In the first two chapters of Violent Environments, Nancy Peluso, Michael Watts, and Betsy Hartmann assert that I am a sloppy and dishonest scholar with a grudge against the poor whose research has no theoretical cohesion and whose findings have little empirical basis. They also strongly imply that my research has links to the military and is intended to provide theoretical and ideological cover for continued large military budgets.1

These authors launch a severe critique of work that I carried out—in close collaboration with a large number of other researchers, specialists, and experts—under the auspices of the University of Toronto, the American Academy of Arts and Sciences, and the American Association for the Advancement of Science. 2 Although Violent Environments includes several chapters severely critical of this work, and although I strongly disagree with much of this criticism, due to space constraints here I will focus on the first two chapters.

In Violent Environments, Peluso, Watts, and Hartmann repeatedly misrepresent my work, take my arguments out of context, and misquote me. They make factual mistakes about the nature of the research projects I directed and about the theory developed to explain the relationship between environmental scarcity and violent conflict. They use straw-man argumentation, they represent research hypotheses as empirical findings, and they take little account of my previous and widely-cited rebuttals of criticisms similar to theirs.3

What emerges is a grotesque caricature. The errors and misrepresentations of this book have the effect of portraying my arguments as far less nuanced and subtle than they actually are. On occasion, Peluso, Watts, and Hartmann are right in their criticisms, and
they are right in important ways. But their wholesale rejection of our work leaves little room for dialogue.

At the University of Toronto, we have always welcomed debate and criticism, because we want to promote the accumulation of knowledge. In the course of our research in the 1990s, we sought out people with a wide range of scholarly backgrounds and ideological perspectives to ensure that our conclusions were well-grounded and thoughtful. Indeed, Nancy Peluso attended and participated in one of our workshops. We have also tried to promote a dialogue with—and support the research of—our acknowledged critics. For this reason we opened our extensive archives of correspondence, research results, databases, and financial records to Hartmann when she was studying the origins and development of the environment-conflict research program. (Surprisingly, this support is nowhere acknowledged in Hartmann’s chapter in Violent Environments.) Unfortunately, the authors of Violent Environments never once contacted us for our comments, suggestions, or responses.

Such an exchange could have significantly improved the book. Here are some examples of errors we could have flagged:

- Peluso and Watts say that I propose “automatic, simplistic linkages” (page 5) between increased environmental scarcity, decreased economic activity, migration, weakened states, and violence. They say I argue that “conditions of resource scarcity…have a monopoly on violence” (page 5), which implies that I believe scarcity is a necessary and/or sufficient condition for violence.

  I argue nothing of the kind. Here’s what I actually wrote in the opening pages of Environment, Scarcity, and Violence: “Environmental scarcity is never a sole or sufficient cause of large migrations, poverty, or violence; it always joins with other economic, political, and social factors to produce its effects” (Homer-Dixon, 1999, page 16). And in the book’s conclusion, I write: “[E]nvironmental scarcity produces its effects within extremely complex ecological-political systems. Furthermore, environmental scarcity is not sufficient, by itself, to cause violence; when it does contribute to violence, research shows, it always interacts with other political, economic, and social factors. Environmental scarcity’s causal role can never be separated from these contextual factors, which are often unique to the society in question” (Homer-Dixon, 1999, page 178).

- Peluso and Watts misquote me in a way that reinforces their assertion that my argument is strongly deterministic. In the concluding chapter of Environment, Scarcity, and Violence, where I commented on the future likelihood of violence in which environmental scarcity is a contributing cause, I wrote: “[I]n coming decades the incidence of such violence will probably increase” (Homer-Dixon, page 177). In their reproduction of this quotation, Peluso and Watts drop “probably” (page 12 of Violent Environments).

- Peluso and Watts present a causal diagram extracted from the Rwanda case study by Valerie Percival and me (Percival & Homer-Dixon, 1998). This diagram, they write, is a good example of our “naïve and static”
conception of social structure (page 20). Yet, in our Rwanda case study, this diagram did not represent a research finding. Rather, it represented a particular hypothesis about the relationship between environmental scarcity and violence in Rwanda. Moreover, Percival and I argued against this hypothesis (Percival & Homer-Dixon, 1998).

Peluso and Watts write that “[t]oday, environmental security as an institutional project is truly global, with academic centers in Toronto, Zürich, Oslo, Cambridge, New York, and Paris. All have garnered significant foundation support, and many are linked to national militaries” (page 10). They provided no evidence for this extraordinary claim about military links. Certainly the research carried out at the University of Toronto received no funding from the military, nor did it have any formal or informal links to any military research, intelligence, or policy activities. I believe this is also true for most of, if not all, the other environment and conflict research projects on their list.

