

Duke Law Journal

VOLUME 56

NOVEMBER 2006

NUMBER 2

REGULATION AS DELEGATION: PRIVATE FIRMS, DECISIONMAKING, AND ACCOUNTABILITY IN THE ADMINISTRATIVE STATE

KENNETH A. BAMBERGER†

ABSTRACT

Administrative agencies increasingly enlist the judgment of private firms they regulate to achieve public ends. Regulation concerning the identification and reduction of risk—from financial, data and homeland security risk to the risk of conflicts of interest—increasingly mandates broad policy outcomes and accords regulated parties wide discretion in deciding how to interpret and achieve them. Yet the dominant paradigm of administrative enforcement, monitoring and threats of punishment, is ill suited to oversee the sound exercise of judgment and discretion.

This Article argues that this kind of regulation should be viewed, instead, as regulatory “delegation” of the type Congress makes to

Copyright © 2006 by Kenneth A. Bamberger.

† Assistant Professor of Law, University of California at Berkeley, Boalt Hall School of Law. J.D., Harvard Law School, 1998. My appreciation to Dean Alex Aleinikoff, Donald Langevoort and the Georgetown University Law Center for the resources and generous guidance accorded me as a Spring 2004 Visiting Researcher. My thanks as well to Margaret Blair, Jim Cox, Lauren Edelman, Dan Farber, Noah Feldman, Jody Freeman, Mort Horwitz, Vicki Jackson, Anne Joseph, Bob Kagan, Martha Minow, Erin Murphy, Roy Schotland, Paul Schwartz, Garrick Sevilla, Susan Sturm, Molly Van Houweling, Phil Weiser, David Wilkins, John Yoo, and members of the University of California Working Group on Public Administration and Organizational Theory for their generosity in comments and discussions.

agencies when it accords them the authority to fill in the details of ambiguous statutory mandates. Administrative law's "delegation" paradigm, unlike its "regulation" counterpart, relies on decision processes to channel discretion in the service of public goals. Informed by the comparative capacities of different institutions, it structures delegated decisionmaking to promote rational and accountable policy implementation.

The Article then applies this administrative law approach to the exercise of delegated discretion by regulated firms. Drawing from the literature on judgment and decisionmaking in organizations used increasingly by corporate law scholars, it suggests that the efficient structure of profit-making firms will, in a subset of cases, systematically blind decisionmakers to the types of risk and change in which regulation is interested, and lead to unaccountable regulatory decisions.

Finally, I suggest ways in which administrative law might learn from recent research on organizational learning that examines how decisionmaking in firms can be structured more effectively, to incorporate additional accountability tools through regulatory design, third-party relationships, and relations between administrative agencies and those they regulate.

TABLE OF CONTENTS

Introduction.....	380
I. Regulatory Delegation	385
A. The Trend Toward Regulatory Delegation.....	386
B. Regulatory Delegation and Traditional Compliance Models	392
1. Prevailing Compliance Models of Firm Behavior	393
2. Regulatory Delegation's Challenge to Compliance Models	396
C. Drawing from a Different Model: The Administrative Accountability Paradigm.....	399
1. Administrative Delegation	401
2. Administrative Law and the Accountability Paradigm	404
3. Administrative Accountability as a Model for Structuring Regulatory Delegation	407

II. Learning from the Literature on Business Organizations—How Delegation to Regulated Firms Creates Accountability Problems	408
A. How Firms Organize Decisionmaking Around Efficiency	409
1. Overcoming Limits of Individual Cognition	409
2. Overcoming Environmental Uncertainty	415
B. The Weaknesses of Efficient Organization: Accountability Problems in Firm Decisionmaking.....	417
1. Decisionmaking Pathologies in Efficient Organizations	417
2. Efficient Firm Decisionmaking and Accountability Problems in the Exercise of Regulatory Discretion.....	425
III. Administrative Accountability for Regulated Firms	436
A. Administrative Law Lessons and Decision Pathologies.....	438
B. Identifying Accountability Tools	439
1. Tools for Enhancing Decisionmaking Rationality	439
2. Tools for Enhancing Responsiveness to Public Norms	442
3. Tools for Enhancing Accountability Through Review.....	445
C. Learning from Organizational Learning: Three Administrative Law Approaches to Cognitive Accountability	446
1. Directly Regulating the Decisionmakers' Focus: Improving Accountability Through "Attention Regulation"	447
2. Encouraging Rationality, Responsiveness and Reviewability Through Boundary-Spanning Relationships: Diversifying the Third-Party Monitor Model.....	452
3. Encouraging Responsiveness and Reviewability Through the Agency-Firm Relationship: Agencies as Educators	458
Conclusion	467

INTRODUCTION

Regulators increasingly enlist the judgment of the private firms they regulate to achieve public ends. Whether capital markets regulation spurred by high-profile fraud, data security and privacy replies to information technology abuse, or homeland security responses to new global threats, regulatory measures seek to tame complex risk by mandating broad policy outcomes, but according regulated parties wide discretion in deciding how to interpret and achieve them.

The trend is understandable. Certain complex statutory goals do not lend themselves easily to traditional regulatory forms. Risk, in particular, arises from the interplay of a variety of factors and manifests itself differently in heterogeneous firms. Its regulation, therefore, often cannot be boiled down to uniform rules governing behavior or mandating particular measurable outcomes.¹ Moreover, regulators have a poor vantage point for identifying threats on the ground. They lack access to private information held by regulated firms. And they face the difficulty and cost of monitoring whether the internal behavior of any particular firm is likely to achieve desired outcomes.

In these contexts, therefore, administrative agencies identify a broad policy goal—“preventing violations” of the securities laws by those supervised by broker-dealer firms,² “protect[ing] the security, confidentiality, and integrity of customer information,”³ or “managing the risks” of the over-the-counter derivatives trade⁴—but leave for regulated firms the tasks of interpreting the regulatory norm in local

1. In particular, attempts to regulate risk through uniform rules are either underinclusive in their specificity because focusing on a closed set of specified behaviors invariably neglects others that might be of greater importance, ignores the systemic interplay between such behaviors, and directs the attention of the regulated to factors that may or may not be relevant in a particular case, or meaningless in their generality, for example, “Reduce risk 25 percent.”

2. See Securities Exchange Act of 1934 § 15, 15 U.S.C. § 78o(b)(4)(E)(i) (2000). The Securities Exchange Act relieves liability for failure to supervise if “there have been established procedures, and a system for applying such procedures, which would reasonably be expected to prevent and detect, insofar as practicable, any such violation by such other person.” *Id.*

3. 16 C.F.R. § 314.1(a) (2006) (Federal Trade Commission regulations implementing §§ 501 and 505(b)(2) of the Gramm-Leach-Bliley Act (codified at 15 U.S.C. §§ 6801(b), 6805(b)(2) (2000))).

4. See 17 C.F.R. § 240.15c3-4(a) (2006) (“An OTC derivatives dealer shall establish, document, and maintain a system of internal risk management controls to assist it in managing the risks associated with its business activities, including market, credit, leverage, liquidity, legal, and operational risks.”).

context, assessing risk, and determining the appropriate response. This Article argues that leaving such tasks to the judgment of regulated firms is analogous to Congress's delegation to agencies, through statutory ambiguity, the power to "fill in the details."

As administrative law recognizes when it comes to agency oversight, it is difficult to regulate the exercise of judgment.⁵ Informed by a sophisticated institutional analysis of decisionmaking within and between government bodies, therefore, administrative law uses procedure and structure to shape agency discretion so that it is accountable: agencies must demonstrate to others that they reached their decisions consonant with public law values of rationality, responsiveness, and reviewability. Administrative law, then, "regulates regulators."⁶

In general, however, administrative law's sophisticated vision of organizational decisionmaking ends at the doors of the regulated firm. Despite the institutional focus of its examination of *regulators*, administrative law too often conceives of the *regulated* as unitary actors that act rationally and purposefully, best motivated by clearly articulated legal requirements, and external incentives and monitoring.⁷

5. See Paul Seabright, *Skill Versus Judgement and the Architecture of Organisations*, 44 EUR. ECON. REV. 856 (2000) (discussing the difficulty in codifying standards for, or even monitoring, the exercise of judgment).

6. Jerry L. Mashaw, *Structuring a "Dense Complexity": Accountability and the Project of Administrative Law*, ISSUES IN LEGAL SCHOLARSHIP, Mar. 2005, Article 4, at 5 (available at <http://www.bepress.com/ils/iss6/art4>).

7. One notable exception is Richard B. Stewart, *Organizational Jurisprudence*, 101 HARV. L. REV. 371 (1987) (reviewing MEIR DAN-COHEN, RIGHTS, PERSONS, AND ORGANIZATIONS: A LEGAL THEORY FOR BUREAUCRATIC SOCIETY (1986)), which summarizes and suggests the importance of several strains of organizational theory. Legal scholars Timothy Malloy and David Spence have also drawn on sophisticated accounts of organizational behavior in their analyses of environmental regulation. See Timothy F. Malloy, *Regulation, Compliance and the Firm*, 76 TEMP. L. REV. 451, 457 (2003) ("[V]isions of the firm . . . share a common flaw . . . [T]hey . . . overlook the ways in which the firm's internal environment can affect managers' decisions [F]irm behavior is driven more by the firm's routines than by economic rationality or normative values."); Timothy F. Malloy, *Regulating by Incentives: Myths, Models, and Micromarkets*, 80 TEX. L. REV. 531, 533 (2002) ("[A]ssum[ing] that the organization is a monolithic entity that essentially makes decisions as a natural individual would . . . [mean] the collective nature of the firm and its internal features are largely ignored.") (footnotes omitted); David B. Spence, *The Shadow of the Rational Polluter: Rethinking the Role of Rational Actor Models in Environmental Law*, 89 CAL. L. REV. 917, 936 (2001) ("[B]ecause environmental regulation relies on numerous, fluid, vague, and difficult-to-find rules . . . most noncompliance is neither rational nor a choice.").

This approximation of regulated firm behavior might, in many instances, work well. In traditional command-and-control regulation, or even newer performance-based directives, for example, regulators can articulate specific outcomes that are easy to monitor and enforce. In such contexts, agencies themselves exercise the discretion left by ambiguous statutes, and the inner workings of regulated firms remain largely beyond concern.

Yet as regulators turn to regulation that relies less on specific directives and more on judgment within firm boundaries, a stylized theory of the firm as a unitary rational actor provides, at best, an incomplete account of firm decisionmaking. Firms frequently engage in financial misrepresentation when it is irrational for them to do so in light of the certainty that their behavior will be discovered.⁸ Others with strong organizational incentives to ensure the accuracy of their internal controls badly misestimate their financial and operational risk.⁹ Gatekeepers responsible for the accountability of financial systems acquiesce in managerial fraud or misrepresentations, risking legal and market sanctions and loss of reputation that far exceeds any potential gain. Indeed, the lesson of the investigations into the Enron fraud and other contemporary misconduct cases was not that one could find individual “bad apples” within companies, but that a systemic problem existed. Namely, each of the “watchdogs” in the “multilayered system of controls devised to protect the public”—even those without ill intentions—failed to assess accurately or stop the situation.¹⁰

8. See generally Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (And Cause Other Social Harms)*, 146 U. PA. L. REV. 101 (1997).

9. The notable failure of Long Term Capital Management, for example, resulted from systemic underestimation of risk despite its leadership by two Nobel-winning economists, threatening its counterparties and lenders and—some believe—debt markets more generally. See generally Franklin R. Edwards, *Hedge Funds and the Collapse of Long-Term Capital Management*, 13 J. ECON. PERSP. 189 (1999). Even in the wake of the Enron scandal, 45.9 percent of corporate directors surveyed by the Institute of Internal Auditors and the National Association of Corporate Directors answered that their organizations had no formal process for identifying risk, while 17 percent were “not sure.” *After Enron: A Survey for Corporate Directors*, 1318 PLI/CORP 563, 571 (2002).

10. STAFF OF S. COMM. ON GOVERNMENTAL AFFAIRS, 107TH CONG., FINANCIAL OVERSIGHT OF ENRON: THE SEC AND PRIVATE-SECTOR WATCHDOGS 2 (2002) (concluding that “[n]ot one of the watchdogs was there to prevent or warn of the impending disaster,” including Enron’s Board of Directors, Arthur Andersen (Enron’s auditor), investment banking firms, attorneys, Wall Street securities analysts, credit rating agencies, and the SEC).

These problems, well documented in the financial context, raise concern in realms with even higher stakes. Government must, for example, rely on the judgment of private actors who own and manage most of the nation's critical infrastructure holdings to identify, assess, and mitigate the threats posed by low-probability, high-risk occurrences like terrorist threats.¹¹ The advantages of addressing compliance shortcomings *ex ante*, rather than after catastrophic harm, are clear.

Because private firms increasingly exercise regulatory discretion of the type delegated to agencies, administrative law should be concerned with private firm behavior. In particular, administrative law should follow the lead of recent corporate law scholarship, and draw on insights from the management and organizational behavior literatures to develop a richer account of decisionmaking within the corporate "black box" and, accordingly, an understanding of the extent to which firms' exercise of regulatory discretion is, or is not, accountable to public norms.

This Article begins that process. It uses those literatures to identify one cluster of accountability problems raised by regulatory delegation to private firms. These problems are rooted not in self-interested calculation about private gain or shortcomings in normative commitments to legal compliance, but in the less conscious workings of organizational decision processes. Specifically, efficient methods of coordinating individuals to achieve firm goals can cause predictable decision pathologies that mask the very type of risks and dangers targeted by regulation. Thus, these pathologies are especially pronounced when regulatory norms cause a drag on efficiency, i.e., when those norms are in tension with the core goals around which the firm is structured. As a result, the combined choices of even well-meaning individuals can lead to the exercise of regulatory discretion in ways that are not rational, not responsive to legal goals or

11. "Private industry owns and operates approximately 85 percent of our critical infrastructures and key assets." Larry M. Wortzel, Securing America's Critical Infrastructures: A Top Priority for the Department of Homeland Security, Address at the Conference for Critical Infrastructure and Homeland Security: Public Policy Implications for Business (April 23, 2003), in HERITAGE LECTURES NO. 787, May 7, 2003, at 2, available at http://www.heritage.org/Research/HomelandDefense/upload/41362_1.pdf. Because of this the government has recognized that federal agencies must rely on private companies for the identification of homeland security risk and protection of critical assets. JOHN MOTEFF & PAUL PARFOMAK, CONG. RESEARCH SERV., CRITICAL INFRASTRUCTURE AND KEY ASSETS: DEFINITION AND IDENTIFICATION 6 (2004), available at <http://www.fas.org/sgp/crs/RL32631.pdf>.

enforcement efforts, and shielded from review because they result from unconscious and invisible routines buried deep within firm structures. In this sense, a firm's "regulatory decisionmaking" can be literally arbitrary and capricious, unreviewable, or wholly captured by private concern.

