Book Review

Tort System on Trial: The Burden of Mass Toxics Litigation

Agent Orange on Trial: Mass Toxic Disasters in the Court (enlarged edition). By Peter Schuck.† Cambridge: Belknap Press of Harvard University Press, 1987. Pp. vii, 363. \$12.95

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Vietnam was a searing experience, even for those of us who were predominantly passive observers on the sidelines. Twenty years ago, as students chanted and tear gas canisters exploded, I struggled to convince myself that a young law teacher's first obligation was to prepare and teach his class—and that somehow, despite the hellish jungle nightmare portrayed by the media and the seething discontent on the University of Wisconsin campus, it remained important to get my job done.

Inevitably those images receded as the war ended. American society seemed to engage, for almost a decade, in repressing the bad dream of Vietnam. But reminders eventually began to surface in the popular culture, as a succession of surrealistic cinematic portrayals attest—depictions including *The Deer Hunter* (1978), *Apocalypse Now* (1979), *Platoon* (1986), and *Full Metal Jacket* (1987). And at about the same time, the veterans themselves began to rise, as from the dead, with new wounds—articulating a legacy of suffering that linked their wartime experience, which was the hallmark of the 1960's, to the widespread concern

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about toxic risks to health and safety that has become a singular characteristic of the present decade.

The dramatic story of the veterans' efforts to obtain legal redress for the multitude of disabilities attributed to toxic poisoning in Vietnam is the subject of Peter Schuck's case study, *Agent Orange on Trial*.¹ But Schuck has broader intentions as well. Just as no first-rate account of the Vietnam War could ignore the role of American political culture and institutions, Schuck's analysis of the *Agent Orange* litigation is grounded in a searching examination of the institutional capacity of the tort system to deal with mass toxics incidents.

I will recount briefly the story of Agent Orange in the courts, as Schuck tells it. Mainly, however, I want to focus on the broader problems of institutional structure and process that Schuck takes as his correlative theme. If the Vietnam War symbolized to many the moral bankruptcy of American post-World War II foreign policy, *Agent Orange* demonstrates, to my mind, the intolerable consequences of relying on the tort system in mass toxic disaster cases. The question, then, is whether a better alternative can be designed.

I. THE CASE

The origins of the Agent Orange controversy can be traced to the Veterans Administration (VA), where, in 1978, a benefits counselor in the Chicago regional office raised the possibility of a connection between an emerging pattern of veterans' illnesses and exposure to Agent Orange, an herbicide containing trace amounts of dioxin that the Army had sprayed on jungle warfare zones in Vietnam. After a local TV station broadcast a special report on her findings, claims based on a variety of illnesses, diseases and genetically transmitted birth defects began to arise. Apart from a non-serious skin condition known as chloracne, the VA routinely rejected these claims on the grounds that they were not "service-connected," the required nexus under the statutory benefit program.²

Before long, Agent Orange cases were in the courts. As the number of claims against a handful of chemical manufacturers of the product began to swell, the parties successfully petitioned the federal Judicial Multidistrict Litigation Panel to consolidate the cases in Federal District Court in New York where it was assigned to Judge George Pratt.³ For the next

1. P. SCHUCK, *AGENT ORANGE ON TRIAL: MASS TOXIC DISASTERS IN THE COURTS* (enlarged ed. 1987) [hereinafter by page number only].

2. For a brief description of the VA benefits program, see Rabin, *Preclusion of Judicial Review in the Processing of Claims for Veterans' Benefits: A Preliminary Analysis*, 27 STAN. L. REV. 905 (1975).

3. Interestingly, the veterans did not choose to join the U.S. government as a defendant in their suits. Undoubtedly, the *Feres* doctrine, *Feres v. United States*, 340 U.S. 135 (1950), was a key reason for their lack of enthusiasm. *Feres* created blanket governmental immunity in cases of military service-related tort suits on a variety of grounds, principally the need to show due regard for military disci-

four and one half years, Judge Pratt worked at what can most charitably be described as an inconstant pace in an effort to impose a semblance of pre-trial order on a controversy that posed daunting issues of class certification, notice, statute of limitations, choice of law, causation, governmental immunity, government contractor status, and damages, just to mention the principal complexities.

As Schuck describes it, Judge Pratt appears to have initially moved in fairly decisive fashion to make the government contractor defense the centerpiece of pre-trial discovery.⁴ Under his view of that defense, the chemical companies would have been immune from suit if they could establish that the government had at least as much knowledge about the health risks of Agent Orange as the military contractor did.⁵ At a later date, however, the judge came to recognize that the comparative knowledge issues raised by the defense were so inextricably intertwined with other issues in the case—principally, whether dioxin in fact posed human health risks at low levels of exposure—that his strategy collapsed like a house of cards. At that point, the litigation began to drift in an alarming fashion, until, fortuitously, Judge Pratt was appointed to the court of appeals.

Enter Judge Jack Weinstein, who immediately took command of center stage in the unfolding drama. At his first meeting with the parties, Judge Weinstein seized the initiative, announcing a trial date only six months later and redefining the issues—putting causation at the center of the case—in a way that struck terror in the hearts of all concerned. And he never faltered, combining unpredictability and boldness with considerable imagination. Unfazed by the Second Circuit's refusal (in an earlier reversal of a Judge Pratt ruling) to mandate the applicability of federal law to the case,⁶ Judge Weinstein discerned a "national consensus law" among the states that achieved the same result.⁷ Undaunted by the obstacles to a mass tort class action, he enunciated a "representative" test case approach, developed a strategy for providing notice to far-flung veterans, and fashioned an opt-out alternative for recalcitrant claimants. When the Army

pline. Schuck reports that the veterans were also reluctant to cast aspersions on the government's conduct because by doing so they would be impugning their sense of loyalty to the country.

