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Noga Morag-Levine

Michigan State University College of Law, moraglev@law.msu.edu

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NOGA MORAG-LEVINE*

The History of Precaution†

DAVID VOGEL, *THE POLITICS OF PRECAUTION: REGULATING HEALTH, SAFETY, AND ENVIRONMENTAL RISKS IN EUROPE AND THE UNITED STATES* (2012).

THE REALITY OF PRECAUTION: COMPARING RISK REGULATION IN THE UNITED STATES AND EUROPE (Jonathan B. Wiener et al. eds., 2011)

The distinctiveness of European from American regulatory cultures or traditions is a matter of longstanding controversy. Two recent books—The Politics of Precaution by David Vogel—and The Reality of Precaution, edited by Jonathan Wiener with several others—have made notable contributions to this debate. Both books argue that regulatory cultures or traditions are incapable of explaining current differences between American and European approaches to precaution, which they define as regulatory stringency. For Wiener, this conclusion derives from the inconsistency of patterns of stringency between the United States and Europe. Vogel argues that while the stringency of current European environmental regulation indeed exceeds that of its U.S. counterpart, the split is unstable and opened relatively recently. In combination, the books aspire to put to rest an entire family of historical-institutional explanations for cross-national regulatory differences in the transatlantic context and beyond.

This essay draws from legal history to argue for an alternative position: legal traditions and their associated administrative-law principles are highly relevant to current transatlantic conflicts over precaution. The paper's starting point is the distinction between two separate meanings of the precautionary principle, the first prescriptive, and the second permissive. In its prescriptive sense the

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precautionary principle urges regulators to take stringent mitigation measures in the face of scientifically uncertain risks. In its permissive sense, the principle authorizes the state to regulate when the relevant harms are scientifically uncertain. Conflicts over permissive precaution thus inherently reflect divergent views of the scope of the state's autonomy in the regulation of risk. These disparate views correspond closely, in turn, with relevant differences between the administrative-law traditions respectively associated with Anglo-American common law and Continental civil law.

INTRODUCTION

The United States and the European Union (EU) clashed openly at the start of the twenty-first century over the proper regulatory response to a number of environmental health and safety risks, including greenhouse gases, chemicals, hormones in beef, and genetic modification of food crops.¹ With respect to all of these areas, the United States cited scientific uncertainty as grounds for delaying or limiting regulatory restrictions. By contrast, the EU, invoking the precautionary principle, argued that it possessed authority to regulate in advance of clear scientific proof of harm. In a speech before European regulators in 2003—a time of particularly heightened tensions over this question—John D. Graham, the then-head of the U.S. Office of Information and Regulatory Affairs (OIRA), said of the precautionary principle: “We consider it to be a mythical concept, perhaps like a unicorn.”² The tone was emblematic of the transatlantic schism that had opened.

Identifiable differences between European and American approaches to the regulation of technological risk became evident almost in tandem with the creation of new environmental regimes in the United States and Western Europe in the 1970s. The resulting puzzle has since produced an extensive and important body of scholarship collectively focused on the source of transnational differences in regulatory policy and style.³ While building on these initial stud-

1. Norman J. Vig & Micheal G. Faure, *Introduction*, in *GREEN GIANTS? ENVIRONMENTAL POLICIES OF THE UNITED STATES AND THE EUROPEAN UNION 2* (Norman J. Vig & Michael G. Faure eds., 2004) [hereinafter *GREEN GIANTS?*]; Samuel Loewenberg, *Precaution Is for Europeans*, N.Y. TIMES, May 18, 2003, <http://www.nytimes.com/2003/05/18/weekinreview/precaution-is-for-europeans.html>.

2. Loewenberg, *supra* note 1.

3. See, e.g., SUSAN ROSE-ACKERMAN, *CONTROLLING ENVIRONMENTAL POLICY: THE LIMITS OF PUBLIC LAW IN GERMANY AND THE UNITED STATES* (1995); JOSEPH L. BADARACCO, JR., *LOADING THE DICE: A FIVE-COUNTRY STUDY OF VINYL CHLORIDE REGULATION* (1985); RONALD BRICKMAN, SHEILA JASANOFF & THOMAS ILGEN, *CONTROLLING CHEMICALS: THE POLITICS OF REGULATION IN EUROPE AND THE UNITED STATES* (1985); ROBERT A. KAGAN, *ADVERSARIAL LEGALISM: THE AMERICAN WAY OF LAW* (2001); STEVEN KELMAN, *REGULATING AMERICA, REGULATING SWEDEN: A COMPARATIVE STUDY OF OCCUPATIONAL SAFETY AND HEALTH POLICY* (1981); LENNART J. LUNDQVIST, *THE*

ies, more recent comparisons of American and European environmental regulatory policy can be distinguished in a number of ways. Rather than individual European countries, it is the EU as a whole that is nowadays the primary unit of comparison to the United States (though case studies of individual European countries still play a role). Likely related is the degree to which recent comparative works have taken the European-championed terminology of “precaution” as their starting point, irrespective of the various authors’ definition of, or sympathy towards, the precautionary principle. The result has been a bumper crop of recent studies focused on whether, how, and why Europe has become more precautionary than the United States.⁴ Of particular note are two recent books: *The Politics of Precaution*, by David Vogel,⁵ and *The Reality of Precaution*, co-edited by Jonathan B. Wiener, Michael Rogers, James Hammitt, and Peter Sand (referred to hereinafter as Wiener).⁶

Written by leading scholars in comparative environmental law, both books deepen and enrich understandings of the complexity of risk regulation on both sides of the Atlantic at the start of the twenty-first century. As can perhaps be deduced from the parallel titles, the two books are engaged in dialogue with each other. While in agreement over many aspects of contemporary American and European risk regulation, the conclusions they draw diverge in one key respect. *The Reality of Precaution* argues that conventional understandings of Europe as more precautionary than the United States do not withstand empirical scrutiny. Instead, the evidence suggests that “the reality of precaution is a much more complex pattern of overall par-

HARE AND THE TORTOISE: CLEAN AIR POLICIES IN THE UNITED STATES AND SWEDEN (1980); REGULATORY ENCOUNTERS: MULTINATIONAL CORPORATIONS AND AMERICAN ADVERSARIAL LEGALISM (Robert A. Kagan & Lee Axelrad eds., 2000); ECKARD REHBINDER & RICHARD STEWART, ENVIRONMENTAL PROTECTION POLICY (1985); DAVID VOGEL, NATIONAL STYLES OF REGULATION: ENVIRONMENTAL POLICY IN GREAT BRITAIN AND THE UNITED STATES (1986).

4. See e.g., GREEN GIANTS?, *supra* note 1; DOUGLAS A. KYSAR, REGULATING FROM NOWHERE: ENVIRONMENTAL LAW AND THE SEARCH FOR OBJECTIVITY (2010); MARK A. POLLACK AND GREGORY C. SHAFFER, WHEN COOPERATION FAILS: THE INTERNATIONAL LAW AND POLITICS OF GENETICALLY MODIFIED FOODS (2009); LINA M. SVEDIN, ADAM LUEDTKE & THAD E. HALL, RISK REGULATION IN THE UNITED STATES AND EUROPEAN UNION: CONTROLLING CHAOS (2009); UNCERTAIN RISKS REGULATED (Michelle Everson & Ellen Vos eds., 2009); KERRY H. WHITESIDE, PRECAUTIONARY POLITICS: PRINCIPLE AND PRACTICE IN CONFRONTING ENVIRONMENTAL RISK (2006); Robert V. Percival, *Who's Afraid of the Precautionary Principle?*, 23 PACE ENVTL. L. REV. 21 (2006).

5. DAVID VOGEL, THE POLITICS OF PRECAUTION: REGULATING HEALTH, SAFETY, AND ENVIRONMENTAL RISKS IN EUROPE AND THE UNITED STATES (2012).

6. THE REALITY OF PRECAUTION: COMPARING RISK REGULATION IN THE UNITED STATES AND EUROPE (Jonathan B. Wiener et al. eds., 2011) [hereinafter THE REALITY OF PRECAUTION]. In addition to serving as the lead editor, Jonathan Wiener co-authored two of the case studies in the book and the quantitative comparison study, and wrote the introductory and concluding chapters.

ity,"⁷ and that while Europeans are more precautionary about some risks, Americans show greater precaution about others. The view promoted by *The Politics of Precaution*, by contrast, is that Europe today is indeed more precautionary than the United States with respect to key environmental and public health risks. Importantly, Vogel understands greater European precaution to be a relatively recent phenomenon and a reversal of the situation during the 1970s and early 1980s when Europe lagged behind the United States, a shift he attributes largely to changes in the domestic politics of the respective regions. Hence the rationale for the dueling titles becomes clear: the *Politics* as opposed to the *Reality* of precaution. In earlier publications Vogel dubbed the thesis regarding the precautionary switch between Europe and the United States the "flip flop" hypothesis.⁸ *The Reality of Precaution* was partially conceived as an empirical test of that hypothesis, as Wiener notes in the introduction to the book, and one of the study's primary findings is its rejection.⁹

This disagreement aside, the two books concur with respect to one central point. They both reject cultural or historical-institutional explanations for transatlantic variations in levels of precaution. For Wiener, this conclusion derives from the absence of consistent patterns of stringency on either side of the Atlantic. For Vogel, it is a function of the instability and ostensible recent emergence of the current transatlantic split. The premise that "a variable cannot be explained by a constant,"¹⁰ leads Vogel to reject "historically rooted" and national-cultural explanations¹¹ in favor of a set of interrelated factors based on public opinion, leadership preferences, and guiding policy criteria.¹² Together, it might seem these books have settled a matter of long-standing debate: the capacity of legal culture and in-

7. Jonathan B. Wiener, *Introduction: The Rhetoric of Precaution*, in *THE REALITY OF PRECAUTION*, *supra* note 6, at 3, 13.

8. Regarding the "flip-flop" terminology, Vogel's recent book clarifies that a literal switch between the United States and Europe exists only with respect to the list of risks against which the United States took earlier and more stringent action in the 1970s and 1980s, e.g., toxic chemicals and ozone depleting substances. Many of the risks regarding which the EU currently shows greater precaution, e.g., climate change and genetically modified (GM) foods, were not subject to stringent regulation on either side of the Atlantic earlier on. VOGEL, *supra* note 5, at 5-6.

9. As Wiener writes in the book's introductory chapter, "The merit of the flip-flop or reversal claim is a central question of this book." Wiener, *supra* note 7, at 12. "In sum, both our case studies and our quantitative study find little or no support for the hypotheses of U.S.-European convergence, divergence, or reversal (flip-flop) in relative precaution over the past four decades." Jonathan B. Wiener, *The Real Pattern of Precaution*, in *THE REALITY OF PRECAUTION*, *supra* note 6, at 519, 533.

10. VOGEL, *supra* note 5, at 30.

11. *Id.* at 34.

12. *Id.* at 293-94.

stitutions to explain cross-national regulatory differences in the transatlantic context and beyond.¹³

This essay draws from legal history to argue for an alternative position: legal traditions and their associated administrative-law principles are highly relevant to current transatlantic conflicts over precaution. The starting point is the distinction between two separate meanings of the precautionary principle—the first prescriptive, and the second permissive.¹⁴ Used prescriptively, the precautionary principle *urges* regulators to take stringent mitigation measures in response to scientifically uncertain risks. Used permissively, the principle *authorizes* the state to regulate even in the face of scientific uncertainty. Prescriptive precaution is thus concerned with regulatory outcomes, whereas permissive precaution speaks to relevant legal principles. Largely ignoring this distinction, both Vogel and Wiener base their analysis and conclusions on a prescriptive interpretation of the precautionary principle. To be more precautionary, in both books' formulation, is to act earlier and more decisively in response to uncertain risk. It is, however, the permissive meaning that has figured most prominently in recent transatlantic tensions, as these have for the most part focused on the scope of regulatory *discretion*, rather than any *obligation* to regulate. Moreover, it is the permissive meaning that is essential for the purpose of assessing the relevance of historical legal and political institutions to European-American divisions over precaution.

