

Transformative Torts

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What is a mass disaster and how do we distinguish it from a more conventional event? The difference cannot be one of size alone. The few thousand deaths resulting from the Chernobyl catastrophe comprise a mass disaster.¹ The 46,000 deaths annually occurring on U.S. highways do not.² Tort scholars have realized that size alone is inadequate, and have employed other criteria for identifying mass disasters, including the economic analysis of tort law,³ the distinction between collective and individual action,⁴ and the peculiarities of multiple⁵ and probabilistic⁶ causation present in many mass disasters.

There is no general analytic framework for characterizing mass disasters.⁷ This Note suggests that traditional modes of analysis, even taken collectively, are insufficient to describe many mass disasters. In order to construct a more complete taxonomy of mass disaster, this Note introduces the concept of "transformative torts," disasters of such magnitude that they strain the limits of adjudication.⁸ To the extent that a disaster falls

1. This figure is nothing but an intelligent guess. Compare Wilson, *Chernobyl: Assessing the Accident*, 3 ISSUES SCI. & TECH. 21 (1986) (estimating as few as 200 extra cancer deaths) with Woodwell, *Chernobyl: A Technology that Failed*, 3 ISSUES SCI. & TECH., Fall 1986, at 30 (offering more pessimistic estimate).

2. The highway death figure comes from U.S. DEPARTMENT OF COMMERCE, STATISTICAL ABSTRACTS OF THE UNITED STATES 600 (1986) (1984 figure).

3. See, e.g., W. LANDES & R. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* (1987); *infra* note 33.

4. See, e.g., Abraham, *Individual Action and Collective Responsibility: The Dilemma of Mass Tort Reform*, 73 VA. L. REV. 845, 847-49 (1987) (distinguishing between individual and collective responsibility for causing accidents); Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277, 279-83 (1985) (distinguishing between publicly and privately assumed risk); Abel, *A Socialist Approach to Risk*, 41 MD. L. REV. 695, 702-10 (1982) (same, with emphasis on personal autonomy in privately assumed risk).

5. See, e.g., *Sindell v. Abbott Laboratories*, 26 Cal. 3d 588, 607 P.2d 924, 163 Cal. Rptr. 132 (1980).

6. See generally Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779 (1985) (discussion of probabilistic causation in tort); *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740, 777-94 (E.D.N.Y. 1984) (same, in toxic tort context). Mass torts also tend to present peculiar jurisdictional problems. See, e.g., Weinstein, *Preliminary Reflections on the Law's Reaction to Disasters*, 11 COLUM. J. ENVTL. L. 1 (1986).

7. See Abraham, *supra* note 4, at 846 ("[M]ass tort' is not a single, unitary phenomenon, but a name given to a series of very different kinds of accidents posing a cluster of different legal problems.")

8. Few large-scale disasters are actually litigated. See *infra* notes 77-80 and accompanying text. A more precise name for "transformative torts" might thus be "transformative disasters." The use of "transformative torts" suggests that these events require some form of adjudication or other social resolution.

into this category, it will be refractory to conventional legal or economic analysis, and thus difficult to resolve through the tort system.

Although transformative tort analysis can explain otherwise incomprehensible reactions to mass disasters, it is not a universal theory. Since both conventional and transformative torts are ideal types, real events will lie on a continuum stretching from pure transformative to pure conventional tort.⁹ Since most events—including many mass torts—are far better described at the conventional end of the continuum, transformative tort analysis is needed only for exceptional cases.

Section I describes two responses to mass disasters. The adjudication of the *Agent Orange* case was a bold and imaginative response to an injury that may never have existed; the Price-Anderson Act contains a legislative response to an event that may never happen. Both of these responses are hard to justify in terms of traditional tort analysis, but can be understood in terms of the transformative tort analysis presented in Section II. The concepts developed in Section II are then applied to *Agent Orange*¹⁰ and Price-Anderson. Section III further develops the analysis, discussing the resolution of transformative torts in both legislative and judicial contexts.

I. TWO MASS DISASTERS

Neither the Price-Anderson Act nor the *Agent Orange* litigation reflects conventional images of tort law. This Section describes these two anomalous responses to mass disaster.

A. Agent Orange

The *Agent Orange* litigation was an unusual tort case, handled in an unusual fashion. This class action suit was brought by Vietnam War veterans and their families against eight chemical companies that manufactured the herbicide "Agent Orange," used extensively to defoliate jungle land in Vietnam. The class consisted of all the veterans who allegedly were exposed to the herbicide, and their families. The veterans claimed a variety of harms to themselves and their children and alleged that these were caused by a dioxin¹¹ impurity in the herbicide. The suit against the

9. This conventional-transformative continuum is not the only dimension along which tort law can be projected. Economics has analytic power, as do approaches such as causation or the public-private distinction. See *supra* notes 3-6. The complete typology of tort is not only continuous, but multidimensional. This Note examines only one of these dimensions.

10. *Agent Orange*, 597 F. Supp. at 740. This litigation has recently concluded at the appellate level. In nine separate decisions, the Second Circuit generally upheld Judge Weinstein's rulings. *In re "Agent Orange" Prod. Liab. Litig.*, 818 F.2d 145 (2d Cir. 1987), followed by 821 F.2d 139 (2d Cir. 1987), cert. denied *sub nom.* Dow Chem. Co. v. Ryan, 108 S. Ct. 344 (1987).

11. The full chemical name for this substance is 2,3,7,8-tetrachlorodibenzo-*para*-dioxin. The toxicology and epidemiology of dioxin are briefly discussed, with special attention to the Vietnam veterans, in Gough, *Environmental Epidemiology: Separating Politics and Science*, 3 ISSUES SCI. & TECH., Summer 1987, at 20, 22-27.

manufacturers was based on a failure-to-warn theory; the government was involved as a third-party defendant.

The sheer size of the plaintiff class was enough to make the case unusual, but more extraordinary were its political implications. To a large extent, this case involved the reception of America's returning Vietnam veterans, who according to trial Judge Jack Weinstein, "have been . . . treated with less favor and respect than they should have been."¹² Not only did the plaintiffs want compensation in the usual sense; they also wanted public recognition of their plight.¹³

Judge Weinstein did not pretend to treat this unusual tort case in a conventional manner. He introduced uncertainty into the law in order to encourage settlement.¹⁴ He avoided articulated decisions whenever possible.¹⁵ Moreover, in both his informal bench comments and his twisting of precedent,¹⁶ he tried to minimize any sense of rule-bound law. In his decisions, his prose style was frequently compassionate and affective, rather than lawyerly and cognitive.¹⁷ He acted as if he were dealing not with a case at law, but rather with a political problem that required a political solution transcending the legal conflict between plaintiffs and defendants. Judge Weinstein strongly felt that government intervention was required for a successful conclusion to the case,¹⁸ and pushed vigorously for a settlement.

B. *The Price-Anderson Act*

The Price-Anderson Act¹⁹ is the federal tort law for nuclear plant accidents, and preempts state tort laws.²⁰ The Act is structured in three tiers. At the lowest tier, relatively minor nuclear accidents are handled by the

12. *Agent Orange*, 597 F. Supp. at 749.

