

[Recovering Impunity: A Tale of Two Disasters and Governance in Northwest Mexico](#)

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Abstract:

In the state of Sonora, the 2009 Hermosillo ABC Day Care Center fire and the 2014 Cananea copper mine spill highlighted how deregulation and divestiture of state services by the Institutional Revolutionary Party (PRI) and the National Action Party (PAN) served the interests of a few elites, who maintained rule through mechanisms of impunity: in other words, through actions undertaken without concern about the law or repercussions. Although impunity produces a seemingly incoherent set of policy and politics, results from dozens of semi-structured interviews by our team also suggest that exercising power through impunity is part of the culture of governance in Mexico, relying on global ties, but not necessarily requiring any specific individual or party leadership.

Keywords: corruption | disaster recovery | political economy | social justice | victim compensation

Article:

***Note: Full text of article below

Recovering Impunity: A Tale of Two Disasters and Governance in Northwest Mexico

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In the state of Sonora, the 2009 Hermosillo ABC Day Care Center fire and the 2014 Cananea copper mine spill highlighted how deregulation and divestiture of state services by the Institutional Revolutionary Party (PRI) and the National Action Party (PAN) served the interests of a few elites, who maintained rule through mechanisms of impunity: in other words, through actions undertaken without concern about the law or repercussions. Although impunity produces a seemingly incoherent set of policy and politics, results from dozens of semi-structured interviews by our team also suggest that exercising power through impunity is part of the culture of governance in Mexico, relying on global ties, but not necessarily requiring any specific individual or party leadership.

Key words: Corruption, disaster recovery, political economy, social justice, victim compensation.

El incendio de la Guardería ABC de la Cd. de Hermosillo, Sonora en 2009, y el derrame de la mina de cobre de Cananea, Sonora en 2014, exhibió la falta de regulación estatal, así como la ineficiencia en materia de servicios públicos durante las administraciones de los partidos políticos del Partido Revolucionario Institucional (PRI) así como del Partido Acción Nacional (PAN), demostrando que finalmente están al servicio de los intereses de pequeñas élites que mantienen y gobiernan a través de mecanismos de

Mexican Studies/Estudios Mexicanos Vol. 34, Issue 2, Summer 2018, pages 218–249. ISSN 0742-9797, electronic ISSN 1533-8320. ©2018 by The Regents of the University of California. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Reprints and Permissions web page, <http://www.ucpress.edu/journals.php?p=reprints>. DOI: <https://doi.org/10.1525/msem.2018.34.2.218>.

impunidad. Aunque la impunidad sí produce un conjunto de programas y políticas incoherentes, los resultados de más de 100 entrevistas semi-estructuradas sugieren que, además, el ejercicio de poder mediante la impunidad es parte de una cultura de gobernanza en México, que requiere vínculos globales, pero no necesariamente requiere liderazgos específicos, ya sean individuales o de partido.

Palabras clave: Compensación a víctimas, corrupción, economía política, justicia social, recuperación de un desastre.

Introduction

The administration of the first ever PAN governor of the state of Sonora, Guillermo Padrés Elías, elected in July of 2009, was book-ended by two disasters: a fire on June 5, 2009, in the ABC Day Care Center in Hermosillo that killed forty-nine infants and toddlers and sent dozens more to the hospital with injuries; and in August, 2014, a major breach in one of the tailings ponds at the Buenavista del Cobre mine, in Cananea, Sonora, that impacted residents along 250 kilometers of the Sonora River.¹ Many attribute Padrés Elías' election to the populace being disappointed with the response of the then PRI governor, Eduardo Bours Castelo, to the fire and also to the fact that local PRI politicians were related to the day care's owners. The election for governor in Sonora occurred ten months after the spill in 2014 and resulted in yet another change of political party in the governor's office. Many would say this change was a result of the way local, state and national governments handled the spill.

Both events focused the public's attention on matters of neoliberalism and impunity. First, despite promises to the contrary, the neoliberal state of freer trade and government divestiture of industry and services had enriched a privileged few; and, second, these events reinforced the leaders' approach of impunity, with a disregard for the consequences of their actions regardless of party affiliation. We

1. Hereafter, we refer to the mine as the Cananea mine, since it has had different owners and names over the past 100 plus years. Mining had been undertaken in the area by the Pima Indians, later by the Jesuits, and since the mid-eighteenth century by Mexicans and U.S. Americans artisanally mining gold and silver. What we know as the Cananea copper mine was developed on lands and mines bought from General Ignacio Pesqueira, and then opened in 1899 by U.S. company Greene Consolidated Copper Company that was bankrupted by a 1906 strike, resulting, by 1913, in control by the Anaconda Company. The government bought out Anaconda (maintaining Atlantic Richfield as minority partner) in 1961. It was purchased by Mexicana de Cobre (now part of Grupo México) in 1990.

conceive of impunity as people being immune from punishment and thus free to consciously act without concern for negative consequence to themselves. Usually, it means that leaders are above the rule of law. A rise in impunity during the 1980s and 1990s occurred throughout Latin America, where sixteen countries passed amnesty laws for former leaders who had affronted human rights (González Ocantos 2012). Some have argued that the excessive displays of impunity and the lack of concern for the public safety shown by local state and federal officials in Mexico, particularly during the presidencies of Felipe Calderón and Enrique Peña Nieto, are being challenged, and that impunity is being moderated by new forces (Romero y Parás, 2015; Casar, 2015). Examples of these new forces include competition between political parties; greater freedom of the press; spaces carved out by non-governmental organizations run by social scientists; and the strengthening of international human rights law and environmental laws that have allowed some legal response to the Cananea mine spill (as discussed in this paper). In this paper we demonstrate that actions, such as the recent and current investigations into nine former governors from all major parties (including Sonoran governors Padrés Elías,² governor at the time of the Cananea spill, and José Eduardo Robinson Bours Castelo, governor at the time of the ABC fire), and the detention of major figures associated with the ABC day care fire, do not actually represent an end to impunity, but rather characterize a political system that is picking off individuals in an effort to maintain its position of power and authority.