The Article not only frames a critique of administrative law's dominant model of firms, but also suggests a blueprint for thinking about ways to ameliorate failures in the exercise of regulatory discretion by substituting a paradigm of administrative accountability for the traditional model of regulatory compliance. In particular, it derives a set of accountability tools from the literature on judgment and decisionmaking, and identifies contexts in which promising approaches might already exist. These proposals are not intended as an exclusive accountability schema for regulated-firm decisionmaking; they address only the cognitively-rooted threats to good decisionmaking when it is otherwise difficult to measure substantive outcomes. Accordingly, they suggest a framework to guide agencies in experimenting more generally with integrating cognitive understandings into the regulation of decision processes.

This framework should include regulated firms as part of the administrative process. In making this claim, this Article offers an additional dimension to scholarship on the role of private actors in lawmaking. That scholarship focuses on a combination of mechanisms, notably contract and consensus, by which government administrators enlist private parties to perform traditionally public functions ranging from standard setting to the administration of prisons.¹² It suggests that privatization, in the language of administrative law, is a form of delegation that raises accountability concerns.¹³ By identifying ways in which regulation, too, can constitute delegation, I argue that decisions assigned to regulated firms should also be viewed through an accountability lens.

12. See, e.g., MARTHA MINOW, PARTNERS, NOT RIVALS: PRIVATIZATION AND THE PUBLIC GOOD (2002); Jody Freeman, *The Private Role in Public Governance*, 75 N.Y.U. L. REV. 543 (2000) [hereinafter Freeman, *Private Role*] (discussing private role in service provision, regulation and incarceration); Jody Freeman, *Collaborative Governance in the Administrative State*, 45 UCLA L. REV. 1, 56 (1997) [hereinafter Freeman, *Collaborative Governance*] (describing how a flexible EPA permitting process has allowed private companies to devise a more adaptive permitting regime).

13. Gillian E. Metzger, *Privatization as Delegation*, 103 COLUM. L. REV. 1367, 1370–71 (2003).

The Article proceeds as follows. Part I describes the trend toward regulatory delegation and the resulting challenge to the dominant paradigm of regulatory “compliance,” by which regulators seek to affect the behavior of regulated entities through monitoring and incentives. It argues that regulatory delegation is better governed by a different model: the accountability paradigm used for structuring legislative delegations to administrative agencies.

Part II presents an account of the way decisions occur within firms, and identifies particular accountability problems with firms’ exercise of regulatory discretion. More specifically, it describes how corporate structures, mindsets, and routines developed to allow efficient firm behavior can skew compliance efforts by filtering out the very information about risk and change that regulation seeks to identify. This filtering can both result in arbitrary or unresponsive regulatory decisions, and preclude their meaningful review.

Part III uses the literature on how organizations learn to develop tools for increasing the accountability of regulated firm decisions, and suggests three contexts in which they can be implemented. First, it argues that those tools can be used in regulatory design to focus the attention of individuals within the firm, and therefore prompt them to make more rational regulatory decisions. For example, the Sarbanes-Oxley Act’s¹⁴ expansion of federal securities regulation contains a number of provisions with promise as “attention regulation.” Second, it explores ways in which relations with third-party monitors might better be utilized to overcome cognitive decisionmaking pathologies. Finally, this Part suggests a model for reworking the relationship between regulators and firms to augment the agency’s role as educator. In sum, this Part offers a blueprint for thinking about how best to enlist the judgment of private firms—those with the most on-the-ground information about risk in a variety of contexts—to achieve public ends while avoiding pathologies that distort that judgment

I. REGULATORY DELEGATION

Regulatory responses to this decade’s high-profile governance challenges sound a consistent theme: they blur the customary roles of regulators and those who are regulated. Traditionally, public

14. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (codified as amended in scattered sections of 15 U.S.C.).

administrative agencies are delegated wide discretion to flesh out broad legislative goals. Private parties are in turn regulated by provisions mandating their conduct accordingly. Faced with a host of contexts in which it is difficult to mandate specific outcomes from above, however, regulators increasingly assign to regulated private firms important decisions about the definition of those goals and how to achieve them. Regulators no longer command, they delegate. Private firms are no longer simply regulated; they are often assigned discretion to fill in regulatory detail analogous to the type exercised by administrative agencies.

The blurring between regulation and delegation poses a challenge to the traditional paradigm for the legal control of regulated firm behavior. That paradigm uses traditional mechanisms of control—regulatory specificity, monitoring, and incentives—to mandate compliance with regulatory commands. When specific commands are replaced with regulatory delegation, however, these mechanisms are less useful. Because it makes little sense to speak about “compliance with” the exercise of decisionmaking discretion, such mechanisms often provide only illusory constraints on private firm choices, leaving open the possibility that public norms will be subverted by private decisions.

When regulation resembles administrative delegation, then, a more useful model for the legal control of regulatory implementation is often the web of mechanisms employed to make the bureaucratic exercise of delegated authority *accountable*. The accountability paradigm offers a means to glean the benefits of regulatory delegation when private actors claim superior information and expertise, while at the same time cabining private discretion by making firms answerable to others for decisions that should be made consistent with substantive public norms.

A. *The Trend Toward Regulatory Delegation*

Traditional regulation seeks to achieve particular outcomes by articulating, *ex ante*, universal rules requiring certain conduct or particular technology. Such command-and-control regulation conveys little discretion to regulated parties in implementation; they can either comply with the regulatory requirements, or fail to do so.

This type of regulation proves less operative when regulatory goals are more complex. Specific rules often cannot reflect the large number of variables involved in achieving multifaceted regulatory

goals, such as reducing the types of risk produced by a combination of factors.¹⁵ They identify certain relevant factors that can easily be codified, while ignoring others. They thus direct behavior toward compliance with an incomplete set of detailed provisions that may frustrate, rather than further, the broader regulatory goal in any particular circumstance.¹⁶

The problem is compounded when regulated entities are heterogeneous, and contexts are varied.¹⁷ One-size-fits-all rules cannot easily account for the ways in which risk manifests itself differently across firms. Moreover, regulators have neither the resources nor the vantage to attain the granular knowledge necessary to combat risk within individual companies; the uncertainty in predicting such individualized information further renders it unsuitable as a basis for ex ante mandates.

Indeed, as demonstrated by a growing body of empirical and analytic research in the literature on regulation, when regulators attempt to reflect the breadth of uncertain contextual factors in a regime of precise provisions, the proliferation of rules itself creates an unwieldy, confusing body of mandates and exceptions leading to

15. See Douglas C. Michael, *Cooperative Implementation of Federal Regulations*, 13 YALE J. ON REG. 535, 570–71, 590, 598–600 (1996) (discussing rule failure in regulating the health risks of seafood, where context regulation of outcomes is not possible and causes of risk are innumerable and heterogeneous); Julia Black, Critical Reflections on Regulation 13–16 (London Sch. of Econ. and Political Sci., Econ. and Soc. Research Council, Ctr. for the Analysis of Risk and Regulation Discussion Paper 2002) (discussing the increase in the use of regulation to govern the management and distribution of risk, with particular reference to financial services regulation). See generally D.J. Galligan, *Discretionary Powers in the Legal Order: The Exercise of Discretionary Powers*, in A READER ON ADMINISTRATIVE LAW 275, 277 (D.J. Galligan ed., 1996) (discussing the changes in the nature of tasks undertaken by the state and the resulting tendency toward “purposive, goal-based decisions” informed by substantive, rather than formal, rationality, and “therefore towards discretionary authority”). Susan Sturm has detailed this problem in achieving the abstract goal of workplace equity. See Susan Sturm, *Second Generation Employment Discrimination: A Structural Approach*, 101 COLUM. L. REV. 458, 461 (2001) (discussing the problems with regulating the “complex and dynamic problems inherent” in workplace bias with “specific, across-the-board rules”).

16. Carol A. Heimer, *Legislating Responsibility* 5–6 (Am. Bar Found., Working Paper No. 9711, 1997) (discussing how the “30-day rule” in neonatology clinic, under which additional administrative burdens were imposed if a newborn died before 30 days, encouraged efforts targeted on survival for that length of time, with no effect on long-term survival rates).

17. The shortcomings of command and control governance are well recognized. See, e.g., Cass Sunstein, *Administrative Substance*, 40 DUKE L.J. 607, 627 (1991) (citing failures in using “rigid, highly bureaucratized ‘command-and-control’ regulation” to govern “hundreds, thousands, or even millions of companies and individuals in an exceptionally diverse nation”).

uncertain and inconsistent application.¹⁸ Because of such rule failure, regulatory precision is often a poor device for allocating decisions between rule makers and rule followers,¹⁹ and therefore for ensuring consistency in the behavior of regulated parties.²⁰

The extensive literature on the economics of contracts identifies such problems with “complete” contracting—attempting to fully articulate terms *ex ante*—in situations of complexity and uncertainty.²¹ In such circumstances, an instrument’s terms should be left incomplete—vague and unspecified—while future decisions about how to fill in the imprecision may be assigned to the party that will, at the appropriate time, have best access to relevant information.²²

These insights have shaped choices about regulatory design. Indeed, the past two decades have seen widespread experimentation with more “incomplete” regulatory instruments. Regulators employ

18. See, e.g., John Braithwaite, *Rules and Principles: A Theory of Legal Certainty*, 27 AUSTL. J. LEGAL PHIL. 47, 60–75 (2002) (showing, based on a comparative study of the regulation of nursing homes in the United States and Australia, how a regulatory regime based on the proliferation of detailed rules creates an unwieldy, confusing body of rules and exceptions, leading to uncertain and inconsistent applications); J.B. Ruhl & James Salzman, *Mozart and the Red Queen: The Problem of Regulatory Accretion in the Administrative State*, 91 GEO. L.J. 757, 805 (2003) (describing the problem of regulatory accretion, whereby the “system burdens” arising from the collective operation of rules thwart a regulated organization’s ability to comply); Spence, *supra* note 7, at 918 (discussing the “complexity critique” of regulation, which “see[s] a complex, ‘ossified’ system [of regulation] that often makes compliance difficult and impractical”); Sturm, *supra* note 15, at 461 (describing how in a complex system like employment discrimination, rules will be too general).

19. See, e.g., Frederick Schauer, *The Convergence of Rules and Standards*, 2003 N.Z. L. REV. 303, 305 (suggesting that the choice between specific and vague directives does not make nearly as much of a difference as is ordinarily assumed because “the adaptive behaviour of rule-interpreters and rule-enforcers will push rules towards standards, and push standards towards rules”).

20. Indeed, these problems trouble principal-agent relationships generally. See Darren Hawkins & Wade Jacoby, *How Agents Matter*, in DELEGATION AND AGENCY IN INTERNATIONAL ORGANIZATIONS 199, 206 (Darren Hawkins et al. eds., 2006) (“Although the use of particular rules is a control mechanism . . . [n]o set of rules can be completely precise nor cover all contingencies; thus, there is always room for interpretation. Principals of course have the capacity to interpret the rules to their advantage, but so do agents. . . . Once substantial delegation occurs . . . agents are more likely . . . to openly reinterpret their mandate . . . ”).

21. See generally Robert E. Scott & George G. Triantis, *Incomplete Contracts and the Theory of Contract Design*, 56 CASE W. L. REV. 187, 191 (2005) (“In contract theory, incompleteness is due to the fact that information is costly and sometimes unavailable to (a) the parties at the time of contracting or (b) the parties or the enforcing court at the time of enforcement.”).

22. See generally OLIVER E. WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, RELATIONAL CONTRACTING 34 (1985) (discussing “governance structures” put into place to resolve future contractual uncertainty).

performance-based measures when they can identify specific outcomes but cannot easily codify in generally-applicable rules the means for achieving them.²³ Such regulation articulates a measurable result, but leaves “the concrete measures to achieve this end open for the [regulated entity] to adapt to varying local circumstances.”²⁴ Accordingly, it assigns the determination of required outcomes to the regulator—who can, *ex ante*, determine the desired result with specificity—but leaves contemporaneous implementation decisions to the regulated entity itself, which is more familiar with inner firm workings on which desired outcomes hinge. By executive order, Presidents Clinton and George W. Bush have directed agencies, when feasible, to regulate by mandating performance objectives, rather than behavior,²⁵ and much regulation of complicated subject matter takes this form.

Certain public problems, however, lend themselves to neither specific behavioral commands nor measurable outcomes. Their harms arise in heterogeneous contexts and result from a complex interaction of events or behaviors that cannot be identified *ex ante*. Moreover, desired performance is difficult to identify in advance or assess contemporaneously. In these circumstances, outcomes (whether the regulated party successfully stopped a data privacy or homeland security breach, for example) are, in one scholar’s understated words, “undesirable to rely upon as the sole basis for a regulatory standard.”²⁶

Prominent twenty-first-century regulatory initiatives have focused on such targets. Animated by a series of scandals and disasters in the forefront of the public consciousness—specifically Enron and WorldCom, the repeated compromise of private or

23. See generally Cary Coglianese et al., *Performance-Based Regulation: Prospects and Limitations in Health, Safety, and Environmental Protection*, 55 ADMIN. L. REV. 705 (2003) (summarizing a dialogue among regulators and researchers about performance-based regulation); Christine Parker, *Reinventing Regulation Within the Corporation: Compliance-Oriented Regulatory Innovation*, 32 ADMIN. & SOC’Y 529, 547 (2000) (discussing “outcome-based” regulation).

