



## IN MEMORIAM: THE CONTRIBUTIONS OF R. SCOTT FREY

### R. Scott Frey was Doing Critical Environmental Justice Long before Anyone Else

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#### Abstract

*The term critical environmental justice (EJ) studies was perhaps first used in the early 2000s and has become more mainstream in the last two years. R. Scott Frey's research on the transnational trade in hazardous substances reveals that he was producing critical EJ studies scholarship well before that. Frey's body of work has advanced the fields of world-systems theory and environmental sociology because it skillfully explores the violence of militarism and the brutality of capitalism and economic globalization, while also making clear that positive and transformative social change is possible when independent, grassroots movements mobilize within and across international borders. Frey's research provides us with an impressive set of analytical tools for imagining and bringing into existence another world that is more socially just and environmentally sustainable.*

**Keywords:** Transnational trade, Critical environmental justice, Political economy

I had the privilege and honor of meeting R. Scott Frey some years ago. His research on transnational waste and hazardous material flows and global environmental inequality is enormously important and foundational for the field, and he totally transformed my thinking on the topic. What follows are some of my thoughts on his work.

Only a small number of social scientists have examined this topic with particular attention to the social forces behind the waste trade, and Scott's work opened my eyes to the fact that the global



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trade in hazardous wastes is also a case of environmental inequality that reflects enduring historic divides between global North and South. As Frey argued, sending poisons to poor nations around the globe adheres to the historical pattern of siphoning wealth out of nations that are often former colonies, but is a new form of exploitation because it involves the export of what he called “anti-wealth”: substances that drain a nation’s resources and disrupt its ability to produce resources in the future must be understood as antithetical to development. Despite that troubling reality, Scott’s work also reminded me that we could draw hope and inspiration from the fact that a number of transnational social movement networks have emerged to draw attention to and combat these practices.

In many ways, Scott was doing what we now call critical environmental justice long before anyone proposed that terminology. There are four areas that this framework names as helpful for advancing environmental justice (EJ) studies: 1) expanding the social categories of difference—and their intersections—that we examine through an EJ lens; 2) embracing and pursuing multiscale (both spatially and temporally) methods and theories of EJ; 3) examining environmental injustices and the possibilities for realizing environmental justice through a framework that is not limited to the role of the government or nation-state as perpetrator or resolver of these challenges; and, 4) an ethics of radical inclusivity that is undergirded by a firm belief in environmental justice for all. R. Scott Frey was advancing a critical environmental justice lens many years before anyone ever uttered or wrote those words.

In a recent article in *Research in Human Ecology*, Frey offers a major contribution to the scholarship on the treadmill of destruction—the concept that presents an expansion of the treadmill of production theory by extending the scope of that literature to interrogate the socioecological impacts of militarism and war-making. In Frey’s paper, he rightly notes that it is surprising that this emergent literature from American environmental sociology had yet to consider the extraordinary case of the usage of Agent Orange and other herbicides during the U.S. war in Vietnam and Southeast Asia in the 1960s and 1970s (known by its military code name, Operation Ranch Hand). Considering the vast destruction of flora, fauna, and human life these wars produced over the decades (an example of both immediate and “slow” violence [Nixon 2011]), it is rather urgent that scholars address this as a case of the treadmill of destruction and environmental injustice in the world-system. Frey extends his reach beyond Agent Orange to the full range of what were called the “rainbow” herbicides, which includes Agents pink, green, purple, white, and blue, named after the color bands on the barrels in which they were delivered to Vietnam for use as defoliants and weapons of war.