13. "[To] justify the veterans' sufferings by allowing them to tell their story, find an authoritative explanation for their conditions, and assign moral and legal responsibility. . . . [T]he prospect of monetary compensation [was] . . . subsidiary." P. SCHUCK, *AGENT ORANGE ON TRIAL* 171 (1986).

14. At one point in the litigation, Weinstein pointed out that the legal "uncertainty enhance[d] the desirability of the settlement." *Agent Orange*, 597 F. Supp. at 754. This uncertainty was largely created by Weinstein himself. See P. SCHUCK, *supra* note 13, at 131-38; cf. *Agent Orange*, 597 F. Supp. at 816 (concerning uncertainty of relevant statute of limitations); *id.* at 842-43 (concerning uncertainty caused by indefinite plaintiff and defendant problems).

15. "Whenever possible, [Weinstein] avoided formal opinions and gave many informal signals from the bench; these revealed his 'preliminary' thinking to the lawyers without really committing him to a position" P. SCHUCK, *supra* note 13, at 124-25.

16. One Weinstein invention was his bold invocation of "national consensus law" to settle the thorny choice-of-laws problem posed by class certification in the suit. P. SCHUCK, *supra* note 13, at 128-31. Schuck characterizes this particular legal move as "combining prestidigitation and rank insubordination [in the face of a Second Circuit ruling]." *Id.* at 130.

17. See *infra* note 58.

18. P. SCHUCK, *supra* note 13, at 132.

19. 42 U.S.C. § 2210 (1982).

20. See, e.g., NUCLEAR REGULATORY COMMISSION, *THE PRICE-ANDERSON ACT—THE THIRD DECADE* (NUREG-0957) (1983) [hereinafter NUREG]. The Price-Anderson preemption of the tort system survived takings and due process challenges in *Duke Power Co. v. Carolina Env'tl Study Group, Inc.*, 438 U.S. 59 (1978).

tort system, buttressed by a compulsory liability insurance scheme.²¹ Once the Nuclear Regulatory Commission (the administrative agency responsible for civilian nuclear power) declares an "Extraordinary Nuclear Occurrence" (ENO), the second tier of the Act is invoked.²² After an ENO is declared, all cases are removed from the tort system and consolidated under one federal judge in proceedings that are essentially administrative. When the \$650 million liability limit²³ of Price-Anderson is reached, the utility is exempt from further liability.

Up to this point, conventional tort economics suffices to explain the Price-Anderson Act. Small-scale accidents are adequately treated by traditional tort adjudication. Larger accidents are handled by an administrative scheme which should be easier and cheaper to administer than individualized adjudication, but that still is consistent with the norms of deterrence and compensation that are the economic foundation of traditional tort law.²⁴ But the liability cap cannot be explained within this paradigm. The cap limits the deterrent effect of damages, and thus provides an inefficiently low level of safety.²⁵

Above the \$650 million liability limit, the Act directs Congress to "thoroughly review the particular incident and . . . take whatever action is deemed necessary and appropriate to protect the public from the consequences of a disaster of such magnitude" ²⁶ Mass tort commentators generally have ignored this congressional tier of Price-Anderson, viewing the Price-Anderson structure as a two-tier compensation scheme with a

21. This liability insurance pool itself is composed of two tiers. See NUREG, *supra* note 20. The first \$160 million of insurance is provided by two consortia of private insurers. Most of the coverage comes from a secondary "retrospective" policy, which requires all nuclear plant operators to pay up to 5 million dollars per plant per year after an accident has occurred. See 42 U.S.C. § 2210(b)(3) (1982); see also L. ROCKETT, FINANCIAL PROTECTION AGAINST NUCLEAR HAZARDS: THIRTY YEARS' EXPERIENCE UNDER THE PRICE-ANDERSON ACT 18-19 (1984) (since amount of secondary insurance depends on number of nuclear plants in operation, total size of liability insurance pool now approximately \$650 million). Nuclear liability insurance is not to be confused with nuclear property (first party) insurance, which is not covered by Price-Anderson. See NUCLEAR REGULATORY COMMISSION, NUCLEAR PROPERTY INSURANCE: STATUS AND OUTLOOK (NUREG-0891) (1982).

22. An ENO is declared when a large-scale radiation release will probably result in substantial damage. Upon declaration of an ENO, utilities and their indemnitors must waive all defenses, except causality. See 42 U.S.C. § 2210(n) (1982).

23. See *supra* note 21.

24. See *infra* notes 29-34 and accompanying text.

25. Under some circumstances, liability caps in tort may be economically justifiable. For example, an argument may be made against pain and suffering damages in the products liability context. See, e.g., Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353 (1988). These caps may also be seen as a sophisticated response to transaction cost problems induced by bankruptcy and limited insurability. See Weinstein, *supra* note 6, at 18-21. But in general, caps on damages cannot be economically justified. See W. LANDES & R. POSNER, *supra* note 3, at 15. Landes and Posner therefore view the Price-Anderson cap as simple redistribution to a well-organized interest group. See also Easterbrook, *The Supreme Court, 1983 Term—Foreword: The Court and the Economic System*, 98 HARV. L. REV. 4, 42-45 (1984) (discussion of *Silkwood v. Kerr-McGee*, 464 U.S. 238 (1984) as judicial recognition of Price-Anderson as interest-group bargain).

26. 42 U.S.C. § 2210(e)(2) (1982). This language, inserted into the 1975 amendments to the Price-Anderson Act, was designed to make "explicit the intention contained in the legislative history of the original Act." L. ROCKETT, *supra* note 21, at 20.

liability cap.²⁷ Ex post congressional reaction to a large nuclear disaster is generally not considered an integral part of Price-Anderson.

The carefully articulated procedures and guaranteed insurance below the liability limit discourage congressional intervention and permit conventional judicial or administrative processes to work. However, Price-Anderson encourages intervention when total claims exceed the limit. The political firestorm engendered by the liability cap, in conjunction with the congressional promise embedded in 42 U.S.C. § 2210(e)(2), will force Congress to act. Section 2210(e)(2) can therefore be viewed as a predetermined threshold for the transition from conventional accident law to a new, political regime.

The *Agent Orange* adjudication seems to be questionable law; the liability cap of Price-Anderson seems to be suspect economics.²⁸ The transformative tort framework developed in Section II shows that both *Agent Orange* and Price-Anderson are sensible responses to difficult problems.

II. ANALYTICAL FRAMEWORK

Transformative torts are best seen in terms of community standards that, in turn, are conveniently placed in the context of tort economics. Therefore, this Note develops the notion of transformative torts in a sequence starting with familiar concepts of tort economics, progressing to a discussion of community standards as a hidden requirement of tort economics, and concluding with an analysis of transformative torts as a breakdown of limited notions of community standards.

A. *Tort Economics and Community Standards*

In the last twenty years, the economic analysis of tort and other accident law has been widely accepted in the legal academy for its broad analytic power.²⁹ Economic analysis explains the characteristics of the tort system in terms of its ability to ensure an efficient allocation of social goods and the injuries those goods produce.³⁰ Its single-minded emphasis on economic efficiency makes it a powerful intellectual tool, capable of

27. See *supra* note 25 and accompanying text.

28. The converse is just as true. Awarding \$180 million for a nonexistent injury seems economically unsound; ex post congressional largesse hardly seems to be part of the rule of law.