24. NEIL GUNNINGHAM & RICHARD JOHNSTONE, *REGULATING WORKPLACE SAFETY: SYSTEMS AND SANCTIONS* 23 (1999).

25. Exec. Order No. 12,866, § 1(b)(8), 3 C.F.R. 638 (1994), reprinted in 5 U.S.C. § 601 (2000) (issued by President Clinton and retained by President George W. Bush).

26. Cary Coglianese, Reducing Risk with Management-Based Regulation, Notes on the Columbia/Wharton-Penn Roundtable on Risk Management Strategies 2 (2002), http://www.ldeo.columbia.edu/chrr/documents/meetings/roundtable/pdf/notes/coglianese_cary_note.pdf (last visited Oct. 25, 2006).

secured data, and the World Trade Center attacks—regulators have turned their attention to preventing, and not just punishing, capital markets abuses, data breaches, and security compromises. These initiatives regulate issues of immense financial and societal importance. Yet their goals involve, in large part, the reduction of complex risks about which advance information is uncertain at best, in varied contexts about which administrators know far less than the entities they seek to regulate.

Responding to these problems, regulators have shied away from regulatory detail as to either outcomes or methods. Expanding on regulatory models documented by Cary Coglianese and others in the fields of environmental protection and food safety,²⁷ they have instead enlisted the expertise and judgment of regulated parties themselves—those entities claiming the greatest familiarity with risks on the ground, how those risks arise, and how they can be mediated—to determine not just the means to achieve regulatory goals, but also the definition of those aims in particular contexts, and the monitoring of achievement.

This development has been particularly marked in the securities realm, in which SEC regulations requiring the disclosure of operational risk generally have implicitly left to regulated firms the tasks of developing systems for identifying and assessing risk. These assignments have now become explicit, as in the Sarbanes-Oxley regime discussed in greater detail in Part III.C and the 2003 SEC rule targeting conflicts of interest on the part of investment advisers who exercise voting authority with respect to client securities. The conflicts rule sets a policy goal: it requires advisers to adopt policies and procedures “reasonably designed to ensure that [the adviser] vote[s] . . . in the best interest of clients.”²⁸ The Commission, however, left the substantive detail to regulated advisers, expressly refusing to provide any further specifics. Indeed, the SEC would provide no “specific policies or procedures for advisers,” nor even “a list of

27. See, e.g., Cary Coglianese & David Lazer, *Management-Based Regulation: Prescribing Private Management to Achieve Public Goals*, 37 LAW & SOC’Y REV. 691, 696–700 (2003) (describing the use of management-based regulation in the areas of food safety, industrial safety, and pollution prevention).

28. Investment Advisers Act Rule, 17 C.F.R. § 275.206(4)–6(a) (2006).

approved procedures,” recognizing that investment advisers “are so varied that a ‘one-size-fits-all’ approach is unworkable.”²⁹

Measures seeking to safeguard sensitive personal and financial information reflect a similar direction. Title V of the Gramm-Leach-Bliley Act³⁰ (GLB) empowers various agencies to promulgate data security regulations for financial institutions.³¹ The Federal Trade Commission’s 2003 standard implementing the Act in turn instructs firms to develop risk assessment and data security systems “appropriate to your size and complexity, the nature and scope of your activities, and the sensitivity of any customer information at issue.”³² While the implementing regulations do include some guidance for implementation tools, such as “periodic risk assessments,” and “sanctions against employees that fail to comply,” the particular implementation is left to individual firms, and “[t]he ultimate test remains a broad one, that of ‘reasonable data security.’”³³ The proposed Identity Theft Protection Act,³⁴ and Personal Data Privacy and Security Act of 2005,³⁵ each reported out of Senate committee, would impose information security requirements that track the regulatory implementation of the GLB.³⁶

Finally, regulators struggling for regulatory responses to homeland security threats in the face of international terrorism recognize that government must rely on the judgment of private actors—who own and operate approximately 85 percent of U.S. critical infrastructures and key assets³⁷—for the ongoing assessment, identification and mitigation of the risks connected with such low-

29. Proxy Voting by Investment Advisers, 68 Fed. Reg. 6585, 6587 (Mar. 10, 2003) (codified at 17 C.F.R. pt. 275).

30. Pub. L. No. 106-102, 113 Stat. 1338 (1999) (codified at 15 U.S.C. §§ 6801–6827 (2000)).

31. 15 U.S.C. §§ 6801, 6805.

32. 16 C.F.R. § 314.3 (2006).

33. Paul M. Schwartz & Edward J. Janger, *Notification of Data Security Breaches*, 105 MICH. L. REV. (forthcoming Mar. 2007) (manuscript at 7, on file with the *Duke Law Journal*) (quoting Interagency Guidelines Establishing Information Security Standards, 69 Fed. Reg. 77,620 (Dec. 28, 2004)).

34. S. 1408, 109th Cong. (2005) (approved by the Senate Commerce Committee in July 2005 and reported to the full Senate in December 2005).

35. S. 1789, 109th Cong. (2005) (reported to the Senate by the Judiciary Committee in November 2005).

36. Ira Rubinstein, *Privacy and Security Legislation and Policy: The Last 12 Months*, in SEVENTH ANNUAL INSTITUTE ON PRIVACY LAW: EVOLVING LAWS AND PRACTICES IN A SECURITY-DRIVEN WORLD 76–78 (Francois Gilbert et al. eds., 2006).

37. Wortzel, *supra* note 11, at 2.

probability, high-risk disasters.³⁸ Thus, while regulation in this arena is more diffuse and less developed, regulators are experimenting with regimes such as New Jersey's chemical plant protection measures, which turn principally to regulated plants themselves for the "assessment of facility vulnerabilities and hazards that might be exploited by potential terrorists," and the development of "prevention, preparedness, and response plan[s]" including measures "to eliminate or minimize risk of terrorist attack, to mitigate the consequences of any attack that does occur, or to respond to an attack that does occur."³⁹

Although these initiatives address a variety of substantive ills, they share certain important characteristics. Each articulates general goals, yet largely assigns to regulated firms themselves the decisions about specifics—everything from the meaning of the public aim in particular context (mitigating risk, avoiding conflicts of interest, protecting information, enhancing security) to the means for achieving it. Certainly, some measures require that regulated firms employ certain management processes. Yet they make few *ex ante* decisions about substantive detail, leaving such decisions—at least in the first instance—to the regulated firm's judgment.

Such developments signal a shift in the vision of the regulated entity. Regulated parties are increasingly no longer just the objects of governance, enlisted for "transmission-belt" implementation of clear regulatory mandates. They are partners in regulation, implicitly and explicitly enlisted to fill out the substance of legal norms and develop the means for implementing those broader principles locally.

B. *Regulatory Delegation and Traditional Compliance Models*

This shift in the role of the regulated entity poses a serious challenge to the ways in which regulators and scholars traditionally think about firms and their compliance with legal mandates. In a world in which regulation mandated observable conduct or outcomes, regulators relied on traditional tools for principals' control of agent behavior: making rules as specific as possible, monitoring performance to ensure those rules were followed, and providing

38. See MOTEFF & PARFOMAK, *supra* note 11.

39. STATE OF NEW JERSEY DOMESTIC SECURITY PREPAREDNESS TASK FORCE, DOMESTIC SECURITY PREPAREDNESS BEST PRACTICES STANDARDS AT TCPA/DPCC CHEMICAL SECTOR FACILITIES 4–5 (2005) (on file with the *Duke Law Journal*).

appropriate incentives—both carrots and sticks—for desired behavior.⁴⁰

This suite of restraints reflects the two existing visions that dominate administrative law understandings of private parties.⁴¹ One emphasizes a firm's normative commitment to compliance. The other emphasizes compliance based on instrumental calculations. Because of their emphasis on the measurement of externally observable regulatory requirements, however, neither concerns itself with detailed understandings of behavior and decisionmaking within the black box of firm boundaries. When thinking about firms' exercise of regulatory delegation—which inherently involves complex behavioral interactions between individuals and systems within firms—both come up short.

1. *Prevailing Compliance Models of Firm Behavior.* The first traditional model dominating administrative law understandings of private firm behavior describes regulated firms as “amoral calculators,”⁴² profit-maximizing actors who decide whether to comply with the law based on a calculation of the costs and benefits of doing so.⁴³ Such firms’ behavior can therefore best be controlled by “top-down” measures associated with principal-agent relationships: adjusting incentives so as to align the interests of regulated-agents with those of the regulator-principal.⁴⁴ The primary means for affecting firm incentives involves deterrence: using monitoring and sanctions (fines or imprisonment) to set the cost and likelihood of ex post punishment sufficiently high so as to deter ex ante deviation from the regulator’s command.⁴⁵ Certain administrative agencies, such

40. See, e.g., Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976) (discussing, in the context of corporate shareholders and managers, market and contract controls designed to align the divergent interests of principals and agents).

41. James Salzman et al., *Regulatory Traffic Jams*, 2 WYO. L. REV. 253, 255 (2002).

42. Robert A. Kagan & John T. Scholz, *The “Criminology of the Corporation” and Regulatory Enforcement Strategies*, in ENFORCING REGULATION 67, 69–74 (Keith Hawkins & John M. Thomas eds., 1984); see also Spence, *supra* note 7, at 919–23 (discussing the “rational polluter” model of compliance to environmental regulation).

43. See generally Malloy, *Regulation, Compliance and the Firm*, *supra* note 7, at 453–54 & nn.9–11 (discussing the vision of a “firm as a rational profit-maximizer, obeying the law only when it is in the firm’s best economic interest to do so” and associated literature).

44. See generally Jensen & Meckling, *supra* note 40.

45. For classic statements of the deterrence approach, see generally RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 201–27 (1986); Gary S. Becker, *Crime and Punishment: An*

as the SEC, include positive carrots along with punitive sticks in the incentive model, offering a reduction in punishment for those regulated firms that demonstrate good faith attempts at compliance.⁴⁶ In either form, this behavioral model reflects economist Oliver Williamson's classic definition of agents: opportunistic actors "given to self-interest seeking with guile."⁴⁷

The latter account, then, builds explicitly on the behavioral paradigm of the self-interested, utility-maximizing individual—the archetype embraced by "[v]irtually all of modern economics and large parts of the rest of social science."⁴⁸ Under this model, individual decisionmakers approach choices armed with knowledge of the available alternatives and their consequences. In addition, decisionmakers have a consistent hierarchy of "preferences," which are "consistent values by which alternative consequences of action can be compared in terms of their subjective value."⁴⁹ By assessing alternative consequences in light of her preferences, the utility maximizer will make the choice that maximizes her own utility by choosing the greatest benefit at least cost (or, more accurately, the highest net benefit and the highest probability of occurrence). This model, accordingly, supposes a consequentialist model of decisionmaking, by which individuals make choices based on a calculated evaluation of the outcomes of various strategies.

The amoral calculator account of regulated entities attributes this pattern of individual economic behavior to the firm as a whole. It assumes that all regulated parties, whether individuals or organizations, make rational calculative choices. The prevailing administrative account of the firm, then, is that of a unitary self-interested actor, rationally structuring decisions in order to maximize profit.⁵⁰ Consistent with the utility-maximizing model, incentives, if set

Economic Approach, 76 J. POL. ECON. 169 (1968); George J. Stigler, *The Optimum Enforcement of Laws*, 78 J. POL. ECON. 526 (1970).

46. See, e.g., Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934 and Commission Statement on the Relationship of Cooperation to Agency Enforcement Decisions, Exchange Act Release No. 44,969, 76 SEC Docket 220 (Oct. 23, 2001) (declining to take action against company because of internal control efforts and cooperation).

47. OLIVER E. WILLIAMSON, THE MECHANISMS OF GOVERNANCE 253 (1996).

48. James G. March, *Understanding How Decisions Happen in Organizations*, in ORGANIZATIONAL DECISION MAKING 10 (Zur Shapira ed., 1997).

49. *Id. See generally* DECISION MAKING: ALTERNATIVES TO RATIONAL CHOICE MODELS (Mary Zey ed., 1992).

50. Spence, *supra* note 7, at 918 ("The traditional view holds that firms are rational and self-interested economic and political actors, and rational pursuit of their self-interest guides

at the right level, will guide organizational decisionmaking by causing organizations to undertake whatever internal adjustments are necessary to ensure that they conform their behavior to the legal rule.⁵¹

The second of the prevailing compliance models focuses on regulated parties who are “good apples.”⁵² These are agents for whom conformity with the law derives from “bottom-up” commitments, which legal sociologists credit for much, if not most, legal compliance.⁵³ These firms comport their behavior, of their own accord, to comply with the law to the extent possible.⁵⁴ Because these agents are hindered principally by external obstacles to compliance such as “ambiguous regulations, constantly shifting rules, and conflicting mandates,”⁵⁵ regulators can best control these agents by providing clear rules to guide their behavior.

These two models offer divergent motivational accounts. Whereas the amoral calculator is motivated by self-interest, the good apple is guided by a normative preference for legal compliance.⁵⁶

both their compliance decisions and their attempts to influence policy.”); *see also* Milton Friedman, *The Methodology of Positive Economics*, in *ESSAYS IN POSITIVE ECONOMICS* 3, 21–22 (1953) (examining the hypothesis that individual firms behave as if they were seeking rationally to maximize profits); Ruhl & Salzman, *supra* note 18, at 797 (“[Environmental behavior] is portrayed as merely the result of a rationally derived decision whether or not to comply—that is, based on the perceived costs of complying versus the risk and costs of being caught, the ‘good apples’ decide it is efficient to comply and the ‘bad apples’ decide it is efficient to violate.”).

51. *See, e.g.*, Jennifer Arlen & Reinier Kraakman, *Controlling Corporate Misconduct: An Analysis of Corporate Liability Regimes*, 72 N.Y.U. L. REV. 687, 693 (1997) (“[E]ntity liability can lead companies to institute ‘preventive measures’ that deter by making misconduct more difficult or expensive for wrongdoers, or by reducing the illicit benefits of unpunished (or successful) misconduct, without affecting the probability that it is detected by enforcement officials.”).

52. EUGENE BARDACH & ROBERT A. KAGAN, *GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS* 64–66 (1982) (arguing that most regulated enterprises are “good apples”).

