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Blomquist: An Introduction to American Toxic Tort Law: Three Overarching Me

AN INTRODUCTION TO AMERICAN TOXIC TORT LAW: THREE OVERARCHING METAPHORS AND THREE SOURCES OF LAW

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Toxic tort law is of relatively recent vintage in American law. Its origins can be traced to the burgeoning growth in the industrial production of synthetic chemical substances following World War II and society's reaction to this growth.¹ Indeed, toxic tort actions typically involve plaintiffs who claim

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1. See PETER H. SCHUCK, *AGENT ORANGE ON TRIAL: MASS TOXIC DISASTERS IN THE COURTS* 3 (1986). See generally *Chemical Process Industries*, in 21 *ENCY. BRIT.* 251 (15th ed. 1985). As noted in a recent book, discussing chemical use in the "modern" era:

Citizens of developed countries rely on a vast number of chemical preparations: cosmetics, shampoos, preservatives, plastics, solvents, detergents, insecticides, petroleum fuels, inks, fertilizers, and many more. Although life is improved by chemicals, some of them can harm human health, poison fish and wildlife, and pollute rivers, air, and land. . . .

Today 50,000 chemical substances are sold commercially in the United States. Chemical usage has grown dramatically since 1940. . . . The chemical industry has become an industrial giant. In 1980 it reported total sales of \$162 billion and employed 1.1 million people at 11,500 plants across the country.

Of these commercially important chemicals, only a small number — perhaps 2% — are harmful. The remaining 98% are relatively harmless, either because they are not poisonous or because people are not exposed to them during the production-consumption cycle. Still, that small percentage amounts to hundreds of potentially dangerous chemicals.

DANIEL D. CHIRAS, *ENVIRONMENTAL SCIENCE: A FRAMEWORK FOR DECISION MAKING* 405 (1985).

As a parallel development to increased chemical production following World War II, "[d]uring the 1970s a series of dramatic episodes sharpened for the American people the experience of their toxic environment." SAMUEL P. HAYS, *BEAUTY, HEALTH AND PERMANENCE: ENVIRONMENTAL POLITICS IN THE UNITED STATES, 1955-1985*, at 188 (1987). This included:

Incidents involving kepone at Hopewell, Virginia; PCBs from the General Electric plant on the upper Hudson River; polybrominated biphenyls dispersed into food in Michigan; contaminated drinking water in New Orleans; hazardous wastes at Love Canal — all creating wildly used buzz words.

A general climate of distrust developed toward private and public institutions for being unable to prevent and even to know about conditions that might lead to such events. To public authorities such as the Environmental Protection Agency the task appeared so enormous and resources so limited that only sporadic and cosmetic action could be taken. To the chemical industry the dangers were grossly exaggerated and proposed actions were unwarranted; it sought to minimize efforts to control toxic

“actual or potential physical injuries, emotional distress, property damages, and economic losses, which were caused by substances in the air, ground, and water.”² Toxic tort disputes, therefore, have tended to be preoccupied with the issue of *toxicity*: “the capacity of a chemical to produce injury or harm.”³

Lawsuits seeking compensation for various harmful substances have a rich and varied history, going back to at least the 1940s.⁴ Yet the first mention of the concept “toxic tort” by an American court in a published opinion was not until 1979.⁵ Since that seminal year, explicit judicial reference to the phrases “toxic tort” or “toxic torts” has grown geometrically, accompanied by an explosive expansion of what has become loosely known as toxic tort law: a collection of common law decisions, statutory provisions, and scholarly expositions about the legal consequences of harmful and potentially harmful substances in the workplace and in a non-work setting.⁶ As it becomes more prominent and visible, toxic tort law has become more controversial. It is in vogue, for example, to argue that use of more rigorous science is a purpose of

chemicals. Even many public authorities shared the view of private industry that the problems were far less than many thought; some were prone to belittle citizen concern as involving “housewives’ data” or “political pollutants.”