Understood as a permissive rather than prescriptive rule, the principle can be restated as a requirement of judicial deference towards regulatory measures even where the evidence linking the regulated activities with distinct harms is uncertain. Seen through this prism, disagreements over permissive precaution track longstanding divisions between common law and civil law-based understandings of administrative autonomy and judicial review. Debate over health and safety regulation in both Britain and the United States during the nineteenth century revolved around competing models of administration—the first termed “nuisance,” the second “police.” Nuisance, reflecting common law principles of judicial supremacy, gave courts a final say on the reasonableness of regulatory interventions in the face of uncertainty regarding relevant environmental and public health risks. Police, by contrast, granted administrative bodies autonomous discretion regarding regulatory decisions of this type, in accordance with Continental understandings

13. See MARY DOUGLAS & AARON WILDAVSKY, *RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECHNICAL AND ENVIRONMENTAL DANGERS* (1982); SHEILA JASANOFF, *RISK MANAGEMENT AND POLITICAL CULTURE: A COMPARATIVE STUDY OF SCIENCE IN THE POLICY CONTEXT* (1986).

14. For specific references to this dual meaning of precaution within the literature on the topic see *infra* Part II.

of state prerogative. Within the context of this nineteenth-century conflict, the relevance of legal traditions was self-evident. The argument that the police model violated core precepts of common law constitutionalism was time and again deployed by both British and American opponents of Continental-style regulatory measures.¹⁵ Supporters of such reforms, meanwhile, rejected the alleged constitutional status of common law institutions and argued for the legitimacy of the Continental approach. That differences in legal traditions were front and center in this fight was, however, not in doubt.

American regulatory discourse today is rarely explicit with respect to the difference between common law and civil law ideas regarding administrative autonomy and judicial supremacy. But while we no longer construe the pertinent choice in terms of competing nuisance and police paradigms, common law sensibilities retain their influence on American administrative law practices and thought. The administrative autonomy inherent in permissive precaution conflicts with the common law's long-standing insistence that judges, rather than state administrators, have the final say on which health and safety risks justify regulatory interventions.¹⁶ The European Court's deferential stance towards administrative risk assessment and the European institutions' demand for similar deference from the World Trade Organization (WTO)¹⁷ are likewise consistent with the long-standing practices of domestic courts in Germany and other environmental leaders within the EU.¹⁸

The insight that current disputes are the contemporary incarnations of this historical division is not intended as a normative argument on the superiority of either the Continental or Anglo-American approach. Neither does it suggest that Americans are somehow united in monolithic support for the judicialized administrative models associated with the common law, nor that Continental-modeled-institutions have failed at times to find substantial foothold in American regulatory practices and vice versa. The claim instead is both descriptive and relatively narrow in scope: common-law-based rhetoric and ideology did not disappear from American regulatory discourse and policy with the New Deal. The contemporary American preference for judicial oversight over the regulation of scientifically

15. See Noga Morag-Levine, *Common Law, Civil Law, and the Administrative State: From Coke to Lochner*, 24 CONST. COMMENT. 601, 628–37 (2007) [hereinafter Morag-Levine, *Common Law, Civil Law*]; Noga Morag-Levine, *Is Precautionary Regulation a Civil Law Instrument? Lessons from the History of the Alkali Act*, 23 J. ENVTL. L. 1, 13–27 (2011) [hereinafter Morag-Levine, *Alkali Act*]. Noga Morag-Levine, *Facts, Formalism, and the Brandeis Brief: The Origins of a Myth*, 2013 U. ILL. L. REV. 59, 71–77 (2013) [hereinafter Morag-Levine, *Facts, Formalism*].

16. See *infra* Part III.

17. See *infra* Part II.

18. See ROSE-ACKERMAN, *supra* note 3; BRICKMAN, JASANOFF & ILGEN, *supra* note 3.

uncertain health risks, both in the domestic and international arenas, is consistent and continuous with the long-standing role of judges in the adjudication of nuisance disputes under common law. We cannot make sense of current transatlantic regulatory relations in isolation from this history.

The Reality of Precaution and *The Politics of Precaution*, individually and in combination, are important achievements advancing and enriching the transatlantic comparison of regulatory approaches. They are essential reading for anyone with an interest in the intricacies and complexities of American and European risk regulation. When it comes to their treatment of the role of legal culture, traditions, and institutions, however, both books rush to conclusions that a longer historical perspective would fail to support. The remainder of this Essay proceeds as follows. Part I provides a snapshot comparison of the two books' methodologies and chief findings. Part II expands on the distinction between prescriptive and permissive precaution and its relationship to divergent models of administrative law. Part III ties current divisions over permissive precaution to the historical distinction between the Continental police and common law nuisance paradigms, and follows the latter's incarnation in American "hard-look" judicial review. Part IV takes up the challenge of reconciling the view that differences in legal traditions are behind the transatlantic divisions over precaution, with the existence of evident variations between common law jurisdictions, most importantly the United Kingdom and the United States, with respect to the questions at issue. The implications of this history for Vogel's and Wiener's analyses of the role of judicial review, legal culture, and traditions are the subject of Part V.

I. THE REALITY AND POLITICS OF PRECAUTION

A. *The Reality of Precaution*

The Reality of Precaution is the most ambitious and comprehensive effort to date to empirically compare European and American responses to risk. A joint venture of a group of leading American and European scholars, the book employs two separate tools. The first is a series of detailed case studies of European and American responses to a broad spectrum of risks. The second is a quantitative analysis of the regulatory standards adopted (without regard to implementation) in response to a set of one hundred randomly selected risks drawn from a dataset of nearly three thousand.¹⁹ In combination, this dual strat-

19. See Brendon Swedlow, Denise Kall, Zheng Zhou, James K. Hammitt & Jonathan B. Wiener, *A Quantitative Comparison of Relative Precaution in the United States and Europe, 1970–2004*, in *THE REALITY OF PRECAUTION*, *supra* note 6, at 377.

egy aims to provide both the depth and the breadth necessary to support an empirically valid transatlantic comparison.

Importantly, the study was designed to identify governmental responses to risk as such, rather than the narrower regulation of environmental and health and safety risks. The universe of risks examined as a consequence is considerably broader than the familiar list of food safety and environmental risks that typically feature in transatlantic comparisons of this sort. This is most evident in the design of the quantitative study, whose 100 risks span eighteen separate categories, which, in addition to familiar examples of environmental and occupational health and safety risks, include crime and violence; alcohol, tobacco, and other drugs; medication and medical treatment; recreation; war, security and terrorism; consumer products; and construction. The rationale for this breadth was the necessity of "a representative sample of risks that may be subject to regulation" if valid conclusions on relative precaution were to be drawn.²⁰ In this, the authors of the quantitative study have sought to correct for what they perceive to be the primary deficiency in the existing body of literature comparing European and American precaution: case-selection bias. Whereas earlier studies tended to focus on specific policy areas (e.g., cancer) or categories of risk (e.g., environmental protection), the goal here was "to assemble a database representing the universe of risks and draw a representative sample from that list."²¹

The objective of broadening the transatlantic comparison beyond the well-trodden territory of environmental risks and health and safety is evident also in the range of specific risks considered in the book's eleven case studies. Particularly notable in this respect is the inclusion of risks from terrorism and weapons of mass destruction (WMD). As Jessica Stern and Jonathan Wiener explain at the start of their chapter on the topic, terrorism, using conventional methods or WMD, "has become one of the great risk problems of the current era."²² Working from this premise, the authors compare "the degree of precaution exhibited by counterterrorism policies in the United States and Europe from 1970 to 2005."²³ In this connection they contrast the American (and British) willingness to go to war in response to the threat of WMD in Iraq with the refusal to join the second Gulf War by "key European countries [such as Germany and France], which generally favor precaution as applied to health and environmental risks."²⁴ The conclusion drawn is that when it comes to

20. *Id.* at 379.

21. *Id.* at 404.

22. Jessica Stern & Jonathan B. Wiener, *Terrorism and Weapons of Mass Destruction*, in *THE REALITY OF PRECAUTION*, *supra* note 6, at 285, 285.

23. *Id.* at 286.

24. *Id.* at 285-86.

terrorism and WMD, the conventional wisdom regarding greater European precaution is seemingly turned on its head. More broadly, “[t]he pattern indicates that neither the United States nor Europe can claim to be precautionary or antiprecautionary across the board; rather, the reality is of precautionary particularity . . . [i.e.,] selective use of precaution against selected risks at different times, on both sides of the Atlantic.”²⁵

Relative precaution is judged in reference to the timing and stringency of actions taken in the United States and Europe with respect to each of the risks examined.²⁶ Employing these criteria both in its case studies and quantitative assessment, *The Reality of Precaution* ultimately rejects the claimed existence of any consistent patterns distinguishing American and European responses to risk. Certain risks received earlier and more stringent responses in Europe; in other cases, the United States was more proactive. Notwithstanding areas of visible transatlantic divergence, the overall pattern suggests “substantial internal variation in the degree of precaution in risk regulation across risks, agencies, and Member States, both within the United States and within Europe.”²⁷ Contrary to the vision of two coherent and distinct American and European approaches to risk, “the reality of precaution is a much more complex pattern of overall parity, combined with detailed variation on particular risks.”²⁸

The implications that Wiener draws from this conclusion are far reaching, most importantly, as already mentioned above, with regard to the validity of any explanations of cross-national regulatory differences based in culture or legal tradition. As he writes, if “attitudes towards risks, technology, and regulation are not uniform or permanent on either side of the Atlantic,” then claims regarding the existence and source of such differences are mere “stereotypes, not empirical reality.”²⁹ Put differently, if there are no consistent transatlantic differences in the level of precaution in the first place, the collapse of explanations of what might account for such differences—whether political, legal-institutional, or drawn from any other realm—follows as a matter of logic.

B. *The Politics of Precaution*

The eye-catching cover of David Vogel’s *The Politics of Precaution* sports a pair of cows, American and European flags respectively

25. *Id.* at 286.

26. Wiener, *supra* note 9, at 530 (“Thus, we treat precaution as a strategy, and measure its degree as a continuous variable in terms of two factors: timing and stringency.”).

27. *Id.* at 521.

28. Wiener, *supra* note 7, at 13.

29. *Id.* at 8.

attached to their ears, pointing in opposite directions from one another. Evoking European-American disputes over hormones in beef as a proxy for broader transatlantic divisions, this picture whimsically telegraphs the book's central thesis regarding current regulatory differences between Europe and the United States. Vogel builds his assessment through detailed analysis of current American and European regulatory policies regarding chemicals, greenhouse gases, genetically modified (GM) foods, beef hormones, antibiotics in animal feed, hazardous material in electronic waste, and chemicals in children's toys and cosmetics. The time span covered in the case studies starts in the early 1970s so as to allow for comparison of European and American responses to environmental risk across both space and time. The conclusion consequently drawn identifies a distinct shift in the relative precaution of American and European policies regarding environmental and health and safety risks. Whereas during the 1970s and 1980s the United States was the more precautionary of the two jurisdictions, since the early 1990s the EU has assumed global leadership in this regard.

