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# Silver Linings:

## Environmental Disasters as Critical Junctures in Global Governance

by Miriam Matejova

*The Santa Barbara oil spill led directly to the creation of Earth Day, now celebrated internationally. Here, an Earth Day rally in Montreal.*



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**E**nvironmental disasters—events that may cause widespread environmental damage without claiming many human lives—are frequently thought to be catalysts for social and political change. A growing body of literature has identified disasters as political events that open windows of opportunity for political actors and affect the actions of governments and social movements. For example, disasters may help exacerbate or lessen violent conflicts, serve as focal points and springboards for protests, and even bring down regimes.<sup>1</sup> Disaster effects are conditional upon some preexisting social conditions such as economic inequality, regime repression, or ongoing violent conflict. In light of the overwhelming scholarly focus on such structural conditions, there tends to be less causal relevance assigned to disaster events themselves.

This article discusses environmental disasters as critical junctures in global environmental politics, emphasizing these events' unique characteristics. Within states, some disasters, like major oil spills, expose the failure of existing institutions and force the trajectory of institutional development down an unplanned path. Through a case study analysis of some of the most impactful oil spills in recent history—Torrey Canyon, Santa Barbara, and Exxon Valdez—this article traces the change-making potential of environmental disasters, revealing how taking opportunity of crises and disasters may help us move forward with institutional innovation and positive change.

## Disasters as Political Catalysts

Disasters are serious disruptions of societies that often bring widespread destruction, and cause human, material, economic, or environmental losses. According to their speed of onset, disasters may be categorized as sudden-onset (or acute) or slow-onset (or chronic). While the former result in sudden harm immediately or shortly after occurrence, the latter generally take much longer to

manifest.<sup>2</sup> Events like major oil tanker spills are sudden-onset disasters. Long-term processes like desertification or soil salinization are examples of slow-onset environmental disasters, many of which are increasingly linked to climate change.<sup>3</sup> These, however, are not the focus of this article.

Recent scholarship understands disasters as long-term processes where human and ecological factors intersect.<sup>4</sup> Disasters in part result from human (i.e., society's decision makers') choices, like allocation of resources and investment in knowledge and capabilities, since such choices determine societies' vulnerability to hazards. Hence, while disasters may stem from natural or human-made hazards, disasters themselves are not "natural," as they occur when hazards overwhelm the existing systems in human societies. Disasters are therefore social events. They are also political, as the need of the government to not only manage but also explain a disaster to the public opens space for politicization of the event. Furthermore, because they create power vacuums and highlight power failures, disasters open windows of opportunity for various groups to push through their agendas.<sup>5</sup>

Disasters as catalysts can be understood in two ways: (1) triggering events, and (2) critical junctures. The former assumes that disasters *accelerate* the existing conditions. In this perspective, disasters are viewed as triggers. A trigger is "a stray spark from a match" that is often mistakenly understood as the cause of the fire, while it is in fact only an ingredient in "a potentially explosive environment."<sup>6</sup> Triggers have been of less interest to social scientists because they are believed to be substitutable—while some trigger may be necessary for a causal chain to unfold, specific triggers are usually viewed as unimportant. Similarly, disasters are often interesting to scholars as events that, given some structural conditions, help produce sociopolitical or policy changes but not necessarily as events in themselves.<sup>7</sup>

A slightly different view of disasters understands these events as historical turning points that create irreversible

changes in affected social systems. Institutions are characterized by long periods of stability that are path dependent, meaning they are influenced not as much by current conditions as by past events and decisions. When institutions change, this tends to happen during brief and occasional periods (i.e., critical junctures) when some decisions send an institution down a new path while closing alternative pathways. These historical moments have occurred in the past in the context of party systems, economics, technological progress, and regime and state development, among many other things.<sup>8</sup>

When specific environmental disasters act as critical junctures, they "highlight breakdowns or failures of existing institutional arrangements, thereby creating *chaotic shifts* [emphasis added] in the trajectory of institutional development."<sup>9</sup> How is one to conceptualize and measure such critical changes? One way is to trace notable transformations of environmental culture, as such culture encompasses long-standing environmental beliefs, norms, and attitudes that are difficult to dislodge or change. The presence of environmental culture implies both internalization and codification of environmental protection values in different parts of the society, both public and private. Such values are slow and difficult to change. Shifts in environmental culture, however, can be observed in the creation of state-led environmental institutions and new legislation linked to unprecedented stringency of environmental regulations.