In this paper, we look at how the processes put in place and the actions taken by the PRI and PAN governments did provide some relief to those affected by these disasters, but how, in reality, they served primarily to protect the ruling elite. In this study of political anthropology, or, more specifically, this study of the anthropology of governance, insights generated suggest that mechanisms for demonstrating power and control are often the “fall back” position of oligarchic systems. Prioritizing the exercise of power through impunity can generate robust continuity that does not require maintaining the leadership of any specific individual or party, even though it

2. Padrés Elías went into hiding in October 2015, and turned himself in a year later in November 2016. He was jailed for fiscal fraud and the illegal transfer and use of funds. He was absolved of several charges in February 2018, but remains in jail as of June 2018, awaiting trial for a money laundering charge. During his administration, he had also illegally dammed a stream (Bacanuchi-Río Sonora tributary) to make an irrigation pond on his own property in the Río Sonora watershed, close to where the spill mine occurred, and then blew up the damn when inspectors (from the opposition party) had been instructed to confirm the damming was illegal.

produces a seemingly incoherent set of policy and politics. The two cases in this study show how the ability of those governing to maintain the governing structure depends as much (or more) on a well-developed set of traditionally-employed techniques of governing, as on the knowledge, ability, skill, or character of those doing the governing. The **impact** of impunity on the people affected by it is demonstrably similar in both cases, as are the practices of acting without consequence that the governors and leaders employ in generating those impacts.

The paper centers around two case studies of government response to disaster. To discuss these we have divided the essay into five sections: details about the two human-caused events; a framework discussing state leadership in the face of disaster methodologies, findings, a discussion centering on the key dynamics of impunity, and, finally, a conclusion that revisits the key challenges for, and goals of, governments trying to maintain power when faced by disasters. This paper is the result of continuous monitoring of the response by the Governments of Mexico and Sonora to both the ABC fire and the Cananea spill. The methods, discussed in more detail later, included direct structured, semi-structured, and open-ended interviews with victims, government officials, and key individuals (such as academics, newspaper columnists, first responders, and religious leaders). The interviews were carried out in Spanish by the authors. In addition, we monitored the major newspapers in Sonora as well as national magazines and newspapers, such as *Proceso*, *La Jornada* and *Reforma*. We also monitored reporting by electronic media in Sonora. The conclusions are based on the responses to the events by those in power and how citizens felt about those responses as discussed by the authors and their students who triangulated the impact of the two events.

The Two Case-Study Events

The ABC fire

As temperatures rose towards 100 degrees Fahrenheit under the clear, cloudless midday sky on Friday, June 5, 2009, the people of Hermosillo carried out their normal activities. Air conditioners and water evaporative (swamp) coolers hummed, keeping much of the citizenry comfortable in their offices and automobiles.

Hermosillo (capital city of Sonora) was, until the mid-1980s, a slow-paced, medium sized city, whose economy depended on government and agricultural services. Construction of the Ford

Motor Company stamping and assembly plant in 1986, and the associated infrastructure that follows such an industry, transformed the city. Today, Hermosillo and much of the northern half of Sonora is a major manufacturing center for the automobile and high-tech industries, such as aerospace and medical devices. Much of this production was and is geared to the United States and Canadian markets but, with the expansion of the port at Guaymas, those in power set their sights set on the emerging Pacific Rim Market. In concert, the citizens of Hermosillo and of the broader state of Sonora had begun to see themselves as part of a new democratic Mexico with an important place to play on the world stage. The historic ties to the United States through agriculture, mining and trade were getting stronger and the citizens looked forward to a bright liberal and democratic economic future.

Shortly before 3 p.m. on June 5 2009, smoke was seen rising from a building in the southeastern portion of the city. The structure housed the Guardería ABC (ABC Day Care Center), which was owned by relatives of then-governor Bours.³ The fire eventually claimed the lives of forty-nine of the approximately one hundred and forty-nine children present and hospitalized at least forty others. Care staff rushed to get children out of the building's one exit, and one care worker lost her own child to the blaze. News of the incident swept Hermosillo, Sonora and the whole country like a shock wave. By the next morning, newspapers in Hermosillo, in other Sonoran cities, and in Mexico City, along with important news commentators such as Carmen Aristegui, were demanding answers to questions: How did the fire start? Who are the responsible parties? How could the fire have been prevented? How can such tragedies be prevented in the future?

Today, the terrible ABC Day Care Center fire—referred to as “la tragedia” in Hermosillo—lingers in the minds of Hermosillo residents. Each year there is a commemorative parade and demonstration in Hermosillo. In addition, similar demonstrations occur in places as disparate as Ciudad Obregón, Mexico City and Mérida. Obviously, being the parent of a child who is killed or severely injured is a devastating experience for any parent (Murphy et al. 1999, 2002). The death of a number of children by a single event impacts an entire community in ways that have yet to be fully understood by social scientists and others who seek to understand such events.

3. The cost (2210 pesos per child) was covered by the national government social and health insurance program. Parents paid into the program through their salary.

The Cananea Spill

In early August of 2014, leaders from the village of Bacanuchi arrived in the *municipio* capital Arizpe, a small town located at the junction of the Río Bacanuchi and the Río Sonora/Bacoachi, with tales of a rust-colored sludge that was flowing down the river. They said they had traced it back to a breach in a dam holding back waste sludge (including heavy metals) produced by the Buenavista del Cobre mine in Cananea. The Cananea mine is Mexico's largest—and the world's third largest—copper mine and lies some forty kilometers from the United States–Mexico border at Nogales, Arizona. Within days, the contamination reached Arizpe and continued to flow down the Río Sonora past eight *municipios*, finally reaching the small lake behind the Molino dam, approximately forty kilometers north east of Hermosillo. Eventually, over 10 million gallons of orange-colored copper sulfate were released into the watershed. It affected two hundred fifty kilometers of the Río Sonora and directly or indirectly touched the lives of over 24,000 individuals who lived along the river or made their living from goods produced along its banks.

The Cananea mine lies at the headwaters of three drainages: the San Pedro Basin of the Colorado River; the Bacanuchi and Bacoachi tributaries of the Río Sonora; and also the Concepción river watershed, which flows down into the Sonora Desert. Spills have occurred at other times in the mine's history. The fears of the U.S. government of spills into the San Pedro River caused the mine owners to reconfigure their tailing ponds towards the south and the Bacanuchi and Bacoachi tributaries.⁴

The Cananea mine tailings pond spilled into the Bacanuchi River on August 6, 2014, affecting more than forty villages in eight municipalities⁵ along the Bacanuchi and Sonora Rivers. As this area is deep in the Sonora desert, water access is always an issue, and agriculture is heavily dependent on surface water supplemented by agricultural wells.

Shortly after the leaders from the village of Bacanuchi had reported the contamination of the Bacanuchi tributary of the Río

4. Despite these precautions, on September 21, 2014, a spill occurred into the San Pedro River from the Cananea mine. The U.S. was not notified for two days of the spill. Testing on the U.S. side did not show levels outside of normal once the water was tested by the United States Geological Survey and the Arizona Department of Environmental Quality (Porier 2015).