Similarly to Wiener, Vogel equates relative precaution with risk aversion, as reflected in the timing and stringency of regulation. However, the book's underlying methodology otherwise differs in some important respects. The first is the universe of risks examined. Whereas Wiener and his colleagues chose risk writ large as the object of their analysis, Vogel limited his study to the regulation of "health, safety, and environmental risks caused by business."³⁰ Excluded as a consequence are some of the key examples Wiener offers as instances of greater American precaution: nuclear energy, speed limits, teenage drinking, public smoking, and, most notably, terrorism and WMD. Vogel cites the particular "political dynamics" associated with the regulation of business-generated environmental and public safety risks in his explanation of the decision to exclude other categories of risk from his study.³¹ Given this narrower focus, Vogel considers his findings regarding the existence of transatlantic divergence to be potentially compatible with Wiener's finding of no consistent differences. As he explains, his "argument is not that the EU has become more risk-averse than the United States, but rather that it has become more risk-averse toward a broad range of health, safety, and environmental risks."³² Anticipating this argument, Wiener explicitly rejects Vogel's distinction in this regard, and argues that "[e]ven within the category of environmental risks . . . the reality does not support the claim that U.S. policy has substantially slowed and the

30. VOGEL, *supra* note 5, at 18.

31. *Id.*

32. *Id.* at 19–20.

two sides have ‘traded places.’”³³ In support, he offers a long list of environmental statutes and regulations put in place over the past three decades relating to the regulation of toxic waste, air pollution, and drinking water, among others.³⁴ Vogel seemingly counters with the statement that

[w]hile not *every* European and American consumer or environmental risk regulation is consistent with a transatlantic shift in regulatory stringency since 1990, a *disproportionate number* of the consumer and environmental regulations adopted, or not adopted, on either side of the Atlantic during the last five decades do fit this pattern.³⁵

An additional element distinguishing Vogel’s methodology from Wiener’s is his focus on change over time in the regulatory policies on both sides of the Atlantic. In keeping with this focus, each of the case study chapters pairs current examples of greater European precaution with earlier instances of increased American precaution regarding the same family of risks. Thus, in his discussion of food safety, Vogel juxtaposes the more stringent current European restrictions on GM foods and beef hormones with the earlier American stringency reflected in the 1958 Delaney Clause ban on cancer-causing food additives, and subsequent restrictions on the use of the steroid growth promoter DES in cattle, the artificial sweetener cyclamate, the pesticides Aldrin and Dieldrin, and the treatment of apples with Alar.³⁶ As to air pollution, Vogel contrasts the current European leadership on climate change with the earlier and more stringent action of the United States regarding automotive emissions and ozone-depleting chemicals.³⁷ Finally, Vogel finds in the evolution of chemical regulation in Europe and the United States an almost paradigmatic illustration of the “flip-flop” between earlier American precaution under the 1976 Toxic Substances Control Act and the greater precaution now characteristic of European regulation of chemicals under the REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals).³⁸

In response to these findings, Vogel offers what he terms a “Big Picture” explanatory framework³⁹ that links three critical transformations in the American and European political context. The first is

33. Wiener, *supra* note 6 at 527.

34. Wiener, *supra* note 9, at 527.

35. VOGEL, *supra* note 5, at 5.

36. *Id.* at 48, 54, 66.

37. *Id.* at 152.

38. *Id.* at 187–88; Toxic Substances Control Act, Pub. L. No. 90-469, 90 Stat. 2003 (1976) (codified as amended at 15 U.S.C. §§ 2601–2629); Regulation 1907/2006, of the European Parliament and of the Council of 18 December 2006 Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, 2007 O.J. (L 136) 3.

39. VOGEL, *supra* note 5, at 3.

the growing political salience of consumer and environmental risks in Europe, and attendant public pressure for regulatory intervention. The second is increased political polarization in the United States and an associated decline in the earlier bipartisan support for stringent environmental regulation, which contrasts with a far less polarized political landscape in Europe, at least along this dimension. And the third is a growing gap between European willingness to regulate in the face of scientific uncertainty and increased American emphasis on scientific proof of risk and on formal risk assessment.⁴⁰

In tandem, Vogel rejects a number of alternative explanations for the transatlantic divergence, including differences in actual risks faced,⁴¹ a push to “catch up”⁴² following expansion in the EU’s regulatory authority, differences in underlying economic interests,⁴³ the role of political systems,⁴⁴ and most importantly for the purpose of this discussion, cultural values and attitudes toward the role of government.⁴⁵ Where the latter two are concerned, Vogel highlights the alleged shift in the respective American and European regulatory orientations as decisive grounds for the rejection of explanations based in culture or attitudes towards government. As he writes, “Europe’s statist traditions and America’s long-standing hostility to ‘big government’ and belief in ‘free enterprise’ cannot explain why, for three decades, the United States consistently enacted *more* extensive and costly consumer and environmental regulations than did most European countries as well as the EU.”⁴⁶ The United States’ shift from environmental leader to laggard over the course of the past four decades decisively refutes, in Vogel’s account, explanations rooted in historical institutions and embedded cultural predispositions, on the assumption that any such explanations are inconsistent with the perceived discontinuities in American policy.⁴⁷

II. PERMISSIVE VERSUS PRESCRIPTIVE PRECAUTION

The Reality of Precaution and *The Politics of Precaution* share a common understanding of the relevant meaning of precaution in the context of the transatlantic comparison. To be more precautionary, in both books’ formulation, is to act earlier and more decisively in response to uncertain risk. By equating precaution with risk aversion, both Vogel and Wiener restrict their analysis to only half, and arguably the less central, of the meanings associated with the related

40. *Id.* at 34–45.

41. *Id.* at 23.

42. *Id.* at 25.

43. *Id.* at 27.

44. *Id.* at 31.

45. *Id.* at 32.

46. *Id.* at 30–31.

47. *Id.* at 34.

precautionary principle and discussions within the transatlantic context.

Current writings on the precautionary principle include two distinct, if related, concepts under its umbrella—the first prescriptive, the second permissive. In its prescriptive meaning, the principle requires stringent, risk averse regulation even if the relevant risks remain uncertain. In its permissive sense, the principle speaks to the existence of regulatory authority, rather than any obligation to take regulatory action against uncertain risks. Put differently, the principle is said to act as both a sword and a shield.⁴⁸ Used as a sword, the principle seeks more stringent and risk-averse actions in the face of uncertain risks—demands that may be directed at the relevant regulatory decision-makers, or the judicial bodies in charge of reviewing them. By contrast, when used as a shield, the principle serves to defend and insulate regulatory discretion from judicial and other oversight mechanisms. Theofanis Christoforou, a principal legal adviser with the European Commission, offers an unusually clear differentiation between the principle's two core meanings:

The precautionary principle applies to scientific uncertainty and risk regulation. It *permits* regulatory authorities to take action or adopt measures in order to avoid, eliminate, or reduce risks to health, the environment, or in the workplace. The precautionary principle may also *oblige* the regulatory authorities to take action when this is necessary to avoid exceeding the acceptable level of risk.⁴⁹

In their discussion of the definition of the precautionary principle as such, both Vogel⁵⁰ and Wiener⁵¹ refer to permissive and prescrip-

48. For a discussion of the precautionary principle's dual "sword and shield" functions, see Nicholas De Sadeleer, *The Precautionary Principle in European Community Health and Environment Law: Sword or Shield for the Nordic Countries?*, in IMPLEMENTING THE PRECAUTIONARY PRINCIPLE: APPROACHES FROM THE NORDIC COUNTRIES, EU AND USA 10 (Nicholas De Sadeleer ed., 2007); MARIA LEE, EU ENVIRONMENTAL LAW: CHALLENGES, CHANGE AND DECISION-MAKING 104-05 (2005); Giandomenico Majone, *Strategic Issues in Risk Regulation and Risk Management*, in ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, RISK AND REGULATORY POLICY: IMPROVING THE GOVERNANCE OF RISK 108 (2010). Joseph Corkin distinguishes between the principle as expressed in "permissive terms" and in "emphatic terms" (the latter equated with "allowing the principle to be used as a sword"). Joseph Corkin, *Science, Legitimacy and the Law: Regulating Risk Regulation Judiciously in the European Community*, 33 EUR. L. REV. 359, 380-81 (2008). In similar fashion, Alberto Alemanno distinguishes between "obligatory" and "facultative" interpretations of the precautionary principle. ALBERTO ALEMANNI, TRADE IN FOOD: REGULATORY AND JUDICIAL APPROACHES IN THE EC AND THE WTO 125-28 (2007).

49. Theofanis Christoforou, *The Precautionary Principle, Risk Assessments, and the Comparative Role of Science in the European Community and the US Legal Systems*, in GREEN GIANTS?, *supra* note 1, at 17, 17 (emphasis added).

50. Vogel writes in connection with this, "While there are scores of definitions of the precautionary principle, in essence, it enables, encourages, or requires policy makers to 'err on the side of caution.'" VOGEL, *supra* note 5, at 275.

tive meanings of the principle (without using these terms). But, in using stringency and timing as their comparative criteria, both authors exclude the principle's permissive meaning from their empirical analysis. Wiener is explicit in this respect when he follows a discussion of the precautionary principle's alternative meanings with the following methodological explanation:

Our approach in this book has been to convert these narrative conceptions of the PP [precautionary principle] into a measure of the degree of relative precaution, stated as a continuous variable The earlier in time a policy is adopted, the greater the uncertainty about the future manifestation of the risk, and the more stringent the policy, the greater the prevention of future risk. These two dimensions translate the narrative versions above into a continuous measure of degree of relative precaution.⁵²

Having defined the precautionary principle as a prescriptive mandate for early and stringent regulation, both authors interpret the internally inconsistent levels of compliance with this mandate, both in Europe and the United States, as grounds for rejecting an entire family of historical-institutional explanations for transatlantic differences.

Yet for the purpose of understanding the root of recent transatlantic regulatory tensions, it is the precautionary principle's permissive meaning that is of greater relevance. This follows from the fact that in the context of international trade disputes—the primary arena of American-European regulatory conflict currently—it is permission to regulate, rather than an obligation to regulate, that is fundamentally at issue. Before both the WTO and the European courts, the EU has argued that it is *permitted* to regulate, relying on the precautionary principle to defend against claims of “excessive precaution.” By contrast, as Veerle Heyvaret has documented, efforts to use the precautionary principle to challenge “insufficient precaution” have been rare and, for the most part, unsuccessful. As she writes, “it is undeniable that, to date, the role of the precautionary principle as a legal tool to compel [European] Community institutions

51. Wiener distinguishes among what he terms three “versions” of the precautionary principle: (1) “Uncertainty does not justify inaction,” (2) “Uncertainty justifies action,” and (3) “Uncertainty requires shifting the burden and standard of proof.” Wiener, *supra* note 9, at 528–29. In explanation of the first version, Wiener writes:

In its most basic form, the PP permits regulation in the absence of complete evidence about the particular risk scenario. . . . This version of the PP rebuts the contention (often urged by those about to be regulated) that uncertainty precludes regulation, but it does not answer the harder question: *what* action to take, given inevitable uncertainty.

Id. at 9, at 528.