Frey also pulls no punches and names the range of specific corporations involved in the production of these death-dealing substances, including Dow Chemical, Monsanto, Uniroyal and many others. Thus, young and old, local and transnational actors, Vietnamese and American

stakeholders were all caught up in this conflict and have collectively paid an unimaginable price. This was an environmental justice conflict that revealed the importance and centrality of social class and race, as well as age, nationality, gender, political ideology, and disability—as inclusive an EJ scholarly analysis as there ever was. This article presents a sophisticated multiscalar exploration of the causes and consequences of the war and its ecological impacts, detailing the fact that the chemicals used during Operation Ranch Hand resulted in horrifying effects on the bodies of civilians and Vietnamese and U.S. soldiers, as well as extensive impacts on local, national, and regional ecosystems throughout Southeast Asia. Frey also notes that one cannot understand the driving forces behind the war and the use of herbicides as a weapon without paying close attention to the global geopolitical tensions and aspirations among U.S. chemical manufacturers, political elites and allies during the Cold War, as well as the earlier history of chemical warfare against insurgencies by other colonial or regional powers like Britain, France, Portugal, the Soviet Union, and Israel. In other words, statecraft and war-making are all too often linked, and we must recognize that the world-system is fueled in large part by this kind of mass atrocity, which underscores the need to support an ethic of justice for all.

Frey was a brilliant chronicler and analyst of the flows of ecologically and socially toxic materials across international borders. I remember being absolutely floored (and horrified) by his work on shipbreaking. This is the phenomenon wherein core nations send their obsolete ocean vessels to peripheral nations for dismantling, or “breaking.” Frey wrote about this process occurring in cities like Alang, India and Chittagong, Bangladesh—known as the shipbreaking capitals of the world since the beaches in those cities are the sites of more shipbreaking than any other place on earth. This paper is important and revelatory for many reasons. First, in this so-called digital age where so much of our commercial goods seem to appear in stores, at our doorsteps, or on our phones or computers with such ease and immediacy, one can be forgiven if we overlook or remain ignorant of the fact that the vast majority of the global trade in materials and goods is moved by ships. Second, around 90% of all ships deemed obsolete and destined for ship breaking yards are sent to peripheral nations from the core, where they are dismantled for the purpose of reclaiming and recycling steel and other parts and where enormous volumes of hazardous materials and other pollutants accumulate—a clear example of unequal exchange and environmental inequality. Workers (often young, poor, unhealthy, migrants) are exposed to a range of toxins (including asbestos, heavy metals, fuel residues, biocides, radioactive substances, and persistent organic pollutants) that place them at great risk of adverse health effects, while waterways, air, and land are simultaneously contaminated as a result of these activities. Frey challenges a wide variety of well-meaning proposals to address these problems—most involving increased inspections and regulations, stronger international environmental agreements, codes of conduct, etc.—as limited and unlikely to produce significant change, because none of them truly

address the structural character of the world-system and the driving forces motivating ecologically unequal exchange among nations. This paper clearly suggests that more transformative thinking, analysis, and action are required to confront this global crisis.

In another key paper, Frey examined the evolution of the production and export of asbestos, those fireproof mineral fibers that unfortunately produce terrible chronic illnesses among people exposed to them for significant periods. This case follows a pattern that has changed over the last several decades, as core nations imported less and less of this substance once its hazards and risks became known and publicized, yielding calls for bans and greater regulation. Canada's government and industrial elites have major financial and political stakes in the asbestos sector, so production there has continued. On the receiving end, the leaders of many peripheral nations have welcomed asbestos imports from Canada because they represent cheap and durable materials to be used in buildings and pipes for the transport of sewage and water in political-economic contexts where higher environmental risks and lack of regulation and oversight go hand in hand. The World Bank, the International Monetary Fund, and the Inter-American Development Bank's enthusiastic lending practices to promote the use of asbestos in global south nations facilitated these trends. All of this occurs despite the well-known, clearly documented links between exposure to asbestos and the development of lung cancer, gastrointestinal cancer, asbestosis, and mesothelioma. And while regulation and other protective policies and practices have been proposed and enacted with some success, Frey rightly contends that those approaches will fall far short of the mark since they fail to confront the ways in which powerful political and economic institutions and stakeholders profit from and maintain this trade.