The distinction between a critical juncture and a trigger is rarely acknowledged in disaster studies. Viewing disasters as triggers that merely accelerate a status quo implies that their unique characteristics are negligible. Yet disaster characteristics such as size and location matter in specific contexts, and viewing disasters as triggers may obscure these critical events' potential causal implications. As noted earlier, some major environmental disasters become symbols that open political opportunities or fuel social mobilization. Among environmental disasters, major oil spills, for example,

frequently become objects of framing and counterframing by different political actors struggling to delegitimize each other's claims in order to sway public opinion to their side.

As discussed in the following sections, prominent oil spills in marine environments, including the Torrey Canyon, Santa Barbara, and Exxon Valdez disasters, became critical turning points in institutional development with respect to environmental legislation. What these sudden-onset disasters have in common, aside from the damage they caused to the marine life and ecosystems, is that by exposing inadequacies in existing institutional arrangements they led to positive and unexpected institutional changes both domestically and internationally. Preexisting inadequacies, like fragmented legislation on governing oil spills

and lack of coherent policies, equipment, and personnel to respond to pollution, are, however, only part of the story. Some attention to disaster characteristics—such as their size and/or the valued locations they damage—is also needed to better understand the change-making character of these events.

## An Unparalleled Peacetime Disaster: The Torrey Canyon Oil Spill

The world's first large oil spill from a tanker occurred in March 1967 off the coast of southwestern England near Land's End, a holiday destination in Cornwall. The tanker *Torrey Canyon*, carrying some 119,000 tons of crude oil,

ran aground on rocks due to a misjudgment by its captain.

Approximately 30,000 tons of oil immediately leaked into the sea, with some 70,000 more over the following days during the unsuccessful attempts to salvage the ship. The disaster resulted in damages to the recreation industry, fisheries, and wildlife; it was followed by catastrophic narratives in the media amid local fears and worries for destroyed livelihoods. Thousands of birds were oiled and killed, and hundreds of kilometers of coastline were polluted with oil. The government response was improvised due to lack of experience with large oil spills.<sup>10</sup>

At the time of the disaster there was a general lack of scientific knowledge about the damaging effects of oil on the environment and no government strategy for a coordinated emergency response at this unprecedented scale.<sup>11</sup> The community affected by the Torrey Canyon spill was an important tourist destination. Economic concerns and the pressure to “save the beaches” forced the British government to drastic pollution-combatting measures such as the use of harmful caustic detergents that the local community opposed.<sup>12</sup> The legal environment was also such that it favored potential polluters and their ability to “detract from the property of others without bearing the associated costs,” and there were few provisions in international maritime law to compensate for pollution damages.<sup>13</sup> The disaster redefined this institutional environment.

The Torrey Canyon oil spill played a major role in the beginnings of the UK environmental discourse, the emergence of British environmental consciousness, and international governance of maritime pollution. Domestically, the British political response to the disaster “had no parallel at the time” in terms of both the improvised government response and the subsequent regulatory changes that were to set up “some kind of permanent machinery for coping with peacetime disaster.”<sup>14</sup> The location of the disaster played an important role in the political response. Oil from Torrey Canyon contaminated 40 holiday beaches and wildlife protection sites in an area where the



*The Torrey Canyon supertanker shown breaking up on the Seven Stones Reef, after which it would release more oil into the sea.*