52. *Id.* at 529–30.

to take protective action has been marginal.”⁵³ Joseph Corkin goes a step further in saying that “in practice the Court dismisses such insufficient precaution challenges with little ceremony.”⁵⁴

More broadly, as David Vogel himself has written elsewhere, the agenda behind the EU’s push for the incorporation of the precautionary principle in multiple international agreements in the first place was primarily defensive. Faced with the likelihood of American and other challenges to its regulations before the WTO, the EU set out to entrench the precautionary principle in international law so as to be able to rely on it in justification of scientifically controversial measures before the WTO.⁵⁵ For their part, critics have accused European institutions of using the precautionary principle “at the international level as a shield to justify measures that are viewed as thinly disguised forms of protectionism by the EU’s trading partners.”⁵⁶ The call for more stringent or risk-averse measures—the question at the heart of the precautionary principle’s prescriptive interpretation—was largely irrelevant to these transatlantic controversies. Instead, the key issue in dispute in recent European-American regulatory disagreements has been the precautionary principle’s capacity to shield regulatory discretion from scientific oversight.

Trade disputes surrounding the validity of European food safety regulation under the Sanitary and Phytosanitary (SPS) Agreement provide the paradigmatic example. Created in 1994 and binding on all members of the WTO, the SPS Agreement specifies the conditions under which Members to the Agreement are entitled to deviate from international standards pertaining to variously defined food-related risks.⁵⁷ While acknowledging the autonomy of such Members in this regard,⁵⁸ the Agreement aims to ensure that “these sovereign rights are not misused for protectionist purposes and do not result in unnecessary barriers to international trade.”⁵⁹ Towards this goal, the SPS Agreement requires that where national measures exceed international standards, they be “based on scientific principles and . . . not

53. Veerle Heyvaert, *Facing the Consequences of the Precautionary Principle in European Community Law*, 2006 EUR. L. REV. 185, 195. See also LEE, *supra* note 48, at 104–05 (“[T]he precautionary principle essentially expands the substantive discretion of decision-makers. It is much less obviously amenable to being used as a sword, to constrain substantive discretion, in an action claiming that regulation is insufficiently precautionary.”).

54. Corkin, *supra* note 48, at 380.

55. David Vogel, *Trade and the Environment in the Global Economy*, in GREEN GIANTS?, *supra* note 1, at 231, 241.

56. Majone, *supra* note 48, at 108.

57. Agreement on the Application of Sanitary and Phytosanitary Measures art. 14, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493 [hereinafter SPS Agreement].

58. *Id.* art. 2.1.

59. ALEMANN, *supra* note 48, at 239.

maintained without sufficient scientific evidence,”⁶⁰ and also be “based on an *assessment*, as appropriate to the circumstances, of the risks to human, animal or plant life or health.”⁶¹ The precautionary principle’s status and its consequent influence on the scope and meaning of the required “scientific evidence” under the SPS Agreement, have been the central bone of contention in contemporary transatlantic trade disputes.

The controversy that surrounded the legality of the EU’s ban on hormone-treated beef for over two decades perhaps best illustrates this point. Responding to concerns over cancer, the EU prohibited in 1985 both the production and importation of the meat of animals treated with growth hormones, an action that was taken notwithstanding a finding by a scientific working group that the hormones posed no risk to health.⁶² After the EU began to enforce the ban in 1989, the United States and Canada challenged it before the WTO dispute-settlement bodies under the argument that it was not based on an adequate risk assessment.⁶³ The EU defended its action with the claim that the precautionary principle, which it considers to be integral to the SPS/WTO regime under principles of international law, authorized its regulation notwithstanding any deficiencies in the risk assessment.⁶⁴ In 1997, without ruling on the status of the precautionary principle in international law, the WTO Appellate Body held that the principle could not “override” the risk-assessment requirements of the SPS Agreement.⁶⁵ In the wake of this ruling, and the EU’s refusal to rescind the ban, the United States and Canada received WTO authorization to impose high-import tariffs on some EU agricultural products as a retaliatory trade sanction. The long-standing trade dispute was finally resolved in 2012 after the United States and Canada agreed to lift the sanctions in exchange for a substantial increase in the EU’s import quotas for hormone-free beef. The EU’s ban on hormone-fed beef will remain in effect.⁶⁶

60. SPS Agreement art. 2.2.

61. *Id.* art. 5.1.

62. Grace Skogstad, *Regulating Food Safety Risks in the European Union: A Comparative Perspective*, in *WHAT’S THE BEEF? THE CONTESTED GOVERNANCE OF EUROPEAN FOOD SAFETY* 213, 223 (Christopher Ansell & David Vogel eds., 2006).

63. ALEMANN, *supra* note 48, at 90–91.

64. The EU argued that the precautionary principle was “a general customary rule of international law or at least a general principle of law.” Appellate Body Report, *European Communities—Measures Concerning Meat and Meat Products (Hormones)*, ¶ 121, WT/DS26/AB/R, WT/DS48/AB/R (Jan. 16, 1998).

65. Appellate Body Report, *EC—Hormones* ¶ 125; *see also* ALEMANN, *supra* note 48, at 280–81.

66. Gilbert Reilhac, *Vote Ends EU–U.S. Hormone-Treated Beef Row*, REUTERS, Mar. 14, 2012, <http://www.reuters.com/article/2012/03/14/eu-trade-beef-idUSL5E8EE50620120314>; Ed Bray, *Transatlantic Hormone Beef Trade War Ends*, EUROPOLITICS, Apr. 26, 2012, <http://www.europolitics.info/transatlantic-hormone-beef-trade-war-ends-art332735-10.html>.

As evident from the discussion above, within the context of recent transatlantic trade disputes, the precautionary principle has essentially functioned as a demand for a deferential standard of judicial review regarding science-based regulatory measures. The key disagreement in this respect pertains to the level of scrutiny to be accorded to a member state's scientific findings under the WTO's "scientific justification discipline."⁶⁷ The EU has found itself on the losing side of this issue in a number of food-safety-related cases in which the WTO insisted on conducting its own scientific assessment of the relevant risks.⁶⁸

The European courts, by contrast, have shown significant deference towards Community health and safety measures.⁶⁹ Most importantly, in this connection, the courts have upheld the Community's authority to rely not only on "science-based factors," but also on a broad range of "societal, economic, traditional, ethical and environmental factors" in reaching regulatory decisions.⁷⁰ In the words of Alberto Alemanno, "[t]he perceived need to consider non science-based factors within the decision-making process characterizes the European approach to risk analysis and differentiates it greatly from the one adopted by the U.S. regulatory agencies and by the WTO/SPS framework."⁷¹ Notably, this discretion coexists in European case law with an American-modeled distinction between risk assessment and risk management steps in the regulatory process, as well as with a willingness to impose detailed procedural requirements in judicial evaluation of the risk-assessment process.⁷² With respect to risk management, meaning the decision on the regulatory measures to be taken in response to the risk, the European courts have upheld the existence of extra-scientific, precautionary, regulatory authority.⁷³

67. ALEMANNO, *supra* note 48, at 338.

68. Alberto Alemanno describes the WTO's standard of review applicable to SPS measures as showing "a growing trend towards a narrowly-construed interpretation of the scientific requirements leading to an intrusive role . . . in reviewing (food safety) science-based risk regulations adopted by WTO members." *Id.* at 345.

69. *Id.* at 324–25 ("[I]n all these cases, the court, after having relentlessly recalled the limited scope of review applicable to science-based measures, has always refrained from addressing the merits of the scientific findings brought by the parties, thus showing great deference to the EC scientific bodies."). Notably, as Alemanno points out, the European courts have shown lesser deference toward Member States when the latter offered public health justifications for domestic measures that derogated from harmonized EU legislation. *Id.* at 325–26.

70. Alberto Alemanno, *The Shaping of European Risk Regulation by Community Courts* 43 (Jean Monnet Working Papers No. 18/2008, 2008), available at <http://ssrn.com/abstract=1325770>.

71. *Id.*

72. *Id.* at 7, 21, 26.

73. *Id.* at 60.

The 1999 *Pfizer* decision serves as the paradigmatic example in this regard.⁷⁴

The case concerned a challenge to an EU regulation prohibiting the sale of non-therapeutic (growth-promoting) antibiotic additives to livestock feed. Prior to imposing this ban the European Commission had requested the opinion of the Scientific Committee for Animal Nutrition (SCAN) regarding the potential for antibiotic resistance in humans as a consequence of the use of the antibiotic in question in the animal feed. Though SCAN opined that the feed posed “no immediate risk to human health,” the Commission proceeded to withdraw authorization for this type of antibiotic use all the same.⁷⁵ Ruling on the challenge to this ban, the European Court of First Instance (CFI) noted that “a scientific risk assessment . . . is an important procedural guarantee whose purpose is to ensure the scientific objectivity of the measures adopted,”⁷⁶ but went on to uphold the Community’s authority to take action based on reasons other than scientifically assessed risk.⁷⁷ “[I]n a situation in which the precautionary principle is applied, which by definition coincides with a situation in which there is scientific uncertainty,” the CFI held, “a risk assessment cannot be required to provide the Community institutions with conclusive scientific evidence of the reality of the risk and the seriousness of the potential adverse effects were that risk to become a reality.”⁷⁸ Instead, “under the precautionary principle the Community institutions are entitled, in the interests of human health to adopt, on the basis of as yet incomplete scientific knowledge, protective measures which may seriously harm legally protected positions, and they enjoy broad discretion in that regard.”⁷⁹

As the above suggests, when the precautionary principle is construed as a permissive principle, cross-national divisions over its status and application are reduced to a disagreement over the proper scope of discretion in the regulation of risk. Put differently, the conflict revolves around the choice between divergent conceptions of the scope of agency autonomy in the regulation of health and safety risks, or alternative models of administrative law. Each of these models aligns, in turn, with divergent historical regulatory paradigms, respectively associated with the civil law and common law traditions, as discussed below.

74. Case T-13/99, *Pfizer Animal Health v. Council*, 2002 E.C.R. II-3305, ¶¶ 168–69, 323 [hereinafter *Pfizer*].

75. Alemanno, *supra* note 70, at 39

76. *Id.* at 27.

77. *Id.* at 39.

78. *Pfizer*, 2002 E.C.R. II-3305, ¶ 142.

79. *Id.* ¶ 170.

III. FROM NUISANCE TO "HARD LOOK" AND FROM POLICE TO PERMISSIVE PRECAUTION

The constitutionality of Continental-modeled approaches to sanitary reform, regulation of noxious trades, and other environmental threats was a matter of controversy in both Britain and the United States during the nineteenth century. The existence of broad administrative discretion on when and how to respond to uncertain risks was the defining element of the Continental approach. The subordination of such decisions to judicial oversight was the mark of the countervailing common law approach. In the context of the late nineteenth century police-power debates, the question was cast in reference to the existence of nuisance-based limits on the scope of the police power.

More than a substantive limit on the subject matter of regulation, nuisance served here as a synonym for a judicial model of administration. As Christopher Tiedeman, the author of the leading treatise on the topic, wrote in 1886, "[w]hat is a nuisance [is] a judicial question."⁸⁰ Writing in 1851, a British barrister by the name of Joshua Toulmin Smith explained what was thought to be at stake in the requirement that regulatory interventions be restricted to nuisance adjudication. In placing the burden of proof on "those who allege any particular thing or course of proceeding to be inconsistent with the health of any neighbourhood, or its welfare," Toulmin Smith argued, the common law ensured that public health interventions would proceed only out of "true regard for the Public welfare" rather than "specious disguise" aimed at "gain[ing] some interested object, or . . . crude individual notions."⁸¹ In this, nuisance law was said to fundamentally differ from its antithesis, the "foreign centralized system of Police."⁸²

"Law" and "Police," Christopher Tomlins has argued in reference to late eighteenth-century Anglo-American political discourse, stood for "distinct paradigms" of social ordering.⁸³ "Law" in this context meant the common law, which in turn referred to a set of limited-government principles, notably including judicial supremacy. "Police," by contrast, imbued the state with the authority to manage and advance the common welfare. Its roots traced to early modern Continental legal and political thought and the "Continental police

80. CHRISTOPHER G. TIEDEMAN, *A TREATISE ON THE LIMITATIONS OF POLICE POWER IN THE UNITED STATES* 426 (1886).

81. J. TOULMIN SMITH, *LOCAL SELF-GOVERNMENT AND CENTRALIZATION: THE CHARACTERISTICS OF EACH; AND ITS PRACTICAL TENDENCIES, AS AFFECTING SOCIAL, MORAL, AND POLITICAL WELFARE AND PROGRESS* 116 (1851).