5. Cananea, Bacoachi, Arizpe, Banamichi, Huepac, San Felipe de Jesús, Aconchi, Baviácora, Ures and Hermosillo.

Sonora to the downriver leaders of the *municipio* of Arizpe (of which they are part), the event was reported in the press, thus raising the specter of heavy metal poisoning along the river as well as possible contamination of food stuff produced in the region. Official protocols established that an occurrence such as the Buenavista breach and spill required two actions: 1) the closing of all water wells within 500 meters of the center line of the river; and 2) the prohibition of the sale of all food stuffs produced using river or well water. In announcing the closing of the river and wells, the government implied they were doing so because of contamination by heavy metals from the mine. People along the river were left with no access to water for domestic consumption, irrigation or to sustain their livestock.

In an effort to support the population, the state and federal governments and Grupo México, the owners of the mine,⁶ organized a fleet of tank trucks that delivered water to homes in the affected area. In addition, the Comisión Nacional de Agua (CONAGUA) brought in portable water purification plants. These drew water from the wells, then ran the water through a purification process and bottled it for domestic consumption. The water was ostensibly free to those households and businesses whose water source had been cut off, although it took time and energy and storage capacity to receive the water until the government installed household water tanks. For weeks after the event, water trucks roared up and down routes 14 and 89 (La Ruta del Río Sonora) from Hermosillo to Cananea, delivering water to a population who wondered when they would be able to re-open their wells for domestic use or irrigate their fields from the river.

As with the ABC fire, this spill was also viewed as a tragedy. The secretary of SEMARNAT (Secretaría de Medio Ambiente y Recursos Naturales)—the federal environmental agency—called this the worst mine environmental disaster in Mexico's history. Such tragedies are made even more intense when they are seen to be the result of human activity, either through negligence or greed (Wortman et al. 1997). "Acts of God" are accepted as the result of natural forces or divine intervention. But, if the calamity is the result of—or made much worse by—the greed of officials whose role is to protect the public, but who cut corners or ignore warnings in order to increase their power and or profits, then the impact feels much worse. A quest

6. Grupo México is the largest mining company and one of the largest copper producers in the world. The CEO is Germán Larrea Mota-Velasco, who, according to Forbes, is the second richest man in Mexico and number 72 in the world.

for meaning in such an event is often converted into a quest for justice. In the case of these two events, the quest for justice by the people affected by the events leads to questions about the impunity of those officials who are seen as responsible.

Conceptualizing the State

Anthropologists have long held that forms of government resembling the state in complexity frequently act as if they are exempt from consequence of their actions. However, it is clear that governance is rarely carried out in a monolithic or coherent fashion by elites who all have similar agendas (e.g., Gupta 2012a, 2012b). In this paper, we are focusing on two disasters to examine how the agendas of leaders of various bureaucracies (and other elite leaders) are expressed when greater chaos or less coherence appears likely. In other words, we are interested in examining how extremely unstable situations like disasters produce specific challenges to governance; and to what degree there is uniformity (and variation) in the responses of leaders and other state officials in extreme settings like disasters. While hazards are defined as the risky events that a populace might face, it is our social hierarchies, governmental policies, and investments that create vulnerabilities that put people and physical infrastructure in harm's way to produce disastrous consequences (Garcia Acosta 2002).

When the actions of non-state actors (for example, non-governmental organizations, student groups, and civic clubs) become unpredictable or unstable—as in post-disaster situations like the two under discussion—some leaders attempt to increase their own control, while other leaders employ abandonment or negligence (see, for example, Goldstein 2016). Often, existing state programs or institutions cooperate rather than compete when faced with the challenges of disasters and other extreme events. In the case of the Cananea mine spill, two bodies converged to create a commission: CONAGUA, as part of SEMARNAT, and the Universidad Nacional Autónoma de México (UNAM). They cooperated in the creation of a commission charged with ameliorating the impact of the disaster and determining when the water was safe to use again.⁷ The arrangement allowed SEMARNAT to support its

7. In January 2015, article authors Luque and Murphy were invited to participate in a meeting organized by researchers from the Instituto de Geología at UNAM for the purposes of coordinating research and providing feedback to SEMARNAT.

activities with scientific impartiality provided by one of Mexico's leading public universities.⁸

Anthropology and Impunity

At the heart of this study is the notion of impunity. Our main conceptualization of impunity is that individuals or small groups of people—elected state leaders, in this case—are immune from punishment and thus free to consciously act without concern about negative consequence to themselves. However, this concept proves insufficient when we try to account for the fact that leaders very often act in such a way that brings about their own downfall. An analytically powerful concept of impunity, then, seems to us to require not only a sense of license and a lack of fear of reprisal, but additionally a sense of justification of both a governmental body's symbolic encompassment of society and the governmental body's symbolic verticality. Ferguson and Gupta (2002) have discussed the metaphor of the spatialized state, and noted how it is used by scholars and members of civil society to describe the relationships between state actors (for example, police, elected officials, heads of state agencies) and non-state actors, with the state at the center or core and non-state actors as peripheral. As Ferguson and Gupta (2002) point out, anthropologists have focused on how national and provincial governing structures impact local communities, and how government offices use symbolic devices (for example, insignias, endorsements/ sanctions, appearances by leaders, unnecessary paperwork/ rules) to maintain the state's imagined and privileged relationship to civil society. Much of the focus is on two ways in which national government actors (for example, agencies, departments) tend to expand and secure their legitimacy and authority: 1) by presenting symbols of their superiority over the governed (sitting on a dais, wearing "official" shirts and other clothing and, most commonly, making the "other" wait, in other words a form that could be conceptualized through a notion of verticality); and 2) by finding opportunities to present symbols of an agency's relevance to more and more domains of life. This is the process of encompassment—by which an agency of the government uses an event such as the fire or the *derrame* to expand its reach into people's homes, work, and community. It may even extend to the

8. Efforts by the SEMARNAT/UNAM committee to coordinate with local academics, for example La Universidad de Sonora (UNISON), el Centro de Investigación en Alimentación y Desarrollo (CIAD), and public entities such as the state water agency, were not as successful.

wider community and region if conditions, such as water pollution and scarcity (e.g., Anagnost 1997; Ferguson and Gupta 2002).⁹

According to Ferguson and Gupta, to maintain this dual sense of illusion of relevance and superiority, state entities undertake various symbolic actions and rituals (such as visits by political and administrative figures, national symbols such as the flag, and placed news stories supporting the government's actions), to maintain the image of comprehensive beneficence or generosity, while at the same time protecting and producing hierarchy (Ferguson and Gupta 2002). Benevolence is one mechanism for being relevant, especially if the benevolence can be symbolized to protect hierarchy, as in the case of providing water tanks for homes along the Río Sonora or designating a special location for the burial of the lost children in the city's cemetery.

