RISK AND REFLEXIVITY: WHAT SOCIO-LEGAL STUDIES ADD TO THE STUDY OF RISK AND THE LAW

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INTRODUCTION

In the Meador Lecture Series on Risk and the Law, which began last year and concludes with this Essay, the University of Alabama School of Law community has heard from two of the most distinguished risk scholars in the American legal academy. There are clear differences between them. Professor Cass Sunstein is a noted advocate of cost-benefit analysis as a necessary, if not sufficient, core of democratic deliberation on risk regulatory decisions. Professor Lisa Heinzerling is a strong critic of cost-benefit analysis and has published one of the most noted challenges to the empirical strength of one particularly politically influential example. Professor Sunstein has made a particular point of challenging the "precautionary principle," at least in some of its forms. Professor Heinzerling applies the precautionary principle in her analysis of risk regulation.

At the same time, we should note what Professors Sunstein and Heinzerling share. Both focus primarily on environmental regulation and to a large extent embrace the appropriateness of governmental regulation of risk, although they could be placed at different points on the left, or pro-side, of a regulatory continuum. With some exceptions, they do not primarily consider the way risk is articulated and distributed in criminal law and procedure, products liability, or in the vast set of enterprises known as insurance. Both turn to the natural sciences as the primary sources of information that should inform risk decisionmaking.⁵ In a sense, both view the critical problem of environmental law as bringing scientific knowledge and democratic decisionmaking together.⁶ For Professor Sunstein, cost-benefit analysis pro-

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^{1.} See Cass R. Sunstein, Risk and Reason: Safety, Law, and the Environment 4-9, 106-08 (2004).

^{2.} Lisa Heinzerling, Regulatory Costs of Mythic Proportions, 107 YALE L.J. 1981 (1998) (applying the concept of "discounting" to human life in risk analysis).

^{3.} See CASS R. SUNSTEIN, LAWS OF FEAR: BEYOND THE PRECAUTIONARY PRINCIPLE (2005); Cass R. Sunstein, Cost-Benefit Analysis and the Environment, 115 ETHICS 351 (2005).

^{4.} See Frank Ackerman & Lisa Heinzerling, Priceless: On Knowing the Price of Everything and the Value of Nothing 117-20, 224-29 (2004).

^{5.} See, e.g., id.; Sunstein, supra note 3.

^{6.} Compare ACKERMAN & HEINZERLING, supra note 4 (questioning the use of cost-benefit analy-

vides a crucial mechanism for democratic deliberation and risk decision-making. For Professor Heinzerling, the precautionary principle is critical to prevent regulation from being captured by the enormous economic interest behind potentially catastrophic risks. 8

Perhaps more than any other legal academic today, Professor Sunstein has sought to develop a multi-disciplinary framework, involving primarily economics and cognitive psychology for analyzing the law of risk—an approach that has been called "behavioral law and economics." One component of Sunstein's approach, as noted above, is the centrality of cost-benefit analysis, the imperfect yet improvable art of quantifying the real cost of reducing risk and measuring the likely benefits to be obtained. Another component recognizes that human decisionmakers are influenced by a series of cognitive biases rooted in psychology and perhaps in sociological and demographic factors. One prominent example of a cognitive bias is the widely noted "availability heuristic," which predicts that a subject will overinvest in risks that are being discussed by others in the subject's environment. Another example is "probability neglect," which is the tendency for subjects to pay far more attention to the seriousness of the risk than to the probability that such risks will come to fruition.

Both sides of Professor Sunstein's approach are grounded in scientific projects. Cost-benefit analysis is largely the product of risk assessment experts who draw from a variety of engineering and science fields, as well as statistical methodologies, to provide estimates of both costs and benefits associated with particular regulations. Cognitive biases have been identified by a rich body of experimental results in cognitive psychology since the early 1970s. In Sunstein's analysis, economics play an important part in bringing the insights of both projects together and drawing inferences from them about the behavior of subjects and institutions. For Sunstein, both the law and the governance of risk (through regulation and rule-guided private

sis in public policy decisions), with Sunstein, Cost-Benefit Analysis and the Environment, supra note 3 (promoting the use of cost-benefit analysis in public policy decisions).

^{7.} SUNSTEIN, supra note 3, at 131.

^{8.} See ACKERMAN & HEINZERLING, supra note 4, at 185.

^{9.} Though one should note that Justice Breyer wrote extensively on this topic prior to leaving academia. See, e.g., STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION (1993).

^{10.} Christine Jolls et al., A Behavioral Approach to Law and Economics, in BEHAVIORAL LAW & ECONOMICS 13, 13-21 (Cass R. Sunstein ed., 2000).

^{11.} SUNSTEIN, supra note 1.

^{12.} *Id*

^{13.} See, e.g., CASS R. SUNSTIEN, Introduction, in BEHAVIORAL LAW & ECONOMICS, supra note 10, at 3, 3-9.

^{14.} SUNSTEIN, supra note 3, at 65-66; see also SUNSTEIN, supra note 1, at 33-35; Amos Tversky & Daniel Kahneman, Availability: A Heuristic for Judging Frequency and Probability, 5 COGNITIVE PSYCHOL. 207, 208, 230 (1973).

^{15.} SUNSTEIN, supra note 3, at 64-69.

^{16.} See SUNSTEIN, supra note 1, at 192.

^{17.} Tversky & Kahneman, *supra* note 14, at 207 ("Much recent research has been concerned with the validity and consistency of frequency and probability judgments.").

^{18.} See, e.g., SUNSTEIN, supra note 3, at 129-48.

behavior like insurance contracts) should seek to achieve the efficient reduction of risks identified by democratic processes after correcting, as much as possible, for the cognitive biases that afflict both subjects and institutions. ¹⁹ The study of risk should strive to achieve the most general, abstract, and parsimonious theory of risk selection possible.

Whatever its merits as a normative guide to policy, Sunstein's behavioral law and economics framework is too narrow a guide for scholarship and pedagogy concerning the intersection of risk and the law.²⁰ In this Essay, I would like to offer, based on work in sociology, anthropology, and cultural studies, an alternative strategy for research and pedagogy—an approach which I label a socio-legal analysis of risk.²¹

Similar to Sunstein's theory, this approach emphasizes two components. One focuses on how risk is "problematized" at a particular time. Like the cognitive psychology notion of "availability," the focus on problems recognizes the importance of the way subjects apprehend risk. Both acknowledge that the flow of risk information is an important determinate. But instead of focusing primarily on frequency, the analysis of problematization is concerned with the richer narratives in which certain privileged examples of risk are broadcast at specific historical times. For example, at the turn of the twentieth century, in the United States and other industrializing nations, the problem of work accidents emerged as the central example of the new kinds of risk that industrial societies confronted. From the perspective of economics and behavioral economics, these narratives and the history of power struggles over the problem of work accidents may appear irrelevant

^{19.} See, e.g., SUNSTEIN, supra note 1; SUNSTEIN, supra note 3.

