
Rejoinder: Eight Misrepresentations and a Confession

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In her response to my article, Mary Durfee argues that my research, though promising, is “flawed” in its execution and rests on “incoherent biophysical science.” She reaches this conclusion by misrepresenting my article in eight ways. I would like to highlight these misunderstandings before pointing out, and correcting, a real flaw in the execution of my research, which went undetected by Durfee, but which did not affect the conclusions of my study.

According to Durfee, I argue “that the adversarial culture of the United States compared to the cooperative culture in civil law nations meant that firms in Europe were more proactive in cleaning up their emissions than was the case in the United States,” and that to make this point I sought to “compare chemical pollution in the Rhine to that found in the Great Lakes of North America.” These opening statements contain two important misrepresentations. First, my study does not contain any claims about how environmental measures taken by “firms in Europe” fare in comparison to environmental policies of corporations “in the United States,” and I do not turn my comparison between the chemical pollution of the Rhine and the Great Lakes into a decisive test for settling this grand issue. Second, my research does not compare chemicals found *in* the Rhine with pollutants found *in* the Great Lakes. My research mainly focuses on the relative toxicity of industrial effluents into the Rhine and the Great Lakes by enterprises that are located in these two watersheds. I defend this choice by pointing out that the protection of the Rhine and the restoration of the Great Lakes are widely seen as two highly successful, even exemplary, cases of water protection in their respective regions. Moreover, I embed my findings in the larger comparative literature in which similar research results are presented. But I never claim, and do not

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believe, that either my study or the larger literature allows one to draw any definitive conclusions about the extent to which European and American companies have engaged in environmental protection. I do not even assert in the article (or elsewhere) that the conclusions of my research on industrial effluents into the Rhine and the Great Lakes can be extrapolated to other forms of environmental degradation plaguing these two watersheds, such as pollution from agricultural sources and municipalities, or polluted sediments.

Durfee also shows her misunderstanding of my work when she writes that I claim “the International Joint Commission [has] worsened the situation in the Great Lakes.” I am more careful than that. On p. 1043, I argue that the work of this Commission has “probably been beneficial” to the efforts to restore the Great Lakes watershed *given the adversarial nature* of the water politics of the Great Lakes watershed. However, I also point out that the Commission has contributed to the adversarial nature of the water politics of the Great Lakes in a variety of ways, the wisdom of which can be questioned on the basis of my study.

A fourth misrepresentation occurs when Durfee writes that in my view the “only relevant difference” between the Rhine countries and the United States “lies in their legal cultures (civil versus common law).” This statement comes as a surprise. In my article, I spend some fifteen pages (pp. 1029–43) summing up, and discussing, a plethora of institutional differences that have made the water politics of the Great Lakes more adversarial than those of the Rhine. I divide them into three groups: national political cultures (“American exceptionalism”), state-society arrangements, and international regimes. Under the heading “state-society arrangements,” I show how differences in the relations among the executive branch, the judiciary, the legislature, business corporations, and environmental groups have all made the water politics of the Great Lakes more adversarial. Differences in legal institutions form only a small, and not overly significant, part of this analysis.

A fifth misrepresentation follows on the heels of the second one. Durfee states, “Verweij assumes that chemicals found in a sample of water from the Great Lakes or at the outlet of the river Rhine reflect the success or failure of reduction of toxic substances releases by industry.” I do not assume this. In the article, I am mainly interested in comparing the toxicity of industrial effluents into the watersheds—not in probing the water quality of the basins.

To establish the toxicity of industrial discharges for the Great Lakes case, I use data contained in EPA’s Toxic Releases Inventory. These data show the chemicals that are discharged into open waters by the companies on the U.S. side of the Great Lakes

*through their releases of wastewater.*¹ I could not follow the same procedure for the Rhine case, because companies in the Netherlands, Germany, France, and Switzerland are not obliged to, and do not, publish data on the toxicity of their effluents into open waters. Therefore, I constructed a different method, in which I use the water quality of the Rhine as a proxy for the toxicity of industrial effluents into the river. In my article (pp. 1013–14), I explain why I believe that this is a good proxy (which has to do with the fine-grained measurement system of Rhine water quality set up by the water supply companies along the river). One might disagree as to whether this is a good enough proxy, but it is not true that my case rests on a comparison of water quality of the two watersheds.