53. *Id.*

54. Salzman et al., *supra* note 41, at 255; *see also* Malloy, *Regulation, Compliance and the Firm*, *supra* note 7, at 454 (describing vision of the firm as “law-abiding actor, struggling in good faith to comply with increasingly complicated and contradictory laws and regulations”).

55. Salzman et al., *supra* note 41, at 255.

56. *See, e.g.*, Malloy, *Regulation, Compliance and the Firm*, *supra* note 7, at 464–75 (“In the normative model, people comply with the law not out of a fear of formal legal sanctions but out of a sense of obligation arising from a social norm.”); *see also* Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1497 (1998) (discussing the “norm of law abidingness”).

Yet the two share similar understandings about firm behavior. The normative account mirrors the consequentialist's assumption that organizations structure decisionmaking rationally, so as to conform behavior to legal commands.⁵⁷ They both assume that firms reach decisions consciously and purposively.⁵⁸ And they both anthropomorphize the firm, attributing to organizations the unitary decisionmaking patterns of individuals.

The ability of both models to rely on rule precision, monitoring, and incentives to ensure observable compliance with specific commands, then, permits them to treat firms as atomistic, rational, purposive decisionmakers. It further obviates the need, in either case, to look within the "black box" of the firm to understand the ways in which decisionmaking actually occurs.

2. Regulatory Delegation's Challenge to Compliance Models.

The delegation of regulatory discretion poses a challenge for the prevailing accounts of firm behavior. The existing compliance paradigm relies on some firms' normative commitment to follow specific mandates, and other firms' responsiveness to incentives and monitoring. Experience with delegation to administrative agencies, however, suggests that these elements alone are insufficient to guide organizations' exercise of broad regulatory discretion.

Certainly, the dominant model of control and the behavioral premise of rational purposive action by regulated firms on which it rests explain important elements of firm behavior, regardless of the level of discretion delegated. Business organizations are generally sensitive to profits, and therefore to government penalties. They are often able to organize their operations to respond successfully to market pressures, and to pursue the strategic and normative goals set forth by management. Moreover, the delegation of decisionmaking discretion to private firms does not change their nature as parties who must follow the law. Thus imposing civil or criminal penalties provides an important means of *ex post* punishment for the bad apples who violate regulatory mandates.

57. See, e.g., BARDACH & KAGAN, *supra* note 52, at 64–65 (making the case that the "good apples" have the strongest conception of the link between compliance and long-term self-interest, and the most effective internal controls to achieve regulatory compliance).

58. See Mark C. Suchman, *On Beyond Interest: Rational, Normative and Cognitive Perspectives in the Social Scientific Study of Law*, 1997 WIS. L. REV. 475, 480 ("[T]he normative or moral decision-making model agrees with rational choice theory's claim that people generally make conscious and systematic decisions . . .").

Yet experience suggests that these approaches are, at best, imprecise controls on private firm decisionmaking. Firms engage in financial misrepresentation even when discovery and punishment is virtually assured. Even good-apple firms that seek to implement effective internal controls fail to comply with regulatory mandates. Especially in contexts in which regulatory delegation is prevalent, traditional models of control fare poorly.⁵⁹

Some of the imprecision in control may be addressed by overcoming the challenges inherent in the tools themselves: the difficulties of determining optimal incentives for deterrence,⁶⁰ the challenge and costs of effective monitoring,⁶¹ and the complexity of promoting independent norms of law abidingness in business firms. Indeed, regulation has integrated creative means both for better aligning the incentives of private actors with government (such as regulatory schemes that rely on market-based incentives rather than deterrence⁶²) and for improving monitoring of outcomes (by, for

59. See, e.g., U.S. GEN. ACCOUNTING OFFICE, TRENDS, MARKET IMPACTS, REGULATORY RESPONSES AND REMAINING CHALLENGES 4 (2002), available at <http://www.gao.gov/new.items/d03138.pdf> (finding that, between January 1997 and June 2002, 10 percent of all listed companies announced at least one financial restatement, and that financial restatements due to prior irregularities grew 145 percent); Ruhl & Salzman, *supra* note 18, at 791–96 (“[F]ull compliance with regulatory mandates is seldom achieved.”); *id.* at 823–24 (“[E]very compliance study of environmental law to date has revealed significant levels of noncompliance.”); Joyce E. Cutler, *Large Number of Companies Noncompliant with Environmental Laws, EPA Official Says*, 29 ENV’T REP. (BNA) 2233 (1999); James Surowiecki, *The Dirty Little Truth About Corporate Lies*, SLATE, July 6, 1998, <http://www.slate.com/id/1001803/> (last visited Oct. 28, 2006) (discussing survey of CFOs indicating that 12 percent admitted misrepresenting corporate financial results at the request of senior company executives, and another 55 percent had been asked to misrepresent results, but had “fought off” the demand).

60. The difficulty in setting optimal incentives to ensure deterrence proves a challenge because, to determine the right penalty level, a regulator needs to calculate accurately the costs of compliance, as well as the probability of detection and enforcement. Such detailed information may simply be inaccessible to public administrators, especially because these costs vary radically by firm. See DOUGLAS NEEDHAM, THE ECONOMICS AND POLITICS OF REGULATION: A BEHAVIORAL APPROACH 335 (1983) (discussing regulators’ inability to know actual costs and benefits when setting incentives). See generally TOM R. TYLER, WHY PEOPLE OBEY THE LAW 22–23, 67 (1990) (noting “practical difficulties of implementing a policy based only on the increased use of threatened or delivered punishment”); Tom R. Tyler, *Public Mistrust of the Law*, 66 U. CIN. L. REV. 847, 857–58 (1998) (noting that deterrence is difficult because it depends on the likelihood of being caught); Tom R. Tyler, *Citizen Discontent*, 45 AM. J. COMP. L. 871, 873–74 (1997) (highlighting the high costs of deterrence).

61. See Donald C. Langevoort, *Monitoring: The Behavioral Economics of Corporate Compliance with Law*, 2002 COLUM. BUS. L. REV. 71, 80–81 (“[M]onitoring is a far more difficult and costly practice than we conventionally assume.”).

62. See Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 STAN. L. REV. 1333, 1342–43 (1985) (advocating marketable permits in part on the ground that

example, focusing on the independence of third-party auditors). Administrative agencies have also experimented with innovations intended to promote normative commitments to compliance. For example, programs under which regulated firms may negotiate the content of applicable rules, seek (among other things) to promote those businesses' acceptance of the legal mandate.⁶³ Moreover, agency programs that publicize high levels of compliance are calculated to convince regulated parties of the fairness of regulatory regimes. Legal sociologists have found this to increase a decisionmaker's sense of normative duty.⁶⁴

Yet shortcomings of models relying either on top-down incentives or bottom-up faith inhere in the approaches themselves. As in the administrative agency context, the very nature of broad delegation blunts the applicability of two of the standard control mechanisms. By definition, a regime that accords regulated parties wide discretion relinquishes its effectiveness as a precise directive. Similarly, the more a regulation prescribes broad policy goals, rather than specific behavior or a measurable outcome, the more difficult it is to monitor compliance. As discussed in Part I.A., attempts to boil down complex goals to auditable tasks often thwart the accomplishment of the wider objective.

marketability puts the regulatory information-processing burden on “business managers and engineers who are in the best position to figure out how to cut back on their plants’ pollution costs”); Richard L. Revesz & Robert N. Stavins, *Environmental Law and Policy* 33–43 (John F. Kennedy Sch. of Gov’t Working Paper No. RWP04-023, 2004), available at <http://ssrn.com/abstract=552043> (discussing a number of alternative means of adjusting incentives, including pollution charges, tradable permit systems, market friction reductions, and government subsidy reductions).

63. See Procedures for Negotiating Proposed Regulations (Recommendation No. 82-4), 1 C.F.R. § 305.82-4 (1993) (expressing expectation that negotiated rulemaking would result in rules more acceptable to the interests affected by agency decisions). But see Cary Coglianese, *Assessing Consensus: The Promise and Performance of Negotiated Rulemaking*, 46 DUKE L.J. 1255, 1335 (1997) (concluding on the basis of empirical study that “[n]egotiated rulemaking does not appear any more capable of . . . avoiding litigation than do the rulemaking procedures ordinarily used by agencies”).

64. See Tom R. Tyler, *Procedural Fairness and Compliance with the Law*, 133 SWISS J. ECON. & STAT. 219, 220–22 (1997). That same result is achieved when a decisionmaker believes that most others are behaving according to the same norm, see Dan M. Kahan, *Trust, Collective Action, and Law*, 81 B.U. L. REV. 333, 341–42 (2001) (“In sum, individuals behave like the amoral calculators posited by the conventional theory *only* when they believe that others are cheaters; if they believe that others are morally motivated to comply, they reciprocate by complying in turn, whether or not they believe that they could profitably evade.”), and that those who are not are being punished.

Private firm agents, furthermore, possess characteristics indicating particular incentives to exploit the “slack” inherent in their delegation. They are structured around strong corporate self-interest—the very interest the legal and economic literatures are most concerned will capture public decisionmaking.⁶⁵ And they are “permeable,”⁶⁶ in that they are particularly responsive to influences other than the interests of regulator-principal, such as the behavior of competitors, the interests of consumers, and the pressures of the market.

Finally, the information asymmetries between regulated firms and administrative agencies—one of the important justifications for employing regulatory delegations in the first place—prevents effective monitoring. Not only do regulated entities possess superior knowledge about the workings of their organization, their behavior is often, by practical constraints or even by operation of law, more effectively hidden within the firm.

These factors all suggest the insufficiency of incentives, imperfect monitoring, and faith in good apples to guide private implementation of broad and imprecise public mandates. Certainly regulatory delegation creates the opportunity for individual firms to participate creatively in developing effective governance solutions, and some firms might seize the chance. Yet relying on the trappings of a traditional enforcement framework to ensure an across-the-board pursuit of public norms provides only illusory control of firm behavior; it leaves too much to chance.

C. Drawing from a Different Model: The Administrative Accountability Paradigm

The mismatch between regulatory delegation and traditional methods for administrative control of regulated parties should not pose much surprise to scholars of administrative behavior. Indeed, the difficulty in “commanding” and “controlling” broad decisionmaking discretion constitutes the central focus of administrative law.

65. See *infra* note 80 (citing the literature on capture of administrative processes by private interests).

66. See Hawkins & Jacoby, *supra* note 20, at 208–10 (discussing ways in which agents are permeable to third parties).

Specifically, administrative law concerns itself with ways to shape policy decisions that Congress delegates to the judgment of administrative agencies, bodies largely unanticipated by the Constitution's three-branch framework⁶⁷ yet essential to the massive project of modern governance. Traditional legislative delegation frequently involves contexts in which there is little ability to monitor particular outcomes. The administrative state accordingly turns to agencies to use their judgment, informed by difficult-to-measure factors such as expertise and executive politics.

Administrative law recognizes that the exercise of such judgment is difficult to police. Accordingly, it has long abandoned notions of straightforward agency *compliance* with legislative mandate.⁶⁸ Instead, it is animated by a model of agency *accountability*.

Indeed, when the ex post measurement of outcomes is elusive, or outcomes are insufficient as a means for assessing decisionmaking, the accountability model rejects singular reliance on traditional principal-agent control tools. It relies instead on a robust set of doctrines, procedures, and relationships intended to channel decisionmaking in ways that promote both more effective decisionmaking in the service of public goals, and independent values about the ways in which public norms should be pursued. Specifically, the accountability paradigm regulates decisionmaking to promote rationality, responsiveness to public norms, and reviewability by others.

The accountability model provides a useful blueprint for the oversight of regulatory delegation. It takes seriously the notions that policy solutions are complicated and varied, and that parties to whom discretion is given should employ their knowledge and judgment in the service of effective solutions. It further recognizes that organizational decisionmakers do not behave in any one singular manner—let alone in the manner of a rational maximizer; rather, organizational decisionmaking is complex, and can only be affected through a combination of inexact means. Exploring this framework for making administrative delegates answer for decisionmaking

67. See A. Christopher Bryant & Timothy J. Simeone, *Remanding to Congress: The Supreme Court's New "On the Record" Constitutional Review of Federal Statutes*, 86 CORNELL L. REV. 328, 370–71 (2001) (providing summary of discourse regarding the place of agencies in constitutional structure).

68. See *infra* notes 71–76 and accompanying text (discussing the “transmission-belt” model of the administrative state).

offers important guidance when those same actors in turn delegate decisions to those they regulate.

1. *Administrative Delegation.* The administrative state governs through delegation.⁶⁹ Congress possesses exclusive power to legislate regulatory principles and priorities, but lacks both the constitutional capacity to execute laws and the resources to shape legislative principle into particularized policies. By delegating significant policymaking discretion to administrative agencies to supply the practical detail necessary for regulatory implementation, however, it enlists their relative expertise, ability to research and collect pertinent information, and capacity to devote extended time and attention to specific problems.⁷⁰

Administrative law's vision of agency decisionmaking has transformed to reflect developments in governance. The "traditional model" conceived of the "agency as a mere transmission belt for implementing legislative directives in particular cases."⁷¹ Congressional dictates guaranteed that agency action was "commanded by a legitimate source of authority—the legislature."⁷² The "additional assurance" of judicial review⁷³ further "ensure[d] compliance with legislative directives."⁷⁴

The very idiom of the traditional model, however, rings hollow in an era when federal legislation charging administrative agencies with broad goals has long eliminated the specificity on which the

69. The delegation of authority may either occur explicitly, *see Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984) ("[When Congress has] explicitly left a gap for [an] agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation."), or implicitly, by assigning to agencies the task of administering statutes containing some ambiguity or "gap," *United States v. Mead Corp.*, 533 U.S. 218, 229 (2001); *see also* Kenneth A. Bamberger, *Provisional Precedent: Protecting Flexibility in Administrative Policymaking*, 77 N.Y.U. L. REV. 1272, 1281–82 (2002) (discussing implications of implicit administrative delegation).

