Restitching Reality: How TNCs Evade Accountability for Industrial Disasters

Susan Dodd York University

23

The first Section of this paper tells the story of how Union Carbide protected itself in a hostile social environment by exerting profound influence over the construction of public memory of the 1984 Bhopal gas leak disaster, its causes and its impact.¹ From this story, we can draw on the body of academic work generated around this paradigmatic industrial disaster² to identify the costly story-controlling tactics used by TNCs and their agents to construct public memory with the strategic intent of protecting the corporate person from social accountability for wrongdoing. Having drawn the characteristics of what I will call "TNC accountability evasion" around the paradigm of "Union Carbide in Bhopal" I can begin to analyze other TNC misdeeds and accountability evasion. In Section Two, I apply this paradigm to a Canadian industrial disaster, the sinking of the oil rig Ocean Ranger off Newfoundland in 1982, of which there is remarkably little academic analysis. With reference to the paradigm of "Union Carbide in Bhopal," we can organize the information that we do have about the behaviour of responsible TNCs in the aftermath of the Ocean Ranger disaster, and thus we can begin to retrieve post-disaster information-control dynamics as they occurred here, in our "industrialized" or "developed" society. Finally, with the contrasts between information control in developed nations and developing nations laid out before us, we can begin to evaluate existing liberal-democratic tools for curtailing anti-social behaviour by TNCs.

Focusing on the aftermath of industrial disaster provides a unique opportunity to highlight the suffering knowingly perpetrated by transnational corporations (TNCs), as well as to emphasize the vulnerability of public memory to strategically constructed versions of "reality." The tragic impact of industrial disaster—particularly the deaths and sudden injuries—propels

us through legal, economic and discursive knots in search of TNC perpetrators, in hope of attaching lines of accountability to them. The suddenness and painfulness of industrial disaster tears the fabric of dominant "reality": communities previously living unreflectively with local TNC "development" are confronted with the bottom line of TNC self-interest. In the disaster's aftermath we will see that the TNC draws on all available social resources to stitch this dominant "reality" back together, thus to hide the suffering victim. Whereas the "malnourished body of the Third World" symbolizes the problem of identifying perpetrators in complex postmodern power systems (Escobar, 1984), the obvious violence of industrial disaster, and demonstrable stitch-up of dominant "reality" after the disaster, represent persisting opportunities for drawing lines of accountability to responsible agents.

1. UNION CARBIDE IN BHOPAL

24

The story of the Bhopal disaster exists in many forms—as many as there are survivors and other interested agencies to tell it. The following is a generally agreed upon account.

On the night of December 2-3, 1984 the Union Carbide India Ltd (UCIL) plant in Bhopal leaked undetermined quantities of Methyl Isocyanate (MIC), a chemical component of the pesticide SEVIN, along with other, still unidentified gases. The poisonous gases spread over densely populated Bhopal: "Over 200,000 local people were exposed to the toxic fumes, some 60,000 were seriously affected, more than 20,000 were permanently injured, and as many as 10,000 people may have died as a direct result of the tragedy" (Pearce and Tombs, 1993: 192). In addition were unmeasured destruction of crops and livestock, and long-term pollution (Dembo et al., 1990: 86).

The impact was apocalyptic in Bhopal. As the mayor of Bhopal stated: "I can say that I have seen chemical warfare. Everything so quiet. Goats, cats, whole families—father, mother, children—all lying silent and still. And every structure totally intact," (in Varma, 1986: 134). Families were fragmented in panic, bodies were buried on bodies, plants and animals died but did not decompose for days as even the micro-organisms of decay had been wiped out (Varma, 1986: 134). The "initial trauma of the catastrophe" was "cosmically frightening" and seemed to many to be "the end of the world," (Visvanathan, 1986: 148).

As for Union Carbide, then CEO of Union Carbide Corp of America, Warren Anderson, flew to Bhopal and released a Carbide statement accepting

25

"moral responsibility," indicating that "restitution would be provided," (Behraman, 1988: 278). Two years later, "(a)t the end of 1986, two... socialaction groups applied to the Bhopal District Court to order Union Carbide Corporation to pay interim compensation to provide for at least the minimal survival needs of the victims. The company responded by denying that it had any legal or moral responsibility for the victims' welfare ..." (Cassels, 1993: 197). In 1989, *five years after accepting moral responsibility*, Union Carbide would settle with the Indian government who, acting on behalf of the mass of plaintiffs, accepted a settlement of US\$ 470 million. Cassels says :

Awards to the families of the deceased victims might produce, after inflation, annual amounts of about \$900 for twenty years, with nothing left at the end of that period. Awards to those who were permanently disabled might generate about \$350 per year. These amounts can hardly be called 'generous'... Indeed, the income awards to individuals would likely fall short of total average per-capita income in India, and scarcely exceeds nationwide individual consumption. (Cassels, 1993: 230)

The settlements are further reduced with the understanding that in India "one wage earner may be responsible for supporting two or three generations," (Tyagi and Rosencranz, 1988: 1109). This settlement was a far cry from the three billion dollar suit the UOI had filed initially in the US, (Jaising and Sathyamala, 1992: 108). The number of affected victims on which this settlement was based was not supported by any systematic assessment of the situation in Bhopal. Though there were 600,000 filed compensation claims, and indications that as many as 300,000 to 400,000 victims are "suffering from serious medically diagnosable injury today" (Jaising and Sathyamala, 1992: 110), Union Carbide and UOI settled on the basis of 30,000 injured permanently, and 20,000 injured temporarily (Jaising and Sathyamala, 1992: 109). On top of all this, appeals and distributional complications have plagued the actual delivery of the settlement to Union Carbide's victims (Jasanoff, 1994).

The story-control efforts which paved the way for this settlement demonstrate the terrible extent to which TNCs' agents are willing to go to protect the corporate person. These efforts are far too complex to be exhaustively represented here; however, the following is a list of striking story-control tactics used by Union Carbide to evade social accountability for the Bhopal disaster.

Strategy First

Union Carbide acted strategically from the outset. While surviving victims struggled with physical survival in the chaos of Bhopal, Union Carbide—as aself-interested agent in a hostile environment—marshalled all the forces of transnational privilege: it hired doctors, (Jaising and Sathyamalá, 1992: 105), it hired a team of experienced tort defence lawyers, (Cassels, 1993: 124), it hired "independent" consultants to "study" the technical and operational failures leading to the gas leak (Pearce and Tombs, 1993: 194), and it hired public relations consultants and placed a gag order on all employees (Cassels, 1993: 113).

Union Carbide was instantly aware of the need to construct, or at least profoundly problematize public memory, particularly where this memory is refracted through expertise: medical, engineering and legal.

Making Sense out of Chaos:

The Manipulation of Documentary Evidence by "Company" Experts

While aspects of Union Carbide's tactics seem too fantastic to be strategically useful, they effectively undid confidence in the factual validity of existing documentation, even where they could not plausibly replace it with a Carbide-protecting version.

Medically, the magnitude of Bhopal's suffering before and after the gas leak made documentation extremely difficult. However, Union Carbide's agents compounded this, refusing to release "trade secrets" about the exact composition of the leaked gases (Jaising and Sathyamala, 1992: 107). Union Carbide later used the documentary chaos around the medical facts to its legal advantage: throughout the settlement process, Union Carbide argued that "it was in no position to defend itself" against legal claims until it was "aware of the number of victims and the extent of their injuries," (Cassels, 1993: 189).

From the first, Union Carbide manipulated information about the leaked chemicals, meaning victims did not receive potentially life-saving treatment. Throughout the early days of the disaster, "the chief medical officer of Union Carbide India Ltd kept telling enquiring doctors, even as patients were dying by the hundreds, that [MIC] was merely an irritant like tear gas, never fatal," (Varma, 1986: 135; cf Jaising and Sathyamala, 1992). Hence, whereas "clinical information" immediately indicated that MIC affected both the respiratory tract and the central nervous system, Union



Carbide's agents—including doctors—withheld and distorted information about the nature of MIC and other leaked chemicals in order to protect Union Carbide from looming litigation.

An anti-cyanide treatment widely found to be effective in clinical use and sanctioned by a famous German toxicologist (who had been flown in by the Indian government) was pronounced ineffective by Union Carbide's medical professionals and the Indian Council of Medical Research (ICMR). The Indian government facilitated Union Carbide's information hegemony by suppressing the cumulative findings of doctors treating victims in Bhopal (Varma, 1986: 135). Consequently, the anti-cyanide treatment was *banned*:

The success of 'hypo' injections confirmed the presence of cyanide, a fact that embarrassed Union Carbide officials and some government doctors. 'In an unusual step, the director of health services issued an official letter banning the use of sodium thiosulphate.' The order was withdrawn only after the evidence became overwhelming. But many lives had been lost during the period of the ban from 11 December to 3 February. Even now...the availability of injections has been restricted to a trickle. (Visvanathan, 1986: 151)

It is now widely accepted that cyanide can in fact "accumulate in the bloodstream as an indirect result of MIC exposure," (Rosencranz et al., 1994: 49). Morehouse and Subramaniam (1986: 41) argue further that Union Carbide was well aware of the toxic nature of MIC, as it had commissioned "confidential" research about the nature of the gas as early as 1963. The full and long-term effects of MIC remain "undetermined" (Lepkowski, 1994: 22).