The chemical companies, however, had no such compunctions, and, for a variety of strategic reasons, sought to join the government as a third-party defendant—despite *Stencel Aero Eng'g Corp. v. United States*, 431 U.S. 666, *reh'g denied*, 434 U.S. 882 (1977), which extended *Feres* immunity to the end-run prospect of such third-party situations.

4. See pp. 67-71.

5. See pp. 61-62, 81-82. As Pratt subsequently articulated the defense, the companies would also have been required to show that they supplied a product that met governmentally-established specifications.

6. *In re "Agent Orange" Prod. Liab. Litig.*, 635 F.2d 987 (2d Cir. 1980), *cert. denied sub nom.*, *Chapman v. Dow Chem. Co.*, 454 U.S. 1128 (1981). Under the Second Circuit's ruling, the basis for a federal forum would have been diversity jurisdiction, and, as a consequence, the choice-of-law problems would have been nightmarish; indeed, the court could well have been faced with interpreting the product liability laws of every state and applying them accordingly.

7. See pp. 128-31.

insisted on its military command immunity under the *Feres* doctrine,⁸ he devised an independent theory of government liability to aggrieved spouses and after-born children. When the plaintiffs' lawyers evinced a determination to go to trial, he opined that their case on causation might not survive summary judgment. At the same time, when the chemical companies showed signs of stonewalling, he raised the specter of crippled and maimed veterans appearing before a sympathetic jury.

From the outset, Judge Weinstein appears to have been unwavering in his single-minded determination to achieve a rapid settlement of the case, on terms that he regarded as equitable to both sides in the controversy, and, in the eleventh hour, he succeeded. Drawing on a battery of settlement masters, and resorting alternatively to cajoling and admonishing the parties, he was able to announce—after a marathon weekend of negotiations—an agreement to settle for \$180 million before dawn on the May 7, 1984 trial date.

In his subsequent "fairness opinion" evaluating the settlement, which he had in essence imposed upon the parties, Judge Weinstein proceeded both to outline a bold foundation for litigating mass toxic tort claims like *Agent Orange*—based on proportional liability of "indeterminate" defendants and probabilistic recovery for "indeterminate" plaintiffs—and to legitimate the settlement in the present case on the grounds that causation, among other issues, was so attenuated.⁹ Subsequently, he unveiled a distribution plan that, as amended and with accumulated interest, set aside \$150 million for cash payments to claimants who died or suffered from exposure to Agent Orange, and earmarked \$45 million for an endowed fund to address the future needs of afflicted veterans and their offspring suffering from birth defects. *Agent Orange* was history—apart from an appeal that upheld the settlement.¹⁰

This brief description of the pre-trial handling and disposition of the case cannot do justice to the staggering array of substantive and proce-

8. See *supra* note 3.

9. See *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740 (E.D.N.Y. 1984), *aff'd*, 818 F.2d 145 (2d Cir.), *cert. denied*, 108 S. Ct. 695 (1987). "Proportional," or market share, liability was recognized in the widely-noted case of *Sindell v. Abbott Laboratories*, 26 Cal. 3d 588, 607 P.2d 924, 163 Cal. Rptr. 132 (1980), involving claims against the manufacturers of DES—none of whom could be identified as the supplier of the precise product ingested by a claimant's mother during pregnancy. "Probabilistic recovery" anticipates an extension of *Sindell* from the situation where the particular defendant cannot be identified, to a scenario in which the plaintiff is "indeterminate" in the sense that the background risks of contracting a particular disease have been enhanced by the claimant's exposure to defendant's toxic product. In this situation, each victim would recover damages discounted by the risk enhancement factor associated with the product. See Robinson, *Multiple Causation in Tort Law: Reflections on the DES Cases*, 68 VA. L. REV. 713 (1982).

10. *In re "Agent Orange" Prod. Liab. Litig.*, 818 F.2d 145 (2d Cir.), *cert. denied*, 108 S. Ct. 695 (1987). The Second Circuit relied heavily on the government contractor defense in upholding the settlement. In a recent decision, the U.S. Supreme Court articulated a broad version of the defense that would make military contractors immune from suit in design defect cases as long as the supplier warned of dangers known to the supplier but not to the government and met the conditions mentioned *supra* note 5. See *Boyle v. United Technologies Corp.*, 108 S. Ct. 2510 (1988).

dural issues raised in *Agent Orange*, let alone the complexities confronted by Judge Pratt, and later Judge Weinstein, in dealing with an army of contentious lawyers. Schuck is consistently lucid, insightful, and fair-minded in his portrayal of this exceedingly elaborate tale. But he also has large aims, and if I have been somewhat sparing in my account, it is because I share his view that *Agent Orange* warrants evaluation more broadly as a chapter in the unfolding saga of toxic torts in the judicial system.