Peluso and Watts present a straw-man account of my argument about the role of ingenuity in society’s adaptation to environmental scarcity. They assert, for example, that my concept of ingenuity is “synonymous with technological innovation” (page 22 of Violent Environments). Yet in Environment, Scarcity, and Violence I wrote at length that technological innovation is insufficient by itself and that societies need copious “social ingenuity,” which is “key to the creation, reform, and maintenance of public and semipublic goods such as markets, funding agencies, educational and research organizations, and effective government” (Homer-Dixon, page 110).

Peluso and Watts say that the environment, in my analysis, is a “trigger” of violence (pages 5 and 22 of Violent Environments). However, in Environment, Scarcity, and Violence I argued explicitly against a trigger model of environmental scarcity’s role as a cause of violence. I propose instead that environmental scarcity is best seen as a deep, “tectonic” stress that can have multiple, long-term effects on a society’s economy and political stability (Homer-Dixon, 1999, pages 18, 106, and 177).

Hartman says that, in my analysis of deforestation in the Philippines in Environment, Scarcity, and Violence, I neglected to note that “under the Marcos dictatorship fewer than two hundred wealthy individuals controlled a large fraction of the country’s forests” (page 51).

Actually, however, I wrote: “The logging industry boomed in the 1960s and 1970s and, following the declaration of martial law in 1972, President Ferdinand Marcos handed out concessions to huge tracts of land to his cronies and senior military officials. Pressured to make payments on the foreign debt, the government encouraged log exports to the voracious Japanese market. Numerous companies were set up with exclusive opportunities to exploit forest resources, and they rarely undertook reforestation” (Homer-Dixon, 1999, page 66).

Later in her chapter of Violent Environments, Hartmann suggests that Valerie Percival and I manipulated the findings of our Rwanda case study for essentially political reasons—in particular to avoid any association with “environmental determinism and racial stereotyping of Africans” (page 58). She provides no evidence for this serious charge of scholarly misconduct.

Given these examples, I would maintain that Violent Environments occludes rather than encourages dialogue.

In the interests of promoting such a dialogue, let me identify what I think are the three key issues at the heart of our disagreement. First, Peluso, Watts, and Hartmann use Marxian political ecology as a theoretical framework to guide their analysis of environmental problems in the South. I agree that such a perspective on processes of

The tone of Violent Environments suggests that all perspectives other than those based in Marxian political ecology are by definition theoretically incoherent.

—Thomas Homer-Dixon
production, accumulation, and distribution can generate critical insights. It can help fill some of the serious gaps in our analysis—especially, for example, our relative neglect of the powerful influence of the capitalist global economy and Northern consumption patterns on environmental scarcity in the South.

But other theoretical tools are often useful too, including, for instance, the theories of relative deprivation, social identity, civil violence, and endogenous economic growth that I use in my work. Unfortunately, the tone of Violent Environments suggests that these other perspectives (and indeed all perspectives other than those based in Marxian political ecology) are by definition theoretically incoherent.

Second, we do sharply disagree about the role of population size and growth as a cause of environmental scarcity. In Environment, Scarcity, and Violence, I provided abundant evidence that population pressures—when combined with certain social, economic, and political factors—can make environmental problems far worse.

Third, while I believe that nature can have an independent or exogenous influence on a society’s political affairs and trajectory of development, Peluso, Watts, and Hartmann do not allow for this influence as a possibility. Here lies, I think, our sharpest and most important disagreement. In Environment, Scarcity, and Violence I argue at length, and with numerous detailed illustrations, that sometimes our natural environment has an independent causal role. I support Daniel Deudney’s call to “bring nature back in” (Deudney, 1999)—to expand our explanatory repertoire from strictly “social-social” theory (theory that posits only social causes of social outcomes) to include “nature-social” theory (theory that posits nature as a cause of certain social outcomes). This is not “naturalizing violence” as the authors assert; rather, it means improving our understanding of the causal role that nature can sometimes play in spurring violence.

Despite our critical differences, there is room for us to learn from each other and to build on each other’s insights. I hope this exchange can be the first step in a dialogue that pushes forward our understanding of these complex interactions.

Notes

1 For example, on pages 10 and 11 they write that “[Many environmental security projects] are linked to national militaries” and that the environmental security “industry” has arisen in “the context of a distinctive set of geopolitical conditions: the end of the Cold War [and] the need of overfunded militaries to legitimize their existence in the face of clamoring for the ‘Peace Dividend,’ . . . .”

2 See, for example, http://www.library.utoronto.ca/pcs/eps.htm or http://www.library.utoronto.ca/pcs/state.htm.


References


Tad Homer-Dixon claims that we (and Betsy Hartmann, whom we will let speak for herself) have slandered his academic reputation, grossly misrepresented his ideas, engaged in intellectual dishonesty and caricature, and charged that he actively dislikes the poor. He says that he and his Toronto group have always stood for openness and dialogue, even inviting one of us into his coterie. These would be serious charges were they not completely unrelated to what we have actually written. They are also consistent, in our view, with his narrow reading of the field of environmental politics.