Union Carbide's marshalling of medical expertise was quick, and evidently motivated by strategic accountability evasion:

Carbide sought to establish its definition of the problem through limited administrative action and through legitimation. The limited administration included Carbide's decision on December 3 to fly in their physician, along with medicines, oxygen, respirators, and 120,000 rupees (\$10,000), while providing treatment for 6,000 victims at the company dispensary. The legitimation of company policy appeared as a scientific report, prepared by a Carbide "investigation team" and released to the public in March 1985, on the "Bhopal methyl isocyanate incident." Even the name

of the report symbolically downplayed the significance, the damage, and thehuman suffering that had occurred. The company also hired "leading medical authorities here in the United States, not otherwise associated with Union Carbide," to evaluate the health condition of the victims. By early January, the company's Chairman of the Board, Warren M. Anderson, was proclaiming that "those injured by methyl isocyanate are rapidly recovering and display little lasting effects." Reports on the scene in Bhopal indicated otherwise. (Reich, 1994: 186)

In the crucial days when people were dying by the thousands, Union Carbide contributed to confusion about the gases, hence about treatment. Part of Union Carbide's initial reaction to the disaster in Bhopal was to ensure that it had its own medical documents, and its own medical expertise to interpret them.

On the *technical* front, Union Carbide's "independent consultants" effectively problematized the logs at the Bhopal plant, suggesting that they had been fixed to hide the performance failure of employees, (Cassels, 1993: 11). Despite the fact that "most of the world's safety engineering community doubts the veracity of Carbide's sabotage evidence," (Lepkowski, 1994: 35) these experts provided "evidence" in support of Union Carbide's remarkable series of sabotage theories.

Scapegoating

Of the myriad accountability evasion techniques used by Union Carbide and their agents, the evolving set of "sabotage theories" circulated by Union Carbide is one of the most demonstrative of TNC attempts to construct public memory of events:

First, it had been claimed that the disaster itself was the result of the actions of careless or malicious employees who had placed a water line where a nitrogen line should have been used. The *New York Times* pointed out that neither an accidental nor a deliberate incorrect coupling were possible... That same day Warren Anderson withdrew the contention on admitting at Congressional Hearings that he had no evidence of sabotage. Then, between 31 July 1985 and 3 January 1986, UCC claimed that a group of Sikh extremists called the Black June Movement were responsible. But no such group was ever identified in any context other than allegedly

29

putting up posters about Union Carbide... Not surprisingly, this was also quietly abandoned. In August 1986 a specific but unnamed employee was blamed.... (Pearce and Tombs, 1993: 194)

These sabotage theories were raised by Union Carbide's lawyers throughout litigation (Cassels, 1993). Alternately, Union Carbide would claim that the non-

sabotage, organizational/safety failure cause of the gas leak suggested in studies by the Indian Council of Science and Industrial Research was "developed by reporters in search of a 'scoop,' by government officials seeking to blame Union Carbide, and by employees seeking to escape responsibility for their part in the disaster" (Cassels, 1993: 9).

Union Carbide's 1984 Annual Report contends that "India's cultural backwardness was responsible for the poor maintenance and management, poor planning procedures and the inadequate enforcement of safety regulations," and that "there was a national proclivity to engage in sabotage, political or personal, and this demonstrated national immaturity," (paraphrased in Pearce and Tombs, 1993: 193). We can only speculate as to how conscious Union Carbide's public relations specialists were as they tapped into anti-Indian prejudice, and how useful this prejudice was in re-stitching the collective conscience of shareholders and potential investors.

The sabotage theories are transparent scapegoating, intended to turn attention away from Union Carbide's slack safety management in the Bhopal plant. Further, the broader scapegoating of India/Indians was likely intended to divert attention from the fact that safety management technology in the Bhopal plant was demonstrably inferior to that of a similar plant located in Institute, West Virginia, USA (Pearce and Tombs, 1993: 196). The scapegoating strategy was successful at least with American "Carbiders" long-time employees in towns built on Union Carbide work—"When reminded of the Bhopal disaster, a Carbider always replies that the cause was sabotage at a plant operated by Third World foreigners" (Lepkowski, 1994: 25).

It is plausible that Union Carbide hoped to deflect the anger of victims, dependents and an empathetic public around the world from the corporate person, known as "Killer Carbide" onto some nebulous scapegoat. As for the alleged saboteur, he has "often publicly argued against the allegations" (Lepkowski, 1994: 35). When finally named publicly, Union Carbide's

sabotage suspect "continued to live peacefully among his alleged victims" (Cassels, 1993: 11).

Legal Maneuvers

The story-controlling tactics discussed so far contributed to Union Carbide's evasion of accountability through legal routes. Legal accountability evasion was helped by the fact that whereas both the survivors themselves and the government of India as their representatives had physical human bodies to sustain, the TNC was concerned only with protecting itself as a legal/financial entity.

The survivors of the gas leak emerged, after the apparent "end of the world," to find themselves immersed in the fray of international law. "The first legal response came from American lawyers who flew down to Bhopal and obtained thumb impressions from the victims, authorizing the lawyers to file suits on the victims' behalf in the US. Some of these attempts were so crude that there were reports of authorizations being available at a price" (Jaising and Sathyamala, 1992: 105). More than international ambulance chasers (though the term certainly applies), these lawyers represented the possibility of access to American tort law where plaintiffs stood the chance of winning exponentially larger settlements than they might under Indian tort law (Cassels, 1993: 126). Ultimately, the clumsy individual suits were consolidated, and Union of India (UOI) passed the Bhopal Gas Leak Disaster (Processing of Claims) Act 1985, controversially appropriating the role of legal agent for the mass of plaintiffs (Cassels 1993: 119).

Two story-control techniques formed the core of Union Carbide's complex legal strategy. The first story-controlling technique was a denial of liability of the parent company, Union Carbide Corporation of America (Union Carbide, or UCC), for the torts of its subsidiary, Union Carbide of India Limited (UCIL). The second story-controlling tactic was the claim that Indian courts were denying UCC due process.

As for UCC's responsibility for UCIL and hence for the Bhopal plant, Tyagi and Rosencranz list the following points that indicate "link and control" of UCIL by UCC: UCC "consistently exercised critical control over the establishment, structure, policy-formulation and decision-making process;" "all decisions relating to UCIL business activities have always been controlled by the UCC;" UCC selected and trained personnel, and retained a 50.9% majority of UCIL stock; Warren Anderson virtually *said* that UCC

"was in some measure responsible for its subsidiary's gas leak;" and UCC had "offered publicly \$350 million to settle with Bhopal victims in 1986" (Tyagi and Rosencranz, 1988: 1108). Despite all this, Union Carbide was able to problematize the issue of its responsibility for UCIL.³ If UCC had managed to prove non-responsibility for UCIL conclusively, that could have limited the potential tort recovery by victims to the \$50 million in assets held by UCIL.

Fortunately for Union Carbide, a plea by the victims/UOI to be heard in American courts was rejected:

Simply stated, what was being argued by UCC was that the US was an inconvenient forum in which to decide the suit, the inference being that it should be tried in India since all the evidence and witnesses were located there. The hidden agenda was, quite clearly, UCC's wish to avoid paying the levels of compensation ordinarily awarded by US courts in tort litigation; secure in their assumption that life in India was cheap they were confident that an Indian court would make much lower awards. (Jaising and Sathyamala, 1992: 106)

The court's decision of *forum non conveniens* draws on quite conservative liberal conceptions of 'U.S. interest:' "[Judge Keenan's] denial that there was a U.S. interest in the case seems blind to the power that U.S. companies exercise in the developing world; and his reluctance to hear the case in the United States, because that would be a form of 'imperialism,' ignores the fact that it was the Government of India itself urging him to accept jurisdiction" (Cassels, 1993: 135). It is important to note that part of Judge Keenan's explanation for this ruling was that American courts needed to be protected: "because of the renowned liberality of U.S. remedies, 'the American courts, which are already extremely attractive to foreign plaintiffs, would become even more attractive. The flow of litigation into the United States would increase and further congest already crowded courts'" (in Cassels, 1993: 131).

Ironically, after effectively blocking victims' access to US courts and thus forcing the case into Indian courts, Union Carbide would consistently campaign "to discredit the Indian legal system," claiming that it was being denied "due process" throughout the attempts of Indian courts to respond to the unusual demands of the case—like the provision of interim relief to the victims in Bhopal (Cassels, 1993: 187).

Restructuring

32

Will Lepkowski describes Union Carbide as a "shamed but staunch" corporation (Lepkowski, 1994: 24). Though Union Carbide is now less than a sixth the size it was before Bhopal (Lepkowski, 1994: 25), it is far from clear that this shrinkage is the result of any punitive action, much less that it reflects a market disinclination to reward unethical corporate behaviour. Admittedly, Union Carbide stock dropped dramatically from \$60 to \$30 per share in 1984 (Lepkowski, 1994; 28). However, the causes of this drop are unclear. Union Carbide resisted a hostile takeover attempt, divesting itself of some of its most profitable businesses (Lepkowski, 1994: 29). As one analyst notes: "The cost of compensating the victims of Bhopal pales compared with the debts incurred in fighting the takeover, the legal and banking fees and golden parachutes" (inLepkowski, 1994: 29). Yet another analyst says: "Clearly, by any objective measure ... UCC and its managers benefitted from the Bhopal incident, as did UCIL. They were politically able to close a burdensome plant, take aggressive actions to restructure both companies, and enhance management benefits It is ironic that a disaster such as Bhopal [would] leave its victims devastated and other corporate stakeholders better off" (in Lepkowski, 1994: 30). Finally, Ward Morehouse comments: "It is naive to think that Carbide's ... stock buy-back and divestment maneuvers were motivated solely by its defense against the takeover. Just by coincidence, these steps also placed a significant proportion of Carbide's assets beyond the reach of victims of that disaster, and effectively immunized the company against a consumer boycott" (in Lepkowski, 1994: 30). Ultimately, an Indian court had to order Union Carbide to maintain \$3 billion in assets, "a sum equal to the size of the Indian government's damage claim against Carbide," (Lepkowski, 1994: 30). When the "settlement" of US\$ 470 million was announced, "the price of [Union Carbide's] shares on the New York stock market rose by \$2" (Cassels, 1993: 224).