II. THE TORT SYSTEM: AN ASSESSMENT

As I indicated earlier, the *Agent Orange* case—despite the bold imagination, and sometimes breathtaking legerdemain of Judge Weinstein—depicts a tort system that was institutionally inadequate for dealing with the conflicting claims of the Vietnam veterans and the various defendants. Let me elaborate on this rather harsh conclusion by assessing the tort system's performance according to the traditional mix of goals it is meant to promote: compensation and vindication of injury victims, deterrence of accident-generating conduct, and a tolerable level of administrative cost.¹¹

A. *Compensation and Vindication of Injury Victims*

When the initial *Agent Orange* claims were filed, the case bore a strong resemblance to classic two-party corrective justice tort litigation. The claimants sought individualized recovery for harms that they regarded as identifiable consequences of the indifference, if not greed, of the chemical companies. Their principal attorney was Victor Yannacone, a lawyer long-associated with the public interest movement who shared their commitment to holding the manufacturers of toxic products responsible for the human devastation caused by their perceived heedlessness to risk.

Before long, however, these early players were relegated to the sidelines and the case took on a distinctly Alice-in-Wonderland (or perhaps Kafkaesque is the more appropriate metaphor) cast. The scale of the controversy expanded far beyond the resource capacity of any single personal injury firm. Claimants soon began to appear on a nationwide scale; discovery, as anticipated, would involve a massive coordinated, computerized effort; expert witnesses, it became clear, would be needed on a vast array of complex scientific and technological issues. In response to these exigencies, and notwithstanding the consolidation of the individual claims, the

11. Schuck discusses alternative systems for dealing with the mass tort problem in terms of these same goals, apart from vindication of injury victims. See pp. 277-97. Although compensation and vindication clearly are distinct goals, they are closely related in a case like *Agent Orange* in which a judicial recognition of the victims' claims for redress took on such important symbolic meaning. As a consequence, I discuss the two functions together.

plaintiffs' lawyers began to multiply. Before the case was concluded, a Byzantine network of relationships was developed among financiers, litigators and case management specialists, characterized by intramural bitterness and mutual recrimination. At the same time, as the lawyers multiplied, the claimants and their ideological commitments receded to the vanishing point. Indeed, in the final rounds of the pre-trial sparring, as Schuck describes it, there is no apparent sense in which the Agent Orange victims felt the least connection to the case.¹² If a sense of vindication bears some relationship to meaningful participation in articulating the nature of one's grievance, *Agent Orange* can only be regarded as a perversion of the process: As the case dragged on, the activist veterans experienced a growing sense of alienation.¹³

If *Agent Orange* had taken on a life of its own, it nonetheless moved inexorably towards its denouement under the masterful hand of Judge Weinstein. Unlike Judge Pratt, he would not tolerate drift; in contrast to Congress, the VA and the Justice Department, he refused to treat the *Agent Orange* claimants as pariahs. A settlement there would be, and one that acknowledged the veterans' continuing ordeal. In this spirit, the parties were finally brought to a meeting of the minds at the bargaining table and a settlement was announced: \$180 million and accumulating interest was allocated to long-term total disability awards to exposed veterans, to death benefits for the families of deceased veterans, and to a fund for the "future needs" of veterans and their children with birth defects.

From a compensation perspective, one can hardly be sanguine about this outcome. At the conclusion of the case, Schuck reported that the principal fund was expected to yield awards of \$3,400 to death benefit claimants and \$12,800 to the permanently disabled.¹⁴ Four years later, when the final appeals had been taken, the special master's revised estimate was that the average survivor's benefit would be \$1,800 and the average permanent disability award would come to \$5,700.¹⁵ Furthermore, these awards have to be evaluated in the context of a case that was concluded nine years after the initial claims had been filed. Without denigrating the value of a purely symbolic transfer of funds to the veterans, it is difficult to see these awards in any other light. By no contemporaneous standard of

12. See pp. 255-56.

13. This sense of alienation was perhaps most vividly conveyed in the series of informal "fairness hearings" held by Judge Weinstein in a number of cities after the settlement was announced. See pp. 173-78.

14. See p. 220.

15. See *Weinstein Wraps Up Agent Orange Case*, 200 N.Y.L.J. 1, 3 (1988). A court-ordered analysis of the 250,000 claims concluded that 30,800 veterans would qualify for liability awards, and 18,100 surviving families would be eligible for death benefits. *Id.* at 3. The distribution of the secondary fund to assist damaged offspring and deal with the psychological and social needs of impaired veterans remained unclear.

fairness could they be regarded as approximating the economic value of long-term disability or death.¹⁶

Closer scrutiny of the settlement process serves to underscore this reaction. As Schuck points out, the \$180 million figure seems to represent little more than a number that intuitively appealed to Judge Weinstein as the fair price-tag on the controversy.¹⁷ At first glance, this outcome is troublesome because the parties apparently were mutually receptive to settling at a considerably higher figure.

But the matter cuts much deeper. In reality, the case appears to have been in such a state of disarray, even after five years of pre-trial maneuvering, that no one had a clear idea of the number of seriously disabled claimants in the class or the character and extent of their injuries. In other words, there had been, as yet, no systematic categorization of the incidence, magnitude and type of claims being made, no breakdown of the patterns of exposure experienced by individual claimants, and no particularized genetic and environmental case histories of the veterans. Under the circumstances, the \$180 million figure bore no intelligible relationship to the probability of success in the litigation, let alone to any rational estimate of economic or intangible loss actually suffered by the claimants; it was a dollar amount—like the negotiating figures staked out by the attorneys—simply picked out of the air. Can a serious argument be made for such a compensation process?