Scott Frey's work on e-waste has been monumentally important to me and other scholars. E-waste is the fastest growing waste stream on planet earth and is highly toxic to people and ecosystems. It is a direct result of a convergence among the planned obsolescence of electronics consumer and industrial products, the growth imperative within capitalism, and the highly unequal and consequential relations between core and peripheral nations that produce this form of transnational environmental injustice. In one particularly influential paper, Frey grapples with this problem and frames it as a key illustration of the tensions and contradictions between economic globalization and ecological sustainability. Examining the case of e-waste dumping and recycling in Guiyu, China (where an estimated 150,000 people are employed in this industry), Frey takes on the neoliberal argument that such exports are beneficial to economies and workers in the receiving nations. For example, he cites an article in *The Economist* that makes the claim that e-waste exports will be a boon to China because, as its author claimed, "those who are prepared to buy waste are likely to make good use of it." Frey underscores that a wide range of social categories are entangled in this drama—including women and children who are among the many workers engaged in e-waste recycling and are therefore exposed to a spectrum of hazardous materials. Always attuned

to the multiscalar dynamics of environmental justice conflicts, Frey follows the waste through networks within core nations and industries to peripheral nations in Asia, on down to specific villages and cities where the e-waste trade comes home to pollute bodies, air, land, and waterways. What is to be done? China has banned imports of e-waste, but since the United States continues to export it and an amendment to ban e-waste as part of the Basel Convention on the Control and Transboundary Movements of Hazardous Wastes and their Disposal has not been ratified (and the United States has not signed it), conditions are ripe for the continued flow of these toxins from core to periphery. Through a careful consideration of “globalization from below” efforts by social movements in Asia and around the world, Frey argues that perhaps our best hope for countering the social, political, and economic forces fueling the e-waste trade rest with these transnational grassroots networks that have monitored and confronted the institutions responsible for creating this crisis.

### **Conclusion**

The term critical environmental justice studies was perhaps first used in the early 2000s and has become more mainstream in the last two years (for a review, see Pellow 2017). R. Scott Frey’s research has been advancing research in critical environmental justice studies long before it emerged as a field of inquiry. His studies of the transnational trade in hazardous substances reflected a concern and skill at addressing the ways in which multiple social categories of difference (race/ethnicity, social class, nation, age, gender, disability, etc.) are entangled in EJ conflicts, and how they function across multiscalar terrains (both in terms of space and time). As a world-systems scholar and environmental sociologist, his work pursued a critical assessment of any scholarly or policy position that relied primarily on the power of the state to deliver justice and sustainability—an orientation that many of his peers throughout the academy still hesitate to endorse. And, implicitly or explicitly, his approach to the systematic and unjust devaluation of some lives and ecosystems while others enjoy protection and privilege, suggests a strong embrace of an ethic of radical inclusivity and indispensability.

Scott Frey’s work will endure the test of time because he never shied away from telling the hard truths. Too often, the public, the media, and scholars expect us to present research that offers solutions to some of our most intractable challenges, but I frequently counter that desire with the fact that we must first understand the depths of the problems we face before we can begin to propose solutions, so that they are useful, workable, and effective. And the roots of our socioecological crises suggest that there will be no easy solutions, particularly from within a political economic system that produced these wicked problems in the first place. The hard truths that Scott Frey’s scholarship embrace include the fact that we must confront the violence of militarism and the brutality of capitalism and economic globalization. However, Frey made it clear

that one hopeful path forward will likely be charted through the efforts of independent, grassroots action for social change that is coordinated across international borders. In other words, the solutions will require a great deal of courage, effort, labor, and ambitious thinking and action. I am encouraged and inspired by the breadth and depth of R. Scott Frey's extraordinary body of scholarship because he illuminated so much about our world and provided a set of analytical tools for imagining and bringing into existence another world that would be more socially just and environmentally sustainable.

**About the Author:** Professor David N. Pellow is the Dehlsen and Department Chair of Environmental Studies and Director of the Global Environmental Justice Project at the University of California, Santa Barbara where he teaches courses on environmental and social justice, race/class/gender and environmental conflict, human-animal conflicts, sustainability, and social change movements that confront our socioenvironmental crises and social inequality.

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