^{20.} To be sure, it is possible to have a general belief in broad interdisciplinary inquiry, while also believing in the productivity of pushing parsimony in individual projects.

^{21.} The work in sociology and anthropology that is being conscripted here for the socio-legal study of risk and the law includes: Ulrich Beck, Risk Society: Towards a New Modernity (Mark Ritter trans., 1992); François Ewald, L'Etat Providence (1986); Anthony Giddens, The Consequences of Modernity (1990); Nikolas Rose, Powers of Freedom: Reframing Political Thought (1999); Theda Skocpol, Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States (1992); Viviana A. Zelizer, Pricing the Priceless Child: The Changing Social Value of Children (1985).

There is a growing body of work that would identify with the socio-legal framework including: RISK AND MORALITY (Richard V. Ericson & Aaron Doyle eds., 2003); RICHARD V. ERICSON & KEVIN D. HAGGERTY, POLICING THE RISK SOCIETY (1997); RICHARD V. ERICSON ET AL., INSURANCE AS GOVERNANCE (2003); CAROL A. HEIMER, REACTIVE RISK AND RATIONAL ACTION: MANAGING MORAL HAZARD IN INSURANCE CONTRACTS (1985); JOSEPH V. REES, HOSTAGES OF EACH OTHER: THE TRANSFORMATION OF NUCLEAR SAFETY SINCE THREE MILE ISLAND (1994); Tom Baker, On The Genealogy of Moral Hazard, 75 Tex. L. Rev. 237 (1996); Pat O'Malley, Uncertain Subjects: Risks, Liberalism and Contract, 29 Econ. & Soc'y. 460 (2000); Nancy Reichman, Managing Crime Risks: Toward an Insurance-Based Model of Social Control, 8 Res. In L. Deviance and Soc. Control. 151 (1986); Jonathan Simon, The Ideological Effects of Actuarial Practices, 22 Law & Soc'y Rev. 771 (1988); Deborah A. Stone, Promises and Public Trust: Rethinking Insurance Law Through Stories, 72 Tex. L. Rev. 1435 (1994).

^{22.} Gil Gott, A Tale of New Precedent: Japanese American Internment as Foreign Affairs Law, 40 B.C. L. REV. 179, 183 n.20 (1998) ("Problematization refers to the intellectual method by which complexity and ambiguity are homogenized and normalized.").

^{23.} See John Fabian Witt, The Accidental Republic: Crippled Workingmen, Destitute Widows, and the Remaking of American Law 9-10 (2004).

to the problem of estimating the true costs and benefits posed by a particular risk.

A socio-legal analysis of risk and the law, however, insists on the inclusion of these narratives and their evidence as to how risks actually arise and confront people, not the in abstract, but in specific ways rooted in racial, ethnic, class, and gender characteristics. This evidence provides essential material for understanding the ways in which differently situated subjects interpret the stakes of addressing certain risks. It follows that for a sociolegal study of risk and the law, the subjects who confront risk decisions are not generic human beings;²⁴ rather, they are Southern soldiers fighting the Civil War,²⁵ Baltic steel workers in Pittsburgh at the turn of the twentieth century,²⁶ or Mexican immigrants crossing into the United States at unauthorized and hazardous points on the border.²⁷

The second focus of our inquiry is the specific technologies and strategies that emerge through competition with other people as the preferred solutions to the dominant risks confronting an individual. Thus, consider our first detailed inquiry: the problem of work accidents in the United States during the second half of the nineteenth century and the early twentieth century drew a range of "solutions" that each involved fundamentally different mechanisms, ranging from instilling personal responsibility through discipline (and reinforced by legal immunity for employers) to developing workmen's compensation. By the 1920s, professionally managed workmen's compensation insurance had emerged as the dominant solution, and, indeed, as a blueprint for solving related risk dilemmas. Such as is often the case, the most successful technologies for managing a risk that has dominated public attention become templates, influencing how seemingly analogous risks will be governed.

The socio-legal analysis of risk and the law also differs from behavioral law and economics in what we might think of as its meta-strategy for theorizing. Rather than striving to produce a general theory of risk to locate all the ways risk is articulated in contemporary law, a socio-legal approach focuses on the plurality of different ways that risk choices are ordered by actual institutions, belief systems, and identities. While the behavioral law and economics approach treats risk as belonging to a generic flow of time in which subjects in the present are constantly confronted by threats in the future, the precise nature of which will only be known when they are in the

^{24.} Sunstein also endeavors to address the way that subject position and specific risk change valuations in risk regulation. See SUNSTEIN, supra note 3, at 161. To the extent that his account begins to draw on empirical work, it will become more and more like a socio-legal study of risk and the law, but it will offer a less parsimonious set of cognitive supplements to standard economic analyses.

See SKOCPOL, supra note 21.

^{26.} See, e.g., Crystal Eastman, Work-Accidents and the Law 11-15, 49-75 (1910).

^{27.} See, e.g., Darryl Fears, Border States Paying Toll of Fatal Crossings, WASH. POST, Sept. 7, 2005. at A3.

^{28.} See generally WITT, supra note 23 (describing responses to the work-accident crisis of the nineteenth century).

^{29.} Id. at 147-48.

past, the socio-legal analysis of risk is historical and reflexive.³⁰ From this perspective, subjects rarely confront risks as precisely specified costs and probabilities; instead, their situations vis-à-vis institutions, practices, and beliefs have already marked them with particular social associations and positioned them in proximity to particular technologies of risk management and strategies of governance.

Sunstein has acknowledged that both culture and cognitive bias plague risk assessment.³¹ From this perspective, culture looms as another field of bias leading subjects to deviate from what rational risk behavior would predict—that is, indifference among risk management approaches with the same expected utility. Culture in this respect might be treated as a kind of "plug-in" that improves the operation of cost-benefit analysis where it informs democratic deliberation about risk.³² But the plug-in approach works only if a very thin analysis of culture will suffice. If deliberation has to make room for thick descriptions of particular narratives of risk as well as historical evidence of particular technologies and strategies of risk governance, it will no longer be able to concentrate primarily on cost-benefit analysis.

In the balance of my own contribution to this year's Meador Lectures, I want to highlight three distinct risks which Americans have confronted during the past hundred years that I would argue have been particularly influential: work accidents, crime, and cancer. Each has helped shape the way Americans understand and imagine risk as a more general problem for the legal system and, indeed, for the political system. By narrating risk in a particular context and associating it with specific practices of risk management, these examples constrain our ambition to produce a more general deliberation about risk and how it should be governed.

Each of these exemplary hazards has been associated with distinctive mechanisms of legal coordination and control. First, work accidents were a matter of controversy during the last decades of the nineteenth century in the United States, but within a few years after World War I, professionally managed liability insurance known as workmen's (later workers') compensation became the consensus solution throughout the country.³³ It had already spread through most of Europe.³⁴ Second, the emergence (or perhaps re-emergence) of crime as a consuming obsession for American society

^{30.} C.f. Daniel H. Cole, M. Dale Professorship Inaugural Lecture, *The Importance of Being Comparative*, 33 IND. L. REV. 921, 928 (2000).