Although we disagree with many of the underlying assumptions of Homer-Dixon and the Swiss group under Günther Baechler as well as how they frame their conclusions, it should be said that in Violent Environments we identified their work as the most important and influential (yet obviously different from our) models within the environmental security field. In the book, we provided a careful account of their arguments (and a diagrammatic reformulation) based on their central works. We will not exhaust our limited space here in a “he said—we said” defense. However, let us as an example examine Homer-Dixon’s opening salvo above on his use (and our interpretation) of the relationship between resource scarcity and violence.

We (and James Fairhead in another chapter of the book) point out in Violent Environments that “resource abundance” could serve a more relevant analytical function than does “scarcity” in analyzing environmentally related violence. Moreover, we strongly disagree with the heavily Malthusian cast Homer-Dixon admittedly gives to what he calls scarcity and violence. We argue that, rather than presuming or starting with scarcity (or abundance), analysis of these cases of violence should begin with the precise and changing relations between political economy and mechanisms of access, control, and struggle over environmental resources. Scarcity and abundance are historically (and environmentally) produced expressions of such relations, and as such should not be the starting point of an analysis.

Nevertheless, given its centrality to his analysis, Homer-Dixon’s notion of scarcity is surprisingly untheorized. Of course we understand that he says environmental scarcity “interacts” with “complex-ecological-political systems,” the latter providing a “context” for violence. But what are the theoretical power or precise causal claims (or powers) residing within such a vague and woolly notion of “context”? “Scarcity” and “context” and “social relations” each become their own sorts of black boxes, bereft of any analytical or social specificity and susceptible to being defined and deployed in a
bewildering array of ways as the analyst or reader sees fit.

Our concern in our introduction to Violent Environments was to look carefully at the purported causal mechanisms that Homer-Dixon does deploy—and the connections he purports to make—and to scrutinize them. (Such scrutiny should hold equally for our theoretical apparatus, but there is no such scrutiny in Homer-Dixon's remarks above.) Here we stand by what we said in that introduction. It is one thing to claim that your analysis does "a" and "b"; it is quite another to actually demonstrate "a" and "b." Thus, while Homer-Dixon denies the language of "trigger" (a denial we acknowledge as much in our own chapter), his analyses, in fact, nearly always deploy trigger mechanisms—events that set off violent interactions.

Ultimately, it is not possible to review here all the differences and similarities between our two projects—indeed, that was the intent of our book! But it might serve readers well to know that, with regard to the Rwanda case to which Homer-Dixon's commentary refers (Percival & Homer-Dixon, 1998), we were raising his (not our) invocation of the term "structure" in his "hypothesis" and examining the way in which it was deployed in his model. Hence, it is beside the point whether his hypothesis is right or wrong.

Further, we did not say the environmental security field is funded by the military; we said there were links. This can be seen indisputably in a number of publications as well as in the constitution of the networks that link research, policy, the CIA, and the military. Even before its greening, the U.S. military has made use of ideas and scholars within the environmental security field—so such an observation should come as no surprise. Our point was to emphasize not any complicity (though let it be said that there has been no serious genealogical or sociology-of-knowledge study of the origins and development of environmental security in relation to the military and the state security apparatuses), but rather that there is indeed traffic in ideas and people between the military/intelligence and some key figures in environmental security.1 For the rest of our many disagreements with Homer-Dixon, we believe that intelligent and discriminating readers can make their own judgments.

We now turn to the three matters of substance that Homer-Dixon raises. The first is his endorsement of the insights of Marxian political ecology. But one has to ask: how and to what effect does such an endorsement reveal itself in his work and more generally in the study of environment and conflict? How would such an acknowledgement change his analysis? How, for example, might it provide some analytical bite to his notions of "context" or "scarcity"? Our challenge was to attempt to show that a focus on scarcity does not lead us to a useful understanding of the relations between resources and conflict. Indeed, the emphasis on so-called scarce resources occludes the real sources of such problems/conflicts, and in so doing makes them more difficult to resolve.

The best example of this point is perhaps the way Homer-Dixon describes his view of how appropriations of land/resources by elites create scarcity. The focus of his analysis is subsequently on the scarcities produced—not on the mechanisms of appropriation and exclusion from access at the heart of that process. This focus means far more than what he above characterizes as "[his] relative neglect of the powerful influence of the capitalist global economy and Northern consumption patterns on environmental scarcity in the South." By positing a clean separation between "North" and "South" and not recognizing their complex, relational, and contingent qualities—particularly in very globalized "local" conflicts over valuable resources—Homer-Dixon's analysis blots out the sources of scarcity.