29. See, e.g., G. CALABRESI, *THE COSTS OF ACCIDENTS* (1970); W. LANDES & R. POSNER, *supra* note 3; S. SHAVELL, *AN ECONOMIC ANALYSIS OF TORT LAW* (1987). Accident law need not be limited to tort or tort-like systems such as workers' compensation. Many of the economic goals of accident law can be performed, in principle, by regulation. See Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. LEGAL STUD. 357 (1984).

30. The efficiency criterion is satisfied when economic activity, "injurer care, and victim care [are] . . . carried to the point where the last dollar in care (or foregone [activity]) yields a benefit of a dollar in reduced accident costs." Landes & Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535, 539 (1985). "Care" is the cost incurred providing for safety.

reducing the complex characteristics of accident law to more analytically tractable questions of economic costs and benefits.³¹

The same idea of efficiently allocating goods and their associated hazards pertains to all scales of activity, from driving an automobile to generating nuclear power. Large-scale torts need not violate the economic framework of tort, if some modifications are admitted.³² For example, large-scale torts usually have a different structure of adjudicatory transaction costs, and may therefore benefit from different adjudicatory procedures.³³ Correlation of risks in imperfect capital markets³⁴ is a more sub-

31. Although the economic analysis of accident law is analytically quite rigorous, its empirical predicates are open to doubt. For example, there is little evidence that changes in legal standards display predicted behavioral effects. See Sugarman, *Doing Away with Tort Law*, 73 CALIF. L. REV. 555 (1983).

Empirical critiques of the law and economics movement are rare. More commonly, the basic assumptions of the law and economics movement are attacked. See, e.g., Leff, *Economic Analysis of Law: Some Realism about Nominalism*, 60 VA. L. REV. 451 (1974) (law and economics as non-falsifiable nominalism); Unger, *The Critical Legal Studies Movement*, 96 HARV. L. REV. 563, 574-75 (1983) (law and economics is flawed conjunction of objectivism and formalism); West, *Authority, Autonomy and Choice: The Role of Consent in the Moral and Political Visions of Franz Kafka and Richard Posner*, 99 HARV. L. REV. 384 (1985) (economists' notion of autonomous decisionmaker psychologically unrealistic). These "basic assumptions" vary according to the attacker (or defender), but seldom address the law and economics movement on its own terms. But see, e.g., W. LANDES & R. POSNER, *supra* note 3, at 9-24 (noting, but minimizing problems of insufficient quantitative testing, unrealistic behavioral assumptions, absence of causal mechanism, imperfect congruence with observations); R. NELSON & S. WINTER, *AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE* 363 (1982) (noting near-tautological nature of economists' principles of clarity, perfection and costlessness of contract, property and law enforcement); O. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 44 n.3 (1985) ("A more complete and systematic treatment of the ramifications of dignity for economic organization is sorely needed.").

Although this Note may be viewed as another attack on the ability of economics to explain legal ordering, nothing in this Note is inconsistent with economic analysis. It is better to view this Note's approach as an *extension* of the economic analysis of tort, an extension from static economic analysis to a dynamic realm. See *infra* notes 42-47 and accompanying text.

32. See *supra* notes 3-6 and accompanying text.

33. Mass torts could be defined as the subset of cases that could be litigated at lower cost if joined to other, similar cases through joinder or class action techniques. See Trangsrud, *Joinder Alternatives in Mass Tort Litigation*, 70 CORNELL L. REV. 779 (1985). Cases like nuclear power plant disasters can presumably be litigated cheaply in one mass proceeding because of the common fact patterns for all the injured parties. In contrast, each automobile accident is caused by a separate event, and would not profit from mass joinder. Transaction cost considerations suggest that non-judicial fora are more efficient for large torts. The large academic literature on mass torts treats individualized adjudication unfavorably. See, e.g., Elliott, *Goal Analysis Versus Institutional Analysis of Toxic Compensation Systems*, 73 GEO. L.J. 1357 (1985); Huber, *supra* note 4; Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 849, 887-924 (1984); Trangsrud, *supra*.

Transaction cost peculiarities need not be the only economic criterion for mass torts. Landes and Posner have constructed an economic model of mass tort based on three factors: uninsurability (presumably due to correlation of risks; see *infra* note 34), time delay (with accompanying degradation of evidence) and uncertain causality. W. LANDES & R. POSNER, *supra* note 3. This model does not address the concerns brought forth in this Note.

34. "Correlation of risks" is insurance jargon that reflects insurers' unwillingness to take risks. Insurers avoid risk by pooling their risks among a large group of comparable insured parties whose risks as a group will mature at a predictable rate. Since both premium and payout streams are predictable, the insurer bears no risk. However, if the individual risks are correlated (presumably due to some factor common to many insured parties, such as a hurricane), risks will not mature predictably, and the insurer has to bear risk itself. If the capital market were perfect, uncorrelated risks could not exist; the insurer could always spread the risk over enough time to ensure a large number of uncorrelated events per accounting period. Only capital market imperfections force insurers to use accounting

the addition to the economic framework of tort. But these factors are additions to, not violations of, the framework. No existing extension of conventional tort economics can explain the *Agent Orange* litigation or the Price-Anderson scheme. To find a justification for these cases, we must look to the problem of measuring social costs.

Given the economic goals of tort and a legal system that satisfies them, how do we measure the social costs that we seek to minimize? Conventional economic treatments of tort leave this question unanswered. This problem of measurement is central to transformative tort analysis.

Economists prefer to measure social costs with reference to perfect markets.³⁵ Given such markets, price conveys all possible information about social cost.³⁶ Such a market may be viewed as an excellent measure of community standards. But markets are merely the least controversial way of determining social cost; they are not the only arbiters of community standards, nor always the most efficient ones.³⁷ Markets are frequently poor arbiters for tort injuries. Markets for pain do not exist, and contemporary tort law seldom chooses to impute a shadow market. Tort adjudication must therefore frequently determine community standards independently of the market.³⁸

The community standards embodied in tort law serve as such a means of measurement, an alternative to the market. No single set of community standards is used by the tort system. Some community standards are expressed in formal rules; others in an inarticulate, "customary" way. The inarticulate community standards are generally considered to be within the province of the jury, although judges may also apply their own inarticulate standards upon occasion. Liability and damages are both determined in accordance with these community standards. Although a standard prima facie requirement³⁹ formalizes the liability determination, inarticulate standards enter through legal devices such as the "reasonable person" test in negligence analysis.⁴⁰ Calculations of damages rest even

periods short enough so that correlation is a problem.

35. A perfect market is characterized by large numbers of buyers and sellers, perfect information, and no transaction costs. See Stigler, *Perfect Competition, Historically Contemplated*, 65 J. POL. ECON. 1 (1957).

36. Cf. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945) (discussion of price as social coordinator).

37. See, e.g., O. WILLIAMSON, *MARKETS AND HIERARCHIES* 42 (1975) (imperfect markets frequently less efficient than other means of social ordering).

38. Even the presence of a well-developed market does not relieve the tort system of the need to apply non-market standards. Compensation does not consist solely of converting damages to dollars; it also requires measuring the injury. Consider the economic value of psychological damages. The market may determine what an hour of psychotherapy costs, but the market cannot determine how much psychotherapy is due a frightened victim.