^{31.} See SUNSTIEN, Introduction, in BEHAVIORAL LAW & ECONOMICS, supra note 10. The most influential version of the argument remains MARY DOUGLAS & AARON WILDAVSKY, RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECHNOLOGICAL AND ENVIRONMENTAL DANGERS (1982).

^{32.} One insightful effort to show how cultural analysis needs to be added to the economics and psychology-driven mainstream is Dan M. Kahan & Donald Braman, *More Statistics, Less Persuasion: A Cultural Theory of Gun-Risk Perceptions*, 151 U. PA. L. REV. 1291 (2003).

^{33.} WITT, *supra* note 23, at 145-47. Note that the gender specific term, "workmen's compensation," was used in the early development of the system, but it was later replaced with the neutral "workers' compensation" designation. *Id.* at 20. Both terms are used throughout this Essay.

^{34.} Id. at 132.

corresponded to the renewal of disciplinary strategies that made the beneficiaries of insurance and other systems of collective risk more "responsible" for controlling their own and others' opportunism.³⁵ Third, in the late 1950s, fear of cancer produced one of the strongest environmental laws ever enacted by Congress—a law that, in effect, amounted to something very much like the precautionary principle that Sunstein criticizes.³⁶ Today, the widespread experience of cancer by an older and more affluent population is creating a new kind of risk strategy, one that presupposes insurance but relies heavily on the patient's own participation in evaluating experimental findings and selecting treatment options.³⁷

Part I looks at the emergence, starting in the nineteenth century and continuing through the first half of the twentieth, of work accidents as the central topic of risk narratives and at the rise of insurance as a general solution to the problem of risk in industrial societies. In a very real sense, the broader welfare state that has been so much a part of legal life and controversy since the New Deal arose from a way of imagining risk and the from those institutions managing risk prompted by the problem of work accidents.

Part II is divided into two parts, one describing crime and the other describing cancer as two forms of risk that have emerged to replace work accidents as an influential model, generating their own dominant solutions. If work accidents and loss spreading through insurance anchored an era of general welfare, crime and cancer are rival models for an era of catastrophic risk that has eroded support for welfarist strategies of risk management and encouraged a host of new ones.

Part III looks at possibly emerging models of risk solutions: mountaineers and cancer patients. These individuals seem to draw on pre-workers' compensation forms of responding to risk, and they may shed light on the direction that current risk solution analysis should take.

I. WORK ACCIDENTS AND THE LAW

In some sense, to be sure, all societies throughout civilized history have dealt with risk and sought, through sacrifice and other means to alter, even if just a little, the chance that dreaded hazards will come to pass. Yet we can speak of a "risk society" of a much more recent vintage, if we restrict that term to societies where risk has been objectified through expert calculations of past experience and made subject to trade in markets.³⁸ This phenomenon

^{35.} See DAVID GARLAND, THE CULTURE OF CONTROL: CRIME AND SOCIAL ORDER IN CONTEMPORARY SOCIETY (2001).

^{36.} SUNSTEIN, supra note 3, at 13-34.

^{37.} Jan Hoffman, Awash in Information, Patients Face a Lonely, Uncertain Road, N.Y. TIMES, Aug. 14, 2005, at A1.

^{38.} François Ewald, *Insurance and Risk*, in THE FOUCAULT EFFECT: STUDIES IN GOVERNMENTALITY 197, 197-210 (Graham Burchell et al. eds., 1991).

emerged not much earlier than the mid-nineteenth century.³⁹ Before that, there was an impressive market in risk that formed around Lloyd's Coffee House in London and other places,⁴⁰ but it was probably not until the beginning of the Victorian period in England, when the combination of rising casualties from new industry—in particular railroads—and volatile new financial markets open to a large public made risk a calculable factor and an important problem of governance and laws.⁴¹

Recent work on nineteenth and twentieth century legal history has revealed a great deal about the way American law and government responded to the emergence of work accidents as a profound social problem. Beginning in the late 1870s, work accidents began to replace the Civil War and the trauma it impressed on its survivors as the most compelling image of the risks associated with modern society. This new paradigm remained largely unchallenged, even expanding to deal with the national problems revealed by the economic depression of the 1930s, until the 1950s when the problems of a more affluent consumer society and the Cold War confrontation with communism began to replace it.

During this post-Civil War period, work accidents became so common and so widely noted that they became a major topic of public discussion.⁴⁵ Well before the end of the century, the appearance of young men maimed in industry on the streets of American towns and cities began to replace the injured Civil War veterans.⁴⁶ Work accidents became the model risk that governance and law focused on, attempting to produce more general strategies for dealing with the risks that seemed to afflict modern industrial societies.⁴⁷

For much of the nineteenth century, in England and the United States, the legal response to the losses of both workers and small investors in industries, like railroading, was to hold the individual largely responsible for managing these risks.⁴⁸ Behind the free labor logic of contract, valorized in

^{39.} Id. at 197.

^{40.} PETER L. BERNSTEIN, AGAINST THE GODS: THE REMARKABLE STORY OF RISK 88-89 (1996).

^{41.} See, e.g., Jonathan Simon, Edgework and Insurance in Risk Societies: Some Notes on Victorian Lawyers and Mountaineers, in EDGEWORK: THE SOCIOLOGY OF RISK-TAKING 213-15 (Stephen Lyng ed., 2005).

^{42.} WITT, supra note 23, at 24-42; Arthur F. McEvoy, The Triangle Shirtwaist Factory Fire of 1911: Social Change, Industrial Accidents, and the Evolution of Commonsense Causality, 20 LAW & SOC. INQUIRY 621 (1995); Jonathan Simon, "The Government of its Servants": Law and Disciplinary Power in the Industrial Work Place, 1870-1906, 13 STU. L. POL. & SOC'Y 105 (1993); Christopher L. Tomlins, A Mysterious Power: Industrial Accidents and the Legal Construction of Employment Relations in Massachusetts, 1800-1850, 6 L. & HIST. REV. 375 (1988).

^{43.} *Cf.* WITT, *supra* note 23, at 24.

^{44.} *Cf. id.* at 198.

^{45.} WITT, *supra* note 23, at 37.

^{46.} Id. at 23-24.

^{47.} Id. at 38-39.