70. See Peter L. Strauss, *Legislative Theory and the Rule of Law: Some Comments on Rubin*, 89 COLUM. L. REV. 427, 427–30 (1989) (noting the transformation in practice accompanying the rise of the administrative state from "direct ('transitive') legislative resolution of policy problems to indirect ('intransitive') resolution through the empowerment of agents").

71. Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1675 (1975).

72. *Id.* at 1675; *see also id.* at 1672–74 (describing how specific directives curb official discretion, promote formal justice, and ensure the legitimacy of governmental actions).

73. *Id.* at 1675.

74. *Id.* at 1676.

“transmission belt” theory relied.⁷⁵ Congress now explicitly assigns agencies future decisions for which the details cannot be determined in advance. Administrative policymakers are asked instead to exercise good judgment— informed by expertise and information to which they have access—in choosing between a variety of possible options under conditions of uncertainty. In this light, a model of “controlling” agency “compliance” makes little sense.⁷⁶ Judgment is an activity that is difficult to control, and discretion is inherent in its exercise.

Modern administrative law has, accordingly, focused its attention instead on problems raised by the exercise of discretion—problems that can undermine both the legitimacy and efficacy of resulting decisions. It recognizes that delegation to agents, though necessary for large-scale administration, poses several categories of foreseeable challenges.⁷⁷

First is the danger that permitting undemocratic, extraconstitutional decisionmakers to construe the law unfettered by precise statutory mandate will foster arbitrary or unreflective governance. The absence of any constraint on the exercise of power poses a particular problem in light of fundamental rule-of-law values, which require rationality and regularity in legal application.⁷⁸

Second, broad discretion creates the possibility that the exercise of power will respond to private, rather than public, priorities. The concern over taint by private interests takes several forms. Most

75. *Id.* (“Vague, general, or ambiguous statutes create discretion and threaten the legitimacy of agency action under the ‘transmission belt’ theory of administrative law.”); *see also id.* at 1677 (“[F]ederal legislation establishing agency charters has, over the past several decades, often been strikingly broad and nonspecific, and has accordingly generated the very conditions which the traditional model was designed to eliminate.” (citations omitted)).

76. *Id.* at 1672–76.

77. There is, of course, a vigorous literature setting forth fundamental constitutional and policy arguments against the legitimacy of delegation—especially broad delegation—to unelected agencies in the first place. *See, e.g.*, JOHN HART ELY, DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW 133 (1980) (“That legislators often find it convenient to escape accountability is precisely the reason for a non-delegation doctrine.”); THEODORE J. LOWI, THE END OF LIBERALISM: IDEOLOGY, POLICY AND THE CRISIS OF PUBLIC AUTHORITY 127 (1969) (“[Delegation] becomes pathological, and criticizable, at the point where it comes to be considered a good thing in itself, flowing to administrators without guides, checks, safeguards.”).

78. *See generally* A. V. DICEY, INTRODUCTION TO THE STUDY OF THE LAW OF THE CONSTITUTION 120 (8th ed. 1982) (stating that rule of law requires, “in the first place, the absolute supremacy or predominance of regular law as opposed to the influence of arbitrary power, and excludes the existence of arbitrariness, of prerogative, or even wide discretionary authority on the part of the government”).

simply, particular decisionmakers (whether individual bureaucrats or agencies as a whole) may seek to aggrandize their own power,⁷⁹ minimize their effort level, or favor personal policy predilections over those of Congress. More generally, the process of administrative decisionmaking itself may be captured by interested private factions.⁸⁰ Courts have identified a third type of danger when administrative discretion is delegated to private parties rather than to public regulators: the decisionmaker may be both self-aggrandizing and self-interested.⁸¹

Finally, because its exercise often need not be justified, wide managerial discretion may render careful explanation by decisionmakers unnecessary, thus obscuring the reasons underlying particular decisions. In this way, broad leeway can imperil the ability of democratic or constitutional institutions like the public, Congress, and the courts to oversee agencies and review their decisions.⁸²

Thus, discretion in the interpretation and implementation of regulatory directives may compromise three related governance values: *rationality* in choosing between solutions; *responsiveness* to public interests; and *reviewability* by others. These shortcomings jeopardize both the effective pursuit of legislative goals, and public law norms about decisionmaking in the exercise and implementation of government power.

79. See Daryl J. Levinson, *Empire-Building Government in Constitutional Law*, 118 HARV. L. REV. 915, 917 (2005) (“[The] pervasive assumption in constitutional law and theory is that government officials are empire-builders, imperialistically or avariciously intent upon maximizing the power or wealth of their offices and institutions.”).

80. See, e.g., Thomas W. Merrill, *Capture Theory and the Courts: 1967–1983*, 72 CHI.-KENT L. REV. 1039 (1997) (discussing the development of “capture theory,” which depicted administrative agencies as the captives of big business); Mark Seidenfeld, *A Civic Republican Justification for the Bureaucratic State*, 105 HARV. L. REV. 1511, 1565 (1992) (“According to the capture hypothesis, instead of providing meaningful input into deliberation about the public interest, industry representatives co-opt governmental regulatory power in order to satisfy their private desires.”); Stewart, *supra* note 71, at 1684–86 (describing how administrative agencies are captured by the interests they are charged to regulate).

81. See Carter v. Carter Coal Co., 298 U.S. 238, 311 (1936) (rooting the proscription on delegation to private parties in the concern over self-interested regulation); Sierra Club v. Sigler, 695 F.2d 957, 962 n.3 (5th Cir. 1983) (observing that the U.S. Army Corps of Engineers hiring a private consulting firm was particularly troubling when the private firm essentially prepared the environmental impact statement for a project in which it had a stake).

82. See, e.g., Nat'l Ass'n of Home Builders v. Norton, 340 F.3d 835, 846 (9th Cir. 2003) (“Agencies must articulate a satisfactory explanation for their action to permit effective judicial review.” (internal quotation marks omitted)).

2. *Administrative Law and the Accountability Paradigm.* Modern administrative law seeks methods beyond control to safeguard against the dangers of broad delegation. Specifically, it seeks to channel the exercise of discretionary authority by making administrative decisionmaking “accountable.” Although different scholars employ that term more or less broadly,⁸³ this Article follows the path of those who understand accountability generally as “checks on decision making”⁸⁴ intended to channel discretion so as to promote both effective and legitimate regulatory decisions.

More specifically, the accountability model seeks to overcome uncertainty about changing circumstances or precise substantive results by other means. As to the question “accountable for what?” administrative law supplements incomplete demands for specific solutions with requirements that decisions be made consonant with rule-of-law and sound decisionmaking notions of deliberation, thoroughness and consistency. As to the question “accountable to what ends?” it emphasizes the touchstone of public norms, however general, articulated by Congress. And regarding “accountable to whom?” the administrative process involves multiple players, including Congress, the courts, the executive, and a variety of private actors, making clear that administrative decisions must be made in a way that both results and decision processes themselves can be reviewed from the outside.

Throughout, the accountability model recognizes that discretionary decisionmaking is complicated. It implicitly rejects a simplified rational actor model of agency behavior, and is informed not only by legal theory and policy, but also increasingly by political science and economic understandings of how institutions and the individuals within them make decisions in the political arena.

83. Compare Lisa Schultz Bressman, *Beyond Accountability: Arbitrariness and Legitimacy in the Administrative State*, 78 N.Y.U. L. REV. 461 (2003) (distinguishing political accountability to democratic branches of government from other values like rational policymaking), with Alfred C. Aman, Jr., *Globalization, Democracy, and the Need for a New Administrative Law*, 49 UCLA L. REV. 1687, 1700 (2002) (noting that approaches to accountability dominating by economic values often do not adequately take noneconomic values into account), and Marshall J. Breger, *Government Accountability in the Twenty-First Century*, 57 U. PITTS. L. REV. 423, 423 (1996) (identifying various types of accountability in addition to “[a]ccountability [t]hrough [d]irect [d]emocracy”). See generally Edward Rubin, *The Myth of Accountability and the Anti-Administrative Impulse*, 103 MICH. L. REV. 2073 (2005) (rejecting notions that electoral control and decisionmaking devolution actually constitute “accountability,” and promoting administrative hierarchy as necessary for accountability).

84. Freeman, *Private Role*, *supra* note 12, at 664.

Based on these understandings of bureaucratic behavior, administrative law regulates decisionmaking, in large part through structural design. It ensures that a variety of government and private actors, each with their own interests, capacities, and approaches to problems, have particular roles in the discussion. Directly elected legislators set goals guided by political calculus. Private parties represent a host of divergent interests through participatory procedures. Agencies guided by substantive expertise and informed by executive policies promulgate regulations. Independent judges, guided by precedent and legal principle, review the resulting determinations. Through the administrative structure, multiple participants—each armed with a different decisionmaking logic—participate in the process that leads to a final agency decision.

This external structure shapes internal agency decisionmaking. Formal participation processes govern the procedures by which agencies gather knowledge. The Administrative Procedure Act (APA)⁸⁵ itself requires consideration of divergent perspectives in a number of ways.⁸⁶ Its notice-and-comment provisions, for example, compel agencies promulgating rules to account for a written record filled with information and interpretations from a host of conflicting viewpoints.⁸⁷ By legislation and executive order, Congress and the President further compel agencies to consider information they might not ordinarily address, such as the impact on the environment,⁸⁸ state

85. Administrative Procedure Act of 1946, Pub. L. No. 79-404, 60 Stat. 237 (codified as amended in scattered sections of 5 U.S.C.).

86. See, e.g., Steven P. Croley, *Theories of Regulation: Incorporating the Administrative Process*, 98 COLUM. L. REV. 1, 79 nn.226–27 (1998) (noting that the APA facilitates deliberative agency decisions); Stewart, *supra* note 71, at 1670 (noting that APA procedures are “designed to promote the accuracy, rationality, and reviewability of agency application of legislative directives”).

87. 5 U.S.C. § 553(b) (2000) (setting forth notice and comment requirements for administrative rulemaking). See generally Smiley v. Citibank (S.D.), N.A., 517 U.S. 735, 741 (1996) (“[N]otice-and-comment procedures of the Administrative Procedure Act [are] designed to assure due deliberation.”); John F. Manning, *Constitutional Structure and Judicial Deference to Agency Interpretations of Agency Rules*, 96 COLUM. L. REV. 612, 660–62 (1996) (arguing that APA procedural safeguards promote fair and informed administrative decisionmaking).

88. The National Environmental Policy Act of 1969 (NEPA) § 102, 42 U.S.C. § 4332(C)(i)–(v) (2000), for example, mandated that agencies prepare Environmental Impact Statements. By explicitly instructing agencies to consider types of information not previously taken into account, NEPA changed decision outcomes by “making bureaucracies think.” SERGE TAYLOR, MAKING BUREAUCRACIES THINK: THE ENVIRONMENTAL IMPACT STATEMENT STRATEGY OF ADMINISTRATIVE REFORM 3–4 (1984).

and local governments⁸⁹ and small business,⁹⁰ as well as the costs and benefits of regulatory decisions.⁹¹

Judicial standards further shape the decision process. Under both the APA's proscription against "arbitrary and capricious" agency action⁹² and *Chevron*'s step-two reasonableness requirement,⁹³ courts require that agencies engage in reasoned deliberation in reaching their decisions.⁹⁴ Specifically, they require that agencies take account of all of the information in the record and explain, in a public way, why they reached their outcome in light of contrary data, arguments, and alternatives presented.⁹⁵ Through such requirements, "all of the intensity of [judicial] review is directed toward identifying flaws in the agency's decisional process."⁹⁶

Finally, the transparent nature of administrative record building and agency decisionmaking further facilitates accountability in a host

89. Unfunded Mandates Reform Act of 1995 § 2, 2 U.S.C. § 1501 (2000).

90. Regulatory Flexibility Act § 3, 5 U.S.C. 603(a) (2000).

91. See Exec. Order No. 12,866, 3 C.F.R. 638, 639 (1994), reprinted in 5 U.S.C. § 601 (2000) ("In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating.").

92. See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 41 (1983) (holding that the APA's proscription against arbitrary and capricious decision making requires reasoned decision making); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415–17 (1971) (same).

93. See Lisa Schultz Bressman, *Disciplining Delegation After Whitman v. American Trucking Ass'ns*, 87 CORNELL L. REV. 452, 457–59 (2002) (discussing APA/Chevron parallels); Ronald M. Levin, *The Anatomy of Chevron: Step Two Reconsidered*, 72 CHI.-KENT L. REV. 1253, 1263–66 (1997) (discussing lower court cases interpreting *Chevron*'s step-two "reasonableness" requirement to parallel APA cases requirement and thereby hold that an interpretation is not "reasonable" unless well explained).

94. See *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 851 (D.C. Cir. 1970) (stating that agency action is arbitrary and capricious when "the agency has not really taken a 'hard look' at the salient problems and has not genuinely engaged in reasoned decision-making" (footnote omitted)).

95. See Gary Lawson, *Outcome, Procedure and Process: Agency Duties of Explanation for Legal Conclusions*, 48 RUTGERS L. REV. 313, 315 (1996) ("Well-settled principles of administrative review plainly require agencies to provide reasoned explanations for their legal interpretations"); Mark Seidenfeld, *Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking*, 87 CORNELL L. REV. 486, 518 (2002) ("On its face, arbitrary and capricious review, as currently implemented under the "hard-look" or "relevant factors" rubric, is almost entirely a process-based evaluation. It does not compare the outcome to some ideal that the judge has in mind, and eschews inquiring whether the agency decision, in fact, turned out to be wise. It essentially asks the agency to explain why it reached the outcome it did in light of data available to the agency, alternatives to the outcome, and arguments presented to the agency by those whom the rule will affect." (footnotes omitted)).

96. Jeffrey J. Rachlinski & Cynthia R. Farina, *Cognitive Psychology and Optimal Government Design*, 87 CORNELL L. REV. 549, 589 (2002).

of ways. These processes make agency explanations available to Congress, which can evaluate the agency's implementation of legislative goals and formulate legislative responses. As discussed previously, they allow courts to assess agency decisionmaking without necessarily intruding on the substance of decision outcomes. And they provide both private groups and other government institutions with meaningful yardsticks for reviewing, assessing, and critiquing ultimate agency action.⁹⁷

The accountability paradigm, then, relies on the involvement of multiple actors and methods in the search for regulatory solutions. These actors bring to bear varied institutional capacities and decision-process strengths on regulatory choices. In this model, static notions of control are supplemented—and often supplanted—by learning, dialogue, process, and accountability.