In the context of tragedy and disaster, state agencies are pressed into the tenuous position of employing these symbolic activities on behalf of non-state elite actors (for example, bankers, investors, and industrialists). These elite non-state actors have most benefited from the development of the global neo-liberal governing strategy of negligence and abandonment. Negligence and abandonment is the general abdication of the state's responsibility for the welfare of a population, and is a governing strategy that ironically tends to reduce governmental bodies' capacities to effectively employ benevolence symbolically and thus both remain relevant to society and remain above society. This strategy also overemphasizes symbols of authority through reliance on actions harmful to the populace.

Governance Challenges in the Face of Disasters

Disasters are a kind of focusing event that bring people's attention to, among other things, public policy and its implications. Potentially incongruent agendas of various state bodies might be highlighted by such focusing events. But a focusing event can just as easily present the possibility that traditional agendas are sidelined or even buried. Birkland (2013, 2006, 1996) and Penrose (1999) identified conditions in which goals of broader participation and improved quality of life have a better chance in disaster settings. They found that direct policy change is more likely in events where a specific proximal cause is identified (such as aviation disasters) or where

9. For details of the use of symbols by those in power to control others, see Anderson 1991; Bernal 1997; Cohn 1996; Comaroff 1998; Coronil 1997; Geertz 1980; Joseph and Nugent 1994; Nugent 1997; Scott 1998; and Taussig 1996.

presumed lapses in security or policy are defined and may be “fixed” (such as in the case of terrorism). On the other hand, events with less well-defined responsibility (such as natural disasters) may lead to only incremental policy changes, or even to none at all.

This focusing nature of disasters is particularly salient in recent studies that find disaster risk reduction is not achieved as much by mitigation, response, and recovery as it is by addressing the root causes of disaster—particularly unsustainable development and vulnerability (Oliver-Smith 2009, Wisner et al. 2004). Following these scholars, this study of impunity follows two disasters in the state of Sonora, Mexico, for which we have sought to identify political root causes. The framework of Wisner and colleagues suggests that the relationship between the root causes of vulnerability (such as a lack of resources and power) and the hazardous pressures generated by this vulnerability is mediated by policy-making. Thus, one way of summarizing their heuristic research framework is to say that vulnerability emerges from social and political inequality (typically supported by a related ideology), but disasters are generated by both the enactment of the policies *and* the neglect of the policies themselves. With government policies that are effective and well implemented, inequality will be less likely to turn a hazard into a disaster in terms of both impact and recovery.

The challenge to governance that is generated by the interaction of hazard vulnerability with government policies—particularly privatization and other neoliberal policies—might be mitigated in many disaster settings by what is called disaster capitalism, defined as profiting from the needs and vulnerability of people in these dire situations (Klein 2007. Various articles in Gunewardena and Schuller 2008 and Oka et al. 2009 referred to it as disaster mercantilism when referring to periods prior to capitalist world system). In some cases, profiteers control every aspect of the recovery setting; in other cases, the profit margins are small and people continue to struggle to recover although that recovery is not controlled by the insertion of atypical enterprises. In the cases of the ABC fire and the Cananea spill, we will see that a relatively minor amount of profiteering occurred: the water delivery trucking companies along the Río Sonora indeed benefited hugely for a short time, and it is possible that a few of the lawyers in the ABC fire purposefully engaged in profiteering.

Divide and Conquer with Deservingness

We define efficient and effective government in disaster settings as providing timely and appropriate support to vulnerable people.

A governing body's twist on this expectation via encompassment and verticality is the politics of deservingness, in which government bodies seek fair and effective government more in letter (and symbol) than in deed (Kroll-Smith 2018, chapter 5). In the book *The Best of Times, The Worst of Times*, Susanna Hoffman (1999) discusses the politics of deservingness in the wake of the Oakland Fire, where people competed for access to aid, using different markers to build their case about who is or is not deserving of aid (see also Barrios 2014, Faas 2015).

Employing an analysis of reciprocity between individuals and an institution providing post-disaster resources, Faas (2014, 2015) examined not only the ways in which the benefactor sought to identify deservingness, but also how beneficiaries actively helped form the expectations around, and participation in, recovery efforts that involved the distribution of resources to individuals or households affected by the Mt Tungurahua, Ecuador, eruptions of 2006 and 1999:

In 2008 and 2009, several years after the last great eruptions, displaced villagers often contested the distinctions between those deemed “deserving” and “undeserving” of aid in the form of housing, relief goods, and program inclusion by contrasting their suffering with that of others. Since I had only just begun fieldwork, I did not anticipate the relative importance of the times and spaces of the initial disaster events and evacuation processes in marking these domains of suffering and, hence, deservingness. When households from one village were perceived to be deprived of a form of aid, a typical rejoinder was “everyone from [some other village] receives houses and aid and they never suffered the way we did!” (Faas 2015:251).

Forging Wellbeing among Disaster and Impunity

As highlighted by Faas, disaster victims do not just wait around to be acted upon by state and non-governmental institutions. In research on the ABC fire, Jones and Murphy (2015) have begun to explore how such agency by families affected by the fire—specifically by engaging in social justice activities and movements—is implicated in their post-disaster wellbeing i.e., those participating more in social justice are those with more depression, post-traumatic stress, and complex grief symptoms.

The question that emerges for us (in addition to the possibility that people with worse pain feel a greater need to do something about it) is whether it is the stress and focus on the past through justice-seeking that is responsible for greater mental health issues or whether it is post-disaster impunity by governmental bodies

and wealthy non-state elite actors that further jeopardizes well-being. The consequences of the latter (post-disaster impunity) is exhibited in the post-Exxon Valdez Spill. Two decades of legal maneuvers and impunity by Exxon (Picou et al. 2004) was corrosive to community cohesions in the post-disaster environment (Freundenberg and Jones 1991).

Methodology

To generate data to approach our questions, we relied on a combination of ethnographic, survey, governmental, and newspaper data. Our methods closely resemble the Community Participatory Involvement (CPI) model as described by Whiteford and Vindrola-Padros (2015:62). The CPI model works within the methodological framework of ethnography. It relies heavily on understanding individuals and their communities (and how gender and power shape those experiences). It also relies on understanding how macro-level institutional structures (such as regional or global events) shape policies that become translated into programs and practices.