B. *Deterrence of Accident-Generating Conduct*

In the tort system, compensation and deterrence are two sides of the same coin. The accident costs associated with a particular activity signal to the defendant the rational amount to spend on accident prevention in order to reach the optimum level of operations.¹⁸ In the *Agent Orange* settlement, the chemical manufacturers (and, in fact, their insurers) were assessed a share of the final dollar agreement based on product volume weighted for the dioxin content of their particular output. From a deterrence perspective, one might ask what signals were transmitted to the manufacturers about the appropriate level of future investment in safeguards against toxic exposure.

The earlier discussion of the compensatory function of the \$180 million award provides a partial answer. If the award bore no discernible relationship to any dimension of the case other than Judge Weinstein's gestalt-like sense of a fair figure that the parties could be induced to accept, *Agent Orange* has no rational deterrent value for future cases. In fact, a

16. This is without reference to the massive administrative costs involved in setting these award levels. See *infra* Section II(C).

17. See p. 159.

18. The classic treatment of the subject is G. CALABRESI, *THE COSTS OF ACCIDENTS* (1970).

closer examination of the case supports this conclusion. Under Judge Pratt, the case might well have languished for three or four more years with an indeterminate outcome at the end of that period. Under still another judge, the case might well have never been certified as a class action in the first instance. The singular nature, in other words, of Judge Weinstein's intervention in the case is the most substantial factor undermining its deterrent value. It is simply impossible to separate out his highly individualized assessment and evaluation of the case from its final outcome, and, as a consequence, it offers no real signal about appropriate future levels of investment in safety.

Indeed, Judge Weinstein's strong intimation that the claimants had no case on causation, coupled with his subsequent summary judgment against the opt-out plaintiffs on the same ground, underscores a more fundamental point.¹⁹ As long as scientific understanding of the toxicity of various synthetic products remains so rudimentary, the existing frontiers of knowledge provide virtually no guidance on the incidence and magnitude of harm from new chemical products; and, as a result, judges and juries have almost unlimited discretion in determining causation.

In this milieu, there is very little in accumulated experience that a chemical producer can apply from an assessment of liability for one new synthetic product to an outlay for risk-reducing research and development on another, particularly in a world where the effects of present investment/production decisions are not likely to become manifest until ten or twenty years into the future. As far as I can tell, no serious argument can be made that *Agent Orange* promoted the goal of optimal risk-prevention.

C. *Administrative Costs*

The bottom line figures speak for themselves: A five year process of pre-trial maneuvering, negotiating and appeals, involving administrative costs far exceeding \$100 million dollars, to arrive at a final settlement of \$180 million cannot help but trigger questions about the system in which the controversy was resolved.²⁰ These are not new questions. Indeed, the

19. Judge Weinstein's opt-out opinion is found in *Agent Orange*, 611 F. Supp. 1223 (E.D.N.Y. 1985).

20. In fact, I am offering an extraordinarily conservative figure on administrative costs. Schuck reports the following:

The plaintiffs are represented by a network of law firms that numbered almost 1,500 by May 1984, located in every region of the country; the documented cost of their activities to date certainly exceeds \$10 million and increases daily. It has been estimated that the defendants spent roughly \$100 million merely to prepare for the trial, utilizing hundreds of lawyers and corporate staff in their Herculean effort.

P. 5.

Schuck's figures are not meant to take into account litigation costs associated with the fairness hearings, formulation of the distribution plan, or four additional years of appeals. While it can be argued that the latter step, judicial appeals, also might be taken from any alternative administrative forum designated to hear a mass toxics case, the Second Circuit's 200-plus page opinion, involving nine separate opinions on discrete questions of law by the three judge panel, vividly illustrates how

contemporaneous Rand studies of the mass tort asbestos litigation, indicating a 39/61 ratio of payouts to administrative costs, have been frequently cited by critics of the tort system.²¹ More generally, it is widely recognized that even the resolution of a classic two-party negligence case, involving determinations of fault, causation, and individualized damages, is an expensive mechanism for allocating losses when compared to no-fault and social insurance schemes.²²

Schuck's account provides a vivid illustration of just how costly a mass toxic tort case can be. In *Agent Orange*, the defendants had every incentive to use delay as a strategic measure to impose heavy pre-trial litigation costs on the plaintiffs in the hope of exhausting their resources. Moreover, the law firms representing the defendants had minimal incentives to cut costs or economize on billings to their corporate clients. On the plaintiffs' side, the financial demands of the enterprise rose precipitously as the scale of the case expanded. There was a pressing need to research and brief a seemingly unending succession of legal issues, ranging from procedural questions about class action certification to substantive matters such as the government contractor defense. In addition, there were the ever-present demands of conducting pre-trial discovery. And in conjunction with discovery there was a corresponding need for expert witnesses representing a laundry list of technical areas including, according to Schuck, specialists in "biochemistry, toxicology, epidemiology, internal medicine, statistics, oncology, occupational medicine, genetics, immunology, neurology and plant physiology."²³

On both sides, a veritable army of lawyers and support personnel geared up for battle. Indeed, Judge Weinstein was keenly aware of the unique institutional demands that would be placed on the court itself, if a settlement were to be effected. Almost immediately after his assignment to the case, he took the singular step of appointing three masters to assist him in devising a strategy for effecting its resolution.