3. Administrative Accountability as a Model for Structuring Regulatory Delegation. The administrative accountability model provides a useful model for addressing similar problems arising from the delegation of decisionmaking to regulated firms. It first suggests that when delegations involve complex issues and require the exercise of significant discretion by agents, traditional methods for controlling behavior may prove ineffective at promoting solutions consonant with legislative goals and public norms.

Second, it suggests that additional measures intended to channel discretion must be informed by an understanding of the challenges to good decisionmaking particular to the context.

Third, it emphasizes the participation of a variety of actors in the decision process, each animated by different institutional concerns and approaches to decisionmaking. In particular, it highlights the role of external information inputs and outside influences on internal processes in promoting rational, responsive, and reviewable decisions.

Finally, it suggests that focusing on those processes, rather than just on substantive outcomes, provides one measure by which external parties can assess the administrative exercise of discretion without losing the benefits of delegation by reexamining every agency decision *de novo*. This approach, in turn, makes a certain level of decisional transparency essential to permitting meaningful review. In

97. See Arthur Lupia & Mathew D. McCubbins, *Designing Bureaucratic Accountability*, 57 LAW & CONTEMP. PROBS. 91, 97 (Winter 1994) (discussing Congress's direct "police-patrol" monitoring, and indirect "fire-alarm" oversight in which informed third-parties provide signals).

such a framework, accountability provides a means for promoting good decisionmaking when commands and controls are not enough.

The subsequent two parts of this Article seek to explore the ways in which an accountability paradigm might be applied to regulatory delegations. Drawing on the paradigm's recognition of the complexity inherent in political and agency decisionmaking, Part II develops a detailed account of decisionmaking in regulated firms, with particular emphasis on the ways in which firms' efficient organization can create tensions with the effective pursuit of public goals. So informed, Part III then applies the remaining lessons of the administrative law model, suggesting a framework for regulating private firm decisionmaking in a way that promotes accountability.

II. LEARNING FROM THE LITERATURE ON BUSINESS ORGANIZATIONS—HOW DELEGATION TO REGULATED FIRMS CREATES ACCOUNTABILITY PROBLEMS

The dominant models for controlling regulated firm behavior—bottom-up normative commitments and top-down government control—share two characteristics. First, they envision firms as unitary decisionmakers, treating whole organizations as single legal actors. Second, the dominant models focus on shaping the preferences of atomistic corporations, which presupposes that firms can achieve regulatory goals in a purposive and rational manner.

By collapsing firms and their constituent members into unitary actors, these models neglect the importance of each. For in reality “firm” behavior is a product of both the interaction of numerous individuals within a company and the complex effect of particular organizational context in shaping those individuals’ behaviors.

Recent corporate law scholarship drawing on insights in the management and organizational behavior literatures emphasizes that corporate decisionmaking cannot be understood by a monolithic template of organizational rationality. Rather, it is dependent on relations among individual actors within firms.⁹⁸ Pathbreaking

98. For diverse examples of this wide-ranging scholarship, see Stephen M. Bainbridge, *Why A Board? Group Decisionmaking in Corporate Governance*, 55 VAND. L. REV. 1, 41 (2002) (“Concerns about groupthink, social loafing, and collective action failures, however, all prove relevant to operationalizing group decisionmaking in the corporate setting.”); Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 264 (1999) (“[S]ome kinds of outcomes can only be achieved through joint effort—sometimes the joint effort of large numbers of people.”); Donald C. Langevoort, *Agency Law Inside the*

literature in behavioral law and economics has further dismantled the building blocks underlying models of rational firm behavior, exploring the predictable failures of rationality in individual decisionmaking and cognition.⁹⁹ And the broader social science research on which these approaches draw reveals that organizational dynamics arising from individual cognition and relationships mold firm behavior at least as much as—and often in ways that subvert—the purposive pursuit of institutional goals.

Because administrative law has enlisted private firms in regulatory decisions, it must learn the lessons of those who study private firm decisionmaking by opening the “black box” of the firm to examine the decision systems within. This Part accordingly discusses the pertinent literature on organizational behavior, and considers its implications for the capacity of firms to implement regulation consistent with public norms. It then considers the ways in which predictable behavioral pathologies can undermine firms’ capacities to make regulatory decisions in a manner that effectively furthers regulatory ends. In other words, efficient firm organization can itself make firm decisionmaking unaccountable.

A. How Firms Organize Decisionmaking Around Efficiency

1. *Overcoming Limits of Individual Cognition.* Firms are comprised of individuals. When regulation entrusts firms with pursuing legal ends, it relies on their ability to coordinate those individuals successfully. This organizational challenge would be formidable even if all members of the firm conformed to the ideal of

Corporation: Problems of Candor and Knowledge, 71 U. CIN. L. REV. 1187, 1194 (2003) (“There are many fascinating angles to an inquiry into whether corporate agents have an affirmative duty to disclose information to their superiors”); Lawrence E. Mitchell, *Structural Holes, CEOs, and Informational Monopolies*, 70 BROOK. L. REV. 1313, 1315–16 (2005) (“[T]he focus of corporate law should be on the CEO and the entire senior management structure of the corporation, examining the relationship of that structure to the board’s ability to perform.”); Symposium, *Corporate Misbehavior by Elite Decision-Makers: Perspectives from Law and Social Psychology*, 70 BROOK. L. REV. 1165 (2005). This turn in scholarship was pioneered by John C. Coffee, Jr. See John C. Coffee, Jr., *Beyond the Shut-Eyed Sentry: Toward a Theoretical View of Corporate Misconduct and an Effective Legal Response*, 63 VA. L. REV. 1099 (1977) [hereinafter Coffee, *Shut-Eyed Sentry*]; John C. Coffee, Jr., “*No Soul to Damn: No Body to Kick*”: An Unscandalized Inquiry into the Problem of Corporate Punishment, 79 MICH. L. REV. 386 (1980).

99. For an influential account of the behavioral influence in legal economics, see Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1501–05 (1998). See generally Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499 (1998).

a fully rational actor. Even in rational choice models¹⁰⁰ individuals diverge in their preferences, and therefore in their assessments of how to maximize utility. Thus, coordinating even fully rational individuals requires aligning the economic interests and normative goals of each with those of the firm so as to direct personal choices toward organizational ends.

The management challenge is rendered even more complex, however, by the ways in which humans actually make decisions. Whereas rational choice theory models individuals with perfect (or at least sufficient) information about their preferences and the alternatives open to them, real individuals are at best “boundedly” rational, constrained by the limits of both the human mind and practicality.¹⁰¹ Biological constraints on perceptual and computational capacity mean that real human decisionmakers can never hope to process all available information about all possible choices, or predict the implications of every decision. Moreover, a decisionmaker’s limited attentional capability precludes focused consideration of every alternative—a result exacerbated by the prohibitive cost in time and other resources.¹⁰²

100. Under a rational choice model, actors make decisions based both on complete information about available alternatives, their implications, and on a full awareness of their preferences, which are stable, identifiable and exogenous to—that is, they preexist—any particular decision. By measuring alternatives against preferences, the rational person makes choices that maximize utility.

101. HERBERT A. SIMON, MODELS OF MAN 198 (1957) (“The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world” (emphasis omitted)); see also KENNETH J. ARROW, THE LIMITS OF ORGANIZATION 37 (1974) (“[T]he scarcity of information-handling ability is an essential feature for the understanding of both individual and organizational behavior.”); CHESTER I. BARNARD, THE FUNCTIONS OF THE EXECUTIVE 305 (1968) (“Much of the error of historians, economists and all of us in daily affairs arises from imputing logical reason to men who could not or cannot base their actions on reason.”).

102. See David Hirshleifer & Siew Hong Teoh, *Limited Attention, Information Disclosure, and Financial Reporting* 5–9 (Dec. 20, 2002), <http://www.cob.ohio-state.edu/fin/dice/papers/2002/2002-5.pdf> (last visited Oct. 28, 2006) (reviewing the theory and evidence on limited attention and information processing). The debate as to the precise limits of human computational capacity and to the extent it might be affected by organizational and technological structures falls beyond the scope of this paper. See Joseph Porac & Zur Shapira, *On Mind, Environment, and Simon’s Scissors of Rational Behavior*, 5 J. MGMT. & GOVERNANCE 206, 209–10 (2001) (discussing psychological and neuroscientific research). Yet at a minimum, boundedly rational individuals face constraints on the attention that can be paid to a variety of important factors, including which tasks will attract their focus, which of any number of conflicting goals they will consider in a given circumstance, and which possible paths will deserve more complete consideration. See generally JAMES G. MARCH, *A PRIMER ON DECISION MAKING* (1994)

Humans, therefore, must make decisions with only imperfect information about available courses of action or their consequences, conflicted understandings of underlying goals, and uncertainty as to the relation between the three.¹⁰³

The human mind adapts to these shortcomings by developing unconscious cognitive shortcuts that generally make it easier to make sense of new situations even in the absence of complete information. These “biases” or “heuristics” rely on unconscious cues from familiar aspects of context: a single contextual element can prompt a decisionmaker about the more general nature of an unfamiliar setting, and therefore permit her to make efficient decisions even in situations of uncertainty. Rather than “maximizing,” then, humans consider only a few possible courses of action and “satisfice[],”¹⁰⁴ choosing to settle for a solution that is adequate.

The importance of situational cues for unconscious shortcuts in human thinking reveals the extent to which decisions are wrought by an environment humans do not control, rather than by purposive choices. Legal sociologist Mark Suchman provides an example to illustrate the ways in which even ostensibly rational choices are shaped by unconscious cognitive processes. Imagine, he suggests, “that one finds oneself confronted by a large bag of coins sitting in the open door of an unattended armored car.”¹⁰⁵ How does one decide what to do? A consequentialist account—such as the deterrence model—would emphasize “the mental calculus of appraising the value of the coins, assessing the probability of successfully appropriating them, and estimating the certainty and severity of punishment.”¹⁰⁶ A normative account, such as the good-apple paradigm, would accentuate the values that one applies once one has appropriately identified the context as one in which the norm should prevail.¹⁰⁷

(discussing attentional limits); James G. March & Zur Shapira, *Variable Risk Preferences and the Focus of Attention*, 99 PSYCH. REV. 172 (1992) (same).

103. The implications of these constraints pervade the decision process. Not only is the decisionmaker uncertain about empirical facts, but he or she is uncertain about the logical implications of those facts. See Roy Radner, *Bounded Rationality, Indeterminacy, and the Theory of the Firm*, 106 ECON. J. 1360, 1367 (1996).

104. HERBERT A. SIMON, *ADMINISTRATIVE BEHAVIOR* xxix (3d ed. 1976).

105. Suchman, *supra* note 58, at 483.

106. *Id.*

107. *Id.* “A normative account, too, would emphasize conscious mental reactions, but instead of focusing on the weighing of costs and benefits, it would focus on one’s internal moral

Yet a cognitive understanding of decisionmaking emphasizes processes logically prior to the other two: the culturally-specific process of construing the meaning of the ambiguous social reality¹⁰⁸ one encounters. As Professor Suchman further describes:

[C]ognitive models emphasize the choices that we make without ever noticing. Often, certain lines of action simply seem obvious, natural or necessary as part of “the way the world works.” Given this, the most important determinants of decision-making may be neither costs and benefits nor moral principles, but rather, the taken-for-granted cultural categories, definitions and accounts that help us to make sense of our lives.¹⁰⁹

Accordingly, the cognitive component of decisionmaking addresses, in large part, how one identifies what information is pertinent, interprets that information, and makes sense of those interpretations. In the example of the armored car, assessments of context (“What kind of situation is this?”), identity (“What kind of person am I?”), and even role (“As guard/bank officer/bystander/thief, is there a standard routine that I follow?”) would largely frame one’s ultimate choice, and shape any subsequent purposive inquiry into what norms should be invoked, or what consequences might follow. These cognitive frames explain puzzles such as how individuals committed to certain normative principles may, in context, act contrary to those principles, or how they make decisions inconsistent with their “self-interest.”

They also explain why, despite the fact that humans have only limited information processing capacity, individuals frequently make decisions leading to efficient outcomes. The behavioral literature describes an adaptive process by which humans act according to “rules,” or general shortcuts applicable across contexts, precluding the need to consider anew the character, costs and benefits, and implications of every given choice.¹¹⁰

As the armored car scenario suggests, rules shape appropriate behavior by defining identities, roles, and what is expected in certain

dialogue about the propriety of theft, the justificatory power of personal or familial need, and the (im)morality of concentrated wealth.” *Id.*

108. *Id.*

109. *Id.* at 482.

110. JAMES G. MARCH, MARTIN SCHULZ & XUEGUANG ZHOU, THE DYNAMICS OF RULES: CHANGE IN ORGANIZATIONAL CODES 6 (2000).

categories of situations.¹¹¹ Thus, they provide preexisting patterns that simplify decisionmaking by narrowing down an unlimited combination of uncertain consequences and preferences to a three-step task. First they indicate, with respect to context, the appropriate construction of the self: “Which of my identities is relevant?” Second, they make sense of the reality: “How do I code the situation in which I find myself?” Third, they construe the match between the two: “What do my identities tell me to do in the situation as I have defined it?”¹¹²

The ability of context to shape cognition suggests the role of firms in promoting efficient decisionmaking. Firms provide a particular organizational setting that shapes both the conscious and unconscious rules of decision for individuals within them. In this sense, firm organization can be understood, at least in part, as a response to the constraints of individual cognition. Although any one individual may lack the capacity to collect, possess and assess all of the information and knowledge necessary for complex industrial processes, such capacity can be harnessed by the coordination of multiple boundedly rational actors,¹¹³ permitting the organization itself to “choose” more “rationally.”