^{48.} See Tomlins, supra note 42, at 378; Pat O'Malley, Imagining Insurance: Risk, Thrift, and Life Insurance in Britain, in Embracing Risk, The Changing Culture of Insurance and Responsibility 98, 98-110 (Tom Baker & Jonathon Simon eds., 2002).

key precedents like *Farwell v. Boston & Worcester R.R.*, ⁴⁹ there was confidence in the disciplinary power of employers to produce docile and productive workers who would obey work rules and procedures. ⁵⁰ On into the early twentieth century, the law of work accidents developed a complex series of rules that allowed recovery where employers had failed to produce an adequately disciplined work force. ⁵¹

In the early twentieth century, England (and somewhat later the United States) embraced a social insurance approach to work accidents in modern industries.⁵² Following paths already traveled by countries on the European continent, both England and the United States, as common law countries, abrogated the traditional employer defenses to suit by an employee for an on-the-job injury in favor of no-fault compensation paid from an insurance mechanism.⁵³ In the United States, this occurred state-by-state, beginning before World War I and becoming virtually universal by the end of the 1920s.⁵⁴

Workmen's compensation, as it was known, replaced a civil suit for damages with an administrative case tied to a schedule of payments for varying temporary and permanent injuries.⁵⁵ While most nations in Europe made the provision of this social insurance a matter of state action, most states in the United States allowed private insurers to occupy the field.⁵⁶ Modern insurance, with its actuarial methods for accepting risks and setting premiums, became the consensus solution to compensating work accidents.⁵⁷ The same methods promised to solve the political difficulties of managing the contentious relations between capital and labor by insuring against industrial societies' greatest risks—unemployment, health care expenses, and retirement income loss.⁵⁸ John Witt argues that workmen's compensation produced nothing less than a "new conception of social responsibility," one that

aspired to a breathtakingly radical democratic collectivism. It aimed not just to spread the risks of injury, but also to take on more fundamental risks such as poverty. If collective social insurance were

^{49. 45} Mass. (4 Met.) 49 (1842). The leading English precedent at the time was *Priestly v. Fowler*, (1837) 150 Eng. Rep. 1030 (K.B.).

^{50.} Tomlins, *supra* note 42, at 377-79.

^{51.} McEvoy, supra note 37, at 638-39.

See Tomlins, supra note 42, at 419-20.

^{53.} Simon, supra note 42, at 105.

^{54.} See, e.g., WITT, supra note 23, at 148.

^{55.} Id. at 184-86.

^{56.} See, e.g., id. at 95-97 (outlining origins of European, state-controlled, workers' compensation systems).

^{57.} See id. at 71-102 (documenting the development of various social insurance programs in the late 1800s and early 1900s).

^{58.} *Id*.

to insure workingmen's safety, health, employment, and old age, perhaps it could also insure their material subsistence.⁵⁹

The problem of work accidents, linked as they were to the solution of loss spreading through insurance, produced a palpable experience of solidarity that helped underwrite the forms of collectivism that were successfully implemented, such as much of the New Deal state with its promise of social security and freedom from fear. 60 Until the last third of the twentieth century, the slogan "more insurance for more people" could well have summarized the deepening of the welfare state in the affluent sectors of the global economy.⁶¹ Proponents believed not only that insurance could mitigate the collateral damage of industrial accidents to family and community, but also, that through making the pattern of casualties visible to employers or insurers with the capacity to regulate the work environment, it would push toward the steady improvement of safety.⁶² An indication of just how broad and promising the workmen's compensation or insurance model seemed is found in philosopher Josiah Royce's striking proposal, made during the early shock of World War I, to prevent future conflicts through a system of mutually invested insurance funds—a system he explicitly compared to workmen's compensation.⁶³ It seemed as if workmen's compensation was the model for envisioning all significant risks.

II. THE LAW OF CATASTROPHE

A number of sociological theorists of risk have suggested that the late twentieth century experienced an abrupt decline in the vision of risk anchored in work accidents, insurance, and an ethos of national solidarity through broad risk spreading.⁶⁴ In place of the work accident and other analogous events, such as automobile accidents⁶⁵ and accidents involving items of mass production and consumption, the advanced industrial societies that emerged from the conflagration of World War II came to be increasingly haunted by new risks, catastrophic risks different in kind from the risks of the industrial age—risks like weapons of mass destruction (whether used by a nation or by a terrorist organization); mass exposure to

^{59.} Id. at 150.

^{60.} Id. at 199.

^{61.} Tom Baker & Jonathan Simon, *Embracing Risk*, in Embracing Risk, The Changing Culture OF Insurance and Responsibility, *supra* note 48, at 1, 3.

^{62.} See Witt, supra note 23, at 144-46.

^{63.} JOSIAH ROYCE, WAR AND INSURANCE (1910). See also Jonathan Simon, Peace and Insurance: Recovering the Utopian Vision of Insurance in Royce's War and Insurance, 10 CONN. INS. L.J. 51 (2004).

^{64.} François Ewald, The Return of Descartes's Malicious Demon: An Outline of a Philosophy of Precaution, in EMBRACING RISK: THE CHANGING CULTURE OF INSURANCE AND RESPONSIBILITY, supra note 48, at 273, 282-83 [hereinafter The Return of Descartes's Malicious Demon].

^{65.} For further reading see Jonathan Simon, Driving Governmentality: Automobile Accidents, Insurance, and the Challenge to Social Order in the Inter-War Years, 1919 to 1941, 4 CONN. INS. L.J. 521 (1998).

highly toxic nuclear or chemical industry products; the global spread of new or old deadly infections; and the contamination of water, food, or blood by toxic contaminants, natural or human made.⁶⁶ On a smaller scale, violent crime and systemic diseases, especially cancer, have created their own kind of catastrophe logic.

The rise of catastrophic risks has led to erosion in society's confidence in the ability of the classic industrial age solutions, particularly loss spreading insurance and safety improvement through regulation or internal costsaving by employers. While work accidents occurred frequently, they generated relatively modest losses and were predictable in the aggregate. Catastrophes are, by their nature, rare but difficult to predict and possibly devastating in their consequences. At the extreme end, major catastrophes, like the explosion of a nuclear power facility or the spread of a new viral pandemic, defy the national logic of most loss spreading and regulation. Concerned citizens cannot take confidence in the traditional capacity of government to handle industrial risks in the face of these new hazards. The result is a growing public anxiety and, at times, retributive rage.

François Ewald argues that the logic of solidarity promoted by work accidents and the insurance solution is directly eroded by the emergence of catastrophic risks.⁷¹ Such risks are, or seem, intolerable to society.⁷² Mechanisms to prevent losses are no longer viewed with confidence. Promises to spread losses are not implausible, but they no longer undercut the dread associated with these risks.

In the face of such risks, a new set of strategies and mentalities has emerged. One is the precautionary principle, which brings to the surface the profound sense of skepticism about the capacity of present knowledge to allow reasonable chances to be taken.⁷³ The logic of precaution reflects the premium on avoiding catastrophic losses beforehand rather than compensating loss afterwards.⁷⁴ Likewise, its implicit relativism opens the door to plural narratives of danger and discounts the possibility of scientific resolution of the issues. This new logic of risk bespeaks a shift back towards political responsibility for decisions and away from the expert discretion of administrative agencies. Political leaders in an age of catastrophe stand to be blamed for risks that would have been difficult to predict, let alone those widely discussed.⁷⁵ There is also a return to sentiments of vengeance and

^{66.} See BECK, supra note 21, at 21-22.