Study Design for the ABC Fire

In 1999, Murphy and Fran Norris began to lay the foundation for a long-term study of stress, trauma and post-disaster recovery in Mexico. The initial phase consisted of an epidemiological study of stress levels in four cities that had not suffered a major catastrophe in recent memory. The project used random sampling in the application of stress, trauma and PTSD portions of the Composite International Diagnostic Interview instrument developed by the World Health Organization (1997) to assess mental health problems. Over 2500 people participated in those epidemiological interviews in the cities of Oaxaca, Guadalajara, Mérida, and Hermosillo (Norris et al. 2001, 2005; Norris 2012).¹⁰

The epidemiology of stress and trauma in urban Mexico, particularly in Hermosillo, provided the foundation needed to seek funding from the National Institute of Mental Health for a RAPID grant (NIH grant R21MH090703) to study the long-term effects of the fire on parents at the ABC Day Care Center. The first wave of the study began in January of 2010 and ended in early May of the same

10. The study, carried out with colleagues from the departments of psychology and urban studies at the University of Guadalajara, was funded by a grant from NIH (RO1 MH51278).

year. This new project involved interviews with 226 parents and caretakers from 95 of the 134 families affected by the fire. These families represented 106 of the 162 children who were at the day care center on the day of the fire. The research team carried out structured psychological and social network interviews to understand how grief varied among the different categories of people associated with the event (males vs. females, mothers vs. fathers, parents vs. caretakers, parents of deceased vs. parents of injured). Of interest was how people differed in their response to complicated grief—that is grief lasting longer than six months (Prigerson et al. 2009). A second wave of structured interviews took place between January and April, 2011.

In addition to the structured interviews, members of the team conducted semi-structured interviews with parents, caretakers, and citizens associated with the event. These interviews were wide ranging covering the event itself; people's reactions to the event; and their efforts to organize, and the search for *justicia*. We also reviewed government and judicial reports, the Supreme Court's ruling, forensic reports, news reports, and academic reports as they relate to the fire and its aftermath. Murphy returned to carry out interviews in 2010, 2012, 2013, and in 2014–2015.¹¹ The goal was to understand, in greater depth, what had happened in the intervening four years, as parents (individually and as part of a group) had struggled for justice and with their own internal divisions.

It became clear to us early in our interviews that, in addition to *justicia*, the question of impunity was also foremost on the agenda of at least one of the organized groups. The fact is that for them these two concepts are linked. For many, justice became defined as seeing those they considered responsible thrown in jail. Thus, the high percentage of people who were not jailed or brought before the courts represented another example of impunity on the part of the political and economic elite. As we began to investigate the impact of the copper sulfate spill along the Río Sonora, we saw the same pattern of impunity emerge: in the case of the ABC fire, impunity of the owners of the center and those who were responsible for

11. In 2014, Murphy received a Fulbright-Garcia Robles award from COMEXUS to serve as a Senior Research Fellow in the department of Desarrollo Regional at the Centro de Investigación en Alimentación y Desarrollo (CIAD) in Hermosillo. The purpose of the project was to complete intensive open-ended interviews with parents, non-parents, first responders and officials in order to better understand, how the various groups organized themselves; how their social networks might impact their ability to receive what they considered to be *justicia* and to enable some measure of closure around the event. The Cananea mine tailings pond spill occurred days after Murphy's arrival in Hermosillo.

regulating day care centers; and, in the case of the Cananea spill, impunity of the owners of the mine and state and federal inspectors responsible for overseeing mine safety.

Study Design for the Cananea Spill

We were invited to study the Cananea mine spill by colleagues in Hermosillo and Mexico City (Luque et al. 2015). We conducted two sets of interviews to understand people's perceptions of the problems and how they have interacted with others in their recovery.¹² The first was with official and key informants in seven of the eight affected municipalities (minus Hermosillo); and the second focused on farmers and other residents (114 interviews in 23 affected communities) along the Río Sonora and its tributaries (See Figure 1).

Approximately two months (October, 2014) after the discovery of the contamination of a tributary of the Río Sonora, a team of researchers from CIAD traveled to the region to conduct a rapid assessment of conditions and to study how the event had affected the economic and socio-psychological wellbeing of the region. The goal of the assessment was to interview approximately 30 individuals including: community leaders, small business owners, farmers, and wage laborers. The sample was purposeful in that we looked for community leaders, small business owners, farmers and wage laborers, where possible, in order to get an overall view of the impact, but at the same time the sample was opportunistic, in that we did not turn down anyone who wished to speak with us about their experiences.

Typically, we interviewed people by going house to house in different parts of a village. The maximum number of houses per village was six and the minimum was one. Two of the communities in which we carried out interviews were not directly affected by the copper sulfate spill from the Cananea mine and therefore serve somewhat as a control sample. However, it is fair to say that, although they were not directly affected, the indirect impact was severe due to road blockages and difficulty marketing their products. In one case, for example, a rancher from Bacoachi—a community on a tributary of the Río Sonora not affected by the spill—told us they were having trouble selling their yearling cattle because potential buyers from feedlots both in the United States and Mexico were nervous about

12. Support for this research came from the National Center for the Study of Hazards and Disasters, CONACYT, and a research leave from the College of Arts and Sciences of the University of North Carolina at Greensboro.



Figure 1. The green border of the map shows the area of influence of the copper sulfate spill that occurred in 2014 in the state of Sonora in northwest Mexico. The Sonora River and its tributaries are in dark blue, flowing from the north at the Cananea mine spill site. Along the river are dots representing the wells and irrigation gates. Listed are the communities of the zone, and the seven municipalities along the river are outlined in beige. Source: Luque et al., 2015.

purchasing cattle they might not be able to butcher in the future. Comments like this during our interviews plus reports from the press make it clear that the entire Río Sonora watershed from Cananea to Hermosillo was affected—if not directly by the chemical and heavy

metal solution, then certainly by the social and economic stigma attached to the spill. This is similar to what happened to the Alaskan fishing industry after the Exxon Valdez oil spill (Dyer 1993, 2002, 2009), the algae bloom in western Lake Erie, and Mad Cow scare in western Canada (Smart and Smart 2009), to name a few (for other examples, see Jones and Murphy 2009).

In both the ABC fire and Cananea spill studies, the interview instrument was based on that used by the “International Disaster Response and Recovery Project” in the United States, Mexico and Ecuador (e.g., Norris et. al 2001, Jones et. al 2013). The instrument consists of a series of demographic questions, followed by questions pertaining to the impact of the event on individual and household daily activity and economic wellbeing. It asks about social networks, and the information and support received through these networks, and includes a series of questions on physical and mental health that come from published scales (Leventhal et al. 1996; WHO 1997; Radloff 1977; Tobin, et al. 2014).

Findings

One of the more striking findings in this comparative study of these two disasters in Sonora was how often victims of the Cananea mine disaster indicated symptoms like those experienced by parents who had lost children in the ABC fire (Figure 2). Parents who lost children and Cananea victims experienced: difficulty sleeping, depression, trouble concentrating, and a loss of pleasure in activities that they had found enjoyable in the past.

