seeks to avoid the usual pitfalls of rational choice theory. Her model assumes the instrumental rationality of actors without associating their motivation exclusively with material gain. This approach broadens her argument to encompass a constructivist perspective on normative influences on actors' behavior. She relaxes the unitary actor assumption about states to develop her theories about the important influence of nonstate actors.

Another benefit of Dai's book to scholars of international relations is the spotlight she turns on nonstate actors, which is uncommon, by her own account, in previous rationalist literature. The role of nonstate actors in regime formation is well-trodden scholarly ground outside of neoliberal institutionalism, but Dai's angle on the boost that they get from the mere existence of international institutions, and how this alters the strategic environment in favor of compliance, is an important piece of the puzzle masterfully put in place.

Hamblin, Joseph Darwin. 2008. *Poison in the Well: Radioactive Waste in the Oceans at the Dawn of the Nuclear Age.* New Brunswick, NJ: Rutgers University Press.

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The story of the development and spread of nuclear weapons and nuclear energy over the last 60 years is not a pretty one. Just as ugly is the issue of disposing of radioactive nuclear waste, for which there is still no satisfactory solution. Even today, discharge of liquid radioactive waste into the sea continues in a number of places, including from Britain's notorious Sellafield plant. Britain's victory in ensuring legally sanctioned sea discharge in the face of a vigorous environmental movement from the 1960s is part of the fascinating story that Hamblin charts in his book.

Hamblin offers a study of the competing interests of science, politics, diplomacy, and the too-often cynical world of policy-making surrounding the nuclear industry after World War II in Britain and the United States. As Hamblin notes, the former Soviet Union's routine violation of international norms and agreements on marine pollution by large-scale dumping of radioactive waste has been public knowledge at least since the early 1990s when it was officially acknowledged by the Yeltsin administration. But while Western democracies deemed communist states to be inherently, indeed pathologically, anti-environment, what is not common knowledge is that democratic nuclear powers, led by the United States and the United Kingdom, routinely dumped nuclear waste into the sea for decades. Hamblin paints a detailed picture of the struggles for authority between groups of scientists, between institutions, and between governments in the United States and Europe, against the backdrop of the Cold War and the nascent environmental movement.

The book explores four central themes emblematic of these struggles for authority between competing groups: the "power of threshold values in setting

policies and justifying them to the lay public;" the "struggle for authority between health physicists and oceanographers;" the "role of radioactive waste in cold war international relations;" and the "relationship between radioactive waste and environmental policy making" (pp. 5–8). Each of these intensely political struggles is laid out in the book, illuminating the complicated mesh of the (limited) scientific knowledge of risk, political expediency, cynical public relations and lobbying strategies, and cover-ups of mishaps, as governments on both sides of the Atlantic sought frantically to justify poorly designed national policies on nuclear waste disposal.

Looking at the issue of threshold values, Hamblin examines how health physicists, including radiobiologists, biophysicists, and sanitary engineers, invoked notions of "tolerance dose," "permissible dose," and "safe capacity" to set arbitrary policies on the impact of radiation on humans, even as they rejected suggestions by some geneticists that the very idea of thresholds was illusory. US oceanographers managed to negotiate their way to the nuclear table, persuading the US Atomic Energy Commission (AEC) to fund large-scale research on the impact of dumping radioactive waste in the ocean. But they too emphasized the "opportunities and uncertainties of waste disposal" (p. 101), with little or no interest in preventing radioactive waste being disposed of at sea.

The book explores not just the competition among scientists for patronage and authority, but also the turbulent international context in which nuclear waste disposal policies had to be defended. Dwight Eisenhower's "Atoms for Peace" initiative led to the setting up in 1957 of the International Atomic Energy Agency under the United Nations, which opened up both nuclear weapon and civilian nuclear power programs to international scrutiny. Using this forum (among others) to attack British and US policies of dumping nuclear waste in the oceans, the Soviet Union argued that "putting the dangerous by-products of the nuclear age into the oceans was like poisoning a village well, the shared source of life for all" (p. 7). Indeed, it was the persistent questioning by Soviet scientists of the use of the seas for nuclear waste disposal, evidence from Japanese scientific research, alongside new critical reports from the US National Academy of Sciences Committee on Oceanography, and, most significantly, intense public opposition, that ultimately led the United States to abandon use of the oceans for nuclear waste disposal in the early 1960s.

The penultimate chapter, titled "Confronting Environmentalism," describes the rise of the environmental movement in the late 1960s, in which politicians embraced the environmental agenda. The United States, which had already abandoned dumping in the seas in favor of burial underground, banned actions it no longer practiced. Britain turned to continental Europe, promoting joint dumping operations within the OECD's European Nuclear Energy Agency. Most interesting here is Hamblin's description of how Britain paid lip service to international environmental initiatives, but worked systematically to overcome the agenda of the environmentalists. This approach is especially evident during the negotiation of the 1972 London Convention (on the Prevention of Marine

Pollution by Dumping of Wastes and Other Matter) that viewed high-level radioactive solid waste as one form of marine pollution. Ultimately, Hamblin argues, the Convention was based more on political than on scientific consensus, a fact made evident by the lack of substantive policy change under the new rules. Thus, Britain could continue with its liquid radioactive waste disposal through pipelines from Sellafield. It also succeeded in ensuring that many types of radioactive waste it produced—plutonium and tritium, for example—were exempted from the definition of "high level wastes." Although the Convention banned "high level solid nuclear wastes," Britain made sure it could continue with its waste disposal practices unchanged.

Hamblin succeeds in writing a readable and interesting history of the first three decades of the nuclear age, when US and British nuclear energy establishments were powerful institutions influencing the global agenda on nuclear power. Yet, despite the detailed case study of the machinations around nuclear science, politics and policy, there are still some omissions. One of these is the environmental and political role of US (and French) nuclear testing in the Pacific. Another issue is Hamblin's description of the Soviet Union's criticism of the United States and the United Kingdom. Soviet statements opposing ocean dumping of nuclear waste are described throughout the book as "propaganda" (which they may well have been), whereas clear evidence of prevarication, opportunism, and even lies on the part of the British and US nuclear establishments are curiously not labeled as such.

The book is nevertheless a useful addition to the scholarship on the history of nuclear energy policy and politics. It offers an insightful and cogent analysis, and will be of interest to students and scholars of environmental politics, science and technology politics, and, more specifically, to those interested in understanding how current nuclear power policies in Western democracies took shape.