39. To establish a prima facie case of negligence, the defendant must be shown to owe the plaintiff a duty of care. This duty must be breached, and the plaintiff must suffer a legally cognizable harm caused by the breach. See W. KEETON, D. DOBBS, R. KEETON & D. OWEN, *PROSSER AND KEETON ON THE LAW OF TORTS* 164-65 (5th ed. 1984).

40. The "reasonable person" of tort law embodies community, rather than particularized stan-

more obviously upon community standards. Market valuation represents the standards of the entire community;⁴¹ non-market valuation reflects the standards of the judge and jury acting as community representatives.

B. *Dynamism: Transformative Torts Defined*

Tort law seldom acknowledges that the adjudication of an individual event can change the community standards by which the event was adjudicated.⁴² The economic analysis of tort generally shares this tacit static assumption. However, the resolution of some cases can significantly change the community standards used to adjudicate them. Such cases,⁴³ whose adjudication will force a change in community standards, will be called "transformative torts." *Transformative torts involve dynamism in social choice.*⁴⁴

Although social choices are predicated on the chooser's values, the *consequences* of social choice change the values of the chooser. Presumably, any social choice is initially predicated on the values of the chooser at the time of the choice, before the effects of the choice on the chooser are felt. Although the chooser gets the outcome desired at the time the choice is made, this may not be the desired outcome in light of the new value system engendered by the choice.⁴⁵

This phenomenon is not generally troublesome. Since the consequences of most choices are relatively small, social choice can proceed by an iterative method. A small choice is made; values change slightly in accordance with the choice; a corrective choice is made—a process exemplified by the organic evolution of the common law.⁴⁶ We can safely ignore the slight, ever-present effect of *choice on value*. Dynamism begins to bite only when the choice changes values considerably.

dards. See *Vaughan v. Menlove*, 3 Bing. (N.C.) 468, 132 Eng. Rep. 490 (C.P. 1837) (negligence dependent on degree of caution exercised by man of ordinary prudence, rather than measured by standards of defendant).

41. See *supra* notes 35–38 and accompanying text.

42. But see, e.g., *The T.J. Hooper*, 60 F.2d 737 (2d Cir. 1932) (custom of not equipping vessels with radio receivers not dispositive in determining negligence in vessel not so equipped; determination of negligence set new customary standard). Neither is the economic analysis of tort law always static; the so-called "ex post Learned Hand" criterion for liability proposed by some economic analysts has an explicitly dynamic rationale of providing incentives to acquire new information. See Calabresi & Klevorick, *Four Tests for Liability in Torts*, 14 J. LEGAL STUD. 585, 621–25 (1985). This approach, however, is the exception and not the rule.

43. The emphasis of this Note is on *adjudication*, not the event being adjudicated. Events themselves can change community standards, frequently even more than their subsequent adjudication. The sociological apparatus required to discuss these events would be outside the scope of this legal Note.

44. See Tribe, *Technology Assessment and the Fourth Discontinuity: The Limits of Instrumental Rationality*, 46 S. CAL. L. REV. 617, 633–41 (1973); see also Sunstein, *Legal Interference with Private Preferences*, 53 U. CHI. L. REV. 1129, 1158–66 (1986) (discussing related issue of endogenous preferences).

45. This discussion assumes that the chooser, although presumptively omnipotent, is not quite omniscient. She does not know how her choice will affect her values.

46. This iterative, incremental method is also the common law's favored response to exogenous changes, such as new technologies. See *infra* notes 81–83 and accompanying text.

When adjudication does not significantly change the common law, courts are guided by the community standards embedded in the law. This is not true when dynamism is significant. In such cases, a curious dialogue between the courts and the community emerges. The courts look for standards: "What are the community standards by which we adjudicate?" The community responds: "We won't know until the court articulates them."⁴⁷

Transformative tort litigation⁴⁸ must involve some sort of notion of community-mediated reconciliation between the litigants. In conventional tort litigation, compensation—which makes the victim whole—is reckoned by preexisting community standards and the facts of the case.⁴⁹ But if dynamics affects values, the community standards that decide whether liability exists⁵⁰ or what an "injury" is "worth" become uncertain. Compensation, as determined by static community standards, is thus not a coherent goal of transformative tort adjudication.

Reconciliation is a more attainable goal. Reconciliation involves a dialogue among the victim, tortfeasor and society in which the parties' expectations and perceptions will undergo mutual modification.⁵¹ Victims will want vindication,⁵² tortfeasors absolution⁵³ and society a sense that the trouble has been healed.

47. The judgment of Solomon is a classic illustration of dynamism. 1 *Kings* 3:16–29; see Minow, *The Judgment of Solomon and the Experience of Justice*, in *THE STRUCTURE OF PROCEDURE* 447 (1979). Solomon's decision to divide the baby transformed one woman's conception of the issue, causing her to put the welfare of the baby ahead of the claim of right she had previously asserted. This, in turn, changed Solomon's decree; he awarded the baby to the true mother. Although exemplary of dynamism, the judgment of Solomon is not otherwise a good model for transformative torts, which affect the law as well as the parties. Since the adjudicator is the follower, as well as the shaper of community standards, legal attitudes must change with social ones. "We have no reason to believe that Solomon himself was challenged to grow through this experience." Minow, *Interpreting Rights: An Essay for Robert Cover*, 96 *YALE L.J.* 1860, 1907 n.192 (1987).

48. See *supra* note 43 and accompanying text.

49. Although this Note contends that this is the static economic view of compensation, see *supra* notes 29–34 and accompanying text, even the static value of compensation need not be exclusively monetizable, although damages are denominated in strictly monetary terms:

To be compensated for injury or illness, then, quite aside from supplying a needed source of material support, legitimizes one's feelings of discomfort and apprehension. One . . . has a licence not only to withdraw from the source of that pain but to explain to others why one has done so.

K. ERIKSON, *EVERYTHING IN ITS PATH* 112–13 (1976).

50. This discussion of transformative torts has been couched in terms of the social evaluation of accident costs, rather than determination of liability. This evaluation-of-costs approach, while theoretically easier to digest, is unnecessary. *Agent Orange*, with its forced settlement, was in effect a surprising imposition of liability. This Note will discuss the category of natural disasters as a limitation of liability consistent with the transformative tort approach. See *infra* notes 75–80 and accompanying text.

51. See *infra* notes 54–63 and accompanying text (discussing Price-Anderson and *Agent Orange* in light of transformative tort theory).

52. Vindication may include—or require—compensation. See *supra* note 49.

53. Even such popular corporate villains as large chemical companies seem to desire community approval for their current activities and forgiveness for their past record. This desire strikes me as sincere, Bhopal notwithstanding. See, e.g., Wishart, *Openness*, 64 *CHEM. & ENG'G NEWS*, July 14, 1986, at 3.

Unlike compensation, reconciliation is extremely procedure-dependent. Victims are compensated according to external community standards. In principle, these community standards exist independently of the process chosen to find them. Reconciliation, on the other hand, does not depend on fixed community standards, but rather on dialogue among the parties. The results of this dialogue will depend on the way the dialogue is conducted, on the procedure chosen.