*One month after the Torrey Canyon spill, the beach and cove at Whitesand Bay, Cornwall, remained littered with empty detergent drums.*

tourist industry was valued at about £100 million annually.<sup>15</sup>

A major shift in the British—and soon after, international—environmental discourse occurred as institutional changes

reflected new attitudes toward the role of technology in society. Technology and science were suddenly no longer viewed as mere forces of modernization but also as threats to the environment, which suddenly took a political spotlight. Internationally, the disaster led to expansions of maritime law linked to maritime safety, including the 1969 International Convention on Civil Liability for Oil Pollution Damage and the 1973 International Convention for the Prevention of Pollution from Ships.<sup>16</sup>

### **Pollution in a Middle-Class Paradise: Santa Barbara Oil Spill**

In January 1969, an oil well blew out just off the coast of Santa Barbara, California. The spill continued for almost 24 hours as the spewed gas and oil traveled through the waters and onto the

coastline, where they polluted more than 50 kilometers of beaches and killed thousands of birds, marine mammals, and fish. In the midst of unprecedented media attention, protests, grassroots movements, and a lawsuit followed as the locals mobilized against the devastation of their picture-perfect community.<sup>17</sup>

The oil damage drew attention of the public across the United States as well as globally, exposing the inadequacy of existing protection against oil pollution. The country lacked a coherent policy to control pollution in general, and there were not enough resources and equipment available for responding to large oil spills. The scientific knowledge about the impacts of oil in water was limited and the water contamination detection tools were not available. The federal government had also allowed the oil industry to manage its offshore oil production



*Waste from the beach cleanups related to the Torrey Canyon spill was dumped near Guernsey Island in the English Channel.*



*Platform A in the Dos Cuadras offshore oil field off the coast of Santa Barbara, California, blew out and spewed oil for more than 24 hours in 1969.*

without having a strategy for responding to large-scale pollution.<sup>18</sup>

While the Santa Barbara oil spill could be seen as an accelerator of pre-existing conditions (especially when it comes to U.S. environmental policy), in some areas it led to unexpected outcomes and directions. The creation of Earth Day, a now global reminder of the importance of environmental protection, was in part inspired by the Santa Barbara disaster, albeit in the context of preexisting environmental degradation in the United States, primarily from toxic pollution of air, soil, and water.<sup>19</sup> The spill occurred in a regulatory environment without contingency plans and without federal involvement in states' antipollution policies. In the preceding years the U.S.

Congress had been largely unable to regulate states' management of water and air, and the disaster created fertile grounds for comprehensive federal regulations pertaining to pollution control, such as the 1970 and 1972 Clean Water Acts.<sup>20</sup>

The disaster opened at least one unexpected pathway for U.S. institutional development. Richard Nixon had become president several days before the spill, which profoundly redirected his administration's environmental agenda, as he had not foreseen the changes in public mood that the disaster brought on—in fact, his presidential campaign had not focused on the environment at all.<sup>21</sup> In the wake of the Santa Barbara disaster, Nixon grappled with the

complicated mess of existing environmental policies and the growing pressure from the environmental movement, eventually signing the 1969 National Environmental Policy Act, which later established the Environmental Protection Agency.<sup>22</sup>

The characteristic of the disaster mattered, and specifically the type of damage it inflicted in the specific area, an area inhabited by mostly (upper) middle-class white Republicans and visited by millions of tourists interested in the mountains, beaches, and the waters of the Pacific. Harvey Molotch has argued that the upper-class and upper-middle-class residents of Santa Barbara were a crucial element in the public response to the 1969 Santa Barbara oil spill. They were “a large number of

worldly, rich, well-educated persons—individuals with resources, spare time, and contacts with national and international elites—[who] found themselves with a commonly shared disagreeable situation: the pollution of their otherwise near-perfect environment.”<sup>23</sup> The location of the disaster mattered—as Spezio (2018) explains, the spill meant a sudden and unexpected change in the understanding of wealthy Americans that they cannot escape pollution by moving away from industrial centers to picturesque places like Santa Barbara. Such shift in perception was crucial in the environmental consciousness and subsequent public pressure to change antipollution legislation.