The differences between ourselves and Homer-Dixon turn fundamentally on this issue—even though he claims to want to understand how violence is related to resources and environments. The bricolage of potentially incommensurable concepts that Homer-

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**Given its centrality to his analysis, Homer-Dixon’s notion of scarcity is surprisingly untheorized.**

—Nancy Peluso & Michael Watts
Dixon cites above as informing his work—“relative deprivation, social identity, civil violence, and endogenous economic growth”—do not make for an alternative theoretical approach to the political ecology that we use. They are not formulated in relation to anything and therefore provide no means for empirical analysis.

The second question Homer-Dixon raises speaks to our self-evident differences of opinion over population size and growth. Here the question is whether any or all of the studies presented in Violent Environments deny any role to population in understanding violence, and whether our studies provide counter-evidence to the “abundant evidence” he claims to have marshaled. To take one illustration, Aaron Bobrow-Strain (in his chapter “Between a Ranch and a Hard Place: Violence, Scarcity, and Meaning in Chiapas, Mexico) takes one of Homer-Dixon’s cases (Chiapas) and subjects it to a devastating demographic critique (Bobrow-Strain, 2001). One would have thought that this critique deserved some response in the latter’s comments, since the population question is so central to his work.

Most of us would not dispute Homer-Dixon’s claim that, under some circumstances, population growth can compound environmental problems. Yet, as Mortimore and Adams (1999) have shown in Kenya and Nigeria, population growth in some circumstances can ameliorate environmental problems. Our argument was that Homer-Dixon places much more weight on population growth than he is prepared to admit, and that he reads into scarcity (or abundance) a demographic presence that vastly exaggerates the causal significance of population in conflict and violence.

Homer-Dixon’s third point—that we need to “bring nature back in”—is simply astonishing. What we call “nature’s agency” is something that we have both struggled with in our work over many decades as well as in the Berkeley Workshop on Environmental Politics that we established in 1996. Homer-Dixon commits a truly remarkable aporia in asserting that we should now consider embarking on such a project. He might consider reading Nancy Peluso’s article in Comparative Studies in Society and History (1996) or Watts’ piece in Violent Environments. Watts, for example, explicitly addresses the biophysical qualities of petroleum and how those qualities shape both environmental dynamics and the conflicts that surround the resource. Peluso’s study is a detailed analysis of the relations between land rights and specific forest ecologies—an analysis in which the trees themselves play a role.

We also explicitly discuss “the difference that nature makes” in our introduction to Violent Environments, to which Homer-Dixon restricted his comments. We detail our point of view that the biophysical characteristics and geography of a resource affect the conditions of its extraction, its value, and the means—and scale—by which it can be produced. The strategic value of a resource (or an environment), including its relative scarcity, affects how it will be enclosed, protected, fought for, and so on.

And although Homer-Dixon explicitly says he is only dealing with renewable resources, his theory makes it impossible not to take account of non-renewables (oil, minerals, and so on). The importance of nature and geography in conflicts over renewables as well as non-renewables is discussed in examples in our introductory chapter and is central to the chapters in Violent Environments by Watts, Vandergeest and Stonich, Neumann, Bod, Garb and Komarova, Kuletz, and others.

Homer-Dixon’s response above seems to assert a typical liberal double standard about any analytical approach associated with Marx: that such approaches imply closure by definition and a lack of willingness to engage in “dialogue.” But what is there about our approach that denies a commitment to debate and openness (and is there anything about the history of Malthusianism that unequivocally endorses open, democratic debate)?

A careful reading of Violent Environments reveals both a vital traffic in ideas across the
social and environmental sciences and enough internal debate among contributors to belie the very idea of the dead hand of Marxian closure. We focus on the specific institutions and processes of production, accumulation, and resource access as well as the forms that nature and social relations take as a basis for understanding the nature of resource conflict. This perspective ties all of our case studies together, although there is nothing like a unity of vision among the authors. We all engage a variety of theoretical insights and grapple with the strengths and weaknesses of a political ecology model.

Homer-Dixon sings the praise of inclusion for his Toronto group, and bemoans our unwillingness to send him our manuscript of *Violent Environments* for commentary. And yet one could read his *Environment, Scarcity, and Violence* and never know that there is a huge body of work on resources, environment, and politics—nearly 25 years in the making by geographers, anthropologists, and sociologists—that operates today under the sign of political ecology (see, for example, Tim Forysth’s review in *Critical Political Ecology* (Forysth, 2003)). Is inclusiveness and dialogue to be our burden alone? In the interest of collegiality, if not solidarity, we would be delighted if Homer-Dixon would at some point engage with that body’s research and conclusions.

### Note

1 Indeed, in editing this response, ECSP Editor Robert Lalasz pointed out that “ECSP, for example, works with Kent Butts at the U.S. Army War College—yet we would strenuously resist the suggestion that there is complicity between what we do and everything the U.S. Army War College does, or the Army, for that matter.” This was precisely our point.

### References