Most importantly, perhaps, for the future of both groups—and particularly concerning State efforts to re-engage residents to recover from the disasters—is the high proportion of these residents who had lost faith in the future (see item 2, Figure 2). The loss of faith in the future by Río Sonora residents was surprisingly higher than that of parents who lost children in the ABC Day Care fire. However, their loss of faith in the future was not as high as those parents whose children had been injured in the ABC Day Care fire. Thus, people’s faith in the future is impacted not only by government response, but also by the kind of specific impact the disaster had on people.

In effect, this loss of faith in the future is related to a loss of trust in those governing to be responsive to people’s needs. Based on our interviews, we saw that a lack of faith in the future was closely tied to calls for justice and to demands for an end to impunity. This does not mean that everyone who had less faith in the future was motivated to speak out, march or attend meetings. Many people who spoke of

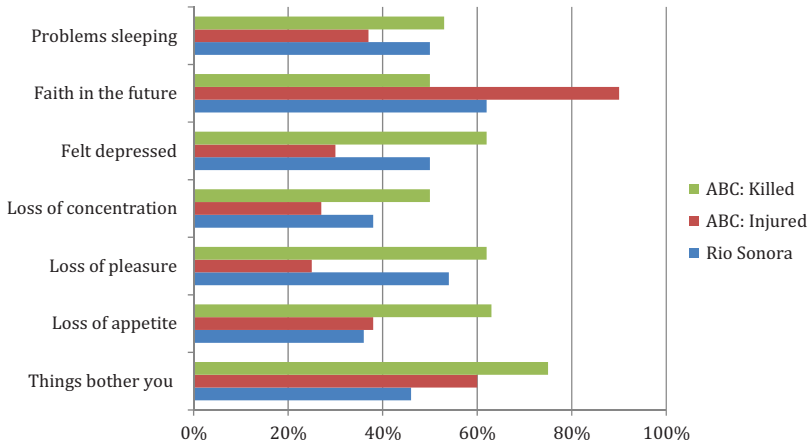


Figure 2. The graph compares the percentage of each sample population affected by the psychological symptoms. The first ABC sample ($n=98$) is of parents and caretakers at 8-11 months post-fire whose children were killed by the fire. The second ABC sample ($n=126$) is of parents and caretakers 8-11 months post-fire whose children experienced the fire but did not die. The Rio Sonora sample ($n=114$) is of adults 8 months post-spill who continued to live in the area and represent all seven municipalities along the river.

little hope for the future also expressed resignation about the government's behavior and felt powerless; thus, they did not participate in calls for social justice. Still, a loss of faith in the future appeared to be tied to a lack of trust in government.

Prior negative experiences with the government or its agents were the norm for those who we interviewed, and, as Birkland (2013) points out, events such as these tend to focus people's attention on policies. While people might trust or might not trust governments before a disaster, governmental emergency and recovery actions following a disaster could generate trust. Indeed, the media will impact unaffected people's perceptions, but victims directly see the response of government and even the response of experts—and victims evaluate that response in relation to their own needs.¹³

13. Independent Study on Best Practices, Including Recommendations, to Assist States in Strengthening their Domestic Capacity to Combat All Aspects of Impunity, by Professor Diane Orentlicher, UN Doc. E/CN.4/2004/88, p. 2 (27 February 2004). The Updated Set of principles for the protection and promotion of human rights through action to combat impunity comprise thirty-eight principles. See UN Doc. E/CN.4/2005/102/Add.1 (8 February 2005).

For both disasters, this loss of faith in the future can be linked to how authorities handled the situation and its aftermath, and the people's specific concerns, as we discuss below. For parents whose children died, although they may maintain a distrust of the governmental response, their child's death is final and so a faith in the future is probably not tied as much to governmental actions. Additionally, the mothers received a pension for the rest of their lives. For the parents whose children were injured, there was no pension, plus there was no sense of finality and they were concerned for the future health of their children. They were not convinced that, just because a child was released from the hospital, the child would be free of future health problems related to the fire. A parent, who sat clutching a squirming victim, described:

My child used to run all the time. Now he can't run around the house once. How do I know that in the future he will not have something wrong with his lungs that will keep him from working?

ABC fire parent (Murphy 2012 field notes, translation).

A general mistrust of the government health care system has not fostered trust between the medical authorities (who suggest that children's symptoms will diminish with time) and the care takers (who see dramatic behavioral changes in the children). This mistrust is not helped by a tendency among *Instituto Mexicano del Seguro Social* (IMSS) and other state-employed physicians to encourage parents to take their children to their private offices where they will receive more "personal" attention. In light of the fact that the children's health care would be taken care of by the government for the rest of their lives, these parents' vision of the future conceivably could change and become more positive and involve more trust in medical experts, but, clearly, this trust would have to be diligently earned by medical professionals given the general distrust of promises about the futures of their children.

For those along the river, uncertainty came when the authorities declared the river and wells to be free of contamination, after these water sources had been officially closed for about three months by CONAGUA. This came after many people had drunk water from wells and from the river and municipal water in the first days after the spill, because the mine had not reported the event and agencies had not reacted immediately. The original handling of the event was marred by a lack of clear information to residents; by squabbling between local, state and federal authorities; and by conflicting stories in the media, such that residents were confused and

frightened about the future. More important to many riverine residents was how the story was playing out among friends and family who no longer lived in the area, but who in the past visited on a regular basis but had stopped “coming home” in fear of the effects on their own children.

In discussions of the impact of the disaster on land, animals and crops, one of the interviewees wanted to express the worst consequence:

My daughter says she is not going to bring her children here. She is afraid of the water and the contaminants in the sediment and sand, and the sickness they might cause in my grandchildren. I fear I will never see my grandchildren play here again.

Farmer/rancher along the Río Sonora (Murphy field notes 2015, translation).

This expression of concern for the future, and especially concerning impacts on family and social relationships, was one we heard over and over in our semi-structured open interviews. The connection between social relationships and this faith in the future happened, for some people, through their hope for social justice, coupled with their actions of protest along with other people. Here, the degree to which faith in social justice would be fomented by trust in government was eventually undermined by the impunity of the state and local elites as they sought to disempower the victims.

