comparing middle-income nations to more advanced democracies, such as the United States, may provide a fruitful analysis. Notwithstanding differences in levels of development, AIDS policy in the United States has also been troubled by boundary institutions; public health institutions and policy, especially at the urban level, are relatively weak, while the federal government is often unresponsive to local needs. Moreover, incorporating the United States and other advanced democracies can provide yet another example of the usefulness of Lieberman's framework.

In closing, as a political scientist conducting research on global health policy, I learned a great deal from this book. *Boundaries of Contagion* provides a good example of the potential that the discipline of political science has for illuminating the challenges of AIDS policy success in developing nations. At the same time, it widens our thinking about the health policy consequences of ethnic divisiveness. This is surely an important contribution to the field of comparative politics and public policy.

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Over the past two decades, roughly 10 times as many people in Africa have died of complications related to AIDS than have been killed in civil wars. Yet while you could fill a small library with the books and articles that political scientists have written about civil conflict in the region, you could count on two hands the studies that deal with the AIDS pandemic from a political science perspective. Civil wars are products of competition over power and resources. They involve information asymmetries, commitment problems, and collective action—all staples of the political science repertoire. AIDS, by contrast, is shaped by the epidemiology of the virus that causes it and by the intimate social behavior of the people who are its hosts—both areas that lie outside the expertise of most scholars in our profession. Political scientists have long recognized the importance of AIDS, but by and large, they have been hard-pressed to find a point of entry where our disciplinary tools might provide leverage for understanding the phenomenon.

In *Boundaries of Contagion,* Evan Lieberman finds a way to turn the AIDS crisis into a political science topic by recasting it as a problem of public policy formation. Disease vectors, individual vulnerabilities, and behavioral choices clearly matter for the spread and impact of AIDS, but so too does government action. Why, Lieberman asks, is there so much variation in the ways that governments around the world have responded to the epidemic? Why, for example, did Brazil react so aggressively and effectively to the outbreak of AIDS while South Africa responded so anemically?

Lieberman locates his answer in the strength or weakness of the formal and informal institutions in a country that delineate the boundaries between ethnic groups. When they are strong—that is, when people from different ethnic groups rarely interact with one another and view the social and political life of the country through an ethnic lens—the AIDS epidemic comes to be seen not as a shared problem for the country but as "belonging" to a particular ethnically defined subpopulation. Members of groups that are perceived to be more deeply affected by AIDS are stigmatized, and this undermines their willingness to make strong demands on their own behalf. Members of groups that are perceived to be less affected see themselves as safe from the disease, and this causes them to withdraw their support for investments in public health measures that they think will mostly benefit others—others who, given the way AIDS is transmitted, they lead themselves to believe have brought the disease on themselves. The result is a

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reduction of potential support for AIDS policies, and a weaker government policy response.

This is a very interesting and provocative argument, and Lieberman supports it with closely reasoned logic and a battery of clever empirical tests. The result is a book that contributes not just to the literatures on AIDS and ethnicity but also to the growing literature that combines multiple methods and data sources with rigorous social science reasoning to test causal claims. A leading practitioner and advocate of mixed-method analyses in comparative politics, Lieberman put his skills on full display. His book reminds us that in the social sciences, where causality is complex and measuring outcomes and explanatory variables is almost always subject to error and bias, the best approach involves the independent testing of multiple observable implications of a theory at different levels of analysis using a diverse set of data sources. It also requires recognizing the limitations of any single test. In this regard, one of the real strengths of the book is Lieberman's candor about the conclusions we can and cannot draw from each part of the analysis.

In an example of his judiciousness and methodological self-consciousness, Lieberman makes clear that the cases of Brazil and South Africa—countries about which he had written previously and from whose divergent responses to the emergence of AIDS he generated his ethnic boundary hypothesis—are used to illustrate, rather than to test, his thesis. The real testing happens in Chapters 5 and 6, where the implications of the argument are evaluated against data from Indian states and a cross-section of more than 70 developing countries. The within-India analysis offers the methodological advantage of holding constant a host of country-specific factors while isolating the key explanatory variable (boundary institutions), which Lieberman demonstrates vary markedly across the units he studies. The cross-national analysis, meanwhile, provides variation on a set of potentially important country-level characteristics, such as regime type, income level, and infection prevalence, allowing him to test for the possibility that the observed outcomes in South Africa, Brazil, and India were shaped by these factors. Although the cases are too few and the models too spare to generate definitive results—this is a criticism of all cross-country analyses of AIDS-related outcomes, not just Lieberman's—the findings are highly suggestive and offer a useful complement to the more micro-level analyses presented earlier. Taken together, the evidence presented is consistent with the argument that the presence of institutionalized ethnic boundaries is associated with weaker policy responses to AIDS.

An ambiguity in the study concerns who the actors are whose behavior is responsible for the aggressiveness of a country's response to the AIDS epidemic. If AIDS is to be seen as a public policy problem, then we need a richer treatment of how public policy—or at any rate public policy in the health sector—is made. Although Lieberman's repeated references to "the state" can be justified as a way of locating the book's contribution within the broader literature, "states" do not make policy decisions; politicians and bureaucrats do. What we need is an account of who the key decision makers in the AIDS policy sector are, what institutional and other constraints they face, and whose political support they require in order to stay in office. Then we can make the connection between the boundary institutions that are present in the country, the expected levels of support for an aggressive policy response to AIDS, and the policy outcomes we observe. Focusing just on the association between social structures and outcomes leaves too much inside the black box.