Coordinating tasks through formally rational structures permits firms to augment, rather than just aggregate, the capacities of the individual in a number of ways.¹¹⁴

Most simply, firms organize administratively in ways that limit the attention and perception demands on any individual decisionmaker. Employees are organized into discrete subunits, each assigned a discrete set of tasks and subgoals, and charged with mastery of a limited set of information. A maintenance worker in a particular plant can focus on the immediate needs of machinery on

111. *See id.*

112. *Id.*

113. ARROW, *supra* note 101, at 37 (“[T]he value of nonmarket decision-making, the desirability of creating organizations of a scope more limited than the market as a whole, is partially determined by the characteristics of the network of information flows.”); Cristiano Antonelli, *The Governance of Technological Knowledge: Strategies, Processes and Public Policies* 6 (Univ. of Turin Dep’t of Econ. Working Paper No. 6, 2003) (discussing the resource-based theory of the firm consensus around the assumption that the generation of knowledge is the distinctive feature of the firm).

114. The informational implications of organization, of course, track the more general recognition that “people can produce more if they cooperate.” PAUL MILGROM & JOHN ROBERTS, *ECONOMICS, ORGANIZATION AND MANAGEMENT* 25 (1992).

the production floor without having to allocate attention to the broader firm goal of profit maximization.¹¹⁵ An attorney in the general counsel's office can attend to contracts with particular suppliers without diverting consideration to customer relations. And a customer sales representative can focus on clients without worrying about production processes. This distribution of decision responsibility throughout the firm mitigates any individual decisionmaker's attention and perception constraints, while permitting the organization as a whole to engage in the wide variety of activities necessary in the modern corporation.

Similarly, firms mitigate constraints on individual perception and attention through what scholars of social cognition in organizations call "knowledge structures," rules and procedures for making sense of situations and identifying the appropriate response quickly. Such structures provide shortcuts that enable individuals to identify the type of challenge they face efficiently, focus their attention on the kind of information needed for that sort of situation, and invoke an applicable rule of behavior swiftly. These structures include formal "top-down" rules, embodied in standard operating procedures, handbooks, and organization charts.¹¹⁶ They also include "bottom-up" rules developed on the ground through the evolution of informal routines and rules of thumb.

Although the importance of top-down rules may be more self-evident, bottom-up routines promote efficiency in a variety of important ways. First, they transform lessons learned from previous decisions—successful and unsuccessful—into rules for identifying similar situations quickly and providing a regularized response.¹¹⁷ By storing firm knowledge in this way, routines eliminate the need to

115. See Malloy, *Regulation, Compliance and the Firm*, *supra* note 7, at 451, 489–90 (discussing this division of responsibilities in the context of environmental regulation).

116. RICHARD M. CYERT & JAMES G. MARCH, A BEHAVIORAL THEORY OF THE FIRM 134 (Blackwell Publishers 1992) (1963) ("These rules are the focus for control within the firm; they are the result of a long-run adaptive process by which the firm learns; they are the short-run focus for decision making within the organization.").

117. James P. Walsh, *Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane*, 6 ORG. SCI. 280, 281 (1995); see also Michael D. Cohen & Paul Bacdayan, *Organizational Routines Are Stored as Procedural Memory: Evidence from a Laboratory Study*, 5 ORG. SCI. 554, 555 (1994) ("[Routines] store organizational experience in a form that allows the organization to rapidly transfer that experience to new situations."). See generally Markus C. Becker, *Organizational Routines: A Review of the Literature*, 13 INDUS. & CORP. CHANGE 643 (2004) (reviewing the theoretical and empirical literature on routines).

reinvent the wheel, and “allow reuse of solutions to problems.”¹¹⁸ Second, the knowledge encoded in routines guides effective decisionmaking in nonroutine situations. Because they convey more nuanced information than formal top-down rules, routines are useful in identifying familiar elements of ill-defined situations, thereby providing behavioral cues for interpreting and solving ambiguous problems.¹¹⁹ Third, learning from new experiences permits firm routines to adapt incrementally to change based on continuous environmental feedback. “Such experiential learning is often adaptively rational. That is, it allows organizations to find good, even optimal, rules for many choices they are likely to face.”¹²⁰

2. *Overcoming Environmental Uncertainty.* Organizational structures further provide means for efficient decisionmaking in the face of changing and uncertain situations outside the firm. No organization is self-sufficient. To survive, firms require information and resources from, and therefore must enter into exchanges with, the external environment. A manufacturing firm, for example, requires external information about customer demands, technological advancements, and the behavior of competitors. It also looks to the environment for inputs to production such as raw materials, labor, and production processes and machinery, as well as for markets for outputs. The more imperfect the information accessible to firms, the greater the uncertainty in their environment.¹²¹ And the more firms need external resources, the greater their dependence on the environment.¹²²

But firms are not merely inactive bodies affected by external forces. Rather, as a rich sociological literature (which has not attracted much attention by legal scholars) describes, firms respond to and influence their environments by organizing through rational and

118. MARCH, SCHULZ & ZHOU, *supra* note 110, at 186 (“[O]rganizations confront internal and external problems, draw inferences from their experiences in those confrontations, and encode the inferences in rules. Lessons encoded in rules represent knowledge about solutions to problems found in the past. Rules retain knowledge and allow reuse of solutions to problems.”).

119. March, *supra* note 48, at 18 (stating that rules that suggest behavior in situations according to the decisionmaker’s identity “may be developed through experience, learned from others, or generalized from similar situations”).

120. *Id.*

121. J.D. THOMPSON, ORGANIZATIONS IN ACTION 9 (1967).

122. See JEFFREY PFEFFER & GERALD R. SALANCIK, THE EXTERNAL CONTROL OF ORGANIZATIONS: A RESOURCE DEPENDENCE PERSPECTIVE 51–52 (1978).

efficient administrative and knowledge structures.¹²³ This adaptivity should, however, be of primary interest to regulators, because it influences interactions with every aspect of the environment, including regulation.

Specifically, organizations make purposive efforts to reduce environmental uncertainty and dependence. They may make internal changes such as adapting their information systems so as to reduce uncertainty, diversifying technologies and processes so as to limit dependence on particular resources, or altering their pattern of management and human relations to better attract needed workers and other relationships. As to the latter, for example, institutional theorists emphasize that firms, through a process of “institutional isomorphism,”¹²⁴ adopt structures and practices from other organizations like competitors, unions, professions, and trade associations that are considered “legitimate”¹²⁵ and which therefore attract environmental partners to work with them.¹²⁶ Moreover, organizations may also take steps to extend control over external exchanges that are critical to their operations by altering the environment through mergers,¹²⁷ or by co-option¹²⁸: attempting to manage those exchanges through long-term relationships over which they can exercise significant control. Thus, by a combination of internal and external measures, organizations work to shape their relations with the environment efficiently, by increasing control over interorganizational exchanges and reducing the power of environmental forces over the organization.

Firms, then, organize not only through internal structures and rules intended to promote efficiency, but also by creating filters through which complex environments can be understood and, in some instances, controlled.

123. In sociological terms, environments not only act on particular organizations, they are “enacted” by them. KARL E. WEICK, THE SOCIAL PSYCHOLOGY OF ORGANIZING 63–71 (1969).

124. Paul J. DiMaggio & Walter W. Powell, *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*, 48 AM. SOC. REV. 147, 150 (1983).

125. *Id.* at 152.

126. See W. Richard Scott & John W. Meyer, *The Organization of Societal Sectors*, in ORGANIZATIONAL ENVIRONMENTS: RITUAL AND RATIONALITY 129, 140 (John W. Meyer & W. Richard Scott eds., 1983) (“Institutional sectors are characterized by the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy from the environment.”).

127. See PFEFFER & SALANCIK, *supra* note 122, at 114–15.

128. *Id.* at 161–65.

B. The Weaknesses of Efficient Organization: Accountability Problems in Firm Decisionmaking

To this point, the account of decisionmaking in firms suggests that the compliance paradigm's model of firm behavior might need no revision. If firms indeed successfully organize themselves to overcome individual shortcomings and achieve complex firmwide goals (including successful compliance with legal mandates) then perhaps the traditional modes of regulatory control—using top-down encouragement and incentives to encourage bottom-up implementation of legal mandates—requires little supplementation.

The firm's sources of strength, however, are also its weaknesses.¹²⁹ Indeed, the same processes that coordinate individual decisions efficiently in many circumstances can also create predictable decisionmaking pathologies in others. These cognitively rooted pathologies are particularly pronounced when decisions involve the pursuit of an externally imposed goal (such as a regulatory norm) that creates tension with other objectives (such as competitiveness or profit making) around which efficient firms structure their focus. Indeed, in the context of regulatory decisionmaking, these pathologies can produce decisions that are both irrational and contrary to the public norm. Moreover, because these pathologies result from decision processes buried deep within firms, they are virtually unreviewable. Accordingly, they pose a problem for the very values about which administrative accountability is most concerned.

1. *Decisionmaking Pathologies in Efficient Organizations.* Part II.A describes the role of organizational and knowledge structures in streamlining decisionmaking within organizations. These structures reflect choices about which factors deserve decisionmakers' focus, and which do not. These efficient arrangements themselves create predictable decisionmaking pathologies. Specifically, they sometimes foster decisions uninformed by pertinent information, and create insensitivity to risk, in part because of adaptive responses that camouflage important threats.

129. Diane Vaughan, *The Dark Side of Organizations: Mistake, Misconduct, and Disaster*, 25 ANN. REV. SOC. 271, 274 (1999) ("[T]he same characteristics of a system that produce the bright side will regularly provoke the dark side from time to time.").

a. *Uninformed Decisions.* The specialization and division of labor critical to efficient firm organization creates information asymmetries intentionally.¹³⁰ Top managers possess more (or exclusive) information about the firm's broad goals, yet only generalized knowledge about the activities of different subunits. By contrast, employees working in subunits are ignorant of many firm priorities and concerns, yet possess superior knowledge about a range of issues, including production processes, customer interactions, product market trends, and technological challenges.

This segmentation of knowledge, therefore, promotes efficiency especially well with respect to ongoing operations that are central to the achievement of recognized firm purposes. Pertinent information about firm and subgroup goals must be communicated downward from the few to the many, while localized knowledge must be transferred upward, or horizontally across units. Yet deriving efficiency from knowledge segmentation requires managers to maximize necessary information flow while devoting the fewest resources to it. This in turn favors systems geared to transmitting types of information that are easily codifiable, arise repeatedly, and relate to the firm's or subgroup's core mission.

Accordingly, downward communication works well when managers can easily integrate information into common job instructions,¹³¹ convey firm and subgroup priorities through repeated behavior,¹³² and embed messages about those priorities in formal incentive structures. Similarly, information is most amenable to efficient upward communication when it is familiar to supervisors, and can be easily filtered and edited, condensed and summarized.

Communication systems that prioritize efficiency, however, are less effective in ensuring that information about unanticipated issues, unfamiliar events and changing circumstances reaches appropriate decisionmakers, or will be recognized as relevant even by those with access to it. For the reasons discussed in Part II.A, for example,

130. RICHARD H. HALL, ORGANIZATIONS: STRUCTURES, PROCESSES, AND OUTCOMES 169 (8th ed. 2002) (“If the total rationale for all actions were known to all members, the potential for chaos would be high, since communication overload would quickly occur.”).

131. See generally *id.* at 168–70 (discussing downward communication, including direct orders, job descriptions, and formal performance feedback); DANIEL KATZ & ROBERT L. KAHN, THE SOCIAL PSYCHOLOGY OF ORGANIZATIONS 440–43 (2d ed. 1978) (same).

132. HALL, *supra* note 130, at 169–70 (discussing, among other things, “attempts to indoctrinate subordinates into accepting and believing in the organization’s (or the subunit’s goals”).

communication overload precludes charging lower level workers with concern for such low-frequency but potentially high-risk matters.

Upward communication systems similarly obscure effective focus on such issues. The attention of the recipient is directed—and misdirected—both by the inherent skew of upward communication, and by the judgment and interpretation of intermediaries. As to the distortion of information, the technical language and classification schemes utilized by an organization's formal lines of communication will shape the content of the transmission. These processes may not permit accurate transmission of knowledge that is difficult to codify, such as the “tacit” knowledge that is embedded in worker skills, work routines, and shared understandings.¹³³ This may prevent upper-level managers relying on the product of those decisions from understanding how they were reached, and risks that may have been ignored.

As to the interpretation of intermediaries, predictable cognitive and systemic processes will bias decisions as to what information is passed along in the editing process. For a variety of reasons other than guile, people are less likely to pass information up if it will be harmful to themselves or their peers. Specifically, pursuant to the theory of cognitive dissonance, recipients of information unconsciously focus on and relay only the information that reinforces their preexisting attitudes, while filtering out conflicting information.¹³⁴

In this corporate version of the children’s game of “Telephone,” then, serial decision makers receive partial understanding, especially about the possibility of unexpected negative outcomes. This effect is exacerbated in cases in which upward communications contain early tentative warnings about risks;¹³⁵ in such cases a busy upper-level manager, in winnowing down information for attention and further

133. Kirsten Foss & Nicolai J. Foss, *Authority in the Context of Distributed Knowledge* 8 (Danish Research Unit for Indus. Dynamics, Working Paper No. 03-08, 2002); Nicolai J. Foss, *Firms and the Coordination of Knowledge: Some Austrian Insights* 24–27 (Danish Research Unit for Indus. Dynamics, Working Paper No. 98-19, 1998) (discussing tacit forms of knowledge); see also MICHAEL POLANYI, THE TACIT DIMENSION 4–20 (Anchor Books 1967) (1966) (describing psychological experiments and various aspects of tacit knowledge).

134. See Coffee, *Shut-Eyed Sentry*, *supra* note 98, at 1137 (discussing the “problems associated with the upward transmission of adverse information within the corporate hierarchy”).

135. See Langevoort, *supra* note 8, at 136.

transmission, may focus on what are perceived as more immediate problems.