Recovering Impunity

Scrutiny

In their own way, both events brought into question the neoliberal path of economic development that Mexico forged upon entering into the General Agreement on Tariffs and Trade and the subsequent negotiation of the North American Free Trade Agreement. During the administration of Carlos Salinas (1988–1994), the Mexican State began an aggressive program to privatize state assets in services, banking and industry. Often—as in the case of the railroads, mines, and telecommunications—state assets were declared bankrupt by the state and sold off at a fraction of their worth. Grupo México purchased many of the state’s mining interests, including the Cananea mine, which they renamed Buenavista del Cobre.¹⁴

14. They subsequently formed the subsidiary Southern Copper Company in Phoenix, Arizona.

On a national level, the sale of these assets created some of the largest fortunes in the world. At the local level, many family members of the home-town elite were given access to business opportunities at a fraction of their value: for example, when IMSS began the process of privatizing its day care services, many of the franchises went to the family members of local politicians and elites. The failure of existing safety measures at the Cananea mine and at ABC Day Care Center (owned by powerful local elites) raised questions of impunity and whether or not the eyes of officialdom had turned the other way to profit influential families. While government ownership of assets in Mexico has often been accompanied by corruption or impunity, privatization as a new modality of oligarchy in Mexico—replacing state oligarchy—seems to have gone alongside greater failures in safety, and this handover of state assets to elites appears to increase risk through a path of reduced attention to worker and citizen well-being—in this case an integral aspect of the practice of impunity.

In the wake of both events, individuals and groups attempted to reach out to others in their search for *justicia*—a kind of social justice foment wherein appropriate overtures are eventually made by the state to appease claimants. The people's political activity was directed toward making sure these sorts of events never happen again, also at identifying those responsible for the catastrophes, and seeking compensation for current and future damages.¹⁵ In the case of both disasters, the issue of culpability loomed large for the local, state, and national powerful elites, as elections happened to occur shortly after each extreme event. In the case of the ABC fire, elections a month after the fire resulted in the first PAN victories in the history of the Sonoran governorship—after over eighty years of rule by the PRI. In the case of the Cananea mine spill, residents and civil society pointed toward the nation's strong Environmental Responsibility Law to support the creation of a compensation fund created by Grupo México and administered by the Mexican government. SEMARNAT declared the spill the worst environmental disaster in Mexico's mining history. The scrutiny that was focused on the region revealed irregularities not only in the management risks associated with the mine, but also in the way in which concessions for water were granted to members of the state oligarchy and high officials in both major parties.

15. This is not unlike what was reported for Buffalo Creek, Love Canal, Exxon Valdez, 9/11, and the BP Gulf blow out (see, for example, Erickson 1972, Schneider & McCumber 2004, Everest 1986, Brown & Mikkelsen 1990, Raphael 1986).

The two disasters focused attention on, and exposed weaknesses in, the existing socio-political structure (Birkland 2006), requiring the state apparatus to swing into action to ensure that elites and the state structure were both reinvigorated and also escaped harm (see Boin 2008).

A mechanism for returning power to the state even in non-disaster settings is a purposeful ambiguity that permits the enforcement of certain norms or expectations to some but not others, so that people can be strategically punished or rewarded (e.g., Goldstein 2016). Compensation can be one important state tactic for using rewards to support the exercise of impunity.

Compensation and Division

Under such circumstances, it is important for the state and the elite to recognize an event, to ensure that it is seen as an aberration outside of normality, and then to isolate those affected in a manner that diminishes their political effectiveness.¹⁶ A common way of accomplishing this is through compensation. In both disasters, the Mexican State established methods of compensation for those affected. An aberration outside of normality—such as a disaster—can, from a government’s perspective, effectively be resolved with compensation, even though the Mexican environmental responsibility law includes the concept of “irreversible and irremediable damage.” Generally, the ethics of impunity work in the following ways: first, by explaining away the event to victims and the public—often through a creative interpretation of scientific reports—; and, second, by appearing to make things right in the eyes of enough victims so that they appear to the public to have effected some kind of recovery. Finally, with the attention of the public on the victims and their supposed recovery, it is generally fine in the eyes of the state to see to it that the victims begin to divide over purpose and strategy. The politics of deservingness is a typical way the victims begin to divide (see also Hoffman 1999, Barrios 2014). As one villager told us: “They created the mine spill trust fund to make us more disorganized, and they succeeded.” We have previously cited the example of Faas (2014) in relation to disaster survivors. In that study, Faas noted that whenever they perceived a lack of equality, the victims clamored: “Everyone from [some other village] receives houses and aid and they never suffered the way we did!”

16. A good discussion of this process can be found in Steinberg (2000).

In the case of the ABC fire, parents were provided with a one-time monetary compensation by the government. In addition, injured children were guaranteed, through IMSS, lifetime medical benefits regardless of their employment status. Mothers of injured children were provided with a life-long pension equal to the minimum salary of a person in the occupation they held at the time of the fire. In the case of the Cananea spill, the State used funds supplied by Grupo México to quickly establish a trust fund of approximately 150 million dollars, to be managed by the government, for remediation along 250 kilometers of river and to compensate those of the 24,000 residents along the river who had lost income due to the spill. Compensation was based on the number of cattle an individual lost—up to \$100,000 pesos total, and \$10,000 pesos per hectare for agricultural land taken out of production. In addition, there was a program to compensate merchants whose businesses had been negatively impacted by the spill and to compensate home owners who lost access to water.

Compensation, however, is a double-edged sword. No one doubted, or doubts today, that parents from the fire or victims of the Cananea spill disaster deserved some compensation for their loss. However, once the money and medical attention were made available, it began to cause divisions among the victims and between victims and the public, plus compensation shifted the focus from social justice to individual appeasement. The ABC parents divided along lines of whether or not they should accept the compensation vs. whether they should hold out until those responsible were brought before a criminal proceeding as well as get actual change in the governance of child welfare.¹⁷ Along the Río Sonora, the process of compensation was put in the hands of an independent commission, thus allowing Grupo México to distance itself from the process. The process to be used to distribute the Cananea spill funds pit the reparations commission against various local authorities (who wanted to maintain their own positions of structural control) and against citizens who felt they were not adequately compensated for their loss and who suspected that their local officials were guilty of corruption and collusion with Grupo México.

The payment of compensation, or the promise thereof, was not only hush money, but also led to an erosion of the moral authority of the victims (Adeola & Picou 2012, Fothergill 2003), while at the same

17. The Act for the Provision of Holistic Care and Development of Infants was passed in late 2011 as a result of the fire and of the efforts of some parents and members of civil society, but this law regulating child care is only as good as the enforcement that governments will give it.

time providing the elite (and the State) with the power to claim the moral high ground. It was not long before the public began to question the moral authority of the parents from the ABC fire and, six years later, the victims of the Río Sonora disaster. Stories began to circulate in the press of mothers who were working again even though they received a pension to stay home with their injured child; or, of some parents who had taken the funds—provided by the “benevolent” state, which supposedly bore little or no responsibility for the fire—and purchased new homes and automobiles. Along the Río Sonora, stories abounded of fraudulent claims to the special compensation fund. The accusations were that people (including local leaders) had made claims when they were not affected; that people had claimed losses far in excess of their possible net worth; and that government officials had siphoned off some of the funds.¹⁸ The effect was to stigmatize reparations and compensation and thus convert reparations from something people were owed for having their human rights violated, to something given by the state/elite as charity to those injured (Fothergill 2003, Adeola and Picou 2012); in other words, charity provided for them by the paternalistic oligarchy in response to a lamentable but out-of-the-ordinary event. In the end, compensation diminished the people’s political effectiveness. And as soon as the money flowed, the political effectiveness stopped—which caused more division and accusations that some people got helped while others did not. With only about one third of the funds spent that were set up in the Cananea spill trust fund (Fideicomiso), the company Grupo México said they finished with the recovery process in 2015. Government acceptance of ending the recovery trust fund’s work, however, received a strong response from the civil sector. At the time of this manuscript going to press, the Supreme Court was taking up the case.