Id. (endnote omitted). Cf. Robert F. Blomquist, “Clean New World”: *Toward an Intellectual History of American Environmental Law, 1961-1990*, 25 VAL. U. L. REV. 1, 22-24 (1990) (discussing Rachel Carson and the idea of “Silent Spring” in American law).

2. TOXIC TORTS AND PRODUCT LIABILITY: CHANGING TACTICS FOR CHANGING TIMES 11 (Michael A. Brown ed., 1989).

3. STANLEY M. PIER ET AL., *Recognition and Evaluation of Hazards in TOXIC TORTS: LITIGATION OF HAZARDOUS SUBSTANCE CASES 1* (Gary Z. Nothstein ed., 1984).

4. *See, e.g.*, *Borel v. Fibreboard Paper Prod. Corp.*, 493 F.2d 1076 (5th Cir. 1973), *cert. denied*, 419 U.S. 869 (1974) (asbestos); *Tinnerholm v. Parke Davis & Co.*, 285 F. Supp. 432 (S.D. N.Y. 1968), *aff'd on other grounds*, 411 F.2d 48 (2d Cir. 1969) (pharmaceuticals); *Drayton v. Jiffe Chem. Corp.*, 395 F. Supp. 1081 (N.D. Ohio 1975), *aff'd on other grounds*, 591 F.2d 352 (6th Cir. 1978) (liquid drain cleaner); *Perry Creek Cranberry Corp. v. Hopkins Agric. Chem. Co.*, 139 N.W.2d 96 (Wis. 1966) (pesticides); *Sinclair Prairie Oil Co. v. Stell*, 124 P.2d 255 (Okla. 1942) (oil wastes); *Lartique v. R.J. Reynolds Tobacco Co.*, 317 F.2d 19 (5th Cir.), *cert. denied*, 375 U.S. 865 (1963) (cigarette smoke); *Mahoney v. United States*, 220 F. Supp. 823 (E.D. Tenn. 1963), *aff'd*, 339 F.2d 605 (6th Cir. 1964) (radioactive material and gases); *Garner v. Hecla Mining Co.*, 431 P.2d 794 (Utah 1967) (uranium); *Bridgeton v. BP Oil, Inc.*, 369 A.2d 49 (N.J. Super. Ct. Law Div. 1976) (oil); *Phillips v. Sun Oil Co.*, 121 N.E.2d 249 (N.Y. 1954) (groundwater pollution by gasoline).

5. *In re Agent Orange Liability Litigation*, 506 F. Supp. 737 (E.D. N.Y. 1979), *rev'd*, 635 F.2d 987 (2d Cir. 1980), *cert. denied*, 454 U.S. 1128 (1981).

6. Generic damages posed to workers due to occupational substance hazards include contact with a variety of chemical agents, including particulates, gases, vapors and liquids. PIER ET AL., *supra* note 3, at 15-26. “In addition, the general public is exposed to dangers from contamination of the environment outside the workplace. These dangers . . . include biological agents, air pollution, water pollution, and hazardous waste.” *Id.* at 26. *See generally id.* at 26-39.

toxic tort law.⁷ Toxic tort law has also been criticized as lacking efficient forms of institutional redress.⁸

Exponents of propositions of this sort are partially correct: all things being equal, it is desirable to utilize better science in toxic tort disputes and, indeed, there are possible administrative reforms that could make the resolution of toxic tort controversies more efficient. These critics, however, tend to view toxic tort law in an unrealistic and unduly narrow frame of reference. Saying that more rigorous science is appropriate or that judicial resolution of toxic tort cases is presently inefficient is not very helpful in understanding the complex⁹ functions served by American toxic tort law. In place of narrow normative judgments about the subject, a comprehensive theory of what toxic tort law is, and should be necessary. Thus, the overriding purpose of future toxic tort scholarship should be to suggest such a comprehensive vision.