^{67.} The Return of Descartes's Malicious Demon, supra note 64, at 295.

^{68.} See BECK, supra note 21, at 22.

^{69.} Id. at 76.

^{70.} C.f. id. at 154 (outlining an argument for political action to stabilize public demand for protection against catastrophe).

^{71.} The Return of Descartes's Malicious Demon, supra note 64, at 298.

^{72.} Id.

^{73.} See SUNSTEIN, supra note 1, at 13.

^{74.} The Return of Descartes's Malicious Demon, supra note 64, at 298.

^{75.} This has been evident in the ongoing political fallout from the mass destruction caused by Hurricane Katrina when it struck New Orleans at the beginning of September, 2005. See, e.g., The Republi-

retribution by the public in response to risk.⁷⁶ The solidarity logic of work accidents drained risk of some of its social capacity to outrage the public. The success of insurance "had almost made us riskophiles; now we are almost riskophobes."⁷⁷ The new logic, which Ewald dubs "safety," demands maximum effort to avoid catastrophe and when such avoidance fails, accountability.⁷⁸

One can find evidence for this catastrophe logic in both American and European public attitudes and policies toward risk, although often with different direction and different policy implications, depending on the specific context that has come to exemplify risk. One context that has at times been potent in both Europe and the United States is environmentalism, especially concern with environmental pollution leading to catastrophic individual conditions, like cancers, or catastrophic ecological conditions, like global warming or the death of parts of the oceans. Because each produces somewhat different mechanisms of governance, I want to address each briefly in turn. A second context that has especially dominated the American political imagination regarding risk is crime. While crime emerged somewhat after pollution and cancer as primary concerns of the post-work accident era, because it has been so dominant in the American context, I begin with it first.

A. Crime and Moral Hazard

Since the 1970s, no risk has preoccupied Americans more than that of crime and in particular crimes of violence. The fear of being assaulted or killed has transformed American life in multiple ways. Voters have supported "tough on crime" policies by legislatures and prosecutors, resulting in an unprecedented level of imprisonment. Middle class citizens have also reacted with market behavior, such as selecting suburbs as remote as possible from urban crime threats and demanding high levels of security in their schools, residences, and those places where they choose to work and shop. The imperative that most Americans of means feel to avoid both crime risks and those populations (poor and usually minority) assumed to be possible crime threats is all the more impressive when we consider how

can Crisis: What's Gone Wrong for America's Right, ECONOMIST, Oct. 1, 2005, at 11.

^{76.} DOUGLAS & WILDAVSKY, supra note 31, at 178.

^{77.} The Return of Descartes's Malicious Demon, supra note 64, at 299.

^{78.} Id. at 298-99.

^{79.} See SUNSTEIN, supra note 1, at 13-14, 24, 34.

^{80.} See id. at 14, 16, 34.

^{81.} GARLAND, *supra* note 35, at 199

^{82.} See id. at 10.

^{83.} See id. at 1, 16-17.

^{84.} MICHAEL TONRY, THINKING ABOUT CRIME: SENSE AND SENSIBILITY IN AMERICAN PENAL CULTURE 21-23 (2004).

^{85.} JONATHAN SIMON, GOVERNING THROUGH CRIME: THE WAR ON CRIME AND THE TRANSFORMATION OF AMERICA, 1960-2000 (forthcoming 2006) (manuscript ch. 9, at 32, on file with author).

many other salient risks are exacerbated by these choices, including increased exposure to automobile accidents, global warming, and dependence on energy from volatile regions of the world.86

The rise of crime as a defining risk for American society has eroded in various ways the culture of solidarity that work accidents and the technologies of mass insurance had created. Emotionally, the focus on violent crime and the irreparable harms it causes has undermined support for a social contract based on risk spreading.⁸⁷ Violent death and injury has come to seem an intolerable risk in just the opposite way that insurance helped make death and injury in work and automobile accidents—once viewed in similarly moral terms—seem tolerable.88

This presents something of a puzzle. Death and deformity, whether caused by violent crime or industrial accident, might seem just as catastrophic on the individual level. Arguably, insurance itself, by addressing the collateral consequences of injury and death on dependent families and communities, helped to make work accidents a more tolerable trade-off for the prosperity (or at least the full employment) produced by rising industrialism. Violent crime, on the other hand, rarely compensated through social insurance and generally leading to stigmatization and psychological harm of its victims as well as collateral harm to their dependents or guardians, produces a kind of rage in its victims—and projected rage in those who identify with that possibility—that is destructive of any sense of social contract.⁸⁹ The response of many Americans has been both to embrace privatized forms of security (of which the gated community may be the most visible expression) and public forms of vengeful justice. 90 In short, while widespread insurance compensation for work accidents helped forge a national consensus around strong risk spreading institutions during the first half of the twentieth century, violent crime (perhaps exacerbated by political manipulation) has produced a fragmenting trend toward ever-greater insecurity manifested in an increasingly privatized security system and an escalating cycle of more severe punishments.

When we examine American penal policies as risk governance strategies, we can observe a precise shift from risk spreading to a new mentality of "zero tolerance." The formal logic of penal correction and the practical operation of indeterminate sentencing and parole release systems common in American states from the 1940s through the 1970s promoted an insurance-like logic of spreading the risks of crime throughout the community under the guidance of expert discretion and surveillance. 92 The triumphant

^{86.} For a discussion of the irrationality of America's crime focus, see BARRY GLASSNER, THE CULTURE OF FEAR: WHY AMERICANS ARE AFRAID OF THE WRONG THINGS (1999).

GARLAND, supra note 35, at 157.

See Simon, supra note 65, at 525-28. 88.

^{89.} See GARLAND, supra note 35, at 9, 121-22.

⁹⁰ See id. at 161-63.

^{91.} See id. at 75-102.

^{92.} See id. at 34-40.

neo-retributionism and incapacitation, as the dominant penal logics of today, alternate between an emotional quest for vengeance—which bespeaks the end of any hope for prevention—and the pursuit of risk prevention through mass preemptive incarceration of the dangerous classes.⁹³ The former is consistent with the return of responsibility and accountability that Ewald associates with the age of catastrophic risks,⁹⁴ while the latter is a form of risk management which rejects spreading and instead concentrates risk within certain groups, for example, prisoners themselves and the largely inner-city and minority communities to which released prisoners return.

The rise of crime as a model risk also subverts insurance systems in a more direct way by introducing a consuming concern with opportunistic behavior within insurance itself or, as it is known in both insurance and economic theory, "moral hazard." At the turn of the twentieth century, moral hazard was a concept among underwriters that implied a kind of problematic and perhaps criminal subject that insurers would prefer not to cover. In contemporary economics, moral hazard has lost the implication of disreputability and bad character, and instead it is understood as the tendency of insurance itself to produce incentives for less precaution by shifting the financial burden of a risk onto the insurer. But the implication is the same: governance and law must work to hold guile in check, especially the guile of workers, consumers, and others at the base of the organization.