82. *Id.* at 204.

83. CHRISTOPHER TOMLINS, *LAW, LABOR, AND IDEOLOGY IN THE EARLY AMERICAN REPUBLIC* 38 (1993).

science” to which it gave rise by the 1700s.⁸⁴ Of greatest relevance in this respect were the public health codes and regulations that absolutist German and other Continental regimes promulgated during the eighteenth century under the heading of “medical police.”⁸⁵

Rooted in cameralist and mercantilist conceptions of the importance of robust populations to the security and prosperity of the state, medical police viewed the state as the guardian of the health, safety, and morality of the nation. As the renowned Prussian physician Johann Peter Frank explained in a treatise he published in 1779, “[t]he internal security of the state is the subject of general police science,” and “[m]edical police, like all police science, is an art of defense.”⁸⁶ With this rationale in place, Frank proceeded to outline a highly detailed list of hygienic practices to be enforced by the state in domains ranging from sexuality and infant- and child-care, to food, housing, and recreation.⁸⁷ Though the ambitious agenda Frank put forth had little realistic chance of actual implementation, it nonetheless offers important insight into the regulatory ideal behind the medical police model.⁸⁸ Integral to this model was the assignment to the state of seemingly unrestricted discretion in deciding what public health meant in practice and what regulatory measures could be deployed in its defense.

By the 1840s, the clashing paradigms were front and center in the tumults surrounding Edwin Chadwick’s sanitary reforms in Britain under the 1848 Public Health Act.⁸⁹ Coming in response to the sanitary crisis in Britain’s rapidly industrializing cities, and modeled after existing French examples, the Act established local and national boards of health with modest sanitary enforcement powers. The legislation was enacted against the backdrop of ongoing medical disagreement over whether and how filth caused disease, and hence over the very existence of a health-based rationale for governmental intervention in this arena.⁹⁰ Most controversially, it was said to violate core common law constitutional principles through the substitution of local nuisance courts with centralized boards. Joshua Toulmin Smith, author of the 1851 tract quoted above, was a leading opponent of the Public Health Act, and it was in the context of that fight that he promoted the virtues of nuisance law. In Britain, the

84. MARKUS DIRK DUBBER, *THE POLICE POWER: PATRIARCHY AND THE FOUNDATIONS OF AMERICAN GOVERNMENT* 63 (2005).

85. GEORGE ROSEN, *FROM MEDICAL POLICE TO SOCIAL MEDICINE: ESSAYS ON THE HISTORY OF HEALTH CARE* 93 (1974).

86. JOHANN PETER FRANK, *A SYSTEM OF COMPLETE MEDICAL POLICE: SELECTIONS FROM JOHANN PETER FRANK* 12 (Erna Lesky ed., E. Vilim trans., Johns Hopkins University Press, 1976).

87. GEORGE ROSEN, *THE HISTORY OF PUBLIC HEALTH* 137–41 (1993).

88. See DOROTHY PORTER, *HEALTH, CIVILIZATION, AND THE STATE* 105–06 (1999).

89. This section draws on Morag-Levine, *Alkali Act*, *supra* note 15, at 13–27.

90. *Id.* at 17.

argument regarding the unconstitutionality of Continental police was a political one directed at Parliament and public opinion.⁹¹ The sovereignty of Parliament precluded judicial invalidation of laws that deviated from common law constitutional principles. By contrast, in the United States, the argument evolved into a claim allowing courts to strike down—under the due process clause—state laws passed “under the pretence of prescribing a police regulation.”⁹² Either way, the common law model, by requiring proof before judge and jury regarding the existence of harm justifying intervention, was said to protect against government intrusion on property and liberty on specious health and safety grounds.

Current divisions over the (permissive) precautionary principle replicate and continue this historical debate. Consider the parallels between the beef-hormone dispute described above and the late nineteenth-century controversy surrounding the regulation of oleomargarine, a butter substitute made from beef fat and churned milk.⁹³ In the oleomargarine situation, as was the case with hormones, at issue was the sufficiency of the evidence regarding risk, and the suspicion that restrictions and bans on the product were at least in part due to protectionist motivations. The various state and Supreme Court judges who reviewed the constitutionality of the oleomargarine laws differed in their understandings of the judiciary’s role in disputes of this type.⁹⁴ Well beyond oleomargarine, the conflict over judicial scrutiny of “legislative facts” played out over a long list of statutes pertaining to the preservation of fish and game,⁹⁵ food safety, sanitary reforms,⁹⁶ and, most viscerally, labor laws.⁹⁷

Lochner v. New York (1905)⁹⁸ provides the paradigmatic example in this regard. Rejecting the State of New York’s proffered health-based justification for a ten-hour limit on daily working hours, the Supreme Court invalidated the law because *in its judgment*, there was “no reasonable foundation for holding this to be necessary or appropriate as a health law to safeguard the public health or the health of the individuals who are following the trade of a baker.”⁹⁹ The state was entitled to impose “reasonable conditions” on property, liberty, and by extension freedom of contract, under the Fourteenth Amend-

91. *Id.* at 126–27.

92. See *Slaughterhouse Cases*, 83 U.S. 36, 87 (1872) (Field, J., dissenting). On late nineteenth-century divisions in American jurisprudence regarding the role of courts in the review of the scientific facts underpinning legislation, see Morag-Levine, *Facts, Formalism*, *supra* note 15.

93. Geoffrey P. Miller, *Public Choice at the Dawn of the Special Interest State: The Story of Butter and Margarine*, 77 CALIF. L. REV. 83, 101–02 (1989).

94. Morag-Levine, *Facts, Formalism*, *supra* note 15, at 72–75.

95. *Lawton v. Steele*, 152 U.S. 133 (1894).

96. *Hutton v. City of Camden*, 39 N.J.L. 122, 129–31 (1876).

97. Morag-Levine, *Facts, Formalism*, *supra* note 15, at 71–85.

98. *Lochner v. New York*, 198 U.S. 45 (1905).

99. *Id.* at 58.

ment.¹⁰⁰ But it was up to the Court to ensure that "health and safety" were the *true* rationale for regulation, rather than a "mere pretext."¹⁰¹ Scientific confidence regarding harm prevention was supposed to mark the dividing line between the two.

United States v. Carolene Products Co. (1938)¹⁰² resolved the constitutional question in favor of the Progressives' demand for judicial deference. In this decision the Court upheld a federal statute that, citing threat to health and the potential for fraud, banned the shipment of milk mixed with fat or oil in interstate commerce. The Court held that the constitutionality of "regulatory legislation affecting ordinary commercial transactions" was, for all intents and purposes, to be presumed.¹⁰³ Minimally rational legislative findings of risk to health would henceforth be entitled to deference as a matter of constitutional law. But the fight, soon thereafter, shifted to the administrative arena.

The construction of judicial review of administrative decisions as a fundamental common law constitutional requirement is most closely associated with A.V. Dicey. For Dicey, the subordination of agencies to regular courts, as opposed to administrative tribunals, was essential to the "rule of law." In this, he believed, the United States and Britain shared a common bond that set their legal systems apart from the European *droit administratif*. As he wrote, "[i]n England and in countries which, like the United States, derive their civilization from English sources, the system of administrative law, and the very principles upon which it rests, are in truth unknown."¹⁰⁴ Roscoe Pound echoed Dicey in 1921, when, against the backdrop of unprecedented growth in federal and state administrative power during World War I, he warned of "the tendency to commit everything to boards and commissions which proceed extrajudicially" and to violate in the process "common law postulates."¹⁰⁵ In his 1938 report as head of the American Bar Association's Special Committee on Administrative Law, Pound explicitly called on the American legal profession to counter "administrative absolutism" by "safeguarding individual interests and preserving the checks and balances involved in the common law doctrine of the supremacy of law."¹⁰⁶

The 1946 passage of the Administrative Procedure Act (APA) marked a temporary truce with seemingly no clear winner in the historic conflict—a "formula upon which opposing social and political

100. *Id.* at 53.

101. *Id.* at 56.

102. 304 U.S. 144 (1938).

103. *Id.* at 152.

104. A.V. DICEY, LECTURES INTRODUCTORY TO THE STUDY OF THE LAW OF THE CONSTITUTION 180 (1885).

105. ROSCOE POUND, THE SPIRIT OF THE COMMON LAW 7 (1921).

106. *Report of the Special Committee on Administrative Law*, 63 A.B.A. ANN. REP. 331, 342 (1938).

forces have come to rest,” as Justice Jackson famously put it.¹⁰⁷ But when it came to the key issue of judicial review of administrative actions, the scope of Pound and the American Bar Association’s victory would become evident in time. Whereas in the initial decades following the APA’s passage the federal courts were cautious and deferential when reviewing agency decisions, in the early 1970s the D.C. Circuit adopted what came to be known as the “hard-look” doctrine, which required “agencies to undertake a reasoned elaboration of their decisions and to submit the factual basis, methodology, and logic of those decisions to exacting judicial scrutiny.”¹⁰⁸ Science-based environmental regulations and health and safety regulations were singled out in this process for particular attention, as judges began to scrutinize the processes and evidence on which the agencies relied in the face of contested scientific questions.¹⁰⁹ During the 1970s, intensive judicial review of science-based regulatory decisions co-existed, especially within the D.C. Circuit, with a precautionary willingness to uphold agency discretion “on the frontiers of scientific knowledge.”¹¹⁰ But the Supreme Court’s 1980 “benzene decision” signaled a shift in this regard.

That case, *Industrial Union Department v. American Petroleum Institute*,¹¹¹ concerned a rule of the Occupational Health and Safety Administration (OSHA) that reduced the permitted level of exposure to benzene in the workplace from 10 ppm to 1 ppm. OSHA justified the 1-ppm standard on feasibility grounds, working from the assumption that there was no safe exposure level to benzene. In basing the standard on feasibility, rather than risk assessment, the agency relied on a specific provision within the Occupational Safety and Health (OSH) Act, Section 6(b), which concerned the regulation of toxic substances. The Supreme Court invalidated the 1-ppm standard due to the agency’s failure to establish the existence of a “significant risk” requiring such a reduction. Absent such a preliminary finding of significant risk, OSHA could not impose further feasibility-based restrictions on exposure to benzene. This requirement, as the Court saw it, followed from the definition of a health and safety standard, under Section 3(8) of the OSH Act, as one that is “reasonably necessary and appropriate to provide safe or healthful employment.”¹¹² All standards implemented under the Act, even those pertaining to toxic

107. Wang Yang Sung v. McGrath, 339 U.S. 33, 40 (1950).

108. DAVID M. O'BRIEN, WHAT PROCESS IS DUE? COURTS AND SCIENCE-POLICY DISPUTES 116 (1987).

109. SHEILA JASANOFF, SCIENCE AT THE BAR: LAW, SCIENCE, AND TECHNOLOGY IN AMERICA 73 (1995).

110. *Id.* at 78 (quoting *AFL-CIO v. Hodgson*, 499 F.2d 467, 474 (D.C. Cir. 1974). See *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (en banc).