Manipulation of State Governments

The goal of alleviating poverty by attracting TNC-provided development leads state governments into the heart of risk society's contradictions. As Pearce and Tombs note: "It is questionable whether it was possible for UCIL both to make pesticides safely *and* to sell these pesticides at a profit. In the event that they could not do so, either the company could have engaged in safe 'uneconomic' production, or it could have produced less safely but more

33

economically," (Pearce and Tombs, 1993: 200). Had the Indian government forced Union Carbide to comply with reasonable standards of safety, they would have faced the 'threat of capital flight.' Furthermore, state governments often lack the technological know-how to enable them to monitor the production hazards of TNCs (Cassels, 1993: 30), and where the state is a part owner in an enterprise, as the Indian government was with UCIL, the government is in the contradictory position of regulating itself (Cassels, 1993: 38).

In the aftermath of Bhopal, Union Carbide would strategically refer to India's regulations requiring a certain percentage of Indian-held shares, and India's incentives to produce fertilizers and pesticides for the so-called "Green revolution" as having forced UCIL to produce dangerous chemicals in Bhopal (Pearce and Tombs, 1993: 200-201; Cassels, 1993: 34).

Union Carbide in Bhopal:

The Myth of the Chastened Corporate Person

The words "Union Carbide in Bhopal" conjure up quite different meanings for different readers. A Canadian pro-business ethics article, which makes no other reference to either Union Carbide or the Bhopal gas leak, begins: "Cynics who stubbornly hold that ethics don't effect the bottom line would do well to consider these four words: Union Carbide in Bhopal" (McCallum, 1994: 21). McCallum is confident that "Union Carbide in Bhopal" resonates with the dire financial consequences awaiting unethical businesses. With these four words we are assured that unethical business is unviable business. On the other hand, Jaising and Sathyamala write, "It is almost as if they have succeeded in erasing the event from human memory and public consciousness" (Jaising and Sathyamala, 1992: 103). These versions of public memory of "Union Carbide in Bhopal" resonates with the false assurance that TNC irresponsibility is punished, wrongs are righted, and TNCs are chastened into more ethical behaviour by the economic consequences of disaster.

Such false assurance depends on our collective forgetfulness of human suffering and TNC accountability evasion. Against this collective forgetfulness, and as a direct result of story control efforts by Union Carbide, a counter-discourse arose from medical non-governmental organizations (NGOs) as they raced, with incomplete knowledge, to treat the dying and injured. NGOs like the Morcha and the Medico-Friends Circle (MFC) stood

34

"between the muteness of the victim and the propaganda of the State" (Visvanathan, 1986: 155). Medical NGOs focused on meeting the medical needs of victims as the full impact of MIC on human beings became apparent. Given the story control efforts of Union Carbide in tandem with the Indian government, medicine-focused NGOs were forced into political activism. Whereas the MFC sought to reconcile victim experience with formal medical science, the Morcha mixed medicine and politics, becoming increasingly militant, and ultimately providing up to 220 of the controversial anti-cyanide injections a day. "If MFC represented the power of voluntarism as 'counterexpertise,' the Morcha added to it the dimension of political protest" (Visvanathan, 1986: 158). On June 24, 1984, the government brutally "raided" a Morcha rally, beating many activists. With many medical professionals frightened off by the violence and a subsequent raid on a clinic that had been set up on Union Carbide property, "voluntary work, especially relief in Bhopal, [was] literally at a standstill" (Visvanathan, 1986: 160).

Visvanathan is scathing in her condemnation of responses by trade unions and opposition political parties. She holds that all such groups showed themselves to be "caught in the grid of modernity, which sees industrialism as good and inevitable," and consequently "saw the victim as an embarrassment" (Visvanathan, 1986: 163). Besides initial disorientation by apocalypse, victims were poor and many experienced a "sense of psychological squalor" (Visvanathan, 1986: 151). Thus, the consolidation of local voices following the Bhopal disaster depended on NGO facilitators. Visvanathan argues:

The voluntary organizations had to substitute for [unions and opposition political parties]. Voluntarism in this context has a double responsibility. It has to redeem, not only the traditional idiom of power, but also the repressive nature of modern knowledge. As mediator between the state and its people, it is not only the refractor of power, but the proponent of *an alternative ecology of knowledge*. In Bhopal it was not only the victims—as politically defeated people-

-that they had to protect but also their voice, their memory, their right to their own vernacular of pain and distress. (Visvanathan, 1986: 163—my emphasis)

Facilitators, and medical professionals in particular, worked to protect the "alternative ecology of knowledge" formed at the site of TNC ir/ responsibility—the bodies of the victims—from being stitched out of sight during dominant "reality's" rehabilitation.

To believe that "Union Carbide in Bhopal" represents an agency profoundly chastened by *financial* retribution for wrongdoing is to wilfully ignore the possibility that Union Carbide benefited financially from the disaster, or at most, suffered a negligible loss. (Union Carbide continues to rank as one of Fortune's 500 American Corporations). What is more, to believe that any financial retribution could settle the account represented by "Union Carbide in Bhopal" is to forget the *human* suffering inflicted in Bhopal—suffering that was perpetrated by Union Carbide's management failures and/or waning interest—suffering that was *intensified and prolonged by Union Carbide's active efforts* to evade social accountability.

TNC Accountability Evasion

As I have indicated, industrial disasters tear dominant "reality," openinga rift in public complacency about a TNC's relationship with society. With the first indication of large scale death by industry, the stitch-up of dominant "reality" begins. Survivors, dependents of victims, political officials all assume the priority of their version of events. This assumption strengthens an established, pre-disaster power imbalance by weakening the positions of victims and their representatives while strengthening the TNCs.' "Union Carbide in Bhopal" demonstrates the following tactics available to TNCs in their attempt to evade accountability in the aftermath of an industrial disaster:

1) Immediate strategic response: The TNC begins story-controlling tactics immediately, at a time when victims are still focused on surviving—whether physically or emotionally. As a self-interested agent, the TNC is immediately conscious that it needs to manipulate the construction of public memory of the event to protect itself from financial impact. Survivors take time, on the other hand, before they can see the lives/deaths of their family members in financial terms; they must also learn to see the TNC, with whom they have co-habitated peacefully up until the disaster, as a self-interested opponent in the adversarial legal "settlement" process.

2) *Problematize documentary evidence:* The TNC hires sources of alternative expert "knowledge" to construct documentary versions of the disaster and its consequences that can either replace or at least profoundly

challenge the documents put together by government or advocacy agencies. The focus of such TNC-

sponsored documentary expertise is technological areas, that is, areas which defy common sense: medicine, engineering, financing, and statistical analysis.

3) *Scapegoat:* The TNC blames in conformity with prevailing social prejudices, in an attempt to shift the focus of blame off itself and its agents.

4) Legal maneuvers: The first three accountability evasion activities contribute to the TNC's capability to evade accountability in legal form. "Union Carbide in Bhopal" is clear evidence that existing structures present un-met promises, rather than clear routes to compensation, punitive measures, and improved safety.

5) Manipulate state governments: Perhaps the trump card of transnational accountability evasion, TNCs can threaten to leave, taking jobs and economic, technological, and broader social benefits with them. This "threat of capital flight" places state governments in a terrible bind, even in the attempt to develop reasonable safety regulations (and then enforce them) in the wake of the disaster. Further, TNCs can blame state governments for investment and/or development restrictions that stipulate levels of domestic involvement in industrial production/ownership. Also, the technological complexity of TNC operations can conspire with joint ownerships—TNC with state government—to leave the government not only regulating a technological process that it lacks the cutting-edge expertise to understand, but also one in which it is a financial *partner*.

6) *Restructure*: The TNC immediately shuffles its resources to ensure it is protected from traditional punitive measures: it can sell off profitable businesses, and also sell subsidiaries which make consumer products so that brand-identified boycotts become impossible. Without brand-identification, it's impossible to know where a particular TNC's product is integrated into the consumer products of other corporations. Also, they can ensure that any risky activities of enterprise are segregated in smaller corporations which may be protected by the corporate veil—thus shielding assets from claims in future accidents (Hansmann, 1991).

7) Replace local experience with transnational myth: TNCs can take advantage of the tendency of public attention to turn from events like industrial disasterwithout following through to compensation or punishment of culprits. Three major objectives of victims and dependents arise in the aftermath of disaster: to recover lost income (ie. to replace those material

37

resources destroyed by the disaster), to minimize ongoing/future risk by improving safety practices, and to achieve palpable punitive measures against TNCs. These are either defeated or drastically curtailed by TNC accountability evasion. For a time, however, local memory resists the stitchup of dominant "reality," as grassroots movements form to articulate the victims' needs and demands. These alternative discourses attempt to legitimize the victims' version, and thus to challenge TNC hegemony; they only gain comprehensive voice once international haggling over the price of local bodies is well under way. Even though grassroots demands are defeated or profoundly curtailed by the TNC and state governments, the stitching of dominant "reality" remains visible—some local memories of TNCs as unpunished culprits linger.

Warren Anderson accepted moral responsibility in the glare of the international media, then subsequently sanctioned the use of every tactic mentioned above to limit the financial impact on the corporate person, Union Carbide. There are still calls in Bhopal for Anderson to be prosecuted on criminal charges.