The perception that fraud is rampant in welfare and social insurance systems has helped to de-legitimize broad, entitlement-based government risk spreading programs. Indeed, at its broadest level, moral hazard has become a block on any substantial expansion of social insurance in recent decades—most strikingly the absence of health insurance for a large minority of Americans. Even in private contracts, the moral hazard has helped focus the governance of insurance on limiting the growth of insurance and building in that risk that is not transferred in the interest of mobilizing prudent behavior on the part of the insured. In health insurance, this takes the form of co-pays and deductibles. In property and liability insurance, it takes the form of exclusion clauses. Both treat the insured as a suspected opportunist, if not outright criminal.

^{93.} See id. at 168-90.

^{94.} Ewald, *supra* note 64, at 291.

^{95.} See Baker, supra note 21; HEIMER, supra note 21, at 28.

^{96.} Baker & Simon, supra note 61, at 15.

^{97.} Id. at 30.

^{98.} Martha T. McCluskey, Rhetoric of Risk and the Redistribution of Social Insurance, in Embracing Risk: The Changing Culture of Insurance and Responsibility, supra note 48 at 146, 149.

^{99.} Malcolm Gladwell made a forceful presentation of this thesis in *The Moral-Hazard Myth: The Bad Idea Behind Our Failed Health-Care System*, NEW YORKER, Aug. 29, 2005, at 44-49, available at http://www.newyorker.com/printables/fact/050829fa_fact.

^{100.} Baker & Simon, supra note 61, at 15-16.

^{101.} Gladwell, supra note 99.

^{102.} Baker & Simon, supra note 61, at 16.

The strength of the crime model has been demonstrated by the way the federal government has thus far conducted the "war on terror." Putting aside the invasion and occupation of Iraq, the major thrust of the government's war on terror against Islamic extremists associated with Al Qaeda has taken the form of techniques from the war on crime, including racial profiling, widespread and long-term incarceration, and heightened application of criminal and immigration laws to exert maximum pressure on individuals who share common religion or ancestry with identified terrorists. ¹⁰⁴ Crime is the government's model for the war on terror.

Similarly, the disastrous failure of federal emergency managers during Hurricane Katrina provides a key reminder of what is not being accomplished by governing terrorism risks through a crime model. As the terror plot of September 11, 2001 attests, a key element of vulnerability is the very infrastructure of American urban culture. Airports, skyscrapers, giant highways, stadiums, bridges and tunnels, as well as energy and water systems (for drinking and of course flood control) create a mass biological target vulnerable to terrorism, natural disasters, and system failures caused by a lack of duplicate systems. Yet this infrastructure has not been substantially reformed in its security in the last four years (with the major exception of airports). 106

Equally relevant is emergency response itself. Since we are unlikely to stop every effort at mass terror, our ability to rapidly rescue and treat victims and terrorized populations is critical. Based on the calamities of the federal, state, and local response to Katrina, this remains as major a vulnerability as it was on September 11, 2001—when, for example, police and fire fighters could not communicate with each other. Because of its element of willful violence, terrorism risks have a natural affinity to the crime risks that Americans have selected for so much attention over the last several decades. But adequate security against terrorism requires attention to just the kind of infrastructure and disaster management capacities that were demonstrably missing in the aftermath of Hurricane Katrina. Perhaps history will show that the disaster formed a turning point in American risk politics, moving away from an exclusive focus on crime.

^{103.} SIMON, supra note 85 (manuscript ch. 9, at 32-38, on file with author).

^{104.} Id. (manuscript ch. 9, at 29-30, on file with author).

^{105.} See, e.g., Joseph B. Treaster, Storm and Crisis: The Coverage; Gulf Coast Insurance Expected to Soar, N.Y. TIMES, Sept. 24, 2005, at C1; Karl Grossman, Op-Ed, Target: Plum Island, N.Y. TIMES, Sept. 11, 2005, at 14LI.11.

^{106.} See Thomas H. Kean & Lee H. Hamilton, Editorial, September 11's Unfinished Business More Apparent, AUGUSTA CHRONICLE (Ga.), Sept. 14, 2005, at A5.

^{107.} See, e.g., Bob Braun, 9/11 Panelists Aren't Naming Names in Katrina Fiasco, Either, STAR-LEDGER (Newark, N.J.), Sept. 15, 2005, at 13.

B. Cancer and Environmental Catastrophe

Before crime became an all-consuming concern, as it did in the United States during the 1980s, fear of catastrophe developed around themes of environmental pollution and biological doom. ¹⁰⁸ In Europe, environmentalism has remained the primary post-industrial concern of the public, and European political leaders have generally embraced the precautionary principle as a philosophy of risk regulation. ¹⁰⁹

In the United States, the first major piece of environmental legislation in the post-war period may have been the Food Additives Amendment of 1958. 110 Created by the first wave of consumer concern in the pre-Depression period, the FDA set allowable thresholds (or tolerances) for various chemical additives in food and drugs. 111 This model of tolerances accepted the imperative of production and idealized the industrial worker as the political subject who must be protected by government. The Amendment forbade interstate commerce in products for consumption containing measurable amounts of carcinogens. 112 In short, Congress declined to recognize any safe margin of exposure to carcinogens. While government agencies had traditionally established "tolerances" for various toxic chemicals, carcinogens, as a class, were held to have no such safe threshold and thus a policy of "zero tolerance" was formed, as economic critics would come to call this and similar regulatory policies during the 1970s. 113

The better known and later environmental laws of the 1970s would be focused on many concerns, including air and water pollution, endangered species, and the removal of toxic chemicals from industrial lands. However, the centrality of cancer to the emergence of legislative concerns about environmental risk also generally prevailed. As Mary Douglas and Aaron Wildavsky argue, pollution generates powerful anxieties in part because it is generally invisible, works involuntarily on bodies who may not be aware of

^{108.} DOUGLAS & WILDAVSKY, supra note 31 (arguing that environmentalism increasingly dominates American risk concerns because of the reshaping of American political life away from the traditional dominance of bureaucracies and markets—which each have their own preferred kinds of risk—toward a sectarianism which found that environmental pollution served as a powerful source of unity against a corrupting world of industry, big science, and government); see also Jonathan Simon, Fear and Loathing in Late Modernity: Reflections on the Cultural Sources of Mass Imprisonment in the United States, 3 PUNISHMENT & SOC'Y 21, 22 (2000).

^{109.} SUNSTEIN, supra note 1, at 13-18.

^{110.} Food Additives Amendment of 1958, Pub. L. No. 85-929, 72 Stat. 1784 (codified as amended in scattered sections of 21 U.S.C.).

^{111.} *Id*.

^{112.} Id

^{113.} To find the first work of major public importance that used the term "zero tolerance," see RACHEL CARSON, SILENT SPRING 225 (1962).