111. *Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst. (The Benzene Case)*, 448 U.S. 607 (1980).

112. 29 U.S.C. § 652(8) (1970).

substances under Section 6(b), were subject to this a priori evidentiary burden.¹¹³ As a matter of statutory interpretation, this was a conclusion with little basis in the text or history of the statute, as many observers have noted.¹¹⁴ Its roots, instead, harked back to fundamental common law principles conditioning the reasonableness of regulation on proof of injury before a court.¹¹⁵

The analogy between the Court's reasoning in the Benzene Case and *Lochner*-era jurisprudence was first made in Justice Marshall's dissent in the case.¹¹⁶ The key difference between the Court's invalidation of the ten-hour workday in *Lochner* and the 1-ppm standard in the Benzene Case was the capacity of Congress in the latter case to amend the statute and emphatically confer on the agency authority to forgo proof of the existence of risk in the implementation of feasibility-based standards. But, as Martin Shapiro has written, the difference between substantive due process in constitutional review and in administrative law review under the hard-look doctrine was greater in theory than in practice.¹¹⁷ "The ultimate administrative law question in judicial review of rulemaking," Shapiro wrote,

is identical to the ultimate constitutional question in economic substantive due process review—is the rule reasonable? In both instances what is or is not reasonable depends on a judicial assessment of the legitimacy and importance of the government's purposes, the appropriateness of the means chosen to achieve those purposes, and the costs to other legitimate interests those means will generate.¹¹⁸

113. "The Court's plurality decision did not represent a wholesale rejection of the precautionary approach to regulation," and allowed for other than quantitative risk assessment where quantitative analysis "was not possible given the extent of uncertainty." Percival, *supra* note 4, at 65. At the same time the case was taken as signaling that "some form of quantitative risk assessment was necessary as a prelude to deciding whether the risk was large enough to deserve regulation." NATIONAL RESEARCH COUNCIL, COMMITTEE ON RISK ASSESSMENT OF HAZARDOUS AIR POLLUTANTS, SCIENCE AND JUDGMENT IN RISK ASSESSMENT 33 (1994). On the connection between the Benzene Case and the institutionalization of risk assessment in American regulation see also Elizabeth Fisher, *Framing Risk Regulation: A Critical Reflection*, 4 Eur. J. Risk Reg. 125, 127 (2013).

114. See, e.g., CASS R. SUNSTEIN, *AFTER THE RIGHTS REVOLUTION: RECONCEIVING THE REGULATORY STATE* 196 (1990).

115. NOGA MORAG-LEVINE, *CHASING THE WIND: REGULATING AIR POLLUTION IN THE COMMON LAW STATE* 36–37 (2003).

116. In his dissent, Justice Marshall accused the plurality of distorting the statute to fit with its "own views of proper regulatory authority," and explicitly compared the decision to *Lochner*. *Indus. Union Dep't*, 448 U.S. at 688, 723–24 (Marshall, J., dissenting) (citing *Lochner v. New York*, 198 U.S. 45 (1905)).

117. Martin Shapiro, *The Supreme Court's 'Return' to Economic Regulation*, in 1 *STUD. IN AM. POL. DEV.* 91, 92–93 (1986).

118. Martin Shapiro, *APA: Past, Present, Future*, 72 VA. L. REV. 447, 471–72 (1986).

In the context of the mid-1980s, when Shapiro made this argument, his analogy between historical substantive due process and the "hard look" doctrines was decisively out of step with the prevailing view. Under the dominant assessment, the judiciary's newly adopted willingness to scrutinize agencies' health and safety regulations tended to be construed as a pro-regulatory "reformation"¹¹⁹ divorced from any historical antecedents.¹²⁰

The administrative law doctrines that came into being during the 1960s and '70s no doubt differed from their predecessors in a crucial respect: the courts' willingness to scrutinize regulatory inaction, as well as action.¹²¹ Whereas the threat of governmental overreaching and a consequent infringement of market liberties and individual property rights had been the primary concern of administrative judicial review in earlier eras, it was the dangers of insufficient health and safety regulation that initially inspired the hard-look doctrine. Nevertheless, in granting courts a final say on the reasonableness of both regulatory inaction and action, the doctrine built upon and revived dormant common law principles of judicial supremacy.

The existence of judicially imposed limits on administrative risk regulation is the common thread linking common law nuisance doctrines with hard-look judicial review. Conversely, the autonomy of administrative discretion from judicial oversight of this type ties the Continental police model to the permissive precautionary principle.

IV. VARIATION ACROSS COMMON LAW JURISDICTIONS: WHY IS BRITAIN DIFFERENT?

Transnational differences over permissive precaution correspond to the well-established differential in the prevalence of litigation and judicial review of environmental risk regulation between American

119. Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1682-83 (1975); Cass R. Sunstein, *Deregulation and the Hard-Look Doctrine*, 1983 SUP. CT. REV. 177, 178 ("These developments represent an effort, still somewhat tentative, to formulate an independent public law—a body of doctrine to control agency action (and inaction) that does not derive from traditional common-law principles or statutory provisions or constitutional commands.").

120. *Id.* at 187 ("The new developments are leading toward a public law that is to a substantial degree independent of private law principles. But because of the absence of a historical tradition, the effort to define the elements of such a public law remain tentative and ill-formed.").

121. Stewart, *supra* note 119, at 1682-83; Sunstein, *supra* note 119, at 184:

[T]he courts have allowed beneficiaries of regulatory statutes both to participate in agency activity and to initiate agency action. This is a revolutionary development, for the traditional role of the courts was to allow regulated entities to avoid governmental intrusions. If inadequate regulatory protection was forthcoming, the remedy was to come from political pressures, not the courts.

administrative processes and those of Europe.¹²² The thesis is perhaps best associated today with Robert Kagan's work on American "adversarial legalism."¹²³ With the notable exception of Mirjan Damaška's work,¹²⁴ however, research into the origins of European-American differences in legal culture has tended to downplay the respective roles of the common and civil law traditions as a potential root cause. Instead, the prominent line of explanation has looked to specific features of American political structure and constitutional history. In this vein, Kagan explains American adversarial legalism largely in reference to the collision between the fragmented structure of U.S. regulatory institutions (itself a product of a deep-seated culture of distrust in government) and exponential growth in citizen demand for regulatory interventions in the later decades of the twentieth century.¹²⁵ A second school of thought, grounded in rational-choice theory, attributes the greater importance of judicial review in U.S. administrative politics, relative to Europe, to the incentive structures associated with American separation of powers, in contrast to those present under European parliamentary systems.¹²⁶

The tendency to discount if not dismiss the role of legal traditions in the creation of cross-national regulatory differences is perhaps best explained by the challenge that evident and relevant variations across common law jurisdictions pose in this respect. A cursory comparison of the history of environmental and health and safety regulatory practices is sufficient to reveal substantial differences

122. BRICKMAN, JASANOFF & ILGEN, *supra* note 3, at 45–46 ("Even a casual observer is struck by the vastly lower level of judicial involvement in European regulatory processes."), 119 ("In defining the scope of judicial review, U.S. courts have shown less deference to the administrative agencies than have their European counterparts."). See also BADARACCO, JR., *supra* note 3, at 3, 40; ROSE-ACKERMAN, *supra* note 3, at 12–16.

123. As Robert Kagan has noted in this regard:

[C]ompared to European democracies, regulatory decisionmaking in the United States entails many more legal formalities. . . . Agency decisions are frequently challenged in court by dissatisfied parties and reversed by judges, who dictate further changes in administrative policymaking routines. . . . Overall, the clash of adversarial argument has a larger influence on decisions than in other countries' regulatory systems, where policy decisions are characterized by a combination of political and expert judgment and consultation with affected interests.

KAGAN, *supra* note 3, at 12.

124. MIRJAN R. DAMASKA, *THE FACES OF JUSTICE AND STATE AUTHORITY* (1986).

125. KAGAN, *supra* note 3, at 15.

126. See, e.g., Murray J. Horn & Kenneth A. Shepsle, *Commentary on "Administrative Arrangements and the Political Control of Agencies": Administrative Process and Organizational Form as Legislative Responses to Agency Costs*, 75 VA. L. REV. 499 (1989); Mathew D. McCubbins, Roger G. Noll & Barry Weingast, *Administrative Procedures as Instruments of Political Control*, 3 J.L. ECON. & ORG. 243 (1987); Terry M. Moe & Michael Caldwell, *The Institutional Foundations of Democratic Government: A Comparison of Presidential and Parliamentary Systems*, 150 J. INSTITUTIONAL & THEORETICAL ECON. 171 (1991); Michael F. Thies, *Keeping Tabs on One's Partners: The Logic of Delegation in Coalition Governments*, 45 AM. J. POL. SCI. 580 (2001).

among common law states, with respect to both the timing and mode of regulatory intervention and the administrative law doctrines at play. The contrast between British and American approaches to environmental regulation, most importantly where the scope of administrative discretion is concerned, was, in fact, the subject of an earlier book by David Vogel, tellingly titled *National Styles of Regulation*.¹²⁷ Jonathan Wiener notably points to the existence of differences between a British and Continental approach to regulation in *The Reality of Precaution*, in order to refute the alleged dichotomy between American and European approaches: “[S]ignificant variation exists within the United States and within Europe: for example California and Sweden often adopt highly precautionary policies . . . and the United Kingdom often plays an intriguing intermediary role between the United States and continental Europe.”¹²⁸ On its face, the existence of these differences appears to refute the causal link between common law ideology and institutions and the creation of what stands as a distinctively American insistence on the adjudication of risk.

Notwithstanding, differences between Britain and the United States, and, for that matter, other common law jurisdictions do not a priori negate the common law’s influence in the American case if two key points are kept in mind. The first is the presence, in all common law systems, of Continental legal and administrative influences. The second is the recognition that different common law countries, for a variety of reasons, absorbed Continental, civil-law-based ideas, in differing degrees and at their own rates.

The common law in England has long existed in tension with the efforts of a long line of English reformers, such as Bentham, who were deeply critical of the common law and molded their proposals on Continental models.¹²⁹ The competing pulls of Continental-inspired administrative reform, and common-law-based opposition, shaped the evolution of British regulatory institutions during the nineteenth century. The result was a hybrid British administrative tradition bearing the imprint of regulatory principles associated with both legal traditions.¹³⁰

As the controversies surrounding codification and related administrative reforms attest, Continental regulatory institutions likewise shaped American nineteenth-century debates. For reasons including the existence of constitutional judicial review and a decentralized federalist structure, the common law proved more resilient in the United States than in Britain. Roscoe Pound commented on this phenome-

127. VOGEL, *supra* note 5.

128. Wiener, *supra* note 7, at 6.

129. Morag-Levine, *Common Law, Civil Law*, *supra* note 15, at 616–19.

130. Noga Morag-Levine, *Alkali Act*, *supra* note 15, at 6.

non when he wrote: “[I]t is not an accident that common-law principles, as they were fashioned in the age of Coke, have attained their highest and most complete logical development in America, and that in this respect we are and long have been more thoroughly a common-law country than England herself.”¹³¹ Where current administrative safeguards against accidents and other hazards are concerned, William Forbath has noted the greater hold in the United States, relative to Britain, of “judicial processes and common law categories and baselines.”¹³² Differences between Britain and the United States have consequently been mistakenly read so as to exclude common-law-based explanations for distinctive aspects of American regulatory culture. This misunderstanding is central to the near absence of this line of analysis from comparative environmental politics, including the two books under discussion.