I. THREE OVERARCHING METAPHORS

In the spirit of James Boyd White's view of the law as "a kind of rhetorical and literary activity,"¹⁰ I contend that toxic tort law in late twentieth century American culture must be understood as an interaction of three overarching metaphors which give the subject its present meaning, while cabining, to a degree, efforts at future reform. First, as observed by commentators such as Don Elliott,¹¹ toxic tort law is a kind of morality play involving the Aristotelian notion of *ethos*.¹² Indeed, "[t]oxic tort cases are about good and evil, about

7. See, e.g., Peter W. Huber, *On Law and Sciosophy*, 24 VAL. U. L. REV. 319 (1990); PETER W. HUBER, *GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM* (1991). Cf. Robert F. Blomquist, *Science, Toxic Tort Law, and Expert Evidence: A Reaction to Peter Huber*, 44 ARK. L. REV. 629 (1991).

8. See, e.g., SCHUCK, *supra* note 1, at 286-97.

9. Cf. Robert F. Blomquist, *The Beauty of Complexity*, 39 HASTINGS L.J. 555 (1988) (book review) [hereinafter *The Beauty of Complexity*].

10. JAMES BOYD WHITE, *Forward to HERACLES' BOW: ESSAYS ON THE RHETORIC AND POETICS OF THE LAW* x (1985).

11. See E. Donald Elliott, *The Future of Toxic Torts: Of Chemophobia, Risk as a Compensable Injury and Hybrid Compensation Systems*, 25 HOUS. L. REV. 781, 781-82 (1988).

12. See *THE RHETORIC & THE POETICS OF ARISTOTLE* (Modern Library 1954). The Greek word *ethos* signifies the character of a person. As noted by Aristotle:

Persuasion is achieved by the speaker's personal character when the speech is so spoken as to make us think him credible. We believe good men more fully and more readily than others; this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided. This kind of persuasion, like the others, should be achieved by what the speaker says, not by what people think of his character before he begins to speak. It is not true, as some writers assume in their treatises on rhetoric, that the personal goodness revealed by the speaker contributes nothing to his power of persuasion; on the contrary, his character may almost be called the most effective means of persuasion he possesses.

corporate greed and indifference, and about the risk of the unknown. [T]oxic tort cases are about redefining our public morality for a new era in which we must confront the troubling truth that we do not fully comprehend the relationships between the things that we have made and our health and well-being."¹³

Second, toxic tort law should also be viewed, in part, as a New England-style town meeting where *pathos*,¹⁴ or societal reaction to emotional questions of justice and equity, is joined with pragmatic community determination of liability and damage questions involving chemical substances, human health, and property. Seen in such a light, toxic tort litigants should not be held to the inappropriately high standards of pure scientific inquiry. Rather, by way of illustration, Tony Roisman properly points out in his discussion of legal causation in toxic tort disputes that:

[Toxic tort litigants should not be required] to prove to a scientific certainty, causation. Scientists have a different theory of causation, it's much closer to the criminal liability standard "beyond any reasonable doubt." [Toxic tort litigants should only be required] to establish causation "at a moment in time." At this moment in time, we ask the jury, take the available information in front of you and answer the question: What caused these injuries? That's a "more probable than not standard," 51 percent is what's required. And . . . those kinds of judgments that scientists make are fine when scientists are in their own sphere. When we are in the legal realm, where we need answers, you can't tell the people of the country, . . . "we don't know to a scientific certainty beyond all reasonable doubt exactly what did this, and another 50 years worth of exposures will produce enough bodies for us to be certain." That's not an answer. The law is more humane than that, and the law says we've got to answer the question now.¹⁵

Id. at 25.

13. Elliott, *supra* note 11, at 782. See generally PHIL BROWN & EDWIN J. MIKKELSEN, *NO SAFE PLACE: TOXIC WASTE, LEUKEMIA AND COMMUNITY ACTION* (1990).