There is a danger of losing sight of the ultimate burdens these costs impose. The attorneys' fees and expert witness costs of the plaintiffs are perhaps most visible, since they eventually were deducted from the compensatory award to the *Agent Orange* claimants. The defense expenditures presumably were incorporated into the chemical manufacturers' overall costs of doing business. The extraordinary outlays on court management were borne, in part, by the defendants, as well as by the taxpayer-

time-consuming and costly an appeal from the tort system is when compared to any conceivable administrative compensation scheme. I consider the comparative institutional questions in greater detail, *infra* Section III(B).

21. See, in particular, J. KAKALIK, P. EBENER, W. FELSTINER, G. HAGGSTROM & M. SHANLEY, VARIATION IN ASBESTOS LITIGATION COMPENSATION AND EXPENSES xvii-xix (1984).

22. For a comprehensive empirical study of the costs of the tort system, see J. KAKALIK & N. PACE, COSTS AND COMPENSATION PAID IN TORT LITIGATION (1986).

23. P. 140.

ing public. The important, and perhaps self-evident, point is that these massive costs do not just disappear; they are a part of the high price of resolving toxic tort disputes through the courts, as compared to other reparation delivery systems.²⁴

Arguably, the price might be nonetheless worth bearing, if the system were achieving high marks for its execution of the compensatory and deterrence functions. As we have seen, however, it has been a dismal failure on both those scores. As a consequence, we face two logical follow-up questions. If *Agent Orange* depicts a tort system in disrepair, is it representative of the prospects for judicial resolution of mass toxics cases? And if it is, does a better alternative exist?

III. AGENT ORANGE AND THE NEED TO MOVE BEYOND TORT

A. Representativeness

Every mass toxic tort case has its own unique features. In this regard, *Agent Orange* was distinctive because the problem of establishing dioxin exposure in individual cases would have been virtually insoluble. Although the Army did maintain records indicating where Agent Orange had been sprayed, it would have been a hopeless task to pinpoint the residue in a particular area on a specified calendar date and link that potential exposure data with the movements of a particular veteran in the jungle during the same period. Indeed, Judge Weinstein amended the final settlement distribution order to include within the principal beneficiary class totally disabled veterans who could establish *any* exposure, in recognition of the attenuated case for specific causation.

Clearly, the Agent Orange controversy was also exceptional because of its origins in the traumatic war in Vietnam. The contextual setting of the case created an emotional and ideological overlay that colored every aspect of the controversy, including the initial characterization of the case by an activist attorney, the growing sense of alienation of the claimant class, and the eventual resolution by an empathetic judge. Without the badge of ser-

24. Consider the following analysis in Sand, *How Much is Enough? Observations in Light of the Agent Orange Settlement*, 9 HARV. ENVTL. L. REV. 283 (1985), discussing the reasons why such a case is likely to run into the tens of millions in litigation costs:

By way of illustration, in the Agent Orange litigation, solely with respect to the government contract defense, the defendants took more than 200 depositions of former or current government employees. Assume that the depositions were performed by outside counsel and that each deposition took two days. Assume that the defendants' counsel each spent one day preparing for each deposition and another day summarizing and reviewing. Assume that the law firms used teams of two attorneys with an hourly billing rate for each attorney of \$150. The calculation begins with: 200 depositions x 4 days x 8 hours = 6400 hours. The next step is 6400 hours x 14 attorneys (2 for each defendant) x \$150 per hour = a total cost for attorneys of \$13,440,000 for deposition costs for this aspect of the suit, leaving out transcript fees, travel costs, and other expenses. This cost would be multiplied several times over in the taking of depositions of the plaintiffs, the defendants, their physicians, and expert witnesses.

Id. at 297-98.

vice to the country in Vietnam, the arguments for class certification, application of national consensus law, and utilization of a workers' compensation-like distributional scheme would have been even more highly controversial.

Despite these distinctive characteristics, Schuck seems correct in concluding that the case has larger lessons for mass toxics litigation. Let me develop the point by drawing on an earlier essay, where I defined the singular difficulties of environmental torts as problems of *identification*, *boundaries* and *source*.²⁵ In that essay, I designated problems of *identification* as the distinctive difficulties the tort system faces in relying on probabilistic evidence (epidemiological data, animal studies, and the like) to isolate harm caused by long-latent toxics from other background risks of living. I referred to problems of *boundaries* as the array of bizarre pathological disorders, *in utero* injuries, and genetic defects that generate singular complexities in projecting and assessing harm in mass toxics litigation. Finally, I defined as problems of *source* the situations where multiple producers or emitters of a toxic substance each contribute to the harmful exposure, but often in a way that is difficult to isolate from the aggregate.

Clearly, the Agent Orange controversy possessed each of these characteristics. The problem of "general" causation that haunted the case from beginning to end, as distinguished from the even more problematic issue of *specific* exposure of individual veterans, was attributable to the claimants' inability to demonstrate persuasively that the array of pathological disorders they experienced in fact could be attributed to Agent Orange exposure. Correspondingly, the wide variety of disorders experienced by the veterans and their family members posed great uncertainty about the eventual size of the class as well as ongoing problems of diagnosis and assessment. Finally, the substantial variations in dioxin content among the Agent Orange producers raised troublesome questions regarding equitable apportionment of responsibility. On each of these dimensions, *Agent Orange* resembled the emerging scenario of mass toxics litigation, which contrasts so sharply with the broken bones and smashed skulls that constitute the fodder of ordinary tort suits.

As a consequence, the Agent Orange controversy generated the now-familiar institutional challenges that mass toxics disasters have posed for a tort system designed to achieve corrective justice in two-party accident cases: proof problems centered on long latency and probabilistic causation, presentation problems posed by reliance on expert witnesses, catastrophic loss issues related to unforeseeable incidence and magnitude of harm, and responsibility-assignment issues grounded in isolating the source of harm.