2. TNC ACCOUNTABILITY EVASION IN CANADA:

THE SINKING OF THE OCEAN RANGER

There is an extensive body of literature analysing the social and organizational contradictions which led to the Bhopal gas leak, and these have been drawn together by Paul Shrivastava to define the "anatomy" of industrial disasters or "crises" (Shrivastava, 1987; 1992; 1994a:b). This "anatomy" of industrial disaster is now widely used to analyze other situations where industrial disasters cause major damage to human life and social/natural environments. Now, however, I want to extend the paradigm to cover what we have been calling the "accountability evasion" of responsible TNCs. For our purposes, this model of TNC accountability evasion provides a framework for organizing the fragmented, anecdotal information we have about the aftermath of a Canadian industrial disaster-the sinking of the oil rig Ocean Ranger. Referring to the tactics of TNC accountability evasion identified in Section 1, we can: frame the information that has already been collected about the aftermath of the Ocean Ranger disaster, we can identify areas where information may be submerged in the privacy of the out-of-court settlements and/or not yet collected, and we can begin to isolate tactics used by Union Carbide in Bhopal that were not used in the Ocean Ranger aftermath with a

view to understanding TNC behaviour as a strategic, essentially defensive reaction to environments.

St. John's Newfoundland, the Sinking of the Ocean Ranger

On February 15, 1982, the oil rig Ocean Ranger sank off Newfoundland in a winter storm. All 84 workers died. Of the 69 Canadians killed, 56 were Newfoundland residents. The crew abandoned the rig and died either while launching the lifeboats or when the lifeboats sank or capsized (Royal Commission on the Ocean Ranger Marine Disaster, 1984: 122). Autopsies on the 22 recovered bodies revealed that all these men had drowned while in a hypothermic state. The rig itself is believed to have capsized and sunk roughly two hours after it was abandoned. A US Coast Guard Report, a US National Transportation Safety Board Report, and the Canadian joint federal-provincial Royal Commission on the Ocean Ranger Marine Disaster (Royal Commission, 1984) all indicate that responsibility rests with Ocean Drilling and Exploration Corporation (ODECO)-a subsidiary of Murphy Oil Corporation-and with Mobil Oil of Canada Ltd (MOCAN). At the time of the Ocean Ranger's sinking, "ODECO was responsible for the rig and the crew and Mobil was responsible for the well" (Royal Commission, 1984: vii). However, as the Royal Commission established, Mobil's senior drilling personnel had effective authority over ODECO's marine "Master"-the Ocean Ranger was seen by both TNCs and federal and provincial governments as a drilling platform first and foremost (Royal Commission, 1984: 37). ODECO/MOCAN responsibility derives from their failure to train crew members in basic systems operations; the absence of a chain of command defining marine decision-makers from drilling decision-makers; and the absence/disrepair/worker-ignorance of available safety technologies (Campbell and Dodd, 1993; O'Neill, 1984; Royal Commission, 1984).

On the evening of February 14, an unusually high wave struck the "leg" of the rig which housed the ballast control room. A glass portlight broke and seawater doused the electronic panel which controlled the rig's stability. No one on the rig understood the ballast system well enough to appreciate the gravity of the problem. The ballast control operators' attempts to control the system manually—without either adequate training or an operations manual—led to the sinking (Royal Commission, 1984: 90-99).⁴

Little academic analysis has been done of either the organizational failures that led to the Ocean Ranger disaster, or its social impact. Brian



O'Neill drives home the inaction of Canadian politicians at both federal and provincial levels, and more distressing, the capability of politicians to distance themselves from the fact there were no Canadian safety regulations specific to offshore drilling operations prior to the Ocean Ranger's sinking. Furthermore, the American Coast Guard regulations that did exist were not enforced (O'Neill, 1984; cf Royal Commission, 1984: 48). Douglas House (1985) presents a comprehensive account of the difficulties facing labour organizers attempting to break into the offshore workforce, and the provincial and federal governments' failure to act soon enough to avert disaster with adequate regulation and enforcement. House also facilitated the collection of accounts of the mourning and coping experiences of Ocean Ranger families, (House 1987), Ray Hawco outlines the coordinated efforts to assist families through mourning, the terrible pressures on corporate employees responsible for informing families and identifying bodies, and he argues for the need for on-shore response plans to industrial disaster (Hawco, 1992). And, in the precursor to this article, Mary Campbell and I raise the question of the contradictory promises and outcomes of the so-called "settlement" process that Ocean Ranger families went through with MOCAN-ODECO (Campbell and Dodd, 1993; Dodd, 1993).

However, there remains a disturbing lack of analysis of TNC behaviour in the aftermath of this disaster, and there is almost no public discussion of the fact that neither Mobil nor ODECO suffered punitive action for the negligence which cost 84 lives. All families of these 84 men settled out-ofcourt. Although the settlements are private, sources indicate that most families settled for around \$45,000 for single men with no dependents, and between \$300,000 and up to \$1 million for married men with children. In total, the group of families known as the Ocean Ranger Claimants Committee settled with Mobil Oil and ODECO for about \$20 million (O'Neill, 1985). O'Neill speculated in 1986: "ODECO may have to pay out as much as \$100 million or more in legal suits and fees, a figure approximating the cost of a new drilling rig (the Ocean Ranger ... was insured). Mobil's legal expenses will likely be much smaller." Furthermore, it is unclear how much ODECO recovered (if anything) from suits it launched against other corporations-the lifeboat manufacturers, and the insurance company for the catering company on the Ocean Ranger (Oil Week, April 4 1983: 6).

Strategy First

40

The aftermath for Ocean Ranger families began with their notification that the rig was in trouble and the men had gone to the lifeboats. Because many of the men were employed by companies who subcontracted to Mobil, the initial contact varied greatly. In some cases, company notification of events came after media broadcasts of the same information. Margaret Blackmore, whose husband was a Medic/Radio Officer on the Ocean Ranger, says: "...I called ODECO. They told me: 'We don't know what's going on out there, but we'll let you know.' That was the last I heard until I heard-on Canada AMthat the rig had sunk. The next time ODECO contacted me was one daysometime around the funeral-when two men came out to see me with a cheque" (Dodd, 1992). Given that ODECO is described by the Economist as "one of the most experienced offshore rig designers and operators in the world," (Dodd, 1993) it is highly probable that this response was strategic rather than disorganized. Shortly after the Ocean Ranger's mayday call reached St John's we may assume that legal and technical-informational resources were being gathered at ODECO's head office in New Orleans.

Problematizing Documentary Evidence

The Royal Commission Report provides some hints as to where ODECO was most *interested* in the Commissioners' public report. Various points in the Commissioners' account of events are interrupted by interjections—into the text-

-of an alternative possible course of events by the "Counsel for ODECO." These tend to be points at which human error and technical failures overlap, particularly in matters concerning the broken portlight, how much water came into the ballast control room when the portlight broke, and what effect the seawater had on the ballast control panel (Royal Commission, 1984: 61,62,91,95). ODECO's counsel asserts that the portlight must have been broken by debris, rather than by sheer water pressure, that the water which entered the ballast control room and covered the control panel did not cause switches to short circuit, and that, ultimately, human error—from the failure to close the cover on the portlight given the bad weather, to the use of the manual ballast control option—was the cause of the Ocean Ranger's fatal loss of stability. However, the Royal Commission explains: "It is difficult to accept the argument by ODECO counsel that the ballast control operator would insert the manual control rods as a precautionary measure if the ballast

control console was operating normally. The operators on board had never used the rods..." (Royal Commission, 1984: 96). It would appear that ODECO's counsel was trying to deflect attention away from flaws in the rig they had designed and their failure to train their personnel, and toward a failure of "common sense" in their untrained ballast control workers. The Royal Commission states a clear opinion on the interconnection of technological failure and human error:

Each event and action which contributed to the loss of the Ocean Ranger was either the result of design deficiencies or was crewinitiated. The disaster could have been avoided by relatively minor modifications to the design of the rig and its systems and it should in any event, have been prevented by competent and informed action by those on board. Because of inadequate training and lack of manuals and technical information, the crew failed to interrupt the fatal chain of events which led to the eventual loss of the Ocean Ranger. It is, nevertheless, the essence of good design to reduce the possibility of human error and of good management to ensure that employees receive training adequate to their responsibilities. (Royal Commission, 1984: 99)

Because crew members inaccurately assessed the situation resulting from the seawater's coverage of the ballast control panel, little documentation or formal reporting of its failure was made. Hence, "conclusions regarding theeffect of the water on the equipment in the ballast control room are drawn from VHF radio conversations overheard [by crewmembers on nearby vessels]," as well as from evidence recovered from the sunken rig (Royal Commission, 1984: 89). The weakness of the documentary evidence about the technical failures of the ballast system permitted ODECO's counsel to interrupt the Commissioners' narrative which might otherwise have drawn an incontrovertible causal line between design flaws and the loss of the lost control of the ballast system, there was nothing to impede the unreflective attribution of the disaster to the ferocity of February's North Atlantic, obscuring ODECO's and Mobil's failure to provide standard safety equipment and to train its employees in their use.

Both ODECO and Mobil had histories of manipulating records/ certifications on the Ocean Ranger. Ballast control procedure was to "fabricate" records about the tension of anchor chains (Royal Commission, 1984:

47). At the time the rig and crew were lost, ODECO still had not met the safety standards stipulated when it received its Certificate of Inspection from the US Coast Guard in 1979 (Royal Commission, 1984: 22).⁵ Furthermore, the crew had resisted reporting—to either Mobil onshore authorities or appropriate government authorities—a serious incident on February 6, 1982, involving ballast control when the men had been called to the lifeboat stations (Royal Commission, 1984: 51). This incident clearly indicated that the "master" of the rig did not know how to use the ballast system—not surprising, in that it was his first shift out after having been land-based for the ten years previous (Royal Commission 1984: 50). Mobil's most authoritative worker on the Ocean Ranger and ODECO's shore-based Superintendent "had lost confidence" in the master, but did not move to replace him. Hence, the Royal Commission suggests that "the master was only on board in order to comply with US Coast Guard Regulations" (Royal Commission, 1984: 50).