14. "Whereas *ethos* consists in the establishment of . . . credibility and credentials . . . *pathos* consists in arousing the passions of the listeners, getting their emotions running in the direction of the action to be taken." MORTIMER J. ADLER, *HOW TO SPEAK, HOW TO LISTEN* 36 (1983). In Aristotle's own words: "[P]ersuasion may come through the hearers, when the speech stirs their emotions. Our judgments when we are pleased and friendly are not the same as when we are pained and hostile." ARISTOTLE, *supra* note 12, at 25.

15. *Toxic Trials* (P.B.S. television broadcast, Feb. 25, 1986, statement of Tony Roisman, discussing proof problems of victims of Woburn, Massachusetts groundwater contamination) (transcript on file with author). Cf. BROWN & MIKKELSEN, *supra* note 13. See also Robert F. Blomquist, *Goals, Means, and Problems for Modern Tort Law: A Reply to Professor Priest*, 22

Finally, and by way of a limiting metaphor, toxic tort law should also be understood as a series of continuing public lectures in the spirit of the Chautauqa and Lyceum movements -- dedicated to *logos*, or logical exposition¹⁶ of scientific principles, policy issues, and human suffering. It is not enough that people assemble in political gatherings while enacting morality plays. Knowledgeable and competent experts need to be a part of the process. Knowledgeable and competent experts must be held accountable for their opinions, scientific judgments, and technological assessments. While experts should not dominate the proceedings, they should nevertheless clearly be major voices in helping to resolve toxic tort disputes.¹⁷

II. THREE SOURCES OF LAW

Toxic tort law has captured considerable popular attention and scholarly interest during the last decade because of vigorous interaction between three dynamic and important areas of substantive law: tort law, environmental law, and bankruptcy law. Peter Schuck observed that “[m]odern tort law is one of the most rapidly changing and controversial areas of American law.”¹⁸ The controversial nature of modern tort law is linked to unresolved social and political tensions that seek to change the individualistic, moralistic, and arbitral moorings of traditional tort law, derived from English common law, with “a more collectivist, functional, and managerial” approach.¹⁹

Second, environmental law has tended to influence and, concomitantly, to be affected by highly visible and contentious tort litigation during the last decade. In one respect, there has always been a symbiotic relationship between traditional tort law principles and problems of human health, aesthetic enjoyment, and resource use. For example, as observed by William H. Rodgers, Jr., “[t]he legal history of the environment has been written by nuisance law.”²⁰ Indeed, “[n]uisance actions have reached pollution of air, water, and land, and by a wide variety of means, have challenged virtually every major industrial and municipal activity that today is the subject of

VAL. U. L. REV. 621, 631 (1988).

16. The Greek word *logos* signifies “the marshaling of reasons.” ADLER, *supra* note 14, at 37. According to Aristotle: “[P]ersuasion is effected through the speech itself when we have proved a truth or an apparent truth by means of the persuasive arguments suitable to the case in question.” ARISTOTLE, *supra* note 12, at 25.

17. See generally Blomquist, *Science*, *supra* note 7. Cf. EDWARD J. IMWINKELREID, *THE METHODS OF ATTACKING SCIENTIFIC EVIDENCE* (1982).

18. PETER H. SCHUCK, *Introduction: The Context of the Controversy*, in *TORT LAW AND THE PUBLIC INTEREST* 17 (Peter H. Schuck ed., Norton 1991).

19. SCHUCK, *supra* note 1, at 12.

20. WILLIAM H. RODGERS, JR., 1 *ENVIRONMENTAL LAW: AIR AND WATER* 1 (1986).

comprehensive environmental regulation."²¹ Nuisance law, as a grand balancing process of individual and social interests, has tended to evolve into a modern organizing theme, or fulcrum, for other tort theories that have occasionally been used to resolve environmental disputes in the courts. Thus, resort to legal theories of strict liability for dangerous activities creates indeterminate tensions as a result of an "open-ended invitation to balanc[e]" competing circumstances such as "appropriateness to the place" and "the value of the activity in the community"²² in determining whether a particular hazardous activity is abnormally dangerous.