V. THE REALITY AND POLITICS OF PRECAUTION: THE VIEW FROM HISTORY

Vogel and Wiener’s shared conclusion is that legal institutions and traditions are not relevant to European-American differences over the precautionary principle; as discussed earlier, they reach this point via quite different routes. For Wiener, this view follows from the absence of any discernible pattern distinguishing American and European regulation of risk; for Vogel, it is a function of the ostensibly recent pedigree of the currently more precautionary European approach. Their understanding of the role of judicial review in the transatlantic comparative context similarly differs. In both cases, however, their treatment of this topic is significantly limited by the absence of a longer historical framework.

Of the two books, it is Vogel’s *The Politics of Precaution* that most directly engages with the significance of judicial review. Building on the comparative literature discussed earlier, Vogel, on more than one occasion, highlights the contribution of differences in judicial review to current transatlantic divisions, as in the following passage: “Courts on both sides of the Atlantic have also played an important role. While in the United States, they have subjected risk regulations to greater scrutiny, European courts have often given EU policy makers considerable discretion to enact precautionary regulation.”¹³³ Importantly, however, he does not relate this divergence to differences between the American and European legal systems or historical antecedents of any type. Instead, he dates the split between the American and European models of judicial oversight to the 1980

131. POUND, *supra* note 105, at 42.

132. WILLIAM FORBATH, *The Long Life of Liberal America: Law and State-Building in the U.S. and U.K.*, 24 *LAW & HIST. REV.* 179, 183–84 (2006).

133. VOGEL, *supra* note 5, at 253.

Benzene Case, which, as he writes, “placed the burden of proof on regulators to demonstrate that an environmental risk was sufficiently important to justify regulating it.”¹³⁴ In this connection, Vogel highlights the contrast between the Benzene Case, and the “precautionary logic”¹³⁵ of a number of earlier decisions, most notably *Ethyl Corporation v. EPA*,¹³⁶ from which it departed. The contrast between the 1976 and 1980 decisions serves in this fashion as one piece in the explanation for the perceived shift in the stringency of American regulation between the 1970s and ‘80s. Whereas earlier, “many American policies reflected a willingness to impose regulations in the face of scientific uncertainty,” increased judicial scrutiny in the 1980s contributed to the growing role of formal risk assessment in the American regulatory process since that time, on Vogel’s account.¹³⁷

At issue in *Ethyl* were EPA regulations aimed at phasing out leaded gasoline, notwithstanding uncertainty as to the hazards associated with airborne lead. Upholding the EPA’s action, Judge Skelly Wright offered an explicitly precautionary rationale in favor of deference to the agency in the case: “[T]he statutes—and common sense—demand regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable.”¹³⁸ The opinion became a centerpiece of an important, though ultimately short-lived, federal judicial effort to “construe a precautionary standard for environmental protection.”¹³⁹ The Benzene Case departed from this trend, as Vogel correctly points out. But in doing so, it also built upon deeply rooted common law principles regarding the evidentiary burdens necessary for regulatory findings of reasonable risk.

If one takes the 1960s and ‘70s as the relevant baseline it is easy to lose sight of the common law’s significance in shaping U.S. regulatory policy. After all, it was the perceived failure of common law environmental doctrines, primarily nuisance law, that prompted the creation of the new federal environmental regime during that time.¹⁴⁰ The new environmental statutes, particularly where they relied on technology standards allowing regulators to bypass scientific proof of risk in favor of feasibility, reflected disenchantment with the common law’s evidentiary burdens. The *Ethyl* court’s deference to the EPA’s “precautionary”¹⁴¹ implementation of the Clean Air Act was consistent with this sensibility. It is significant, however, that the

134. *Id.* at 256.

135. *Id.*

136. *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (en banc).

137. VOGEL, *supra* note 5, at 35–36.

138. *Ethyl Corp.*, 541 F.2d at 25.

139. JASANOFF, *supra* note 109, at 78.

140. RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 133–34 (2004) (“The premise of much modern environmental law has been that such common law doctrines, especially nuisance law, have failed to deal with environmental issues.”).

141. *Ethyl Corp.*, 541 F.2d at 25.

D.C. Circuit was sharply divided on this issue and that within four years the Supreme Court insisted on a change in course. Sheila Jasanoff attributes this shift to the agencies' diminished legitimacy in the wake of regulatory decisions based on inconclusive science.¹⁴² Importantly, the political vulnerability of American agencies in this regard distinguished them from their European counterparts.¹⁴³ Because American regulatory culture privileged scientific proof of harm as a test of regulatory legitimacy, U.S. agencies and courts soon retreated from their precautionary venture. The greater fit of this type of precautionary regulation with European regulatory culture made European regulators less politically vulnerable in this regard.

The precautionary tilt in American environmental law around the 1970s was not in any sense limited to that period. At intervals throughout American history there have been efforts to introduce public health, labor, and other social reforms modeled on Continental paradigms of administrative discretion, as the previous section discussed. Many of these reform efforts took root. But their capacity to do so was often slowed, or hindered, by attacks on the constitutionality or broader legitimacy of regulatory deviations from the common law's evidentiary burdens and principles of judicial supremacy, much like those that led the more precautionary American environmental regime of the 1970s to quickly shift course.

Vogel considers the change in American policy between the 1970s and '90s to be a decisive refutation of "[t]he claim that deeply rooted cultural or social attitudes . . . can adequately explain the large number of current differences in Europe and the United States," and attributes this category of argument to "myopic understanding of the historical pattern of protective regulation across the Atlantic."¹⁴⁴ Yet Vogel's own timeline begins around the 1960s, offering little discussion of the transatlantic patterns existing before that time. The question is one regarding which there is a need for more systematic historical work, but anecdotal examples suggest that, in keeping with what Vogel views as the current transatlantic pattern, nineteenth-century American regulation of food safety,¹⁴⁵ occupa-

142. JASANOFF, *supra* note 109, at 79.

143. *Id.* at 73.

144. VOGEL, *supra* note 5, at 34.

145. General food regulation statutes existed in Britain, Germany, and Sweden by the end of the 1870s, and were adopted in most European nations during the subsequent two decades. OSCAR E. ANDERSON, JR., *THE HEALTH OF A NATION: HARVEY W. WILEY AND THE FIGHT FOR PURE FOOD* 69–70 (1958). Though there were various municipal and state efforts to enact food and drug regulation in the decades following the Civil War, *id.* at 70, "[t]he effort to pass a general [federal] anti-adulteration law was doomed to frustration," *id.* at 78. "Federal regulation of food and drugs in the United States began, in a broad, across-the-board way, with the Pure Food and Drugs Act of 1906." JAMES HARVEY YOUNG, *PURE FOOD: SECURING THE FEDERAL FOOD AND DRUGS ACT OF 1906*, at 3 (1989). The British Parliament's first comprehensive food safety law (the Adulteration of Food or Drink Act) was enacted in 1860. The United States did

tional health,¹⁴⁶ and pollution¹⁴⁷ lagged behind the response of leading countries in Europe. The history of white phosphorous regulation provides a particularly instructive example in this respect: by 1912, when Congress enacted a statute that placed a prohibitive tax on white phosphorous matches in response to the known relationship between exposure to white phosphorous and the development of Phossy jaw disease among workers in match factories, a long list of European countries had already banned the manufacture and sale of phosphorous matches outright.¹⁴⁸

American Progressive reformers during the late nineteenth and early twentieth centuries made great efforts, at times successfully, to introduce European-modeled social and public health legislation into the United States.¹⁴⁹ But it was precisely over these precautionary measures that the battle related to nuisance-based limits on the police power raged. The conflicts surrounding American environmental regulation during the 1970s represented another such moment. Vogel attributes the subsequent shift in American regulatory policy beginning in the 1980s to a political "backlash" prompted by perceived "false positive policy errors,"¹⁵⁰ as well as Republican control of Congress.¹⁵¹ But these explanations are each consistent with the legal-culture-based argument above in that they speak to the political obstacles associated with precautionary regulation in the United States since the early nineteenth century.

The two decades during which the United States outpaced European environmental regulation stand as a time of extraordinary attention to environmental risks, following a decades-long delay.¹⁵²

not enact an anti-adulteration law until the 1906 Food and Drugs Act, which was largely ineffective. JAMES C. WHORTON, *THE ARSENIC CENTURY: HOW VICTORIAN BRITAIN WAS POISONED AT HOME, WORK, AND PLAY* 166 (2010).

146. See DANIEL RODGERS, *ATLANTIC CROSSINGS: SOCIAL POLITICS IN A PROGRESSIVE AGE* 235–36 (1998):

With the rapid elaboration of labor-protective statutes in Europe in the 1890s, however, the American states had not kept pace. On this point those who knew both sides of the North Atlantic economy were of a common mind. France had adopted major new pieces of factory legislation in 1892 and 1900, Germany in 1891 . . . and Britain in 1901. In comparison, Arthur Sadwell in 1903 thought the Americans barely had an effective factory legislation system at all. John Graham Brooks echoed this judgment the same year: "In no country of the first rank is this legislation so weak as in the United States."

147. MORAG-LEVINE, *CHASING THE WIND*, *supra* note 115, at 56–62.

148. These included Finland (1872), Denmark (1874), France (1897), Switzerland (1898), and Great Britain (1908). The Berne Convention of 1906 (which the United States failed to support) prohibited the use, import, and sale of white phosphorous matches. See *Killing Men to Cheapen Matches*, 41 *LITERARY DIG.* 88 (1910).

149. RODGERS, *supra* note 146, at 70.

150. VOGEL, *supra* note 5, at 252.

151. *Id.* at 258.

152. As Vogel writes in connection to this,

[h]istorically, American states have typically been regulatory laggards, rarely strengthening their health, safety, or environmental standards in the

The newly formed EU, by contrast, was then taking its first steps towards becoming an environmental regulatory power. The growth in European environmental regulation since the 1990s relative to the prior two decades is perhaps easiest to explain in reference to the change in European governance structures and regulatory capacity under the 1986 Single European Act, in particular the shift from an earlier requirement that the Council of Ministers unanimously vote on most environmental regulations to a "qualified majority" rule. As Vogel himself points out, "[a]s a result of this change in voting rules, between 1989 and 1991 the EU enacted more environmental laws than it had during the previous twenty years."¹⁵³ If limited regulatory capacity earlier impeded the passage of European environmental regulation, what best explains the EU's ambitious regulatory agenda with this capacity in place? Specifically, what weight should we accord to short-term incidents, such as the false negative regulatory failures that Vogel highlights,¹⁵⁴ relative to long-term legal-cultural factors? This question once again requires a longer historical framework, focused on the individual European countries that would in time come to shape the EU's approach to environmental risk regulation, with Germany and Sweden deserving particular attention.

Vogel discusses Sweden, whose chemical regulations outstripped the United States already by the 1970s, as "an important exception to the relative stringency of European and American chemical regulations prior to 1990, one which would subsequently have an important impact on the EU." He attributes Sweden's exceptionality to the existence of "substantial domestic political support for protecting human health and environmental quality," as well as to the country's "relatively small chemical industry."¹⁵⁵ Importantly, however, the origins of Swedish chemical policy significantly predate 1962,¹⁵⁶ the year Vogel identifies as being when "Sweden had begun to place the responsibility for classifying poisonous and dangerous substances on producers."¹⁵⁷ In fact, a 1906 Swedish Ordinance on Toxic Substances categorized chemicals in reference to their potential toxicity and, among other restrictions, prohibited the sale of toys containing mercury, lead, nickel, or cadmium.¹⁵⁸ This law built on a long list of

absence of federal requirements that they do so. This explains why, during the 1960s and 1970s, the environmental and consumer movements placed a high priority on shifting the locus of regulatory policy making from the states to Washington.