Scapegoating

If the oil companies anticipated further government subsidized involvement in the Newfoundland offshore, then neither Mobil Oil nor ODECO/Murphy Oil could afford a nasty public battle of scapegoating. Whereas in the Bhopal disaster Union Carbide was unabashed about public litigation, the TNCs involved in the Ocean Ranger case had much more to lose by entering into a public legal case with the widows and parents of their victims: Mobil Oil and Murphy Oil, the parent company of ODECO, are now shareholders in the Hibernia oil project off Newfoundland (*Globe and Mail*, March 26, 1993 p. B6; O'Neill 1984,6). Thus, we can speculate that TNC will to settle was relatively strong in the Ocean Ranger case.

Also useful to Mobil and ODECO might be the fact that since 1977 Newfoundland had a local hiring policy for the offshore (House, 1985: 15). The Royal Commission Report contains an indication that ODECO agents attempted to shift blame onto the failure of Canadian regulations and the failure to have American marine certifications:

ODECO's stated operating policy was to ensure that an adequate number of its industrial crew would hold the marine licences required by the US Coast Guard. In fact only one employee, the rig mechanic, had marine certification. The operations manager of ODECO based in St. John's testified that he relied upon the master to ensure that the US Coast Guard manning requirements were

met. He stated that maintaining the required number of marine crew was complicated by the high percentage of Canadians on board because Canadian marine certification was not accepted by the US Coast Guard. No evidence was given, however, as to the number of Canadians with marine certification. In fact Canadian regulations did not require marine training or certificates for crew members employed on rigsoperating offshore. The explanation given by ODECO's operations manager, who was responsible for selecting and hiring all new employees, was not persuasive. (Royal Commission, 1984: 38)

The decision to operate the Ocean Ranger with untrained ballast control operators and without qualified lifeboat operators reflects Mobil-ODECO's drilling focus which omitted safety concerns relevant to the rig's marine environment. Mobile-ODECO reference to Canadian local preference hiring policy and lack of Canadian Marine regulation is a suble form of scapegoating intended to compliment the scapegoating of the ballast control operators themselves.

Legal Tactics

By February 20, 1982 the legal ramifications of the disaster were becoming public in St John's, as the Evening Telegram reported:

The legal outlook is entangled in the multinational nature of the offshore drilling operations, the fact that the victims were employed by a dozen different companies, uncertainties in US and Canadian law, and even the constitutional dispute between Ottawa and Newfoundland about jurisdiction over the continental shelf where the rig went down.

Both American "ambulance chasers" and "company" lawyers moved quickly: a lawyer who worked for Mobil remembers, "You could pick out the lawyers from New Orleans on the streets by what they *weren't* wearing. They had no notion of winter—with summer weight shoes and light top coats" (Dodd, 1992). Some American law firms sent "point men" to scout potential tort claimants for clients. Some families approached by American lawyers were appalled by what they saw as mercenary tactics and engaged local lawyers settling before any of the enquiries had been conducted (Campbell and Dodd, 1993). Most families, however, joined the "Ocean Ranger Claimants'

44

Committee," and were represented by St. John's lawyers who consulted American lawyers. Most families stayed in Canada, accepting settlements roughly double Canadian precedents. However, two families, each of whom had lost a son, split with the Claimants' Committee, persuaded by Texas lawyer Benton Musslewhite that pursuit of ODECO into American jurisdiction might be successful. Though they did not ultimately win American jurisdiction, they did settle with ODECO in the US, winning some ten times the settlements of comparable cases settled in Canada. The story of these settlements contains astonishing parallels to the Bhopal litigation-in fact, Benton Musslewhite would also take part in the Bhopal litigation (Evening Telegram, May 15, 1986). Also, of course, were the questions of American parent responsibility for subsidiaries and "American interest" relevant to winning jurisdiction in US courts. As in the Bhopal case, the issue of relative dollar values for lives arose as claimants from Canadian families sought "compensation" equal to that awarded to American families for their loss (Evening Telegram, July 14, 1984).

Because the Ocean Ranger settlements were all made out-of-court, the negotiations are not immediately accessible. However, discussions with lawyers and plaintiffs indicate that the assignment of negligence seems to have been the least contentious part of the Ocean Ranger settlement process. ODECO does not seem to have vigorously opposed the Claimants' case that it was negligent because of the rig's design. The most difficult legal issues for the settlements were; to what extent would the Claimants' case be restricted by the no-fault provisions of Newfoundland's Workers' Compensation scheme; and if Workers' Compensation permitted suits, where should they be heard-in the US, home of the responsible parent TNCs, or Canada, the home of the majority of victims and subsidiary companies? Newfoundland's Workers' Compensation Act was amended, giving the Board the discretion to permit tort action against an employer even as it provided compensation to the employee/dependents. In the event of a successful action, the compensation was to be repaid, although the Board also had the option to "release its claim" on the money (Newfoundland Workers Compensation Act, Chapter W-11, Part IV). These are, I believe, provisions that were made to support Ocean Ranger families as they waited out their tort action suits against **ODECO** and Mobil.

45

Restructuring

This particular accountability evasion technique was not necessary for the TNCs' survival after the sinking of the Ocean Ranger. Responsible TNCs must have recognized very quickly that the settlements could not be a threat to the integrity of the corporate person, as they might have been for Union Carbide—and certainly were for UCIL. However, ODECO seems to have disappeared from the Newfoundland oil industry, though its parent company Murphy Oil remains: Murphy Oil purchased 6.5% of the shares in the Hibernia oil development project that were "shed" by Gulf in 1993. Mobil's share in Hibernia increased to 33.125% (*Globe and Mail*, March 26, 1993: B6).

Manipulation of State Governments

The unemployment situation in Newfoundland hardly makes for a receptive audience for critics of the few TNCs bringing jobs and money to the province. As O'Neill notes: "as much as \$4 billion (in 1982 dollars) had been spent on East Coast offshore exploration by the time of the Ocean Ranger disaster. Roughly 80% of this amount-over \$3 billion-was provided by Canadian taxpayers in the forms of tax allowances and outright grants to the oil industry" (O'Neill, 1984: 6). The level of government complicity with the TNCs in stitching up dominant "reality" in the wake of the Ocean Ranger disaster cannot be dealt with here. However, it is worth noting that when pressed by an NDP Member to indicate whether criminal action would be taken as a result of the Ocean Ranger disaster, Marc Lalonde, then Minister of Energy, Mines and Resources, responded that "If there is critical liability or criminal liability which might be involved. I assume that this will be the subject of the conclusion by that commission of inquiry" (Hansard, Commons Debates Feb 16 1982: 15044). There is no indication that the Royal Commission was exploring possible criminal responsibility; rather, the Royal Commission Inquiry appears to have been a forum for providing ODECO and Mobil with "their day in court" without any punitive possibilities.

Local Experience is Overwhelmed by Transnational Myth

Against the forgetfulness that facilitates TNC accountability evasion, a group of family members and NGO facilitators, called the Ocean Ranger Foundation, struggled to sustain the alternative ecology of knowledge

46

belonging to the families. Initially acting as a support group and an information resource, the "Foundation" ultimately became a lobby group pushing for the implementation of the Recommendations of the Royal Commission until its provincial-federal funding was cut in 1985. One clear legacy of the Ocean Ranger disaster is that the Canada-Newfoundland Offshore Petroleum Board, which is responsible for ensuring industry compliance with Canadian regulations, includes an extensive presentation on the causes and regulatory responses to the Ocean Ranger's sinking in safety presentations conducted regularly with industry workers (Cook, 1995). However, despite the efforts of the Foundation, in some ways the story of the Ocean Ranger has disappeared as effectively as the rigitself. Cle Newhookformer executive director of the Ocean Ranger Foundation-remembers that the press information package that was distributed at the signing and celebration of the 1985 Hibernia development deal between Newfoundland, Canada, Mobil, and other oil transnationals, contained a history of the offshore oil industry in Newfoundland-

-in which there was absolutely no mention of the Ocean Ranger, or the 84 men whowere lost with it. On the tenth anniversary of the sinking of the Ocean Ranger, Newhook said: "For all intents and purposes the Ocean Ranger has faded to the back of public and corporate memory" (*Globe and Mail*, February 15, 1992). On the other hand, one of the mothers who pursued ODECO in attempts to win US jurisdiction says: "When the press calls me on the anniversary to ask how I feel, I say, 'Rotten.' I feel rotten ten years after, I'll feel rotten 20 and 30 and 40 years after" (in Campbell and Dodd, 1993). A widow says of the TNCs: "They were negligent, that's clear. But they haven't been hurt, and really, they probably haven't changed. When there's money to be made, nothing matters, not safety, not environment, nothing. Money is important, I know, but so are other things" (in Campbell and Dodd, 1993).