Similarly, an indeterminate and open-textured balancing of interests approach, historically derived from the model of nuisance law, has tended to subsume other traditional rights-based concepts such as trespass, inverse condemnation, riparian rights, and public trust arguments in litigation involving land and natural resource use -- two important environmental issues faced by the courts.²³ In a second respect, based on the doctrine of negligence *per se*, which incorporates relevant statutory and administrative standards into a duty of due care, recent environmental laws are germane to the conduct of toxic tort litigation.²⁴ A third area of interaction between tort and environmental law is the use of information by toxic tort litigants that is drawn from environmental statistics required to be kept by legislative command.²⁵

Finally, bankruptcy law has uniquely served to dramatize the equitable

21. Blomquist, *Beauty of Complexity*, *supra* note 9, at 558.

22. RODGERS, *supra* note 20, at 38.

23. *Id.*

24. *See, e.g.*, *Gibson v. Worley Mills, Inc.*, 614 F.2d 464 (5th Cir.), *modified on other grounds*, 620 F.2d 567 (5th Cir. 1980) (violation of state and federal laws regarding sale of seed containing toxic bindweed seed was negligence *per se* since laws were designed to protect plaintiff's class and to prevent the type of hazard and resulting damage to land that had occurred); *Perry Creek Cranberry Corp. v. Hopkins Agric. Chem. Co.*, 139 N.W.2d 96 (Wis. 1966) (failure to follow the Wisconsin Economic Poisons Act in the labeling of malathion was negligence *per se*, and presence of disclaimer on labels was no defense). According to a recent commentator:

To the extent that the lack of clearly enunciated standards has deterred environmental tort litigation in the past, the recent increase in statutes and regulations which impose standards of conduct regarding the environment, health, and safety should aid plaintiffs significantly in defining what constitutes negligence. Equally important, the statutes and regulations and the activities of the enforcement agencies have created greater awareness in the public and the judiciary of the risk of dangers from pollutants emanating from such sources as nuclear energy plants, chemical plants, and toxic waste sites, as well as the gravity of those dangers and the foreseeability of the risks.

Lynn Pollan, *Theories of Liability*, in *TOXIC TORTS*, *supra* note 3, at 310.

25. *See generally* Robert F. Blomquist, *The Logic and Limits of Public Information Mandates Under Federal Hazardous Waste Law: A Policy Analysis*, 14 VT. L. REV. 559 (1990).

dilemmas in individual toxic tort cases.²⁶ This is so because the two basic policies of bankruptcy law, the debtor fresh start and equitable distribution tend to compete with both the tort law goal of full compensation for injuries suffered and the related environmental law principle that the polluter should pay for externalities foisted upon the public by discharge of residuals. Thus, by treating a toxic tort injury like any other "claim," bankruptcy law seeks to aggregate the public outrage occasioned by a debtor's environmental lawlessness and the individual injury or risk of injury brought about by a debtor's tortious conduct with other similar harms, as well as with what may be termed mere commercial expectancies.²⁷ Indeed, under the current regime of American bankruptcy law, many commercial creditors like banks, suppliers, and equipment factors are given a favored status over toxic tort victims because of the advance transactional opportunity of collateralizing their claims and realizing a prioritized secured claim status over unsecured tort claimants.²⁸ Indeed, while the former usually recover the full amount of their claims, subject to the value of the collateral, the latter often recover little or nothing.