### “Everyone’s Secret Nightmare”: The Exxon Valdez Oil Spill

The Exxon Valdez oil spill occurred in March 1989 along the southeastern

coast of Alaska in an ecologically sensitive area of Prince William Sound. The vessel *Exxon Valdez* carried 550,000 tons of crude oil, of which about one-fifth spilled out after it ran aground. Hundreds of harbor seals and thousands of sea otters and birds were oiled and killed as a result.<sup>24</sup>

In the immediate aftermath of the spill, the U.S. media drew attention to the visible and apparently unchecked danger of the disaster. Images of oil-covered dead birds swiftly followed, along with references to an “environmental nightmare” and “everyone’s secret nightmare.”<sup>25</sup> The “crime narrative” about the drunk captain Joseph Hazelwood was also at the center of public attention. The media and various other actors involved in the politics of the disaster aftermath perpetuated the Exxon Valdez story as “a story of addictions: not just a tank captain’s addiction to alcohol but widespread addictions to power, money and

energy consumption,” and presented the United States as “a country completely drunk on oil.”<sup>26</sup> The symbolism was ubiquitous and powerful, permeating disaster origins, cleanup, and the political aftermath.

The Exxon Valdez spill occurred in a U.S. political environment that was not unfamiliar with the challenges of oil pollution. However, the U.S. body of law governing oil spills was fragmented, with various laws covering only specific activities or affected locations.<sup>27</sup> This fragmented governance of oil pollution stemmed from decades-long efforts by the Congress to protect the U.S. shipping industry but also from institutional learning from other major oil spills. For example, after the Santa Barbara disaster Congress added oil pollution within the scope of the Federal Water Pollution Control Act, establishing liability for oil spill cleanup. At the time of the Exxon Valdez disaster, however, the oil



*Oil piled up at the seawall near the Santa Barbara Harbor, California, from the 1969 Santa Barbara oil spill.*



*The port of Valdez, Alaska, was the site of one of the greatest environmental disasters in U.S. history.*

pollution liability limits were still too lenient and the attempts to streamline the various oil pollution laws repeatedly failed in Congress.<sup>28</sup>

The Exxon Valdez spill led to a political storm in the United States, a storm in which questions about the national energy policies, the environment, and multinational corporations swirled around the sociopolitical public space. The disaster led to both domestic and international shifts in public-private relationship when it came to transport of oil. The emotional and widespread media attention had major social effects where the dissatisfaction with cleanup and the impacts of the spill gave rise to public support and pressure for better mitigation efforts. On the corporate side, the disaster revealed the power of the public opinion and led to creation of the “public relations crisis management industry” and its growing concern with “image management.”<sup>29</sup> This shift in

perception of the role of crisis management spilled outside of the United States as American models of crisis management spread globally.<sup>30</sup>

Domestically, the U.S. Congress passed the 1990 Oil Pollution Act (OPA), which substantially increased the penalties for oil spillers and mandated, among other things, development of contingency plans and spill drills, as well as the double hulls for all oil tankers operating in U.S. waters.<sup>31</sup> These requirements eventually gained an international dimension in the midst of considerations of compensation and liability for oil pollution as part of a global regime. In the United States, OPA constituted a dramatic shift in U.S. congressional discussions on oil spill response policies. A series of unsuccessful attempts to create a federal oil spill policy in the 1970s preceded OPA.<sup>32</sup> These attempts failed despite other large oil spills in the U.S. waters (e.g., Argo Merchant

near Massachusetts, Corinthos near Delaware).<sup>33</sup> The Exxon Valdez disaster, however, differed significantly in its contextual setting.

In cases of environmental disasters, context—and specifically, geographic location—matters as a characteristic of the disaster itself. Alaska’s pristine setting (as well as its image as America’s remaining frontier) played a crucial role in forging a new chapter of American social and political history. Alaska’s environment was an unspoiled canvas, and the spill vividly demonstrated environmentalists’ worries, highlighted environmental thoughts, and gave support to the environmental movement.<sup>34</sup> Birkland and Lawrence (2002) argue that “the stunning setting of Prince William Sound together with Alaska’s powerful resonance in the American imagination transformed an important industrial accident into an icon of the American environmental movement.”