Although accident and fatality rates are higher in the offshore petroleum industry than in other comparable industries, House explains that TNCs build on the following myth in response to the question, "What causes a higher accident rate offshore?":

The offshore oil industry is portrayed as a romantic battle against the elements, a new and exciting chapter in mankind's struggle for the mastery of nature. Personal risks to life and limb are presented as an integral part of this struggle, as the unfortunate but Dodd/ TNC Industrial Disaster Strategies necessary price that has to be paid for continued industrial progress. Such a view pervades the thinking of governments, the media, the general public, and even offshore workers themselves. It is, however, specious and does not stand up to empirical investigation. (House, 1985: 31-32)

The marine nature of the Ocean Ranger disaster saved the TNCs much work in stitching dominant reality: coastal provinces like Newfoundland have long histories of marine death and there is a strong tendency to see death at sea as something to be borne as gracefully as possible---not questioned closely or attributed to negligence. This may explain something of the shift in broader social attitudes toward the widows and parents of Ocean Ranger victims during the "settlement" process. Initially, public opinion was fully empathetic with the families. However, as the settlement negotiations and Royal Commission "dragged on," the women I spoke with became increasingly sensible of broad social perceptions that they were "making money off the backs" of their dead sons/husbands, or that they were chasing after "blood money" (Dodd, 1992; cf House, 1987; Campbell and Dodd, 1993). Although they generally agree that the "compensatory" function of their settlement was met-in so far as it served to "replace lost income" (excluding any calculus of pain, suffering or loss of life)-all agree that the punitive promise of tort law was not met. This is true even-perhaps especially-of the two women who pursued ODECO into the US. Of the small sample of families I spoke with, most felt that there is an exaggerated local perception of the size of their settlements. When these last two families settled, the headline in the Evening Telegram was: "Going to U.S. courts has paid off for two Newfoundland families who sought compensation for sons lost in the loss of the Ocean Ranger drill rig four years ago ... " (Evening Telegram, May 15 1986). This headline blatantly ignores the punitive intent of the family's tort pursuit to the US, and contributes to the broader social conception of these families acting out of pecuniary motives. It also misses the relative insignificance of the settlements for the TNCs in question (cf Dodd, 1993).

47

However real the suffering of ODECO employees of Newfoundland who lost co-

workers and friends, (cf Hawco, 1982) as 'one of the most experienced offshore rig designers and operators in the world' ODECO had institutional knowledge of all the safety technologies available and in use in the North Sea, as well as the probability of loss of life on a drilling rig. Precisely because

48

TNCs are essentially legal and financial beings, they can be expected to remember certain costs of industry—Mobile and ODECO were certainly aware of the financial impact of the loss of lives in the North Sea drilling industry and in the Gulf of Mexico before the Ocean Ranger loss.

3. LIMITING TNC ACCOUNTABILITY EVASION:

DISCIPLINING THE CORPORATE PERSON

TNC accountability evasion following the Ocean Ranger disaster was far more subtle than that which followed the Bhopal gas leak. In large measure, this can be attributed to the three inquiries by government agencies which institutionalized consistent accounts of the Ocean Ranger disaster and thus limited the information control opportunities available to the TNCs. Though some TNC strategies are common to both "developed" and "developing" hemispheres, the economic disadvantage of Southern "developing" states vastly increases their susceptibility to victimization through industrial disaster and its aftermath (Pearce, 1993; Cassels, 1993; Shrivastava, 1994b). In a sense, the dramatically different cultural and economic environments in which the Bhopal and the Ocean Ranger disasters occurred make the structural parallels all the more striking. As well, the contrasts in TNC response in these two cases demonstrate the strategic nature of TNCs as selfconscious agents adapting to their environments.

A TNC is a "corporate person," with its own narrative life-story and its own primary instinct for self-preservation. Accountability evasion exercises the flexible, reactive capability of TNCs to organize information in a strong sense of defining and articulating what is legitimate, to the exclusion of what is not (Douglas, 1986: 47). Accountability evasion protects the corporate person on two fronts, legal and investor/worker: legally the corporate person needs to control public memory of events to minimize impact on its financial body, and the corporate person needs to control public memory also to protect itself as an institution, hence against loss of investor/worker complacency within the TNC's social environment. As our outline of accountability evasion tactics show, TNCs stitch dominant "reality" together over the suffering bodies of their victims by profoundly influencing social memory. A TNC is able to refer to the "naturalness" of its place within market society, and as an institution a TNC causes its individual constituents to "forget experiences incompatible with its righteous image, and it brings to their mind events which sustain the view of nature that is complimentary to itself. It

49

provides the categories of their thought, sets the terms for self-knowledge, and fixes identities" (Douglas, 1986: 112).

The ability of the TNC to write its own narrative life-story, and thus to evade accountability for its injuries against other agents and their property poses grave problems for liberal-democratic law. Hence, the absence of punitive action taken against Union Carbide and ODECO-MOCAN is no more an aberration than the disasters are themselves. TNC accountability evasion is structurally permitted within legal systems and broader societal conceptions of risk, injury and blame. These have been conceptions of market society during industrialism, however, as we become conscious of ourselves as a market society cum "risk society" (Beck, 1988/92) our paradigms are shifting. One indication of this shift is a rethinking of the laws of causality---in the scientific, industrial paradigm, strict causality was demanded for both legal and scientific-medical proof (Beck, 1988/92: 63; Cassels, 1993: 84). In risk society, concepts of causality are mutating; we can no longer expect to find single chains of causality: perpetrators-to-actions-to-events-to-consequences. Corresponding to this is a current problematization of agency and responsibility in legal and philosophical debates (Dan-Cohen, 1992; Campbell, 1994; Bergson, 1993). In "risk society," we must search through the synergistic interaction of multiple variables, tracing our way back through manifold causality. The continued adherence of legal practice to strict causality leaves us increasingly vulnerable to TNCs and in particular, to their strategic interference in the construction of public memory.

In current legal debates, this problem is reflected in the re-thinking of basic legal entities: in attempts to draw lines of responsibility and hence accountability around TNCs, their middle managers, and executive officers there is a growing awareness that the fundamental liberal-common law distinction between "legal persons" as actors, and property as that which is acted on, cannot cope with the peculiar actor-property-institutional nature of corporations. As the "Union Carbide in Bhopal" and the Ocean Ranger cases demonstrate, the sheer size and fragmented identity of TNCs in subsidiaries obscures responsibility, and makes accountability more difficult. These difficulties nullify neither the possibility nor the political imperative of achieving TNC accountability and consistent compensation programmes.⁶

Paradoxically, while international legal haggling over the price of local bodies ultimately averts attention from victims/dependents as dominant "reality" is rehabilitated in the disaster's aftermath, this same haggling can force the limitations—and possibilities—of liberal-democratic law into stark

50

relief against TNC accountability evasion. Liberal-democratic law has not concerned itself historically with systemic power imbalances, nor with technologically privileged information control. The following debates within legal discussions indicate that liberal-democratic law is beginning to re-think itself, with precisely these issues in mind.

Recovery of Lost Income: Tort and Workers' Compensation

Canada, India and the US all have Common Law systems. In both Bhopal and Ocean Ranger cases, plaintiffs attempted to pursue TNCs back to their "home jurisdiction" in America, the Common Law system which most emphasizes the "tort," "private," or "civil" law strain of their British legal heritage. "In law, a tort is said to arise when one party, intentionally or unintentionally, engages in an action which violates the rights (those associated with either effective commodities or resources) of another and thereby causes the latter party to sustain losses" (Mercuro and Ryan, 1984: 76). In India, as in Canada, there remains a strong burden of proof on the plaintiff, to show that the defendant was intentionally negligent, and hence, directly responsible for injury. As well, Canadian and Indian awards tend to rely on the traditional calculus, which seeks to replace lost income, generally to the exclusion of hedonic or punitive damages. Thus, Indian and Canadian awards represent the projected market value "of the estimated future stream of the deceased's earnings" (Bruehler, 1993: 2). In the US, however, there is an increasing likelihood of receiving "hedonic" damages. Hedonic value-of-life assessments are seen "as a signal to those making choices about the value of the risks attending to each potential choice" (Bruehler, 1993: 2). Hedonic damages awards then, are calculated according to a re-construction of the probabilityassessments of the perceived risk which culminated in the tort. What we see at work here is a shift away from the strict causality required in the traditional assessment of torts. Acceptance of hedonic value-of-life awards indicate an awareness of incremental blame-that a sequence of decisions based on risk calculations can be attributed to both the claimant and the defendant, reconstructed and weighed against one another after the fact. Further, American tort law rules more frequently in favour of the plaintiff, and as a function of the frequent use of jury trials, awards are much higher. Hence, as we saw, both the Bhopal victims' and the Ocean Ranger Families' litigation were radically altered by the sheer possibility of access to American tort law.

51

A flurry of industrial disasters in the 1980s and subsequent explosion of the number and sizes of personal injury awards in the US has resulted in a rethinking of tort in Common Law systems (American Law Institute, 1991). More frequently, plaintiffs band together to pursue a "class action" in the aftermath of industrial disaster. The most cited cases are the settlements won by Vietnam vets from the producers of Agent Orange, the ongoing asbestosrelated disease suits, and, of course, the Bhopal disaster litigation. Such mass tort claims have a number of similarities: "they result in the filing of many suits, they produce high litigation costs; they are generally resolved only after great delay; they affect not only litigants but other users of the court system; and their total human and economic costs affect all of society" (Rubin, 1986: 427). The "true" costs of mass litigation following disasters is impossible to calculate particularly in the Bhopal disaster, and others like the Hawks Nest Pass disaster, where plaintiffs died waiting for compensation (Dembo et al., 1990). One thing that is clear, however, is that just more than a third of income generated by the settlement process goes to plaintiffs. For instance: "Asbestos litigation has resulted in far more expense than in recovery of damages for injured persons. A Rand Corporation study estimated that injured persons receive less than thirty-seven percent of the total amount spent on litigation. Almost two-thirds of the total expenditures are for attorney's fees and other litigation expenses" (Rubin, 1986: 429).

Both the Ocean Ranger settlement process and the Bhopal litigation conform to 1980s patterns in tort proceedings in America, in so far as: both plaintiff and defense attorneys "organized their efforts" and "exchanged data"-a growing trend in mass litigation (Rubin, 1986: 438). As well, the "ambulance chasers" and "company lawyers" seem to be forming a new international legal expertise: "On both sides, specialized counsel are more frequently appearing as trial counsel that once would have been tried by less experienced counsel" (Rubin, 1986: 439). Grisly as this line of work may be, it can only bode well for victims, at least in providing legal counsel indisputably on a parr with company lawyers bought with transnational dollars. (F. Lee Bailey-lately of OJ Simpson trial fame-was one of the lawyers acting for a group of Bhopal victims prior to the Indian government's intervention.) Also, the importance of strategically chosen expertise is evident: for instance, the Union Carbide medical team included a prominent doctor who had been a researcher and (unconvincing) witness for the defense in the Johns-Maneville as bestos is litigation (Cassels, 1993: 113; cf Morehouse and Subramaniam, 1986). In both Ocean Ranger and Bhopal cases, the

52

American "interest" in the activity of the US-based parent TNC, controlling their subsidiaries in "other jurisdictions" was insufficient to warrant claimants' access to America's domestically generous, but overburdened tort system.