Finally, in the case of the mine spill, this compensation has also been examined for another of its effects—the distribution of wealth. The Department of Agriculture, Fish and Aquaculture provides considerable subsidies to larger farmers and agroindustry enterprises. The compensation plan set up for the mine spill was based on this system of support for industrial agriculture. While there was a limit of \$100,000 (U.S. dollars) for total value of cattle herd per owner, there was no limit on the number of hectares that were

18. Of note were the rumors of street vendors who, in exchange for a portion of the funds extracted from the trust, loaned their damaged business equipment to individuals who then used the equipment to prove their loss and the case of farmers who claimed to have lost more land to the flood than they had registered for tax purposes.

indemnified per owner. Thus, the mine spill recovery was an instrument, inadvertent or not, of increasing rural wealth disparities.

Conclusion

The root causes of most disasters are political economic (Wisner et al. 2004), in other words, how the leaders' governance strategies intersect with people's vulnerabilities. In this case, the root causes specifically lie with the privatization of public goods and services without concomitant regulation. Oliver-Smith (2009) has built upon the understandings of Wisner et al., thus prodding scholars and policy makers to look at risk reduction less as a matter of mitigation, response and recovery, and more as a matter of addressing the goals of unsustainable development and growth as the root causes of disaster.

Disasters are of concern to modern states and oligarchies because they expose both the inability of the state to protect citizens and also the weaknesses of the ruling elites (Araújo 2014). This is particularly the case if a regime is in crisis—as evidenced in events such as the 1976 earthquake in Guatemala (Bates 1982), the 1985 Earthquake in Mexico City (Poniatowska 1988), and the 2004 Christmas tsunami (Gamburd 2014). The state will intensify the effects of the crisis as leaders serve to draw away the unwanted attention of the citizenry and media. These focusing events can be important opportunities for new input and even change in the policy process (Birkland 2006). However, under such conditions, it becomes incumbent on the power structure to ensure the population believes in the uniqueness of the event and its aftermath. That is to say that the event could not have been predicted and that, given the un-predictability of the event, the state is doing all it can to mitigate the impact and return things to the ante crisis state of affairs—thus obviating the need for change in the process of politics.

In the cases of both the Cananea spill and the ABC fire, the cause of the disasters were proximal and specific, and there were lapses in security and policy that could later be fixed, thus qualifying these disasters as good candidates for generating policy changes. But policy hasn't changed much. With the fire, a national child care act sought both greater regulations and the enforcement of existing regulations. However, the enactment of the law is meager. Several individuals were also prosecuted but only nine low rank workers are in jail, whereas high rank persons were able to defend their cases. The ABC case was treated by the national Supreme Court of Justice, which decided that there were serious human rights violations and did

order an investigation of the facts around the responsibilities of public authorities. With the spill, as per the environmental responsibility law, a fine was leveled at Grupo México, but no one was prosecuted. Several months after the spill, there were some non-violent protests against government decisions, and the leaders of those protests were sent to a preventive jail. The planned number of water processing plants has dropped to 7 from 29, and 750 million pesos is still unspent out of the original fine of 2 billion pesos, three years after the event—prompting the people to sue Grupo México in the Supreme Court. The impunity cases from these two disasters are just a small part of a very generalized system of such activities, since the impunity index in Mexico is one of the highest in the world (Le Clercq and Rodriguez 2017).

Both the ABC fire and the Cananea spill represent significant catastrophic events for Sonora that drew considerable attention from citizens and the press. The former caused many in the city to question the safety of day care centers and the local political system that had permitted local elites to profit from the privatization of child care. For the parents and many others in the city, this was a direct abrogation of responsibility on the part of the government. The spill—while it did not directly kill anyone immediately—left an entire region of the state doubting its future. Mining is a major activity along the Río Sonora, and, if this mine, that had been cited for infractions in the past, could get away with a slap on the wrist, it proved to many citizens that neither PRI nor PAN could protect their interests.¹⁹ To paraphrase Emiliano Ruiz Parra, official impunity is “poisoning the social fabric” of Mexico (Rea 2015, 13).

The state is not monolithic and can be composed of a variety of competing agendas, perhaps including some that are pushing for more substantive positive change and not just giving cover to elites and political machines. The neoliberal agendas of PRI and PAN indeed do receive pushback from some cities, state agencies, and federal offices (in addition to social movements against neoliberalism)—and we would like to think that multi-party democracies help keep impunity in check. However, the ethics of impunity in this setting are well developed. Victim groups play into this impunity by

19. One series of stories demonstrated how high-ranking officials and members of the oligarchy had built dams or expropriated water from the Río Sonora or its tributaries without seeking or receiving the appropriate permits. One rancher was found to have constructed a major dam over 180 meters wide and 80 meters tall across a tributary for the purposes of irrigating his stand of pecan trees.

seeking public authority, legitimacy in the eyes of the state, and even belonging (e.g., Lund 2006).²⁰

It would be hard to argue there were winners in the case of the ABC fire, unless you included the lawyers who are making money and reputations from the event, or perhaps, to a very minor degree, the funerary, memorial and poster/printing industries. In the case of the Cananea spill, there were clearly some who benefited via the likes of disaster capitalism from the remediation actions by Grupo México and the government. These were primarily those who supplied the trucks and drivers who provided temporary drinking water to the region and—to a very small degree and only temporarily—those who provided lodging, food and fuel to short-term relief workers. While wealthier landowners received much greater compensation, many of them were impacted at least indirectly by the Cananea spill's negative effect on local product sales. The loss of trust in government generated new state leadership following both disasters. While this appears to be a corrective action that punishes politicians, the major winner was the established socio-political system, which was able, in the end, to divert attention away from itself and its failings and onto negative characteristics of those most hurt by the disasters.

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20. In this paper, we focus on PRI and PAN because they are the major players in Sonora.

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