

Another key contribution of *Amigas y Amantes* is its attention to the diversity represented among Latinas. Most significantly, it features the experiences of LBQ Latinas, a group not often incorporated within broader discussions of Latinos in the United States. But this book also takes into consideration that how LBQ Latinas “do family” may vary depending on matters such as immigration, migration, or citizenship status, the ability to speak Spanish and English, phenotype, and educational level. For example, Acosta found that most of her respondents were in one of two types of relationships—relationships with partners who were also members of racially or ethnically marginalized groups and relationships with white women. In chapter 3, Acosta shows that negotiations of power within these same-sex couples was shaped by issues such as command of the English language, length of time in the United States, and citizenship status, sometimes making one partner more dependent on the relationship and therefore more vulnerable. Additionally, Acosta found that while some biological families struggled to come to terms with acknowledging her respondents’ same-sex relationships, sometimes they considered interracial or interethnic coupling to be more of a transgression. Her findings provide additional support for the assertion by other sexuality scholars that not all women in same-sex couples find themselves in relationships that are more gender egalitarian. Additionally, Acosta makes evident the various constraints under which LBQ women negotiate their creation and maintenance of families in a heteronormative society.

In sum, *Amigas y Amantes* offers a richly nuanced portrait of LBQ Latinas’ family lives. This book will greatly benefit students in undergraduate and graduate courses on families, sexualities, and U.S. Latinas. Acosta skillfully foregrounds the voices of her respondents to make visible the tensions and contradictions entailed in their efforts to bring together their families of origin and choice, and, also important, to create spaces for the existence of the families they envision for themselves.

*Exposed Science: Genes, the Environment, and the Politics of Population Health.* By Sara Shostak. Berkeley and Los Angeles: University of California Press, 2013. Pp. xiv+297. \$29.95 (paper).

Owen Whooley  
*University of New Mexico*

More than a decade after the mapping of the human genome, growing pains have tempered the early optimism of genetic science. But the mystique of genetic science endures, having been reformulated, in part, through the emergence of epigenetics. Knowing the genetic code is no longer enough; to understand genetic expression, epigenetics redirects attention toward the complex relationship between DNA and the environment. Social scientists often overinterpret the epigenetic turn as validation of their research, as a return to the social, and as a comeuppance for genetic reductionism.

However, the reality is far more complicated. Epigenetics involves more than just an appreciation for social and environmental effects on DNA; it entails a thorough reformulation of how we define the “environment.”

In her fascinating book, *Exposed Science*, Sara Shostak examines the incorporation of genetic science—its methods, insights, and style of reasoning—into the environmental health sciences, a field that would appear to be unfertile ground for such wares. The book explores how environmental health scientists attempt (somewhat awkwardly) to integrate genetic science into its mandate to study and regulate toxins in the environment. The analysis thus involves untangling the messiness of a paradigm shift in a scientific field that is implicated in policy making, regulation, and political mobilization. It is fortunate that Shostak is more than up to the task. Her method is unimpeachable—the analysis is based on over 80 interviews, participant observation, and an exhaustive documentary analysis of scientific publications—and her prose is clear, if unadorned. The reader could not ask for a better guide.

Long committed to a broad notion of the environment that encompasses the physical and social world, environmental health scientists have narrowed their understanding in order to accommodate genetic thinking and trade on its prestige. This process, which Shostak identifies as “molecularization”—a “vision of life” that “visualizes, operationalizes, and seeks to act upon life itself at the submicroscopic level” (p. 19)—entails nothing short of a fundamental reconceptualization of how environmental health scientists think about the “environment.” And the stakes are high, as molecularization affects not only the disciplinary politics of environmental health science but also how we regulate toxic exposures.

The early chapters of *Exposed Science* hew closely to the environmental health sciences, offering a field analysis informed by neoinstitutional theory. Chapter 1 establishes the difficult position in which environmental health scientists find themselves. Joined closely to the regulatory state, the environmental health sciences see their porous boundaries regularly transgressed by interested parties, like regulatory agencies, private industry, or environmental justice activists. Given these “structural vulnerabilities” (p. 8), it is no wonder that some environmental health scientists have come to view genetics as a means to secure resources and scientific credibility. In chapter 2, Shostak explores how advocates of genetics within the environmental health sciences deploy a “consensus critique,” which builds momentum for genetics by first identifying widely recognized technical problems in the field and then proposing genetic science as a solution to these problems.

The next two chapters form the core of the analysis, in which Shostak examines the ways in which molecularization and genetic thinking has altered the meaning of the environment for environmental health scientists. First, it shifts environmental health scientists’ focus to “susceptible bodies.” Here the goal is to look for inherited genetic susceptibilities that make certain individuals vulnerable to toxins, and, in turn, target interventions toward at-risk individuals (chap. 3). Second, it pushes the field to identify the

mechanisms by which toxins affect the body in order to develop genetic biomarkers that detect both the presence and extent of environmental toxicity (chap. 4). In both these visions, the environment is approached molecularly through the genome. The “environment,” which sociologists view as external to the body, is relocated to molecular processes.

The final empirical chapters extend beyond the environmental health sciences proper to address the wider politics involved in the incorporation of genetic science, discussing regulatory agencies and the environmental injustice activists, respectively. These chapters, especially the chapter on environmental justice, give voice to more critical and skeptical appraisals of the genetic turn in regulating environmental toxins. Of particular note here is the analysis of attempts to incorporate microarrays into testing for toxins, which illuminates the inherent conservatism of the regulatory field and the resistance faced by genetic reformers—a case sure to be of great interest to sociologists of science.

As a work of nuanced, empirical sociology *Exposed Science* is first-rate. Yet, at times, one wishes that Shostak stepped back to consider the bigger picture. To most sociologists, the problems with the molecularization of the environment appear evident. It distracts from the structural social inequalities and focuses myopically on the internal body. But Shostak seems reluctant to air these issues in any way that might move her beyond her case. This is not to say that this critical thread is absent in the book. Indeed, the most powerful part of the book comes when Shostak pivots from the internal world of environmental health science to home in on an environmental health controversy involving a housing project in Daly City, California. Her analysis of the failed attempt by environmental justice activists to prove toxin exposure using genetic science, reveals, in devastating fashion, the dilemmas posed to environmental justice by genetic science. Yet, while one appreciates that Shostak sticks to her data and avoids the type of knee-jerk criticism of genetics common in sociology, one can’t help wanting her to reflect more on the broader implications of the molecularization of the environment—not just for environmental health scientists but for all of us.

If you come to this book looking for a strident critique of genetic science you won’t get it. That’s not its purpose; the goal is a sober analysis of the dilemma it poses for a specific field. And in this, it certainly delivers. For this reason, *Exposed Science* is a must read for medical sociologists, sociologists of science, and anyone interested in the effects of science on policy decisions, political discourse, and population health.