Lieberman rightly rejects explanations based simply on cross-country differences in leadership, writing that "it would be difficult to challenge the conclusion that a government adopted aggressive policies because those in charge of government policy acted aggressively, or that a particular president made AIDS a top priority. The relationship between cause and effect is so close that they are almost indistinguishable" (p. 19). Fair enough. But a more compelling account would draw more deeply on the literature on public policy formation to provide a clearer description of exactly how the social pressure faced by leaders translates, first, into the decisions they arrive at and, second, into the outcomes that are ultimately realized. We get a feel for the complexity of this process in the case studies, but it would have been welcome if some more general theoretical expectations had been developed in the earlier chapters.

The book is about AIDS, but it is also about ethnic politics. Therefore, it fits nicely within the growing literature that shows how ethnic divisions can disrupt collective action and undermine human well-being. But the argument here is different from the more familiar accounts. The characteristic of ethnicity that matters for Lieberman is not the numbers and sizes of ethnic communities in the political system—the key aspect of a country's ethnic demography that figures into most treatments of the impact of ethnic diversity—but the depth of the social divisions that separate members of one group from another: their levels of distrust and the barriers to the free flow of information and social interaction that exist among them. Fractionalization is often thought to imply these things, but it may not. A country like Tanzania, with lots of ethnic communities but weak intergroup boundaries, would score high on ethnic fractionalization but low on Lieberman's scale, whereas a country like Rwanda, with few groups but highly institutionalized boundaries, would score exactly the other way. One of the contributions of the book is the reminder it provides that ethnicity may matter for the social barriers it erects within a polity, rather than for the number of distinct interest groups that it defines. A corollary contribution is

its demonstration that measuring these two different aspects of a country's ethnic divisions are completely separate enterprises.

The distinction between these two different ways of thinking about ethnicity is relevant not just for the way we measure ethnic divisions but also for the extent to which we can take the structure of a country's ethnic landscape as exogenous to AIDS. Seen in terms of the numbers and sizes of social units in the polity, it makes sense to see a country's ethnic landscape as exogenous—as part of the "found social material" that existed prior to the onset of the pandemic. But seen as an indicator of whether or not formal and informal practices reinforce a sense of group difference, it becomes possible to imagine that the perception of differential rates of HIV infection across groups might lead to a *deepening* of the boundaries between communities, as those in groups with lower prevalence rates seek to minimize contact with members of groups with higher rates of infection. Such a reaction may have no effect on the formal institutionalization of intergroup boundaries, at least not in the short term. But it may have a profound impact on their de facto salience in everyday interactions, including on the sorts of attitudinal measures that Lieberman employs as his proxy for ethnic boundaries in his comparative analysis of Indian states in Chapter 5. While such a connection does not directly undermine the exogeneity of the relationship between institutionalized boundaries and policy aggressiveness, it does suggest an indirect connection whereby high infection rates (or, more precisely, high inequality in infection rates across groups—more on this in the following) lead both to deeper ethnic boundaries and more reason for an aggressive policy response to the epidemic. The good news for Lieberman is that this connection works in the opposite direction from his hypothesized link between ethnic boundaries and policy responses, and so, if true, makes his findings more, not less, impressive.

While cordoning themselves off from others is one logical response that members of less affected communities might take, another is to push for an aggressive government response to the crisis in order to keep the epidemic at bay and prevent it from spilling across group boundaries—a response exactly opposite to the one that Lieberman says we should expect to see. HIV is an infectious disease—not nearly as infectious as severe acute respiratory syndrome (SARS) or Ebola, but infectious all the same. So it is puzzling why at least some members of the less affected group would not seek to lobby the government to make sure that the disease does not spread beyond its current ethnic hosts. Lieberman invokes the analogy of the potential response of a government to a natural disaster in an ethnically divided society, where, he argues, "it would probably be more difficult to gain national support for a policy providing relief from natural disasters if it were understood that the only group vulnerable to disasters is an ethnic minority" (p. 38). But the difference between natural disasters and disease epidemics is that, if untreated, disease epidemics can spread well beyond their initial epicenters. Lieberman's counterargument is that because HIV requires intimate human contact for its transmission, the danger of uncontrolled spread is much less (and also preventable by measures that individuals are free to take).

This response makes sense if we imagine ethnic communities arrayed around countries in discrete blocks like a checkerboard, such that intergroup interactions can easily be avoided. But very large numbers of people in AIDS-affected countries live in urban areas (including fully 41% of the population in the sample of developing countries that the author analyzes in Chapter 6), where HIV infection rates are typically higher than in rural areas and where levels of intergroup contact are often extreme. In such an environment, it becomes harder to imagine that avoiding contact with members of more affected groups could be a viable strategy. And it becomes correspondingly harder to imagine that members of less affected groups will uniformly reject support for aggressive anti-AIDS measures in favor of an exclusive strategy of shame and blame. The data show what the data show, but the behavior is so puzzling that one cannot help but wonder whether a separate analysis of urban and rural settings might have been called for.

A final point relates to a key variable in the theory that is assumed but never actually articulated: intergroup inequality in HIV prevalence. What is really doing the work in *Boundaries of Contagion* is not just the degree to which ethnic boundaries are institutionalized but the inequality in the extent to which members of different ethnic communities are (perceived to be) affected by the virus. One could imagine a society with deep ethnic divisions but where HIV infection rates were (or were perceived to be) equal across groups, and the logic laid out so carefully in the book would no longer hold. This is partly what lies behind the policy prescriptions outlined in Chapter 7, where Lieberman advocates ceasing to break down prevalence statistics by ethnic group.