^{114.} See, e.g., Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 685 (1977) (codified as amended at 33 U.S.C. §§ 1294 et seq.); Clean Air Act Amendments 1977, Pub. L. No. 95-95, 91 Stat. 685 (1977) (codified as amended at 42 U.S.C. §§ 7419 et seq.); Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 884 (1973) (codified as amended at 16 U.S.C. §§ 1531 et seq.); Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, 90 Stat. 2795 (1976) (codified as amended at 42 U.S.C. §§ et seq.).

its intrusion, and can produce irreversible and cataclysmic harms.¹¹⁵ In this regard, environmental pollution can be compared with witchcraft and with heretical religious ideas, both of which have generated public anxiety and governmental repression in the past.¹¹⁶ The target of pollution can either be the environment or the subject's own body, and of course, a large part of environmentalism as a social movement has involved linking the two together.¹¹⁷

Cancer came to define an exception to the solidarity and risk spreading of industrial America. While workers' compensation presumed some level of risk accepted by American workers, American consumers were to experience zero risk of cancer in their consumption. Why did cancer mark a divide that work accidents and military service did not produce? Like crime, cancer has been a subject of special dread in American society for many generations. Crime and cancer are especially destructive of risk sharing through government because they perform as "anti-governments." Criminal acts are those acts taken in defiance of rules with the greatest social sanction behind them. And although crimes are generally talked about, especially by conservatives, as caused by individual bad actors, the same discourse acknowledges a collective climate in which crime may be out of control. Similarly, cancers are unregulated cells that will neither die nor confine their growth to the functional pathways governed through the body's complex electrochemical guidance systems; as cancers grow, they also act to subvert the functional order of the body's systems in ways that often prove to be fatal. 118

Cancer in the twentieth century has also shared with crime an agonizing proximity to scientific progress. At the end of the nineteenth century, major improvements in medicine—especially bacteriology and the new, ensuing surgical antiseptic measures—generated great optimism that medicine would soon understand and treat cancer with some effectiveness after long being viewed as beyond the reach of medical science. In the same time period, advances in new "social sciences," including criminology, evolu-

^{115.} DOUGLAS & WILDAVSKY, *supra* note 31, at 26. Sunstein acknowledges the emotional power of concepts like involuntariness and irreversibility, but he questions whether they can provide adequate principles by which to categorize risk. *See* SUNSTEIN, *supra* note 3, at 141-42.

^{116.} See generally DAVID CHRISTIE-MURRAY, A HISTORY OF HERESY (1989).

^{117.} CARSON, *supra* note 113, at 225 (linking the way in which pesticides destroy the experienced environment to the despoliation of the human body, leading, in its ultimate form, to cancer).

^{118.} See American Cancer Society, What is Cancer?, http://www.cancer.org/docroot/home/index.asp (follow the "Learning About Cancer" hyperlink under the "Patients, Family, & Friends" hyperlink; then follow the "Learn About Cancer" hyperlink; then follow the "All About Cancer" hyperlink; then follow the "Detailed Guide: Cancer (General Information) hyperlink; then follow the "What is Cancer" hyperlink) (last visited Oct. 20, 2005).

^{119.} See, e.g., CHARLES E. ROSENBERG, THE CARE OF STRANGERS: THE RISE OF THE AMERICA'S HOSPITAL SYSTEM 142-65 (1987). Nevertheless, as late as 1909, general hospitals in New York City would not admit patients with cancer (or tuberculosis and other chronic or incurable diseases). Cancer was so feared that one hospital in New York in the early twentieth century devoted entirely to the care of cancer patients avoided the name altogether, calling itself "memorial hospital" instead of "Cancer Hospital." Id. at 306, 416 n.52.

tionary biology, and psychology, led to a revival of optimism that crime would soon be understood and subjected to therapies or at least preventive measures. 120 In both cases, the confidence in scientific progress was linked with faith that problems could be traced to specific causes in individual human beings that could be prevented. In both cases, however, scientists and their new audience of politicians and the public were to be disappointed through a repeated series of supposed "breakthroughs," rapid escalation of hopes, and disturbingly widespread failure. 121 Although cancer was undeniably an objective physiological disorder, its causes and treatment remained so profoundly mysterious that it shared with crime and other social maladies an essentially indeterminate nature for much of the twentieth century. 122 Consequently, like those social maladies, cancer discourse could not easily exclude moralists and others who saw in the disease primary lessons about the virtues and vices of our culture, rather than specific causal events. 123 Remarkably, despite a century of effort to bring cancer within a completely medical framework, it remains for most people strongly associated with mystery, suffering, and ultimately death. 124

Pollution and cancer (specifically in the post-World War II era) destabilized both the culture of solidarity and the practice of loss spreading through insurance that emerged from the work-accident paradigm. To make the work accident a tolerable loss, insurance and the solidarity culture valorized the industrial society in which accidents were embedded. If work accidents were tolerable, it was because industrial methods were profoundly good for society. Insurance was celebrated in large part because it allowed the costs of those accidents to be channeled through the same markets that distributed the goods. But pollution and cancer caused problems for both industrial production and the market economy that drove it. Whereas work accidents seemed acceptable because they were counter-balanced by the social gains that industrial work brought, cancers caused by industrial production (or consumption) did not lend themselves to the same kind of balancing.

Pollution and environmentally caused cancer also share with crime the destabilizing of trust in government that was essential to the culture of solidarity produced by work accidents and insurance. Unlike Europe, the American insurance system was largely private, though structured and regulated by court-enforced legal doctrines and governmental agencies. Much of the rage behind environmental, cancer, and crime politics has come from

^{120.} See DAVID J. ROTHMAN, CONSCIENCE AND CONVENIENCE: THE ASYLUM AND ITS ALTERNATIVES IN PROGRESSIVE AMERICA 66-72 (1980). In the case of crime, this followed a period of pessimism over the perceived long-term failure of the penitentiary as a mechanism of self improvement for criminals. Id. at 49.

^{121.} James T. Patterson, The Dread Disease: Cancer and Modern American Culture 146-50 (1987).

^{122.} See generally id. at 24-35 (providing a history of public fear, resulting from a lack of medical knowledge concerning cancer).

^{123.} Id. at 22-26.

^{124.} ROSENBERG, supra note 119, at 76.