25. See Rabin, *Environmental Liability and the Tort System*, 24 Hous. L. Rev. 27, 29-33 (1987).

In addition, the internal problems of coordination and consensus encountered by both groups of attorneys, while perhaps exacerbated on the plaintiffs' side by the exigencies of class action case management, sounded a familiar note.

Again, it is essential to realize where these distinctive features of mass toxics litigation, as illustrated by *Agent Orange*, lead. One consequence is uncertain compensation: in *Agent Orange*, tort awards that can only be regarded as a symbolic gesture, unrelated to any serious assessment of proof of harm. Another consequence is haphazard deterrence: in *Agent Orange*, tort assessments that came twenty years after production and offered no intelligible signal about the likelihood or magnitude of liability for unrelated toxic products in the future. A third consequence is intolerable delay: in *Agent Orange*, appellate review that was concluded more than nine years after the initial claims were filed. A final consequence is massive administrative costs: in *Agent Orange*, lawyers' fees, expert witness expenses, court costs, and related outlays that most likely match more than dollar-for-dollar the size of the aggregate award distributed to the claimant class. One cannot but ask, is there no better way to run the railroad?

B. *Alternatives*

In his concluding chapters, Schuck offers his thoughts on the search for better alternatives to the traditional tort system.²⁶ He initially discusses a public law tort model, outlined in a 1984 article by David Rosenberg, which would reconstitute the way the tort system handles mass toxics cases in recognition of their special characteristics. The model would rely on class action treatment of the claims, resort to probabilistic determinations of causation, allocate liability proportionally among defendants, assess scheduled damages, and adopt a variety of other strategies necessitated by the "public" dimensions of the cases.²⁷

It is immediately apparent that this reconstruction of tort law is not really an alternative to the *Agent Orange* approach. In essence, Judge Weinstein adopted a public law model, acknowledging the hopeless fit between a two-party corrective justice approach and a modern toxics case. As my earlier discussion indicates, however, I regard *Agent Orange* as a disheartening comment on the model in practice. All of the imaginative techniques turned sour as the case came to be characterized by intramural wrangling among the "teams" of attorneys, interminable briefing of tech-

26. See pp. 255-97.

27. See Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 851 (1984).

nical legal issues, wholesale arbitrariness in determining damages, and calculated obfuscation of the causation issue.²⁸

The problem is fundamental. The public law model assumes an early warning system for class consolidation that would eliminate procedural wrangles, an organizational strategy that would abolish internecine warfare among the attorneys, advances in scientific understanding that would give meaning to probabilistic causation, and, at the threshold, a bold and imaginative judge. On every count, there is slim hope for translating these demands from theory into practice.

The alternative is to seek a solution outside the tort system. Indeed, Judge Weinstein's instinct appeared to run strongly in this direction. Whenever the opportunity presented itself, he lectured the government lawyers on the responsibilities that Congress, the VA and the Justice Department owed to the Agent Orange veterans. Moreover, the distribution scheme he eventually adopted resembles less the traditional model of tort damages than it does a workers' compensation benefits schedule.

Schuck seems similarly disposed to abandon tort. In his final chapter, devoted to a discussion of non-tort alternatives, he suggests that, political constraints aside, the mass toxics problem might best be handled outside the tort system:

For exposures that entail the kind of causal indeterminacy, scale, spatial and temporal dispersion, and cost exhibited by the Agent Orange case, the law should look primarily to nontort techniques of deterrence, compensation, and dispute resolution. It should stress regulatory standards supported by improved risk information, enhanced public and private enforcement of these standards, a reformed workers' compensation scheme for occupational exposures, and expanded private or social first-party insurance of economic losses from nonoccupational exposures. Private insurers should be subrogated to victims' claims; if the victims' compensation came from public funds, a tax should be imposed, assessed as directly on the risk-generating activity as the determinacy of causality and the potential for effective deterrence permit. In either case, alternative nontort techniques for dispute resolution should be encouraged for settling the issues that remain.²⁹

Like every aspect of *Agent Orange*, however, the search for an alternative outside the tort system turns out to be exceedingly complex. Indeed, even Judge Weinstein's repeated remonstrance that the case was really the government's responsibility seems highly problematic. Judge Weinstein, in fact, subsequently granted summary judgment in the opt-out cases on the

28. Ironically, I am not certain that Judge Weinstein had any better alternative than to wind up the case as quickly as possible at a modest settlement figure, given the lack of any alternative forum for redress and the expectations generated by five years of litigation and media coverage.

29. P. 296.

ground that the veterans had failed to demonstrate a sufficient case on causation to warrant submission to a jury.³⁰ If he was correct in asserting that the epidemiological data and animal studies failed to establish a link between the veterans' injuries and Agent Orange exposure, it is unclear why the VA should have reached a different conclusion—particularly when its task was to decide case-by-case, poorly documented claims of exposure. While this view may seem harsh, it is an inexorable consequence of the agency's mandate to award benefits for service-connected disabilities. Obviously, Congress could provide reparation for all disabled veterans, regardless of cause, but it has not chosen to do so.