It is important to emphasize that dynamism is seldom in the foreground, and most tortlike events have little transformative character. Individual events seldom greatly transform community values, particularly in the context of a single tort adjudication. But the transformative tort framework can still explain many puzzling aspects of major disasters, such as the Price-Anderson Act and the *Agent Orange* litigation.

C. *Agent Orange and Price-Anderson*

The transformative tort concept can explain many problematic aspects of mass disasters. Neither Judge Weinstein's treatment of the *Agent Orange* case nor the legislative prescriptions of the Price-Anderson Act appear aberrational when viewed in the transformative tort framework. Beside explaining individual problematic cases, the transformative tort framework can also partially explain the distinction between natural disasters and torts.

1. *Agent Orange*

Agent Orange was more than a mass toxic torts case, it was a response to the reception Vietnam veterans received after their return from Southeast Asia. Not only were the veterans seeking recognition from the courts and society at large⁵⁴—as they would in a conventional lawsuit—they were seeking recognition from a society that they thought had deliberately ignored their plight since the end of the war. Recognition would change society: fostering transformative reconciliation rather than monetary—or even dignitary—compensation.

Judge Weinstein acted as if he were trying to resolve a transformative tort in the role of a judge.⁵⁵ Aware of the dynamic aspects, Weinstein used the adjudication to garner political support for the plaintiffs' cause. This led to a perverse use of law: a continuous attempt to inveigle the govern-

54. "The case came to symbolize their most human commitments and passions: their insistence upon respect and recognition, their hope for redemption and renewal, and their hunger for vindication and vengeance. For them, it was a searing morality play projected onto a national stage." P. SCHUCK, *supra* note 13, at 11.

55. Although Weinstein's *Agent Orange* opinions and actions may be explained under the transformative tort paradigm, his non-judicial writings on mass disasters are those of a judge concerned primarily with efficient case management. See Weinstein, *supra* note 6, at 15-50; Weinstein, *The Role of the Court in Toxic Tort Litigation*, 73 GEO. L.J. 1389 (1985).

ment into explicit political involvement, and a nationwide set of fairness hearings that seemed more political than judicial.⁵⁶

His insistence on a large settlement in a case he deemed probably baseless indicates that he strove for reconciliation, rather than compensation. Although Weinstein deeply understood the case, he was limited by his institutional role as judge. He realized the limitations of his judicial role and tried to transcend them.

Weinstein's partial failure to achieve a meaningful settlement demonstrates the limits of the present legal system in dealing with transformative torts. The \$180 million settlement did not appease the plaintiffs; a fact partially explicable because settlements, by definition, are private acts that exclude society.⁵⁷ Although Weinstein tried to get as broad a participation in the settlement as possible,⁵⁸ he could not get "the government to join with plaintiffs and defendants in . . . their noble goal [of reconciliation]".⁵⁹ With no government involvement or formal judgment by the court, the settlement could not achieve the plaintiffs' goal of reconciliation with society at large.

2. *Price-Anderson*

A large-scale nuclear plant disaster fits the transformative tort paradigm. Our *collective* values regarding such a large and frightening event

56. Judge Weinstein wrote:

Even though the evidence presented to the court to date suggests that the case is without merit, many of those who testified at the Fairness Hearings indicated that they sought its prosecution not for money but for public vindication. It may be, to paraphrase Sir James George Frazer, that the litigation itself has served a useful function; like many trials, the "main object of the ceremony . . . is simply to effect a total clearance of all the ills that have been infecting a people."

In re "Agent Orange" Prod. Liab. Litig., 597 F. Supp. 740, 857 (E.D.N.Y. 1984).

57. See Fiss, *Against Settlement*, 93 YALE L.J. 1073 (1984). "To be against settlement is only to suggest that when the parties settle, society gets less than what appears. . . . Parties might settle while leaving justice undone." *Id.* at 1085. Settlement deprives inadequately represented parties of a voice. *Id.* at 1078-82. If the *Agent Orange* dispute were truly bipolar, a settlement process would more probably constitute a reconciliative act. See McThenia & Shaffer, *For Reconciliation*, 94 YALE L.J. 1660 (1985).

To be sure, the perceived small size of the settlement and the defendants' refusal to admit fault were doubtless significant, as well.

58. Weinstein's account of the post-settlement Fairness Hearings was highly anecdotal, affective and compassionate. *Agent Orange*, 597 F. Supp. at 764-75. This contrasts with the rest of his Settlement Memo, written in the dry and cognitive style typical of legal prose. He seemed as concerned with the extent of the public debate accompanying the settlement, *id.* at 763, as with its acceptance among the plaintiff class. *Id.* at 775.

59. *Id.* at 862. "As a result [of governmental nonparticipation] . . . possible trials and appeals continue to burden the parties and the courts, disturb veterans and their families and roil the conscience of the nation." *Id.* at 750.

Although no government action has been taken to date, congressional sympathy for the veterans definitely exists and might eventually result in some form of legislation, despite the lack of any convincing scientific evidence that Agent Orange has affected the health of Vietnam veterans. Several compensation bills are pending before Congress. See Hanson, *Science Failing to Back Up Veteran Concerns About Agent Orange*, 65 CHEM. & ENG'G NEWS, Nov. 9, 1987, at 7, 14. For the role of congressional action in transformative tort adjudication, see *infra* notes 90-95 and accompanying text.

cannot develop gradually over the course of many similar, small-scale events. Rather, they will develop at once, in the aftermath of such a disaster. The way we treat such an event when it occurs will thus affect the way we value it afterwards.

The societal impact of a nuclear accident may range from small (e.g., a negligible radiation leak) to transformative—Chernobyl. The three-tier structure of Price-Anderson is readily explicable as a graduated reaction to a range of possible nuclear accidents. The two lower tiers can be explained in static economic terms, while the third, congressional tier is a separate reaction to transformative torts. The congressional tier will not resemble adjudication. Congressional action need not be articulated, in the same sense that a judicial opinion is.⁶⁰ However, inarticulate congressional action certainly need not be irrational, just as Presidential power to declare a disaster area need not be irrational in either motivation or execution.⁶¹ The decisionmaker need not be concerned with precedent. “Protecting the public from the consequences of a [huge nuclear] disaster” must be viewed as a political, rather than a judicial response.⁶²

As a political process, the congressional tier can be oriented toward reconciliation rather than strict compensation, a dynamic recognition of what the accident means to us all, not just the litigants at bar. The \$650 million trigger serves as a border between the world of conventional accident law—a world of fixed social values associated with ideas of deterrence and compensation—and a dynamic world where adjudication of the event is expected to transform social values and in which “political” reconciliation is central.⁶³

D. *A Role for Individuation?*

Community standards are neither homogeneous nor consistent. We view all human lives as equally sacred, but we “would accept railroad crossing accidents because it costs too much to eliminate grade crossings and yet spend ‘whatever it takes’ to save a known individual trapped in a coal mine.”⁶⁴ The phenomenon of individuation—driven by our personal

60. See *infra* note 85 and accompanying text.

61. Presidential authority to declare a major disaster, which is predicated upon a gubernatorial request for aid, is otherwise unlimited. See 42 U.S.C. § 5141(b) (1982).

62. For a discussion of transformative torts' relation to legal and other process, see *infra* notes 84–97 and accompanying text.