CONCLUSION

These three metaphors (toxic tort law as a morality play, a town meeting, and a public lecture) and three sources of substantive law (tort law,

26. See, e.g., RICHARD B. SOBOL, *BENDING THE LAW: THE STORY OF THE DALKON SHIELD BANKRUPTCY* (1991).

27. Under the Federal Bankruptcy Code:

"claim" means --

(A) right to payment, whether or not such right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured, or unsecured; or

(B) right to an equitable remedy for breach of performance if such breach gives rise to a right to payment, whether or not such right to an equitable remedy is reduced to judgment, fixed, contingent, matured, unmatured, disputed, secured or unsecured . . .

11 U.S.C. § 101(5) (1990).

The operation of this bankruptcy principle in toxic tort litigation is illustrated by Judge Merhige's ruling in the Dalkon Shield bankruptcy proceeding:

Judge Merhige ruled that a claim arises, for purposes of federal bankruptcy law, at the time of the conduct giving rise to the injury, not at the time the injury is manifest, regardless of when state law recognizes a right to bring suit. Under this view, every woman who used the Dalkon Shield had a claim against Robins from the moment of insertion, even though an injury might never occur. In reaching this conclusion, Merhige relied on the broad definition of the word "claim" in the Bankruptcy Code and on language in the House and Senate Committee reports on the 1978 Act, which express the intention that "all legal obligations of the debtor, no matter how remote or contingent, will be able to be dealt with in the bankruptcy case."

SOBOL, *supra* note 26, at 114 (endnotes omitted).

28. See 11 U.S.C. § 506 (1990).

environmental law, and bankruptcy law) help to clarify and amplify the dynamic nature of modern toxic tort law. This approach is heuristic, helping to lend some order to chaos, while spurring the discovery of organized patterns amid the varied details of individual cases.

Future toxic tort scholarship²⁹ should seek to explore key questions of the

29. A selective bibliography of the most important articles, chapters, and books dealing with toxic torts published during the last several years is as follows:

Books:

NATIONAL CENTER FOR STATE COURTS, JUDICIAL ADMINISTRATIVE WORKING GROUP ON ASBESTOS LITIGATION, FINAL REPORT WITH RECOMMENDATIONS (1984); KEVIN BUSHNELL & WILLIAM JORDAN, RECENT DEVELOPMENTS IN ASBESTOS LITIGATION (1984); PAUL BRODEUR, OUTRAGEOUS MISCONDUCT: THE ASBESTOS INDUSTRY ON TRIAL (1985); SHELDON D. ENGELMAYER & ROBERT J. WAGMAN, LORD'S JUSTICE: ONE JUDGE'S BATTLE TO EXPOSE THE DEADLY DALKON SHIELD I.U.D. (1985); DEBORAH R. HENSLER ET AL., ASBESTOS IN THE COURTS: THE CHALLENGE OF MASS TOXIC TORTS (1985); JAMES S. KAKALIK ET AL., VARIATION IN ASBESTOS LITIGATION COMPENSATION AND EXPENSES (1984); MORTON MINTZ, AT ANY COST: CORPORATE GREED, WOMEN, AND THE DALKON SHIELD (1985); SUSAN L. PERRY & JIM DAWSON, NIGHTMARE: WOMEN AND THE DALKON SHIELD (1985); PETER H. SCHUCK, AGENT ORANGE ON TRIAL (1986); MOLLY SELVIN & LARRY PICUS, THE DEBATE OVER JURY PERFORMANCE: OBSERVATIONS FROM A RECENT ASBESTOS CASE (1987); THOMAS E. WILLGING, TRENDS IN ASBESTOS LITIGATION (1987).