There is a more fundamental point here. In the 1960's, tort scholars debated the respective attributes of the negligence and no-fault approaches in auto accident cases.³¹ As the decade wore on, and throughout the 1970's, the dialogue shifted to the comparative merits of strict liability and negligence as approaches in defective product cases.³² In the 1980's, the focus of theoretical interest as well as public awareness has shifted from consumer product injuries to mass toxic harms, and the terms of contention must shift correspondingly, in my view, to focus on the tension between no-fault and social insurance.³³ If our horizons stretch no further than the no-fault model, grounded in the dominant influence of the workers' compensation regime, a causal nexus stands as a prerequisite to recovery, and the VA's responsibility to the *Agent Orange* claimants remains indeterminate at best. Only when disability becomes a sufficient condition for reparation—in other words, when a social insurance model is adopted—are the causal issues put to rest.

Moreover, even if the VA had found the requisite causal connection, there is every reason to think that processing mass toxics claims through an administrative compensation system would entail substantial costs and delay. Whatever the forum, the requirement of an established nexus be-

30. See *In re Agent Orange*, 611 F. Supp. 1223 (1985).

31. See, e.g., R. KEETON & J. O'CONNELL, *BASIC PROTECTION FOR THE TRAFFIC VICTIM* (1965); Blum & Kalven, *The Empty Cabinet of Dr. Calabresi: Auto Accidents and General Deterrence*, 34 U. CHI. L. REV. 239 (1965); Blum & Kalven, *Public Law Perspectives on a Private Law Problem—Auto Compensation Plans*, 31 U. CHI. L. REV. 641 (1964); Calabresi, *Fault, Accidents, and the Wonderful World of Blum & Kalven*, 75 YALE L.J. 216 (1965).

32. See, e.g., Calabresi & Hirschhoff, *Towards a Test for Strict Liability in Torts*, 81 YALE L.J. 1055 (1972); Posner, *Strict Liability: A Comment*, 2 J. LEGAL STUD. 205 (1973).

33. In fact, tort reform advocates in the world of practical politics carefully avoid the hornets' nest of mass toxic torts and continue to address less intractable problems involving two-party accidents. See, e.g., U.S. DEPT. OF JUSTICE, *TORT POLICY WORKING GROUP: AN UPDATE ON THE LIABILITY CRISIS* 65-73 (1987) (describing state legislative reforms enacted in 1985-86); REPORT OF THE ABA ACTION COMMISSION TO IMPROVE THE TORT LIABILITY SYSTEM (1987); REPORT OF THE TORT POLICY WORKING GROUP ON THE CAUSES, EXTENT AND POLICY IMPLICATIONS OF THE CURRENT CRISIS IN INSURANCE AVAILABILITY AND AFFORDABILITY (1986) (federal inter-agency study sponsored by Attorney General). But evidence of rising interest in the no-fault/social insurance issue can be found in the academic literature. See, e.g., Abraham, *Individual Action and Collective Responsibility: The Dilemma of Mass Tort Reform*, 73 VA. L. REV. 845 (1987); Rabin, *supra* note 25; Sugarman, *Doing Away with Tort Law*, 73 CALIF. L. REV. 559 (1985).

tween harm and source necessitates reliance on scientific studies, extensive case histories, and data interpretation by a battery of specialized professionals. An agency's institutional capacity for determining these issues may surpass the judicial process, but it is still likely to be a costly enterprise.

Venturing beyond the confines of *Agent Orange*, the thicket grows even more dense if no-fault remains the dominant model.³⁴ In contrast to the clearly definable veterans' class, an administrative benefits scheme for toxics victims would raise serious definitional issues. Would coverage be defined, for example, in terms that included both drug and hazardous waste victims? These are two quite distinct categories of risk that, nonetheless, impose similar strains on the tort process. More generally, how would a class of beneficiaries be designated that comported with notions of fundamental fairness and frontiers of epidemiological research? How would appropriate standards be established for determining exposure? Which, among the extraordinarily wide-ranging sources of toxic substances, would be required to contribute (and according to what formula) to the funding mechanism? These are only some of the many issues of fairness and efficiency that would need to be addressed if a no-fault alternative to the tort system were under serious consideration.³⁵

By contrast, a social insurance model obviates the need to resolve many of these questions. Since eligibility for reparation rests exclusively on proof of disability, the system is liberated from the daunting requirement of isolating a responsible source in a world of background risks. Correlatively, the universality of coverage eliminates the need to draw lines among classes of claimants experiencing like disabilities. In addition, there is no longer a rationale for linking the funding mechanism to the risk-generating activities of identified sources. For these reasons, the search for non-tort alternatives generated by Agent Orange and its family of related mass tort episodes seems to lead naturally from no-fault to social insurance.

Unfortunately, the merits are not so easily resolved. The social insurance model generates its own issues of fairness and efficiency. Abandoning the tort system involves a trade-off of individualized treatment according to corrective justice norms—with particular emphasis on the assessment of intangible loss—for routinized, universal coverage under categorical rules

34. For a discussion of the workers' compensation context, see Locke, *Adapting Workers' Compensation to the Special Problems of Occupational Disease*, 9 HARV. ENVTL. L. REV. 249 (1985).