Many American States and all Canadian Provinces have no-fault insurance systems like Workers' Compensation which conflict with tort actions. Where this is the case, two distinct compensation programmes, supported by different underlying purposes and basic conceptions of "compensation" are competing with one another. To summarize the issue:

The sources of the dissatisfaction with tort remedies can be traced to legitimate economic concerns. Employers exert substantial control and monitoring over workplace conditions, and from a safety incentives standpoint, they should be given financial inducements to provide safe capital equipment and to ensure safe work practices. Tort liability remedies can establish such incentives, butthis is a cumbersome process that imposes substantial costs on both sides. Workers' compensation offers an administrative compensation remedy that imposes lower transaction cost on claimants and avoids the confrontational aspects of a product liability case ... Workers' compensation also provides for more certain and rapid compensation... In return for the greater certainty of compensation, workers receive lower levels of compensation under workers' compensation that they would in a tort judgement. (Moore and Viscusi, 1990: 136)

The no-fault workers' compensation scheme spreads the cost of injury over the entire industry and demands only that the claimant prove he/she was injured at work. Tort, as we have seen, demands proof of employer negligence, but in admitting the possibility of punitive awards, it carries an air of retribution lost in the bureaucracy of Workers' Compensation. Further, Workers Compensation can block tort, even in obvious cases of negligence. As we saw in the Ocean Ranger case, the Workers Compensation Act (NFLD) had to be altered to provide sustenance for families as they pursued their settlements with the TNCs. Even with the Newfoundland provision in place, lawyers for the Claimants' Committee were concerned that the existence of Workers Compensation in Newfoundland might block their tort action in American courts. In contrast, Bhopal's victims had no such support,

53

and further, as we saw, the government of India was less than hospitable to some volunteer NGOs who sought to provide much needed relief.

Risk "Management" Through Tort and Regulation

In both the Ocean Ranger and Bhopal disasters, the issue is one of the legal and moral responsibility of parent companies for their subsidiaries, and for disasters caused by the transfer of hazardous technology without adequateor at least available-management and safety technology to accompany it. Jasanoff argues, "Society is forced to make choices about who bears the risks of technological development, knowing well that the distribution is often unequal and that those who reap the greatest benefits from technology are not necessarily those who suffer most harm" (Jasanoff, 1988: 354). Though, as Beck contends industrial society is giving way to risk society, where one impact of our toxic industrialization is to equalize or "democratize" exposure to risk on account of toxicity's global reach (Beck, 1988/92), we must not lose sight of the fact that risk distribution continues to follow class lines: both Bhopal and Ocean Ranger disasters struck the poorest segments of their relative social environments. The fact that one of Canada's worst industrial disasters killed 84 people, while the Bhopal disaster killed and maimed innumerable people, cannot be attributed to chance. The privileged decide how great a risk society is willing to accept for those marginal groups who will then take it.

It is widely accepted that both regulatory law and tort law attempt to soften the impact of "tragic choices" a society must make when it decides to become "technologically developed" (Jasanoff, 1988: 353). Regulatory, or "public" law approaches to risk management have three distinctive characteristics: 1) "they tend to focus on the aggregated impact of technology", 2) they "steer away from concepts of fault or blame" and focus on future prevention, 3) they are "informed by an awareness of recourse constraints" (Jasanoff, 1988: 355). Tort law is more clearly individualistic and tied to liberal notions of property, hence, "it adjudicates conflicts between specific groups of victims and the producers or generators of specific hazardous techniques" (Jasanoff, 1988: 355). Tort law deals with past wrongs between parties, attempting to place victims in the same position they would have been in, as far as money can do so, if the wrong had not taken place. The "overlap" of tort laws and preventative statutory policies occurs because it is, further, "a well recognized function of privatelaw [tort] to deter harmful conduct by

54

appropriately penalizing wrongdoers" (Jasanoff, 1988: 359). As for technological development that out steps regulatory law, tort action under Common Law has traditionally provided a recourse for workers and victims where the corporations involved should have reasonably foreseen the risk, given their privileged knowledge of the hazards of their technology (Jasanoff, 1988: 359). While overlapping is a problem, so too is the presumption that where regulation lags, tort will suffice. Both Bhopal and Ocean Ranger disasters demonstrate that TNC accountability evasion is facilitated by criminogenic deficiencies in state regulatory legislation.

The Corporate Person in "Risk Society"

The notion of corporate self-regulation which continues to dominate business ethics debates derives from laissez-faire market notions, with their correlative moral, natural science, and political visions of the world as composed of equally free bodies, moving within common structures of law. It includes, furthermore, the liberal notion of directors and agents as the representatives of shareholders: in much the same way that a political representative is expected to vote as s/he believes will best serve his/her constituency, the directors of limited liability corporations see themselves as obligated to make decisions in the best commercial interest of their shareholders.

The corporate form of business is an integral part of the capitalist society. It allows economies of scale by providing a means for a multitude of investors to form a single identity. The risks of ownership are spread out amongst the various investors, allowing a larger percentage of the population the chance to own a piece of the operation and profits. Since ownership is divested, the responsibility for the control function of the corporation is correspondingly allocated. (Lansing and Hatfield, 1985: 409)

Of course, the reality of director-shareholder relations is far more complex. In a study of how corporate directors define their "proper constituencies" it was found that directors' senses of their constituencies range "from the belief that the shareholders are their only proper constituency to the notion that they are responsible to a much broader range of groups, including consumers, employees, and local communities" (in Nesteruk, 1991: 91). Nesteruk argues that attempts to influence TNC behaviour illustrate the need to formally recognize the limited liability of corporations as a third legal entity, beyond the traditional liberal elements of actors and their properties. This would mean institutional recognition of corporations as actor-property, and also as sociological contexts, or as Nesteruk prefers, "moral worlds" (Nesteruk, 1991: 76). Currently, as what Pearce calls "privileged criminals" corporations can engage in lawful private transactions, like any legal person, but they are not made accountable for their most negligent acts (Pearce, 1993).

Taking the strategic capacity of TNCs into account, we must agree with Dembo et al., who argue in their study of Union Carbide that improvement of safety measures and environmental practices cannot be achieved without the willful participation of the TNC world. TNCs control information about their own hazardous technologies, and consequently—as the Bhopal and Ocean Ranger disasters indicate—they have great power to evade external controls. Without a real spirit towards self-regulation in industry, change will be extremely difficult, not to say, impossible. In the meanwhile, we desperately need technical experts who are not of the TNC world, those who understand the technical components of industrial risk, can articulate them, and can criticize (Beck, 1988/92: 234). Universities to some extent have composed a pool oftechnological understanding that was not owned by the TNC world. Cuts to funding for universities means more ambitious, able, technologically trained resources for the TNC world and less technological knowledge held publicly.

It is possible for state laws to influence corporate behaviour through constructive means. For instance, they can assign personal liability to directors of TNCs—as in the recent Bata ruling in Ontario, where two directors were fined \$14,000 each for pollution, with a stipulation that Bata not pick up the tab (R. v. Bata, 1992). This has the added benefit of making directors more aware of the "real" or "true" cost of what have traditionally been considered "free" public goods, like common spaces, air and water. In drawing lines of liability to directors and officers in this way, courts are said to "peel back" or "pierce the corporate veil". Racquet and Romsdahl explain:

courts historically looked through, or "pierced", the parentsubsidiary or corporate-shareholder relationship to find the parent or the shareholder liable for the acts of the corporation. The piercing doctrine was understood as a way to redress the damages caused by the fraudulent acts of a company, when in fact those acts were committed by the parent or owner, hiding behind the corporate structure. The analysis generally was that the subsidi-

ary is no more than the "instrument" of the parent, or that the corporation is only the "alter-

ego" of the shareholder. (Racquet, Romsdahl, 1993: 372)

As in the R. v. Bata case, courts "pierce the corporate veil" in an attempt to respond to "the conflict between a society's need to maintain the benefits of the corporate structure [of limited investor liability] and the need to curb abusive uses of that structure" (Racquet and Romsdahl, 1993: 371).

States can encourage a corporate will to be ethical. For instance, they can implement a system of corporate probation. Placer Developments Ltd. were required by Canadian court to conduct research and produce a manual on hazardous discharges and the environment, after being convicted of discharging waste (R. v. Placer Developments Ltd., 1985). Lansing and Hatfield suggest a toughened criminal law approach to corporate ir/responsibility:

This proposal would use a combination of a 'watchdog' in the corporate structure, a procedure to make public certain corporate records, and the ultimate threat of causing corporate death (dissolving the corporation). To a judge or other nonbusiness officer, these actions would not seem as harsh as a high fine, or jail term for an individual. But to a proud capitalist, these penalties are far worse, and would more than likely actually be imposed in practices. (Lansing and Hatfield, 1985: 413)

As with all such schemes, the problem is enforcement: does the cost of enforcement out-weigh the probability that no accident will occur? Yet another possibility is to provide monetary incentives in place of regulatory measures (Lanoie, 1992). In Britain's North Sea oil industry, there is a requirement of hazardous productive enterprises to submit a work plan, detailing worker safety and environmental impact before state permission to begin production is permitted. (A scheme such as this was one of the main lobby thrusts of the Ocean Ranger Foundation, before its government funding was cut in 1985.)