## Beyond Oil Spills: The Change-Making Potential of Environmental Disasters

Environmental disasters sometimes act as critical junctures; they do not merely accelerate the existing conditions but change societies in unexpected ways. The distinction is important, because it draws attention

to the unique characteristics of disaster events—these may be location and severity, but also type of pollution and even the surrounding uncertainty. Disaster effects, of course, interact with prevailing structural conditions, but to better understand why some lead to broader changes while others do not, we may have to pay more attention to the disaster events themselves instead

of treating them as substitutable and thus causally irrelevant.

The disaster events discussed in this article reveal some factors that may shape public attitudes and environmental culture in unprecedented ways. One factor is the “shock value” that may result from a combination of disaster severity and the underlying unpreparedness, either institutional, as in the case of Torrey Canyon,



*Spills like the Exxon Valdez gain more attention when they disrupt local economies like the Inuit, who have been fishing these pristine waters for centuries.*

or perceptual (i.e., thinking “this cannot happen to us”), as in the case of Santa Barbara. A shocking event brings the emotional charge needed for a sudden change of direction in policies or societal attitudes.

Individuals and communities also tend to place specific types of values on the environment they inhabit, use, and depend on.<sup>35</sup> Some communities, especially indigenous groups, may attach a very high value to the environment that becomes damaged by pollution from a disaster. For example, the location of the Exxon Valdez spill was significant not only because of the general image of Alaska’s pristine wilderness but because of the impact it had on the local indigenous communities and their livelihoods.<sup>36</sup> Similarly, the area where the Torrey Canyon spill occurred was not only valued by vacationers but, importantly, by the locals whose livelihoods depended on the health of the fishery and the influx of tourists.<sup>37</sup>

Santa Barbara’s beaches, too, were highly prized by visitors as well as the locals, for their recreational and aesthetic values. Pollution threatens and reduces these values, generating grievances that may transform into wider public discontent and subsequent public pressure.

Not all environmental disasters, however, lead to societal changes, whether accelerated or unexpected. Many disasters, in fact, fail to generate any kind of public response. Since the beginning of the 20th century, there have been at least 38 major tanker oil spills, large mine leaks, and nuclear disasters in Organization for Economic Cooperation and Development (OECD) countries alone. Only a handful of these events were followed by notable public response—specifically, by various forms of public protest like petitions, boycotts, or demonstrations.<sup>38</sup> It is perhaps intuitive to argue that a structural condition—namely, established environmental or anti-industry

movements—would be responsible for the occurrence of postdisaster protests. In many Western countries, antinuclear movements, for example, shape the intense polarization and political struggle of the nuclear debate, and nuclear accidents often lead to spikes of public opposition to nuclear energy. Due to much media attention, large oil spills, too, tend to lead to public outrage. Yet despite established movements, not all nuclear disasters and not all major spills lead to protest and regulatory change. Studying specific events’ characteristics may help us better understand why.

Type, for example, is a characteristic of a disaster event. Environmental disasters from human-made hazards are generally of three types: chemical (including oil) spills, mine leaks, and nuclear accidents. Different types of disasters are associated with different kind of damage and geographic context, as well as diverse societal conditions (e.g., nuclear power plants situated in



Cleanup efforts after the Exxon Valdez oil spill.



A nuclear power plant on the banks of the Susquehanna River, Pennsylvania.

urban areas, mines located in rural places). They also tend to be linked to distinct narratives created by anti- and pro-industry groups and therefore surrounded by varying degrees of uncertainty and public fear (e.g., mining processes are more straightforward and easier to understand than nuclear energy). Such conditions then have implications for public reactions (and public pressure) in the event aftermath.

Disasters, whether from natural or human-made hazards, expose societies' vulnerabilities. Environmental disasters specifically expose weak spots in environmental legislation, environmental protection, coordination of response, and contingency planning. Subsequently, these spotlights on vulnerabilities may become opportunities for improvements in resilience not only against similar disasters but also environmental degradation in general, both domestically and globally.

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