As a consequence, various charges leveled at my research by Durfee are without foundation. These include the charge that I overlook the fact that the pollution of the Great Lakes is to a significant extent caused by air pollution emanating from outside the basin, and that I ignore the impact of the natural differences between rivers and lakes (which, in fact, I discuss on pp. 1022–23). Precisely to exclude the possible influence of such factors as airborne pollution from outside the basins or ecological differences, my findings are mainly based on a comparison among industrial effluents rather than on water quality.

A sixth way in which Durfee misreads my study is by imagining that I apparently assign a “heavy weight . . . to the views of the Council of the Great Lakes Industries.” I fail to understand how this conclusion is reached, in particular since my depiction of the cleanup of the Great Lakes is at odds with the views of this Council. During my interview with the Council (Ann Arbor, MI, 4 June 1997), I was told that Great Lakes industries had taken many voluntary environmental measures. As Durfee writes in her response, she apparently received the same information in a separate and earlier interview with this Council. However, on the basis of other evidence, I decided not to give much credence to this view—thus, unknowingly, copying Durfee’s own conclusion. I therefore cannot see the grounds of her claim that I privileged the information I received during this one interview. In all, I conducted 101 interviews for the research.

Seventh, I am blamed for leaving Canada out of my study, a country with more consensual environmental politics. This much, at least, is true. However, Durfee does not acknowledge, let alone address, the various solid reasons that I give for doing so. These reasons are openly discussed on pp. 1010–11 of my article. It is one thing to criticize my choice to leave out the Cana-

¹ The Toxic Releases Inventory also documents airborne pollution caused by companies in the Great Lakes states and other states. But these figures are shown separately from the data on industrial effluents, and are not relevant to the question that I raise in my research.

dian case, but quite another thing not to address my stated reasons for doing so.

An eighth misrepresentation is the assertion that I base my conclusion that the International Joint Commission has intensified the adversarial nature of Great Lakes water politics on only “one data point.” According to my critic, “he happened to hear about the 1993 Biennial meeting which was indeed very imbalanced toward the NGOs.” Again, I remain in the dark as to how my critic hit upon this conclusion. I based my finding on the information that I gathered during 47 interviews with Great Lakes stakeholders, and on the official reports of *all* Biennial IJC Meetings. I did not privilege a single type of stakeholder (such as Great Lakes companies), nor was I swayed by any particular Biennial Meeting. If the International Joint Commission and the EPA have begun to extinguish, rather than fan, the fiery politics of the Great Lakes as of late, then I can only see this as a vindication of my study, not as an indictment against it.

Besides these eight misrepresentations, Durfee raises various points with which I would disagree, such as the idea that the arrival of Green parties in parliament tends to make environmental politics more consensual. These are minor issues, however. It is more important to acknowledge that my research does contain a flaw, which went undetected by Durfee, but was kindly pointed out to me by Dr. Marc Braun, a pollution expert at the International Commission for the Protection of the Rhine Against Pollution.

Table 3 of my study (p. 1025) is entitled “Rhine River 1991 Water Quality Standards for Acceptable Levels of 22 Toxic Substances Compared to Actual Levels Detected at Lobith, Netherlands, in the Mid-1980s.” This table shows the extensive degree to which Rhine companies have overcomplied with the legal obligations to reduce the toxicity of their effluents. In assembling this table with the help of the year reports of the International Rhine Commission and the Rhine water supply companies, I apparently made a beginner’s mistake. As a consequence, the entries for the actual water quality of six toxic substances are not correct. Fortunately, this does not impact the conclusion that I can draw from the table. The corrected figures show that for 14 (instead of 18, as I previously reported) out of 22 chemical pollutants, during the mid-1980s, Rhine companies were already in over-compliance with legal standards adopted at the beginning of the 1990s. Hence, I can still safely deduce that Rhine companies have over-complied with legal standards (which was also the conclusion reached in the only other study of this issue, the one undertaken by Thomas Bernauer and Peter Moser, reported in the *Journal of Environment and Development*, vol. 5, 1996, pp. 389–415). I therefore stand by the results of my study.