142>

Accessed: 19/05/2014 21:04

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



The University of Chicago Press is collaborating with JSTOR to digitize, preserve and extend access to
American Journal of Sociology.

<http://www.jstor.org>

workers. *Touching Encounters* is a densely written and highly theoretical book that will appeal to graduate students and scholars of sex work, sexuality, and gender as well as nonacademics interested in an in-depth exploration of one particular group of male-for-male escorts.

Seeds, Science, and Struggle: The Global Politics of Transgenic Crops. By Abby J. Kinchy. Cambridge: Massachusetts Institute of Technology Press, 2012. Pp. xviii+219. \$22.00 (paper).

Arthur Daemmrch
University of Kansas

Controversies over the testing and market introduction of genetically engineered (GE) crops are now three decades old and have developed fixed battle lines. Supporters of GE agriculture draw on a history of concern with feeding the world's growing population, emphasize the economic benefits to consumers from declining real food prices, and cite research that has found no medical harm to people from eating GE foods. Critics counter by identifying the hidden costs of GE crops and cheap industrialized food to human health, natural environments, and farming communities. Yet, as Abby Kinchy observes in this slim but well-researched and eminently readable book, the burden of proof always seems to fall on critics. Anyone working to slow or stop GE crops, or even those who ask questions about their effects on health, the environment, social systems, and national economies, has to prove their case in epistemological terms set by scientists and government officials, who focus on technical definitions of risk to the exclusion of other dimensions.

Seeds, Science, and Struggle is based on case studies of two crops in two countries, namely GE corn (maize) in Mexico and canola in Canada. The first case study builds on the author's field research in Mexico observing activists and farmers seeking ways of engaging with authorities concerning the introduction of GE corn. But with few avenues for participatory involvement with regulators or industry, activists sought change through other venues. In Mexico, as Kinchy describes, they advanced a multilevel strategy ranging from involvement on expert panels, including by international scientists recruited to the cause, to direct environmental monitoring of gene flows in local cornfields.

The second case study offers new insights on two prominent and widely analyzed legal disputes in Canada concerning GE canola. The first court proceeding involved Monsanto suing a farmer, Percy Schmeiser, in Saskatchewan, Canada. The second set of cases arose when organic farmers sued producers of GE seeds for "contaminating" their fields through gene flow and undermining the marketability of their canola. Across these cases, Kinchy analyzes the degree to which courts narrow risk analysis even as

activists develop legal strategies in addition to traditional forms of social movement mobilization. Overall, Kinchy identifies four key strategies employed by civil society movements: involve international experts, carry out independent socially oriented research, engage with judicial inquiries and legal challenges, and use market-based tactics. Throughout, the book considers power disparities playing out among industry, regulators, and critics on several levels, notably in material resources, linguistic authority, powers of classification, and control over meaning.

Academics in science and technology studies (STS) and sociology more generally will find that the book builds on scholarship in standards and risk, notably by analyzing the successes and failures of the mobilization of citizen interests around variation and differences (cultural, social, economic, genetic). Specific to studies of controversies over GE food, Kinchy offers an intriguing comparative study of Mexico and Canada, thus moving beyond the U.S.-E.U. comparisons that dominate the literature. Furthermore, the book advances empirical scholarship of risk and poses the intriguing question: What would it look like if authorities quit fighting the inclusion of political and social dimensions in risk assessment and risk management and stopped trying to make decisions about GE crops into “pure science”? Kinchy actually offers an answer to this question early on by describing a U.S. Department of Agriculture risk assessment that seeks to address social, political, and economic factors for GE alfalfa. The report’s 2,000 pages please nobody and fail to produce a yes-or-no market access decision. Therein lies a conundrum for sociologists in this arena: calling for more inclusive studies and less narrow definitions of risk is eminently sensible, but unless such studies can reach conclusions legible to industry and working regulators they will fail and the debate will revert to its present status.

The book’s central thesis holds that there is an increase in “scientization,” a concerted effort to turn political conflicts into narrower analyses of scientific risk. The march of technological progress in the 20th and 21st centuries in this framing is deeply intertwined with rationality of the Weberian state and its underlying approach to decision making. Kinchy then argues that this approach to risk management is subject to capture by corporate interests. Fair enough, but an unresolved tension for the book arises from the request for greater participation as a solution. That solution, too, would be subject to capture by the same interests, or could turn into precisely the form of mob rule from which the Weberian state protects individual interests. Claiming that “scientization” is the fundamental problem, Kinchy also warns that blindly neoliberal and viscerally antiregulatory approaches are enabling the corporate capture of GE crop regulation. But these are not the same thing. A scientized state may refuse to recognize the local knowledge that Kinchy advocates including, but it would not necessarily be antiregulatory. The book ultimately sidesteps this issue by instead analyzing the shifting ground of activist-run participatory research and the diversity of identity building in relation to sources of political power.

While these points could have been developed further in a longer book, Kinchy provides sufficient empirical material and thoughtful conceptual framings to spark discussions spanning the disciplines of STS, sociology, and political science, especially regulatory studies. The book would work well in both graduate and upper-level undergraduate courses, particularly since it offers more nuanced insights on risk than are found in much of the recent literature and sufficient empirical case material to engage students.

Navigating Environmental Attitudes. By Thomas A. Heberlein. New York: Oxford University Press, 2012. Pp. x+228. \$99.00 (cloth); \$24.95 (paper).

Angela G. Mertig
Middle Tennessee State University

Thomas A. Heberlein's reputable scholarly career has focused on learning "how attitudes work, how they can be changed, and what they have to do with behavior as we struggle to deal with nature" (p. 4). *Navigating Environmental Attitudes* shares what he has learned in this regard. Using the metaphor of white-water rafting, he documents how it is usually much more effective to "read the river" and work *with* attitudes rather than attempt to change them; the latter is akin to trying to move huge boulders out of the way of your raft. Heberlein uses the writings of environmental pioneer Aldo Leopold to exemplify the technical and social psychological structure of attitudes and to show how attitudes can change within certain circumstances. He uses numerous examples to illustrate characteristics that can make attitudes particularly resistant to change, including a basis in direct experience; ties to one's identity; support by one's social context; and links to strong emotions, strong attitudes about other objects, or several beliefs (as opposed to just one or a few). Attitudes can and do change, but they usually do so slowly and not in response to any planning, intentional action, or even media campaigns.

Often, in attempts to motivate behavioral change, it is assumed that we merely need to "educate the public," leading them to change their attitudes and, correspondingly, their behavior. Heberlein refers to this idea as the "cognitive fix"; the book is infused with examples of how this fix has been tried unsuccessfully numerous times in the arena of environmental protection and natural resource management. Not only are attitudes resistant to change, as noted above, but they are only weakly related to behavior. Various examples, including Aldo Leopold's behavior toward wolves, are used to demonstrate how other factors impede any direct connection between attitudes (which are usually general) and behaviors (which are quite specific and contextually dependent).

Heberlein discusses two other approaches to changing human behavior, the "technological fix" and the "structural fix." The technological fix alters