^{125.} Baker & Simon, supra note 61, at 3.

the victims' sense of betrayal by government—either directly or indirectly through regulatory failure. Thus, the increasing attention to these risks is correlated with declining confidence in the very institutions that the culture of solidarity depended on: government, large markets, large corporations, and unions. 127

III. LESSONS FROM RISK EMBRACERS: MOUNTAINEERS AND CANCER PATIENTS

As we continue to develop risk management strategies that can address the new experience of catastrophic risks without further strengthening the tendency toward fragmentation and privatization in American public life, we can profit from reconsidering some of the discarded possibilities in the history of risk. Today we view workers' compensation as a victory for American workers, but as John Witt has documented, those workers and their organizations were deeply ambivalent about this development. 128 This ambivalence stemmed from the belief that the shift of financial liability to employers would also mean a shift of managerial power over the organization of production to employers. 129 Before workers' compensation, the burden of suffering the financial consequences of their injuries—shared to some extent through friendly societies and other pre-commercial forms of insurance—went along with a robust worker culture of shared risk-taking and control over work. 130 Workers made their own rules and accepted living with the misfortunes that they occasioned. But once the employer had to pay for all work injuries, workers would lose that autonomy. 131

Can the spirit of embracing risk through smaller communities of common knowledge and fate provide some insight into this age of catastrophe? I have argued elsewhere that much of the same spirit that animated small groups of skilled workers in embracing the risks of the shop floor has been reproduced or reinvented in the context of contemporary extreme sport adventurers, particularly mountaineers. Mountaineers embrace risk in exchange for autonomy and a chance to experience total reliance on themselves and their close compatriots. In their effort to manage that risk, they are aided by norms like the duty to write down and share experiences of

^{126.} See, e.g., GARLAND, supra note 35, at 109.

^{127.} See id.

^{128.} John Fabian Witt, The Transformation of Work and the Law of Workplace Accidents, 1842-1910, 107 YALE L.J. 1467, 1471-96 (1998).

^{129.} Id.

^{130.} Id. at 1501-02...

^{131.} Id

^{132.} Jonathan Simon, Taking Risks: Extreme Sports and the Embrace of Risk in Advanced Liberal Societies, in Embracing Risk: The Changing Culture of Insurance and Responsibility, supra note 48, at 177, 200.

^{133.} Id.

^{134.} *Id*.

danger and disaster in climbing journals¹³⁵ and the duty to rescue others, an obligation unrecognized by most common law jurisdictions but celebrated in the mountaineering culture. ¹³⁶

Perhaps an even more apt contemporary analogy to the embrace of risk by skilled workers in the late nineteenth century is the emergence of the cancer patient today as a new kind of risk adventurer. Unlike the mountaineer—but more like the worker—cancer patients have little choice of whether to confront the risks of their disease and their treatment. Unlike patients of the past, however, today's cancer patients (as well as those facing other chronic and threatening diseases like AIDS and multiple sclerosis) have begun to emerge as autonomous actors who must engage themselves in the literatures of their disease and then make choices with or without professional guidance as to treatment and its cessation. They do so bolstered by norms and organizational forms that look a great deal like those of mountaineers and perhaps earlier craft workers, including face-to-face solidarity (the all important "support groups") and literature produced both by experts and other patients (the equivalent of climbing journals) now much expanded by the Internet. 138

What if the cancer survivor were to take her place alongside the maimed industrial worker and the crime victim as one of our paradigms of what contemporary risks are and how Americans can confront them? The model of risk response that might emerge would be one that recognizes the vital nature of insurance—for none of the brave survivors who take responsibility for selecting among uncertain choices for treatment could do so without having medical insurance—and the importance of individual responsibility, while also acknowledging the importance of both the real and virtual communities of those facing a common fate. This multiplex image of risk and how to respond to it is one that I would like to leave on the table as a more hopeful logic for the present than the earlier paradigm of workmen's compensation or the more recent paradigm of crime and moral hazard.

CONCLUSION: SOCIO-LEGAL STUDIES OF RISK

I want to return to some reflection on the emerging field of law and risk and to the ways it might inform the normative debate about risk policy. I believe that empirically informed socio-legal studies of risk can complement and complicate the contributions made by behavioral law and economics. Rather than seeking to reduce risk choices to the most parsimonious model, a socio-legal approach tries to recover and highlight the subtle differences between real historical risk practices, struggles, and ideologies.

^{135.} Id. at 200-01.

^{136.} Jonathan Simon, Risking Rescue: High Altitude Rescue as Moral Risk and Moral Opportunity, in RISK AND MORALITY, supra note 21, at 375.

^{137.} Hoffman, supra note 37.

^{138.} See Kelly K. Gelein, Note, Are Online Consultations a Prescription for Trouble? The Uncharted Waters of Cybermedicine, 66 BROOK L. REV. 209, 225-26 (2000).

The injured worker, the crime victim, the cancer sufferer, are not just rational subjects faced with a risky context; they are exemplars, embedded in complex cultural narratives and linked to practices and organizations that help shape the way ordinary people and experts make judgments about risk. One can call this a version of the "availability heuristic" of behavioral law and economics, ¹³⁹ but these exemplars do more than filter the risks we pay attention to; they encourage us to imagine our own experiences and dealings with that risk. Socio-legal studies of risk would find their best curricular expression, not in a field of law and risk, but in substantive classes like Torts, Criminal Law, Insurance, Environmental Law, and Administrative Law, where the models, practices, and narratives unearthed by this research should enrich the analysis of cases, doctrines, and policies.

Normatively, socio-legal studies of risk are likely to complicate rather than simplify choices. We can see how the principles like the "precautionary principle" or "zero tolerance" play out quite differently in different settings. Thus, Professor Sunstein is quite right to point out that some of our responses to the war on terror, including the war in Iraq, represent the same logic as a strong version of the precautionary principle advocated in environmental risk regulation. Indeed, the lengthy war on crime that Americans have pursued over the last three decades is full of similar examples where a fear of crime risks leads to a demand for the state to incarcerate low level criminals who might pose a danger and permanently incapacitate those who committed more serious crimes. These harsh and mandatory penal laws are the criminal risk equivalent of a precautionary principle.

Yet from a socio-legal perspective, it is the particular context, characters, narratives, institutions, etc., within which a precautionary principle, cost-benefit analysis, zero tolerance, or any other risk governance strategy is deployed that makes all the difference. Indeed, to an extent acknowledged, but unexplored, by Sunstein, the practices of cost-benefit analysis are themselves derivative of the practices and mentalities associated with the earlier paradigm of industrial accidents. The very data that cost-benefit analyses utilize to estimate the benefit of particular regulations comes from the awards made by workers' compensation systems. Yet while Professor Sunstein suggests that we need to explore the degree to which different kinds of risks may generate different evidence of willingness to pay for risk reductions, he does not explore whether the cultural experience of work accidents and insurance loss spreading helped to produce the kind of stable values across institutions and persons that any robust cost-benefit analysis must depend on, but which cannot be presumed in this age of catastrophic

^{139.} See SUNSTEIN, super the 3, at 36-39.

^{140.} Id. at 14.

^{141.} See Rachel E. Barkow, Federalism and the Politics of Sentencing, 105 COLUM. L. REV. 1276, 1292-97 (2005).

^{142.} SUNSTEIN, supra note 3, at 138-42.

^{143.} See id. at 132-38.

^{144.} Id.

risks. It is this gap, among others, that the socio-legal study of risk and the legal response to it aspires to fill.