Id. at 287.

153. *Id.* at 238.

154. *Id.* at 252.

155. *Id.* at 156.

156. Mikael Karlsson, *The Precautionary Principle, Swedish Chemicals Policy and Sustainable Development*, 9 J. RISK RES. 337, 344 (2006).

157. VOGEL, *supra* note 5, at 156.

158. Karlsson, *supra* note 156, at 345.

earlier precautionary legislation, including a 1787 prohibition on the sale of arsenic and seventeenth-century restrictions on the sale of hazardous substances by pharmacies.¹⁵⁹

In similar fashion, the German *Vorsorgeprinzip*, generally considered the progenitor of the European precautionary principle,¹⁶⁰ was also historically rooted. When it made its appearance in German air pollution policy during the 1970s, the *Vorsorgeprinzip* prescribed feasible incremental pollution reductions, by all sources, even in the absence of conclusive evidence regarding the specific emission's health or environmental impact.¹⁶¹ In other words, it served as a call for the implementation of a technology-based approach to pollution control, the origins of which dated to licensing requirements encoded in an 1810 Napoleonic decree on noxious trades and, prior to that, the mercantilist practices of absolutist French monarchs.¹⁶² Technology standards are precautionary in that they confer discretion to regulate without requiring proof of harm, and as such, they fundamentally deviate from common law nuisance principles. As I've argued elsewhere, this fact was relevant to early-1980s British opposition to the German-led effort to turn the *Vorsorgeprinzip* into a cornerstone of European environmental policy.¹⁶³ Germany's ultimate success in this regard was likely aided by the false negative policy failures and other political factors Vogel highlights.¹⁶⁴ But the victory was also in no small measure a product of the fit between the principle and the civil-law-based sensibilities of leading EU member states, other than Britain.

Vogel's rejection of cultural or institutional explanations for current divisions between American and European approaches to precaution primarily follows from the difficulty of reconciling the presumed permanence of the relevant cultures and institutions, with the twenty or so years in which Europe, contrary to the expected pattern, arguably lagged behind American environmental risk regulation. This period aside, much of the evidence Vogel presents—most importantly in reference to differences in judicial review—is in quite consistent with cultural-institutional arguments of the type he rejects. Vogel's evidence in fact provides ample basis for the assertion of cultural-historical roots of the precautionary principle in its permissive incarnation.

The same cannot be said of Wiener's *The Reality of Precaution*, since its central thesis argues against greater European precaution,

159. *Id.* at 344.

160. VOGEL, *supra* note 5, at 266.

161. ALBERT WEALE ET AL., ENVIRONMENTAL GOVERNANCE IN EUROPE: AN EVER CLOSER ECOLOGICAL UNION? 67 (2000).

162. Morag-Levine, *Alkali Act*, *supra* note 15, at 9.

163. *Id.* at 2.

164. VOGEL, *supra* note 5, at 252.

either now or in the past. The two books' divergence on this point is in part due to differences in the universe of risks considered in each case: as discussed in Part I, Vogel focuses exclusively on environmental and health and safety risks, Wiener on a significantly broader category of risks including, most importantly, national security and crime.

The logic behind Wiener's methodological move in this connection is clear. If the question is whether either Europe or the United States can be shown to be more proactive and stringent in their response to risk, the source of the risk is ultimately immaterial. But Wiener's book makes an additional claim: not merely the absence of consistent transatlantic differences in risk regulation, but the essential irrelevance of legal-institutional tradition in that regard.¹⁶⁵ Yet, support for such a claim cannot be based on a lumping together of risks that the legal tradition has long treated differently; rather, it requires a sifting of the risks according to the legal tradition's own internal scheme. For this reason, if one is interested in the role of historical institutions—and legal traditions specifically—in recent transatlantic regulatory divisions, it is essential to narrow the analysis, as Vogel does, to risks “that involve health, safety, and environmental risks caused by business.”¹⁶⁶ This follows from the nature of the regulatory controversies at the heart of the historical common law paradigm. Most important in this connection is the long-standing distinction, under common law, between matters within the monarch's essentially unlimited prerogative power, and those falling outside this prerogative and therefore subject to the control of parliament and the courts.¹⁶⁷ The authority to declare war and deploy armies overseas exemplified such prerogative powers.¹⁶⁸ By definition, they were excluded from the category of governmental decisions that common law principles subordinated to judicial oversight. The evidentiary burdens associated with the nuisance paradigm in 19th century Britain and the US were limited to traditional local-government concerns regarding health, morality, and public welfare.¹⁶⁹ The authority of the central state to protect against external threats was not similarly subject to question. For this reason, if one approaches the transatlantic comparison from a legal-historical per-

165. See Wiener, *supra* note 7, at 12, 26, 537.

166. VOGEL, *supra* note 5, at 18.

167. 1 WILLIAM BLACKSTONE, COMMENTARIES *243–44.

168. Blackstone offered the following on the King's prerogative at time of war:

[T]he king has also the sole prerogative of making war and peace. For it is held by all the writers on the law of nature and nations, that the right of making war, which by nature subsisted in every individual, is given up by all private persons that enter into society, and is vested in the sovereign power.

Id. at *249.

169. See Part III, *supra*.

spective, the finding of greater American proactiveness regarding terrorism and WMD (or any other risk not requiring regulatory restrictions on property and market relations) is neither surprising nor relevant to an assessment of the influence of the common law paradigm.

The books' treatment of the role of judicial review similarly differs. For Vogel, as discussed above, the European courts' increased deference towards EU regulatory institutions serves as part of the explanation for the currently greater European stringency. By contrast, *The Reality of Precaution* leaves out any discussion of the existence of consistent differences in this regard. This is perhaps most evident in the chapter titled "Legal and Administrative Systems,"¹⁷⁰ which, rather surprisingly, concludes that the existence of discretion to regulate in the face of uncertainty "was resolved in the United States 25 years earlier than in the EU."¹⁷¹ The authors offer in support the D.C. Circuit's earlier mentioned 1976 opinion in *Ethyl Corporation v. EPA*,¹⁷² but make no mention of the Supreme Court's formative 1980 decision in the Benzene Case. Neither does the chapter discuss the European courts' interpretation of the precautionary principle in decisions such as the previously mentioned *Pfizer* case.¹⁷³ In the conclusion to the book, Wiener approvingly quotes the chapter just mentioned in connection with the purported incapacity of differences in administrative law, judicial review of agency action, and civil liability to "predict the observed complex variety of risk policies."¹⁷⁴ The Benzene Case is mentioned once, in the introduction to the book, with a brief concession to the effect that "[t]he march of precaution was arguably slowed by the U.S. Supreme Court's ruling in [that case]."¹⁷⁵ But this is quickly followed with counter-examples indicative of the existence of precautionary (meaning stringent) regulation in American law.¹⁷⁶

Wiener similarly offers the conclusions of the same chapter as indicative of the irrelevance of differences between legal systems to variation in levels of precaution, an argument he appears for the most part to equate with the "legal origins theory."¹⁷⁷ Based in law and economics, that body of work has made far-reaching claims regarding the association between legal traditions and a range of

170. Lucas Bergkamp & Turner T. Smith, Jr., *Legal and Administrative Systems: Implications for Precautionary Regulation*, in *THE REALITY OF PRECAUTION*, *supra* note 6, at 434.

171. *Id.* at 444.

172. *Ethyl Corp. v. EPA*, 541 F.2d 1, 28 (D.C. Cir. 1976) (en banc).

173. *Pfizer Animal Health v. Council*, 2002 E.C.R. II-3305. *See supra* text accompanying notes 74–79.

174. Wiener, *supra* note 9, at 537.

175. Wiener, *supra* note 7, at 10.

176. *Id.*

177. Wiener, *supra* note 9, at 537.

economic and political outcomes (government ownership of banks, regulation of labor markets, and frequency of military conscription, to cite a few).¹⁷⁸ The general finding is that common law countries economically outperform their civil law counterparts.¹⁷⁹ This is said to follow from a higher incidence of economic intervention and government ownership in civil law countries, a characteristic that is, in turn, said to correlate with negative impact on markets, increased corruption, and higher unemployment.¹⁸⁰ The theory's controversial normative message is clear and explicit: the common law promotes economic growth, the civil law impedes it.¹⁸¹ This type of claim appears to be what Wiener most had in mind in writing that "explanations based on the 'legal system' are too coarse to account for the observed complex variation in particular precautions."¹⁸²

The controversy surrounding the legal origins theory is outside the scope of this essay.¹⁸³ For present purposes it is sufficient to point out that the argument made here regarding the role of legal traditions is different in kind. The legal origins thesis links the common law with more business-friendly economic and regulatory outcomes, and thus speaks, at best, to the stringency of regulation or the prescriptive dimension of precaution. My argument focuses on transatlantic differences in permissive precaution and, within that context, the impact of the respective common law and civil law administrative paradigms. The correlation between this type of "permissive" discretion and regulatory stringency is a question in need of more systematic historical inquiry. In any case, for the purpose of getting to the heart of transatlantic divisions over precaution, it is the principle's permissive, rather than prescriptive, dimension that is of primary concern.

CONCLUSION

The argument regarding the greater resilience of common law principles in the United States is in no way intended to suggest an American consensus around the administrative models associated with these principles, or the containment of the American legal system within an impervious boundary capable of deflecting all external influences. Quite to the contrary, American constitutional history, like that of Britain before it, is one of tug and pull between efforts to

178. Rafael La Porta et al., *The Economic Consequences of Legal Origins*, 46 J. ECON. LITERATURE 285, 286 (2008).

179. *Id.* at 302.

180. *Id.*

181. Ralf Michaels, *Comparative Law by Numbers? Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law*, 57 AM. J. COMP. L. 765, 771 (2009).

182. Wiener, *supra* note 9, at 537.

183. Simon Deakin & Katharina Pistor, *Introduction*, in *LEGAL ORIGIN THEORY* ix (Simon Deakin & Katharina Pistor eds., 2013).

introduce Continental-inspired legislative and administrative reforms, on the one hand, and, on the other, countervailing reliance on common law principles by those seeking to block these influences. This was the case in the context of British sanitary reforms at the start of the nineteenth century; *Lochner*-era divisions over the police power; conflicts between the American Bar Association and the New Deal in the years leading up to the APA; and the disagreement between the Supreme Court and OSHA in the Benzene Case over the agency's implementation of a precautionary, generic approach to regulation of workplace carcinogens.¹⁸⁴ In these examples and others like them, common law ideology served an oppositional function aimed at deflecting the introduction of European social and regulatory institutions. Despite this resistance, many transplanted Continental approaches did succeed in taking root. But the requirement that any such reforms be defended against widely repeated, and deeply resonant, challenges to their legitimacy shaped not only the terms of the debate, but at times their outcomes as well.

The claim that common law principles of judicial supremacy remain a forceful influence within American regulatory policy is conceptually distinct from any assessment of the desirability of this influence. Neither does it suggest the inevitability of transatlantic conflict in this respect. Jonathan Wiener aptly highlights the prevalence and significance of "hybridization"¹⁸⁵ between European and American regulatory institutions as a consequence of "substantial exchange or borrowing of ideas across the Atlantic."¹⁸⁶ The phenomenon is not a novel one in any sense. For centuries, the history of public health and environmental regulation has evolved through processes of intra-European and transatlantic learning and adaptation, and we can expect that in the future, this process will only accelerate. But this history likewise attests to the tenacity and salience of the respective common law and civil law administrative paradigms.

184. See *supra* Part III.

185. Wiener, *supra* note 9, at 521.

186. *Id.*