63. If reconciliation is the transformative tort analogue of the conventional concept of compensation, what is the transformative tort analogue of deterrence, the other (and economically prior) goal of conventional tort law? There is none. Since dynamism presupposes that ex post values are unpredictable ex ante, deterrence is meaningless in the transformative tort framework. This implies that, insofar as they are transformative torts, mass torts involve inherently retroactive legal transitions. See *infra* note 93. See generally Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 511 (1986) (legal transitions introduce uncertainty to deterrence calculus).

64. See G. CALABRESI, *supra* note 29, at 25.

identification with the victim—is one of the chief sources of inconsistency in community standards.

Intuitively, individuation would seem muted in the mass disasters associated with transformative torts. “A single death is a tragedy, a million deaths is a statistic.”⁶⁵ However, the mythic proportions of the wholesale disaster, filtered through modern telecommunications technology, touch us all. In contrast, our neighbor’s misery affects only a small circle of friends. In a curious inversion of sentiment, the large-scale accident may become more individuated than the sum of many individual tragedies.⁶⁶ We all see ourselves and our loved ones at an airplane crash, and cannot judge the event dispassionately. Only the survivors individuate the random roadside accident,⁶⁷ and the rest of us retain the community standards to judge it. In this sense, mass individuation of an event is simply one cause of the dynamism that undergirds transformative tort analysis. It may account for the disproportionate effect of comparatively small accidents: say, the *Challenger* disaster.⁶⁸

Individuation may also be viewed differently, as a separate analytical category within transformative torts. Individuation connotes special identification with another. It cannot be treated rationally without doing violence to our sense of universal rules.⁶⁹ This feeling of identification could conceivably be regarded as just another community standard, with rules of its own. However, we shrink from enunciating these rules, from stating sympathy or identification as rules of law. To do this would deny the

65. J. BARTLETT, *FAMILIAR QUOTATIONS* 954 (14th ed. 1968) (attributed to Stalin).

66. These excerpts from a newspaper article may illustrate this phenomenon:

Thousands around the world are rooting for little Cecelia Cichan, the miracle sole survivor of fiery Flight 255.

Gifts and words of hope have poured in for the 4-year-old, who still lay unconscious Tuesday in Mott Children’s Hospital in Ann Arbor, Mich.

. . . .

One gift: a used teddy bear. “Anybody that thought enough of the little girl to bring her a teddy bear that probably one of their children played with is just tremendous,” said Anthony Cichan.

Whitmer, *Survivor Tugs World’s Heartstrings*, U.S.A. Today, Aug. 19, 1987, at A3, col. 2.

67. To be sure, the adjudicators also individuate this accident; the act of adjudication may—to some extent—be transformative to the judge and jury. But the judge and the jury are cabined by procedural and substantive rules designed to reduce dynamism and individuation to acceptable levels. The impersonal ritual of the courtroom serves a similar function. See J. NOONAN, *The Passengers of Palsgraf*, in *PERSONS AND MASKS OF THE LAW* 111 (1976).

68. The loss of life in this disaster was relatively small, and the victims certainly assumed the risk. Yet public interest in the disaster was intense, triggered largely by the individuation of the astronauts, particularly the schoolteacher Christa McAuliffe. For an account of the impact of the mass individuation of astronauts on the early space program, see T. WOLFE, *THE RIGHT STUFF* (1979).

69. As Roberto Unger has noted:

It is the ethic of sympathy . . . [that] values the present and immediate person more than the future or distant one, and it breaks all moral rules in behalf of the loved one. Such an act always seems irrational, for our very conception of rationality has become identical to the idea of following [rational] rules. Because all human love is a particular relationship among particular persons, it must rebel against the universalizing tendencies of consequentialist or rule-bound ethics.

R. UNGER, *KNOWLEDGE AND POLITICS* 141–42 (1975).

universality of law, if not its utility. Since we cannot do so, individuation—although a real force—is outside the law.

E. *What a Transformative Tort Is Not*

The concept of transformative tort is a limited one. Not all disasters qualify, not even all large-scale disasters. The transformative tort is an ideal type, and even events such as nuclear disasters have many conventional characteristics. Indeed, most mass torts are better understood outside of the transformative tort framework. Of those that could fit the transformative tort framework, many are considered to be natural disasters, inappropriate for any sort of adjudication or formal resolution. These limits on the notion of transformative torts are discussed below.

1. *Spatial and Temporal Limits on the Concept of Transformative Tort*

The Buffalo Creek disaster and the asbestos litigation both illustrate what a transformative tort is *not*.

In the West Virginia coal country in 1972, a makeshift coal company dam disintegrated, causing a flood which destroyed most of the villages in the Buffalo Creek hollow. More than 125 people were killed and 4000 rendered homeless. Not only individuals, but the entire community was destroyed.⁷⁰ The mass litigation that followed was subsequently resolved by an out-of-court settlement.⁷¹ In contrast to the *Agent Orange* case, the settlement was apparently satisfactory to the plaintiffs; they did not appear to desire the sort of broader dialogue whose absence frustrated the *Agent Orange* veterans.

The Buffalo Creek disaster, even though it involved the destruction of a whole community, did not constitute a transformative tort. That the victim was a whole community was not enough in itself. The victims did not seek to transform the larger community that *adjudicated* the event. The values of a nation were not greatly affected by the events in a mountain hollow,

70. Kai Erikson, a sociologist hired by the plaintiffs' law firm to examine the effects of the disaster on the community, describes the emotional trauma suffered by the victims at Buffalo Creek:

By *individual trauma* I mean a blow to the psyche that breaks through one's defenses so suddenly and with such brutal force that one cannot react to it effectively. . . .

By *collective trauma*, on the other hand, I mean a blow to the basic tissues of social life that damages the bonds attaching people together and impairs the prevailing sense of communal-ity. . . . [It is] a gradual realization that the community no longer exists as an effective source of support and that an important part of the self has disappeared. . . . [The survivors] learn that they are isolated and alone, wholly dependent upon their own individual resources.

K. ERIKSON, *supra* note 49, at 153-54 (emphasis in original).

71. The survivors of the Buffalo Creek disaster filed suit in federal court. The defendants (the Pittston Company) eventually settled with the 600 claimants out of court for \$13.5 million, comprising \$5.5 million for property damage and wrongful-death claims, and \$8 million for psychic harm. For an account of the disaster written by the plaintiffs' lead counsel, see G. STERN, *THE BUFFALO CREEK DISASTER* (1976).

even though local values probably were. An event's place on the transformative-conventional continuum therefore depends on the scale of the event with respect to the jurisdiction in which the event is adjudicated or otherwise resolved. A transformative tort is a local matter, even though the locale may be as large as the United States.

The scale of a disaster may be determined not only by spatial factors, but temporal ones as well. The asbestos litigation is a good example. The combined impact of asbestos litigation to date could have had a transformative effect. However, the asbestos litigation took place over many years, in many small trials throughout the nation.⁷² None of the individual plaintiffs—mainly older working-class men—has attracted concentrated attention from the media. No single trial had a particularly large impact; important cases such as *Beshada v. Johns-Manville Products Corporation*⁷³ seemed to conform more to the landmark opinion paradigm described below rather than to the notion of a transformative tort. Even though asbestos has caused tremendous damage, its effects have been too diffuse to engender dynamism and too anonymous to engender individuation.