Articles:

Abraham & Merrill, *Scientific Uncertainty in the Courts*, in ISSUES SCI. & TECH., Winter 1986, at 93; Barbara A. Atwood, *The Choice-of-Law Dilemma in Mass Tort Litigation: Kicking Around Erie, Klaxon, and Van Dusen*, 19 CONN. L. REV. 9 (1986); Gregory A. Bibler, *The Status of Unaccrued Tort Claims in Chapter 11 Bankruptcy Proceedings*, 61 AM. BANKR. L.J. 145 (1987); Bert Black, *A Unified Theory of Scientific Evidence*, 56 FORDHAM L. REVIEW 595 (1988); Bert Black & David E. Lilienfeld, *Epidemiologic Proof in Toxic Tort Litigation*, 52 FORDHAM L. REVIEW 732 (1984); Kenneth S. Bordens & Irwin A. Horowitz, *Mass Tort Civil Litigation: The Impact of Procedural Changes on Jury Decisions*, 73 JUDICATURE 22 (1989); Wayne D. Brazil, *Special Masters in Complex Cases: Extending the Judiciary or Reshaping Adjudication?*, 53 U. CHI. L. REV. 394 (1986); Troyen A. Brennan, *Helping Courts With Toxic Torts: Some Proposals Regarding Alternative Methods for Presenting and Assessing Scientific Evidence in Common Law Courts*, 51 U. PITT. L. REV. 1 (1989); Robert A. Bush, *Between Two Worlds: The Shift From Individual to Group Responsibility in the Law of Causation of Injury*, 33 UCLA L. REV. 1473 (1986); Robert A. Bush, *My Brother's Keeper - Some Observations on Federal Rule 23 and Mass Tort Class Actions in the United States* (pts. 1 & 2), 5 CIV. JUST. Q. 109, 201 (1986); Frank B. Cross, *Asbestos in Schools: A Remonstrance Against Panic*, 11 COLUM. J. ENVTL. L. 73 (1986); Richard Delgado, *Beyond Sindell, Relaxation of Cause-in-Fact Rules for Indeterminate Plaintiffs*, 70 CAL. L. REV. 881 (1982); Michael Dore, *A Proposed Standard for Evaluating the Use of Epidemiological Evidence in Toxic Tort and Other Personal Injury Cases*, 28 HOW. L.J. 677 (1985); Dan Drazan, *The Case for Special Juries in Toxic Tort Litigation*, 72 JUDICATURE 292 (1989); Richard A. Epstein, *Agent Orange Diseases: Problems of Causality, Burdens of Proof and Resitution*, TRIAL, Nov. 1983, at 91; Richard A. Epstein, *The Legal and Insurance Dynamics of Mass Tort Litigation*, 13 J. LEGAL STUD. 475 (1984); Daniel A. Farber, *Toxic Causation*, 71 MINN. L. REV. 1219 (1987); Kenneth R. Feinberg, *The Toxic Tort Litigation Crisis: Conceptual Problems and Proposed Solutions*, 24 HOUS. L. REV. 155 (1987); Kevin M. Forde, *Punitive Damages in Mass Tort Cases: Recovery on Behalf of a Class*, 14 LOY. U. CHI. L.J. 397 (1984); Michael D. Green, *The Inability of Offensive*

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subject in the context of the three overarching metaphors and three sources of law suggested above. A systematic and coherent text would encompass the following outline:

1. Historical Background: American Toxic Tort Law, 1979-87.
2. Historical Evolution: American Toxic Tort Law, 1988-91.
3. Determining Toxic Liabilities and the Basic Role and Limitations of Traditional Tort Law.
4. Refining Toxic Liabilities: The Problems of Establishing Tort Causation.
5. Establishing Damages in Toxic Tort Litigation.
6. Statutory Influences: Policy Interactions of Environmental Law and Bankruptcy Law with Toxic Tort Law.
7. The Role of Courts in Toxic Tort Litigation: Issues of Process,

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Evidence, and Science.

- 8. Some Jurisprudential Questions Regarding Toxic Torts.**
- 9. The Future of Toxic Torts.**

In the final analysis, however, modern toxic tort law will continue to evolve over time and will continue to pose challenges to our collective understanding. If the framework of synthesis and analysis discussed in this article offers some modest insights about this perplexing and important subject, it will have fulfilled its purpose.