35. For detailed toxic compensation plan proposals, see *Superfund Section 301(e) Study Group, Injuries and Damages from Hazardous Waste—Analysis and Improvement of Legal Remedies, A Report to Congress in Compliance with Section 301(e) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980*, Senate Comm. on Environmental & Public Works, 97th Cong., 2d Sess. (Sept. 1982); Trauberman, *Statutory Reform of Toxic Torts: Relieving Legal, Scientific, and Economic Burdens on the Chemical Victim*, 7 HARV. ENVTL. L. REV. 177 (1983). For further discussion of the issues discussed in the text, see Abraham, *supra* note 33.

of eligibility. In effecting this exchange, the American approach, to the extent that it has opted for no-fault, can best be described as pragmatic.³⁶ No-fault systems have been adopted selectively, particularly in the industrial injury and auto accident areas, as focused concerns about the efficacy of the tort system have arisen.³⁷ Even so, critics have questioned the fairness of carving out designated categories of accident victims for special treatment.³⁸

But the social insurance model is far bolder in design. Agent Orange victims would be compensated because of the types of disorders they experienced—the various forms of cancer, liver ailment, psychological impairment, genetic defect and skin disease—without reference to the circumstances under which those pathologies arose. By definition, universal coverage based on such disabilities would be the norm. Thus, the tort system would be replaced or relegated to a minor residual role, and the accident victims' claims for individualized recognition of their misfortune would no longer be honored. While reform on this scale may be warranted, it should be the consequence of a comprehensive analysis of the fairness and efficacy of the tort system, not a result of the mass toxics problem standing alone.

Moreover, the social insurance model is not responsive to the goal of optimal accident prevention. If the tort system were displaced, a finely-tuned regulatory system would be essential to control against undue risks generated by the industrial and service sectors of our dynamic economy; otherwise, efficient resource allocation would be ignored entirely. As a matter of realpolitik, this is no small undertaking. The political will to enact, let alone implement, plenary safety regulation based on comprehensive risk-utility analysis has not been historically evident in this country.

At this point, we have come a long way from *Agent Orange* simply to venture onto uncertain terrain. I have suggested that the case itself illustrates the futility of adapting the tort system to the demands of mass toxics claimants. Yet, the treatment of mass tort "victimization" as a manifestation of a universal need for reparation and sustenance of the disabled raises corresponding concerns about indiscriminate denial of claims for individualized treatment of human suffering, as well as concerns about potential indifference to preventing conduct that is excessively dangerous. The middle-ground represented by no-fault benefit models, in turn, has its

36. The most far-reaching American programs adopting the social insurance model are Social Security Disability Insurance (SSDI) and Medicare. Each program, however, is subject to significant limitations; in the first case, eligibility is limited to cases involving total disability, and, in the second instance, the program is primarily limited to medical assistance for the elderly.

37. There are other, more narrowly focused examples as well. See, e.g., The Black Lung Benefits Act, 30 U.S.C.A. §§ 901 *et. seq.* (1986); The National Childhood Vaccine Injury Act of 1986, 42 U.S.C.A. §§ 201 *et. seq.* (1986).

38. See, e.g., Blum & Kalven, *Ceilings, Costs, and Compulsion in Auto Compensation Legislation*, 1973 UTAH L. REV. 341.

own treacherous pathways; in particular, the re-introduction of vexing inquiries into causal nexus.

Schuck offers a considered analysis of these alternatives, and while he expresses a clear preference for a non-tort system that combines compensation for economic loss with optimal risk-reducing regulatory standards, he cautiously supports the public law tort model until more far-reaching reform is politically feasible. I have no quarrel with this assessment, since some forum must be open to those who have colorable claims to having suffered serious disability from toxic exposure. But I find the specter of Agent Orange in the courts so appalling—and, in like fashion, on more impressionistic evidence, the long journey of asbestos and Dalkon Shield claimants from the tort system into the bankruptcy courts sufficiently discouraging—that continuing resort to the tort system in these mass toxics cases seems indefensible.³⁹

When process costs become the dominant characteristic of a system designed to allocate liability on corrective justice principles, tort law has lost its bearings. When closer inquiry suggests that the system is no longer even pursuing corrective justice ends, tort law has lost its *raison d'être* as well. Whatever its imperfections, a focused no-fault scheme, funded through contributions on an enterprise liability basis and providing economic loss to defined categories of claimants, at least holds the promise of resolving complex causation issues without recreating a lawyers' stage drama of endless motions, briefs, discovery and negotiations.⁴⁰

The war in Vietnam left an indelible legacy of doubt and discontent about the sensibility of our political institutions. A similar lesson might well be drawn from Agent Orange in the tort system.

39. For a discussion of the asbestos cases, see D. HENSLER, W. FELSTINER, M. SELVIN & P. EBENER, *ASBESTOS IN THE COURTS: THE CHALLENGE OF MASS TOXIC TORTS* (1985); J. KAKALIK, P. EBENER, W. FELSTINER, G. HAGGSTROM & M. SHANLEY, *supra* note 21. Some of the problems generated by the Dalkon Shield bankruptcy reorganization are described in *Lawyers Say Robins Plan Has Approval of Creditors*, N.Y. Times, July 18, 1988, at D1, col. 1.

40. In recent years, Congress has adopted focused no-fault schemes addressed to vaccine-related injuries and coal miners' occupational diseases. See references, *supra* note 37. These schemes have not been immune from criticism, and do not, in any event, supply a ready blueprint for a broader no-fault plan that would carve out a designated compensable event coextensive with the mass toxics problem. A satisfying statutory definition of toxic harm would have to be sufficiently open-ended to incorporate new scientific findings on chemical substances that posed serious health risks, and, at the same time, would need to be adequately focused to avoid protracted disputes over a variety of causation issues. While I regard such an approach as worth pursuing, there is clearly no simple solution to the mass tort problem.