Dynamism requires not only a large shift in values, but also a rapid shift in values. The common law can adequately adapt itself to very large social or technological changes, but only when these changes are not packed into one case.⁷⁴

2. Natural Disasters

It is difficult to distinguish between natural disasters and torts. To call an event an "Act of God," rather than a tort, is a decision on liability, rather than a meaningful distinction based on lack of human agency or foreseeability. Tall buildings are vulnerable to earthquake damage; to call an earthquake an "Act of God" is merely to say that builders of tall buildings are not liable for the consequences of earthquakes. Driving a car creates risk of accidents; not holding a driver liable for risk because the driver could not "foresee" the risk⁷⁵ is similar to absolving a builder for damages resulting from an earthquake.

Although natural disasters are not distinguished by unusual foreseeability characteristics, they generally resemble transformative torts. They affect communities, as well as individuals,⁷⁶ and can certainly influence

72. See P. BRODEUR, *OUTRAGEOUS MISCONDUCT* (1985). The impact of asbestos need not have been so diffuse. Congressional intervention was attempted with the proposal of asbestos compensation bills in 1977 and 1980. See *id.* at 194-95. These bills were never enacted.

73. 90 N.J. 191, 447 A.2d 539 (1982) (denying "state-of-the-art" defense to asbestos defendants).

74. See *infra* text accompanying note 84.

75. See, e.g., *Breunig v. American Family Ins. Co.*, 45 Wisc. 2d 536, 173 N.W.2d 619 (1970) (driver who caused accident because of hallucinations not liable because she did not know she was likely to hallucinate and thus could not foresee risk).

76. "[D]isasters often disrupt the normal function of governments and communities . . ." 42

community values. Our reactions to natural disasters resemble those developed in the transformative tort paradigm. For example, disaster relief is particularized and does not involve rule-bound adjudication,⁷⁷ nor does it involve a notion of making the victims whole.⁷⁸

Not all natural disasters are transformative torts, and not all transformative torts are natural disasters. Natural disasters that do not engender dynamism or mass individuation certainly exist. Conversely, some transformative tort-like events escape the "natural disaster" pigeonhole, generally those with a pronounced technological character.⁷⁹ But we still tend to view the mass disaster as sent by God, rather than created by humans.⁸⁰ We do so possibly because conventional ideas of tort cannot cope with the transformative character of many of these events.

III. ADJUDICATION, LEGISLATION AND TRANSFORMATIVE TORTS

This Section further develops the limitations of common law adjudication as a response to transformative torts, and discusses the legislative role in the resolution of these events.

A. *The Common Law and Transformative Torts*

Transformative torts make bad common law by straining the process of traditional judicial decisionmaking. Dynamism strains the evolutionary process of the common law. Transformative tort adjudication attacks judicial rationality. Finally, courts are relatively poor at making the decisions required in transformative tort adjudication.

Dynamism deprives the common law of the time required to work itself out.⁸¹ But what about landmark cases? Even the common law has important individual cases that change its shape. How does this differ from transformative tort adjudication?

The common law is ordinarily viewed as poised in tension between "continuity and change"⁸²—stare decisis and landmark opinions. How-

U.S.C. § 5121(a)(2) (1982).

77. See 42 U.S.C. § 5141(b) (1982) (presidential authority to declare major natural disaster predicated only on gubernatorial request).

78. But rather, disaster relief involves "alleviating the damage, loss, hardship or suffering caused" by the disaster. 42 U.S.C. § 5122(2) (1982) (emphasis added).

79. See Huber, *The Old-New Division in Risk Regulation*, 69 VA. L. REV. 1025 (1983).

80. But see A. WIJMAN & L. TIMBERLAKE, *NATURAL DISASTERS: ACTS OF GOD OR ACTS OF MAN* 6 (1984) ("Though triggered by natural events such as floods and earthquakes, disasters are increasingly man-made. . . . Disasters are political and social events which can be and often are prevented.").

81. Professor Deutsch has described the role of time in the common law: "The key to the stability of the common law is . . . time: time in which to develop a pattern of decision whose meaning will be accessible to hindsight, and time in which to accommodate, in terms of shifting doctrine, the changes required of the law by changing social conditions." Deutsch, *Neutrality, Legitimacy, and the Supreme Court: Some Intersections Between Law and Political Science*, 20 STAN. L. REV. 169, 235 (1968).

82. G. CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* 3 (1982). Dean Calabresi has observed that the "law could normally be updated without dramatic breaks through common law

ever, most landmark decisions only appear to be a break from the past. In fact, they are usually the end product of some gradual process and are presaged by an upsurge of concurrences, dissents, and increasingly untenable legal fictions.⁸³ The underlying community consensus also changes gradually: The apparently abrupt change in legal doctrine lags behind the consensus as much as leads it. Facts—new technologies and modes of social interaction—transform values slowly enough so that their separation is reasonably complete in any individual case. But eventually, societal values—changing over many cases and years—fall out of kilter with legal rules. The realignment of values and rules then takes place abruptly in a single landmark decision.

In contrast to a landmark decision, where rules merely track values that have largely changed already, the adjudication of a transformative tort requires that rules and values change simultaneously. Transformative tort adjudication is marked by extraordinary fact patterns; the underlying fact pattern behind a landmark decision is usually quite ordinary. In transformative torts, facts and changed values are both packed into one case. Adjudication of transformative torts must affect preexisting societal attitudes as much as reflect them. In this sense, adjudication of transformative torts resembles legislation.⁸⁴

Transformative tort adjudication is inimical to a certain type of judicial rationality. In a sense, the judicial requirement for rationality is of a peculiarly narrow kind—the obligation of courts to provide reasoned,⁸⁵ uni-

adjudication and revision of precedents." *Id.* at 4. This statement is consistent with this Note; transformative torts are rare, and their effects on adjudication can normally be ignored.

83. Negligence, strict liability and comparative negligence were all innovations in tort law which, although usually ascribed to one landmark opinion, were the result of a slower movement of law. *See, e.g.,* *Brown v. Kendall*, 60 Mass. (6 Cush.) 292 (1850) (negligence), *described in* M. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW* 89-91 (1977); *Greenman v. Yuba Power Prods., Inc.*, 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963) (strict liability for products), *described in* Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 J. LEGAL STUD. 461, 496-505 (1985); *Li v. Yellow Cab Co.*, 13 Cal. 3d 804, 532 P.2d 1226, 119 Cal. Rptr. 858 (1975) (comparative negligence), *described in* Fleming, *Foreword: Comparative Negligence at Last—by Judicial Choice*, 64 CALIF. L. REV. 239 (1976).

84. "When the cases that make the law are the same ones that apply it . . . the distinction between legislation and adjudication hangs by a slender thread." R. UNGER, *supra* note 69, at 97.

Dworkin views legislation as concerned with "expanding or changing our public standards." R. DWORKIN, *LAW'S EMPIRE* 217 (1986). Adjudication, on the other hand, "interpret[s] these [legislative] standards to find implicit standards between and beneath the explicit ones." *Id.* In Dworkin's framework, then, transformative tort adjudication would be that which must expand or change public standards, and cannot be viewed as interpreting them.

85. Lon Fuller distinguishes the reasoned argument used in courts from the reasoned argument characteristic of other fora (including the political forum), by stressing its formal and institutionalized nature.