CONCLUSION

Starting from industrial disaster—the most obvious anti-social activity of TNCs—I have argued that TNCs are strategic actors who evade social accountability for wrong-doing through a series of demonstable information

control tactics. TNCs stategically influence the construction of social memory of industrial disaster so that accountability claims are deflected from them. States and non-governmental organizations must make legal provisions to protectalternate "realities" from being overcome by the TNC's self-serving version. Finally, as agency, responsibility, and the very language of collective action become increasingly problematic outside the moral worlds of TNCs, we must retrieve material urgency from the vagueries of postmodern Leftism. It is imperative that we make the following claims against TNCs: 1) Recovery of lost resources. This should follow a model seeking to define "replacement of lost income" in cases of death, and a return to previous condition in cases of environmental or property destruction. Though there must be provision for medical support for the injured, no monetary value should be put on suffering, or "hedonic" goods in this type of claim. 2) Implementation of safety measures and a requirement to commit a percentage of Research and Development investments directly into disaster prevention and response. TNCs have privileged information about the dangers of their operations and consequently hold the key to safety. Models of corporate probation will be helpful here. 3) Internationally enforced punitive action against TNCs. It is essential that punitive action be legally distinct from compensatory claims of surviving victims or their dependents. Punitive action against TNCs should be based on a concept of deterrence: if TNCs are truly profit-identified organizations, then a sufficiently strong fining system would make CEO agony over whether "it pays to do the right thing" obsolete. Otherwise, the "corporate veil" will have to be pierced untill it disintegrates. 4) Criminal charges should be pressed against any TNC agent who fails to comply to state murder, manslaughter, negligence, bodily harm; freedom of information; environmental, health and safety, or any other laws, regardless of their position in the TNC.

Without tightly legislated and enforced state and international laws holding TNCs accountable in all jurisdictions, no one is safe—though some are certainly safer than others.

Notes

1. I would like to thank Mary P. Campell for discussion, comments and editing.

2. Industrial disasters are situations in which organized industrial activities cause major damage to human life and social/natural environments (Shrivastava, 1994a;b).

3. For a detailed, readable account of the legal struggle, see Jamie Cassels, *The Uncertain Promise of Law: Lessons from Bhopal*, 1993.

4. These failures conform with Shrivastava's characterization of industrial disasters as crises in technological systems which reflect crises in broader systems of social organization, (Shrivastava, 1994: 251).

5. After the Ocean Ranger disaster, ODECO was fined US\$ 25,000 by the US Coast Guard "for operating 50 days with an expired certificate of inspection and US\$ 100 for operating the rig for two days without two required ablebodied seamen and a lifeboatman" (American Press, December 22, 1983).

6. The recent failure of criminal charges against managers in Nova Scotia's Westray mining disaster indicates yet another incidence of corporate accountability evasion in Canada.

REFERENCES

American Law Institute

1991 "Reporter's Study on Enterprise Responsibility for Personal Injury." Vols1 and 2. Philadelphia: The American Law Institute.

Beck, Urlich

1988/92 Risk Society: Towards a New Modernity. Translated by Mark Ritter. Sage Publications.

Behrman, Jack N. (ed.)

1988 *Essays on Ethics in Business and the Professions.* New York: Prentice Hall.

Bergesen, Albert

1993 "The Rise of Semiotic Marxism." Sociological Perspectives. 36(1): 1-22.

Bruehler, James Raymond

1993 "The Utility Analysis of Choices involving Risk: Some Implications for Hedonic Damages." PhD Dissertation, UM1 Dissertation Services Anne Arbor Michigan.

Campbell, Mary and Dodd, Susan

1993 "The Ocean Ranger: Lessons of Disaster." New Maritimes: a Regional Magazine of Culture and Politics. XI(5) (May/June).

Cassels, Jamie

1993 *The Uncertain Promise of Law: Lessons from Bhopal.* Toronto: University of Toronto Press.

Cook, David A.

Dan-Cohen, Meir

1992 "Responsibility and the Boundaries of the Self." *Harvard Law Review*. 105(5).

¹⁹⁹⁵ Presentation for Offshore Petroleum Board. Unpublished.

Dembo, David; Morehouse, Ward and Wykle, Lucinda

1990 Abuse of Power: Social Performance of Multinational Corporations: The Case of Union Carbide. New York: New Horizons Press.

Dodd, Susan

- 1993 "Reflections of a Family Member." New Maritimes: A Regional Magazine of Culture and Politics. XI(5) (May/June).
- 1992/5 Interviews with family Ocean Ranger family members, and with Cle Newhook, former Executive Director of the Ocean Ranger Foundation, and Leo Barry, former Legal Counsel for Ocean Ranger Claimants Committee.

Douglas, Mary

Escobar, Arturo

1984 "Discourse and Power in Development: Michael Foucault and the Relevance of his work to the Third World." *Alternatives.* X(Winter): 377-400.

Hasmann

1991 Limiting Shareholder Liability for Corporate Torts. Toronto: U of Toronto Press.

Hawco, Ray

1993 "Response to Human Disaster: The Ocean Ranger." Canadian Journal of Community Mental Health 2(1): 147-153.

House, Douglas

1987 But Who Cares Now: The Tragedy of the Ocean Ranger. St John's: Breakwater Press.

House, J.D.

1985 "Working Offshore: The Other Price of Newfoundland's Oil." Canadian Petroleum Directorate.

Jaising, Indira and Sathyamala, C.

1992 "Legal Rights...and Wrongs: International Bhopal." Development Dialogue 1&2: 103-116

Jasanoff, Sheila

- 1988 "The Bhopal Disaster and the Right to Know." Social Science Medicine. 27(10): 1113-1123.
- 1994 Learning From Disaster: Risk Management after Bhopal. Philadelphia: University of Pennsylvania Press.

¹⁹⁸⁶ How Institutions Think. Syracuse, New York: Syracuse University Press.

Lanoie, Paul

- 1992 "Government Intervention in Occupational Safety: Lessons From the American and Canadian Experience." *Canadian Public Policy*. XVIII(1): 62-75.
- Lansing, Paul and Hatfield, Donna
- 1985 "Control Through the Criminal System: An Alternative Proposal." Journal of Business Ethics. 4: 409-414
- Lepkowski, Wil
- 1987 "The Restructuring of Union Carbide." in Sheila Jasanoff (ed.) *Learning* from Disaster: Risk Management after Bhopal. Philadelphia: University of Pennsylvania Press.

McCallum, Tricia

1994 "Taking the High Road: Establishing an Ethical Climate May be one Route to Corporate Survival." *Human Resources Professional*. (October): 21-22.

Mercuro, Nicholas and Ryan, Timothy P.

1984 Law, Economics and Public Policy, Volume 3, Political Economy and Public Policy. Greenwich, Conn.: Jai Press inc.

Morehouse and Subramaniam

1986 The Bhopal Tragedy: What Really Happened and What it Means for American Workers and Communities at Risk. New York Council on International Public Affairs.

Moore, Michael, F. and Viscusi, W. Kip

1990 Compensation Mechanisms for Job Risks: Wages, Workers Compensation and Product Liability. Princeton University Press.

Nesteruk, Jeffrey

1991 "Legal Persons and Moral Worlds: Ethical Choices within the Corporate Environment." *American Business Law Journal*. 29: 74-97.

O'Neill, Brian

1985 "February 15, 1982: Where to Point the Ringer." New Maritimes: a Regional Magazine of Culture and Politics. 2(5) (February).

Pearce, Frank

1993 "Corporate Rationality as Corporate Crime." *Studies in Political Economy*.40: 135-162

Pearce, Frank and Tombs, Steven

1993 "US Capital Versus the Third World: Union Carbide and Bhopal." Bhopal Crime Connections: Dynamics and Control. Frank Pearce and Michael Woodwiss (eds.) Toronto: University of Toronto Press.

Racquet, Bonnie and Romsdahl, Randall J.

- 1993 "Piercing the Corporate Veil under the Oil Pollution Act of 1990." University of San Francisco Maritime Law Journal. 5(2) (Spring).
- Regina v. Bata Industries Ltd. et al.

1992 Canadian Criminal Cases. (no.2) 70(3d): 349-434

Regina v. Placer Developments Ltd.

1985 Canadian Environmental Law Review. 14(1-62) (January): 1-6.

Reich, Michael, R.

1994 "Toxic Politics and Pollution Victims in the Third World." in Jasanoff, Sheila. (ed.) Learning from Disaster: Risk Management after Bhopal. Philadelphia: University of Pennsylvania Press.

Rubin, Alvin B.

1986 "Mass Torts and Litigation Disasters." Georgia Law Review. 20: 429

Rosencranz, Armin et al.

1994 "Legal and Political Repercussions in India." in Jasanoff, Sheila. (ed.) Learning from Disaster: Risk Management after Bhopal. Philadelphia: University of Pennsylvania Press.

Royal Commission on the Ocean Ranger Marine Disaster

1984 Report One: The Loss of the Semisubmersible Drill Rig Ocean Ranger and its Crew. (August).

Shrivastava, Paul

- 1994 "Societal Contradictions and Industrial Crises." in Jasanoff, Sheila. Learning from Disaster: Risk Management after Bhopal. Philadelphia: University of Pennsylvania Press.
- Tyagi, Y. K. and Rosencranz, Armin
- 1988 "Some International Law Aspects of the Bhopal Disaster." *Social Science Medicine*. 27(190): 1105-1112.

Varma, Vijaya Shankar

1986 "Bhopal: Facts and Reflections." Alternatives XI(11): 133-147.

Visvanathan, Shiv

1986 "Bhopal: The Imagination of a Disaster." Alternatives XI(11): 147-165.