Adjudication is, then, a device which gives formal and institutional expression to the influence of reasoned argument in human affairs. As such it assumes a burden of rationality not borne by any other form of social ordering. A decision which is the product of reasoned argument must be prepared itself to meet the test of reason. We demand of an adjudicative decision a kind of rationality we do not expect of the results of contract or of voting. This higher responsibility toward rationality is at once the strength and the weakness of adjudication as a form of social ordering.

versally applicable justifications for their decisions. To the extent that individuation is a significant motive force for transformative tort adjudication, universalism must be discarded. Dynamism poses a different threat to judicial rationality, that of articulating a community standard which is being shaped by the very adjudication that articulates it.⁸⁶

Another kind of judicial rationality is implicated by transformative tort adjudication: reliability of decisionmaking. The growth of the common law places a relatively small value on individual cases, relying on a process of trial and error. However, large-scale torts are different from most conventional cases, in that there is a greater need to judge rightly the first time. The size of the case ensures that the loss from incorrect fact finding is greater than for small cases.⁸⁷ The relative scarcity of large-scale torts means that legal errors are less likely to be corrected soon, especially for legal issues unique to mass disasters.

Common law judges, who tend to be generalists "unfit for processing specialized information,"⁸⁸ are probably less suited for one-shot decision-making than legislatures, which can more efficiently specialize because of their committee structures and staff support.⁸⁹

B. *The Legislative Role in Transformative Torts*

Legislative involvement in dispute resolution is an old idea, harkening back at least as far as the right to petition of colonial days.⁹⁰ The right to petition fell into desuetude, largely because of legislative overload.⁹¹ It is this legislative overload that ensures that a legislative role in transformative tort resolution would not damage the role of the judiciary. As long as administrative treatment of new incidents is precluded, Congress has the time and inclination to deal only with the most politically significant torts. The events which create the greatest political pressure are the ones that furthest violate the conventional tort paradigm.

Legislative resolution of such events tends to be *sui generis*, based on the political characteristics of the situation. Such resolution is political in nature, based on political notions of reconciliation rather than justice-

Fuller, *The Forms and Limits of Adjudication*, 92 HARV. L. REV. 353, 366-67 (1978).

86. See *supra* notes 46-47 and accompanying text.

87. Presumably, common fact patterns will eventually be adjudicated correctly, after the courts have become accustomed to a particular sort of case. Mass cases retard this judicial learning curve by reducing the frequency of litigation.

88. D. HOROWITZ, *THE COURTS AND SOCIAL POLICY* 25 (1977).

89. The straitened rules of evidence, prohibition on *ex parte* communication, and dependence on facts presented by the litigants make judicial fact finding even more difficult. See Note, *Choosing Representatives by Lottery Voting*, 93 YALE L.J. 1283, 1285 n.12 (1984) (limitations of judicial fact finding compared with strengths of legislative fact finding).

90. See Note, *A Short History of the Right to Petition Government for the Redress of Grievances*, 96 YALE L.J. 142 (1986).

91. *Id.* at 147-49. In the Federal Congress, the politics of slavery played a more significant role in weakening the right to petition. Petitioning for dispute resolution had its greatest vitality at the colonial (or state) level.

based ideas of compensation. Logrolling and compromise, so foreign to formal legal thought, are appropriate here. The legislature may choose to create a separate administrative system to compensate the tort victims, as it did with the black lung program.⁹² It may choose to modify the tort system by limiting the judicial role, as with the lower tiers of Price-Anderson. It may decide to expropriate a tortfeasor corporation,⁹³ or expend federal resources on victims and their local governments,⁹⁴ or it may decide to do nothing. Any of these responses may be appropriate in a particular case, as long as a political—not administrative—process is observed. Although creation of an administrative agency may be an appropriate legislative response to an individual event,⁹⁵ routine administrative handling of these events violates the *sui generis* concept of reconciliation. Administrative agencies tend to become routinized and subject to bureaucratic rules and precedents, which share the same problems as judicial ones.

These responses are not hypothetical; they all have occurred. Perhaps politicians, lawyers and other policymakers already understand transformative tort analysis, and wisely ignore both tort economics and the legal system. In such case, this Note merely articulates common knowledge.

IV. CONCLUSION

Adjudication is not necessarily a mere barometer of community values, even outside the transformative tort framework. Owen Fiss's "structural" litigation and Abram Chayes's "public law" litigation have marked similarities to transformative tort litigation.⁹⁶ Fiss, especially, in stressing the

92. The black lung program is a federal adjunct to state workers' compensation programs designed to "compensate coal miners and their dependents for totally disabling respiratory and pulmonary impairments arising as a direct consequence of coal mine employment." Ramsey & Habermann, *The Federal Black Lung Program—The View from the Top*, 87 W. VA. L. REV. 575 (1985). See 30 U.S.C. § 901(a) (1982).

93. This is apparently constitutional, at least for partial takings. Retroactive workers' compensation assessments of employers were ruled constitutional in *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1 (1976). The Court indicated that "[t]he retrospective aspects of legislation, as well as the prospective aspects, must meet the test of due process and the justifications for the latter may not suffice for the former." *Id.* at 17. The court went on to reject retrospective imposition of liability for purposes of deterrence or blameworthiness, accepting a loss-spreading compensation rationale. *Id.* at 18.

No new law can be devoid of at least some retroactive impact. See Graetz, *Legal Transitions: The Case of Retroactivity in Income Tax Revision*, 126 U. PA. L. REV. 47 (1977). See *supra* note 63.

94. This is a response—executive rather than legislative—of the Disaster Relief Act. 42 U.S.C. §§ 5121–5202 (1982). An executive role in resolution of transformative torts is certainly more problematic than a legislative role; executive overload is far less likely to ensure restraint, and executive action is far more likely to be routinized.

95. The federal black lung program is an example of an administrative program set up as a response to a particular event. See *supra* note 92.

96. See Chayes, *The Role of the Judge in Public Law Litigation*, 89 HARV. L. REV. 1281 (1976); Fiss, *The Supreme Court 1978 Term—Foreword: The Forms of Justice*, 93 HARV. L. REV. 1 (1979). See also B. ACKERMAN, *RECONSTRUCTING AMERICAN LAW* 28–37 (1984) (discussing institutionalization of "activist lawyering").

role of the judiciary as a supplier of norms, foreshadows this Note's discussion of dynamism.⁹⁷ However, both of these authors appear to advocate judicial resolution of these "public" or "structural" cases.

This Note's development of the transformative tort rubric argues the opposite case: that a certain kind of litigation should be treated legislatively. But there is no real disagreement between this Note and these authors. The line between legislation and adjudication is blurred; litigation and legislation are complementary, not competitive. If functions traditionally considered legislative have an adjudicative component, the converse is also true. Transformative torts are traditionally treated as private law when not viewed as a natural disaster totally outside the law. However, they may also be fittingly resolved by the political process.

97. Fiss, *supra* note 96, at 30. Fiss seems to imply that judicial norm-setting is the bread and butter of adjudication, while this Note assumes that normal cases are centered around dispute resolution. *Id.* at 36. However, transformative torts are not normal cases and do seem to resemble Fiss's "structural" litigation.