This is not to say that firm communication only works in routine contexts demanding rigid responses. Successful firms, of course, effectively structure flexible systems to identify and respond to changing circumstances like market pressures and customer market demands. But it does indicate that efficient information structures within firms are often ill suited for the effective pursuit of solutions to the type of risks in which regulators are interested—especially if identifying and handling those risks falls outside, or is in tension with, core firm goals.

b. Risk Insensitivity. The mismatch between firm organization and effective regulatory decisionmaking is exacerbated by the knowledge structures on which firm efficiency is premised. Formally rational routines can bias perceptions about the information that is relevant to decisions. This weakness, ironically, arises from routines' strengths: heuristic muscle and adaptability.¹³⁶ Although heuristics often promote good decisions, they sometimes render decisionmakers insensitive to changes in context by: (1) diverting attention from change; and (2) by masking risk through incremental adaptation

i. Diverting Attention from Risk and Change. Approaching a situation with a decision framework in mind exacerbates the cognitive tendency to emphasize the familiarity of the situation and to downplay its ambiguous nature. As Walter Lippmann described in his 1922 tract on the gullibility of the human mind:

Anyone who has stood at the end of a railroad platform waiting for a friend, will recall what queer people he mistook for him. The shape of a hat, a slightly characteristic gait, evoked the vivid picture in his mind's eye. In sleep a tinkle may sound like the pealing of a great bell; the distant stroke of a hammer like a thunderclap. For our constellations of imagery will vibrate to a stimulus that is perhaps but vaguely similar to some aspect of them. They may, in hallucination, flood the whole consciousness.¹³⁷

136. See Dennis A. Gioia, *Symbols, Scripts, and Sensemaking: Creating Meaning in the Organizational Experience*, in *THE THINKING ORGANIZATION* 49, 58–59 (Warren Bennis et al. eds., 1986) (discussing how such structuring of information speeds problem solving by furnishing a basis for evaluating the information, often in ambiguous circumstances).

137. WALTER LIPPmann, PUBLIC OPINION 115 (1922).

When their thoughts are framed by a pervasive knowledge structure, decisionmakers recognize familiar patterns and apply rules of thumb they believe are appropriate for that familiar situation.¹³⁸ This description suggests several different perceptual pathologies that infect the entire decisionmaking process.

First, existing routines can inaccurately shape the characterization of new situations. Before decisionmakers even consider a course of action, they draw on the stock of existing organizational routines to frame their understanding of the situation they face. The more familiar—or cognitively “available”¹³⁹—the past experience, the easier it is to draw on it as a lens for understanding new events, and the easier it is to assimilate into existing routines.¹⁴⁰ As discussed earlier, this availability heuristic is often very effective; the ease of remembering a type of event is often good evidence of its likelihood. Yet, because cognition accentuates familiarity and deemphasizes difference, it masks changes in circumstance that might make existing routines inappropriate. Indeed, the process of matching existing routines with new circumstances is sometimes so haphazard that leading organizational sociologists have described it as the “garbage can model” of decisionmaking.¹⁴¹ This refers to the process of rooting around in the garbage can of routines and applying the one that is first pulled out.¹⁴²

Second, existing routines can inaccurately shape the type of information that decisionmakers will seek out and consider. The cultural script called to mind shapes the type of information that decisionmakers believe is necessary to make a decision. This bias will prompt them to seek information of the type that reinforces the

138. March, *supra* note 48, at 21.

139. The “availability heuristic,” is discussed in Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 3, 11–14 (Daniel Kahneman et al. eds., 1982).

140. Sociologist Carol Heimer further describes how the availability heuristic can distort rules in the opposite direction: by incorporating lessons learned from rare but memorable events. Heimer, *supra* note 16, at 7. This may create other sorts of inappropriate decisions, by which routine situations are treated as disasters. See, e.g., Elizabeth Goodrick & Gerald R. Salancik, *Organizational Discretion in Responding to Institutional Practices: Hospitals and Cesarean Births*, 41 ADMIN. SCI. Q. 1, 5–26 (1996) (exploring the ways in which doctors’ decisions to perform birth by Cesarean section are driven by organizational standards of procedure rather than standards of best practices).

141. Michael D. Cohen et al., *A Garbage Can Model of Organizational Choice*, 17 ADMIN. SCI. Q. 1 (1972).

142. *Id.*

similarity of this situation with others, and draw attention away from other data, such as indicia of difference.¹⁴³ Thus, individuals unconsciously “make the problematic non-problematic”¹⁴⁴ by shielding themselves from information that may disprove the applicability of preexisting categories to new situations, even if the result is to misunderstand the situation and respond inappropriately.

The initial process of contextual interpretation is exacerbated by two sets of decisionmaking biases demonstrated in the behavioral literature on judgment and decisionmaking. The first stems from the unconscious cognitive strategy “to construe information and events in such a way as to confirm prior attitudes, beliefs, and impressions.”¹⁴⁵ Such “cognitive conservatism” is bolstered once a course of action has been commenced by a “commitment” effect, which biases subsequent analysis toward information that confirms the initial interpretation.¹⁴⁶ The second involves the “self-serving bias” by which the mind naturally interprets ambiguous information in a manner favorable to the perceiver.¹⁴⁷ Although this cognitive effect offers benefits as a means of reducing anxiety and permitting functioning, it can subconsciously skew the perception of a situation to justify a self-

143. For discussions of predecisional distortions of information, see generally Aaron L. Brownstein, *Biased Predecision Processing*, 129 PSYCHOL. BULL. 545 (2003); J. Edward Russo et al., *The Distortion of Information During Decisions*, 66 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 102 (1996) (reporting findings of predecision distortions).

144. Vaughan, *supra* note 129, at 280–81.

145. Langevoort, *supra* note 8, at 135 (citing SUSAN T. FISKE & SHELLEY E. TAYLOR, SOCIAL COGNITION 150 (2d ed. 1991); RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 167 (1980); Charles G. Lord et al., *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 J. PERSONALITY & SOC. PSYCHOL. 2098, 2099 (1979)).

146. See Langevoort, *supra* note 8, at 142 (discussing the role of commitment in decisionmaking). For discussion of “commitment” or “confirmation” biases, see generally Jürgen Beckmann & Julius Kuhl, *Altering Information to Gain Action Control: Functional Aspects of Human Information Processing in Decision Making*, 18 J. RES. PERSONALITY 224 (1984); Hillel J. Einhorn & Robin M. Hogarth, *Confidence in Judgment: Persistence of the Illusion of Validity*, 85 PSYCHOL. REV. 395 (1978); Jonathan St. B.T. Evans, *Beliefs and Expectations as Causes of Judgmental Bias*, in JUDGMENTAL FORECASTING 31 (George Wright & Peter Ayton eds., 1987); Barry M. Staw, *The Escalation of Commitment to a Course of Action*, 6 ACAD. MGMT. REV. 577 (1981).

147. See Langevoort, *supra* note 8, at 144 (“The notion of self-serving inference is another fundamental construct in social cognition.”). For other discussions of self-serving bias, see Linda Babcock & George Loewenstein, *Explaining Bargaining Impasse: The Role of Self-Serving Biases*, 11 J. ECON. PERSP. 109 (1997); Jolls et al., *supra* note 99, at 1501–04; Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U. L. REV. 1165, 1172–73 (2003).

interested spin, and permit the self-deception that the group interest is “in full consistency with their personal goals.”¹⁴⁸

These effects, Professor Donald Langevoort suggests, are important in answering the beguiling question of why public corporations mislead stock market investors, given that this behavior “simply delays the appreciation of the truth rather than avoids it indefinitely” and is ultimately uncovered.¹⁴⁹ The first part of the answer arises from organizational response to the bounded rationality of individual managers who ultimately make decisions within a firm. An optimistic “can-do” outlook is a characteristic of an effective workplace. Yet such a culture exacerbates a manager’s “tendency to underestimate or rationalize risk,” by shaping the interpretation of early, and still ambiguous, information.¹⁵⁰ Once managers have publicly committed to expressions of optimism, they are to some extent cognitively locked in to the approach. Their optimistic perceptions are entrenched by their commitment, and they interpret and winnow new information consistent with their self-interest. Accordingly, fewer danger signs will raise red flags.

Finally, routines combine with structural pathologies plaguing upward communication to reproduce individual perceptual distortions throughout an organization.¹⁵¹ As both firm knowledge structures and individual cognitive biases are reproduced at each level of hierarchy, “[t]his more subtle winnowing and revisionism is repeated at each relay point, with predictable effects on the final message.”¹⁵² By Professor Langevoort’s account, systemic skewing of information can result “not only (or even so much) by conscious distortion, but also by biased interpretation” up the communication ladder.¹⁵³

*ii. Masking Risk Through Incremental Adaptation: The “Nut Island Effect.”*¹⁵⁴ Firm routines, moreover, mask change by adapting to it. While the evolution of rules to compensate for new challenges

148. Langevoort, *supra* note 8, at 144.

149. *Id.* at 106.

150. *Id.* at 141.

151. See *supra* text accompanying notes 133–35.

152. Langevoort, *supra* note 8, at 147–48.

153. *Id.* at 147.

154. Paul F. Levy, *The Nut Island Effect: When Good Teams Go Wrong*, HARV. BUS. REV., Mar. 2001, at 51. The following description of the Nut Island episode is taken entirely from this article.

and circumstances can be efficient, it can also have the effect of moving the baseline measure of usual behavior, and obscuring the means to gauge deviation from previous norms. Routinized decisionmaking both veils the existence of risks, and promotes decisions that, because they are guided by logic inappropriate to the context, create additional risk.

The process by which Boston Harbor's Nut Island sewage treatment plant degraded water quality for decades illustrates the ways in which formally rational organizational structures and routines can promote substantively irrational decisions. The plant was operated by a state agency subunit, and was staffed by a cohesive and hardworking staff that had overcome inefficient internal disputes by developing a culture emphasizing cooperation and teamwork. A focused, tight-knit group that eliminated ““squeaky wheels””¹⁵⁵ on staff, they were, in the words of the state agency director, “every manager's dream team.”¹⁵⁶

Through conversations and budgetary decisions, management conveyed a streamlined goal to the unit—keep the facility running and on budget—and the team focused on the demanding task without distraction. They developed standard operating procedures and “rules of thumb,”¹⁵⁷ to maintain plant operations at low cost.

Adapting to circumstances, the rules of thumb were modified as the team learned from experience. As the pumps at the core of the plant degraded, the Nut Islanders increased the amount of lubricant used, which kept the machines operational. As they learned what level of wastewater grit would choke the aeration tanks, they limited plant inflows to a manageable level. When they observed that particularly heavy inflows precluded full treatment of the material, they made sure to treat the wastewater with chlorine to eliminate remaining pathogens, and pipe it out to sea. And they developed routines for adding alkali to tanks when sample readings indicated unusually high acidity.

Over time, however, it turned out that these adaptive procedures simply masked risk, rather than addressing it. The plant ultimately released the oil used on the machines into the harbor. The lubrication routine is a suspected cause of the high concentration of oil in harbor

155. *Id.* at 55.

156. *Id.* at 51.

157. *Id.* at 58.

sediment. It also diverted attention away from other solutions, such as asking managers for extra maintenance funding. Reducing grit by limiting wastewater inflows resulted in the diversion of other untreated waste directly into the harbor. The diversions were not recorded as plant overflows because they had never actually entered the facility in the first place. By adding chlorine to prevent untreated wastewater from ending up in the harbor, they released an environmental contaminant that kills marine life and destroys fragile shore ecosystems. And by controlling acidity with alkali, they never had to deal with the underlying causes of the acid variances. Throughout, busy upper management was reassured by Nut Island's "patina of efficiency," and focused on "business that seemed more pressing."¹⁵⁸

c. *Combining Pathologies.* Professor Langevoort's account of noncompliance with securities disclosure requirements and the case of the "Nut Island Effect" provide vivid examples of how structural and perceptual pathologies work in tandem to distort firm decisionmaking. The decisionmakers' motivations were not unlawful. Indeed, in the case of the Nut Islanders, their commitment was particularly laudable. The organizational cultures reflected exactly the traits—focus, cohesion, cooperation—that can promote an effective workplace. The work and reporting routines were formally rational in light of subgroup tasks, and embodied organizational learning. Yet the organizations' knowledge structures prevented decisionmakers from recognizing signs of risk and danger by assimilating them into preexisting beliefs and familiar frameworks. The prevailing cultures inhibited communication upward by those in the best position to question standard operating procedures. And structural secrecy permitted monitors to filter out troubling indicators and rely only on positive signals that conformed to existing perceptions.

2. *Efficient Firm Decisionmaking and Accountability Problems in the Exercise of Regulatory Discretion.* Such decisionmaking pathologies go to the heart of the effective exercise of regulatory discretion. By this account, decisions are not only unresponsive to the public goals delegated to the firm, but can be literally arbitrary, in

158. *Id.* at 59.

that they are reached because of unconscious and systemic factors that neither firm managers nor individual decisionmakers intend to matter. Moreover, the pathological processes responsible for these irrational decisions, to a large extent, evade external review. The flawed logic on which they rest are hidden in systems and in instinctive responses that appear to be rationally ordered, but are difficult to communicate and hard to monitor. When affected by structural decisionmaking pathologies, then, firms' exercise of regulatory discretion threatens each element of decisionmaking accountability.

a. Failures of Rationality. Predictable firm decisionmaking pathologies suggest the ways in which traditional models of control will fail in promoting the rational exercise of regulatory discretion. Rules developed in prior contexts guide behavior in new situations for which they may be inappropriate; relevant information is ignored in favor of familiar but unimportant guideposts; the knowledge necessary for informed judgment may be trapped so that it never reaches the appropriate decisionmaker; and the vigorous and purposeful pursuit of reasonable ends may subvert ultimate goals. These pathologies, moreover, impede judgment most predictably when the matter at issue is the type of greatest concern to regulation: the accurate assessment of the type of risk and change not only likely to affect an individual subunit or even a single firm, but to impose costly externalities on product or capital markets or threaten health and safety more broadly.

These sorts of decisionmaking pathologies indicate, at least, that reliance on bottom-up commitment by firms for vigorous pursuit of regulatory ends will undermine the type of rational decisions for which administrative law holds delegated decisionmakers accountable. Some firm decisions will predictably, in the words of the Supreme Court, have “relied on factors which Congress [or agencies] ha[ve] not intended,” have “entirely failed to consider an important aspect of the problem [or] offered an explanation for its decision that runs counter to the evidence,” or be “so implausible that it could not be ascribed to a difference in view or the product of [decisionmaker] expertise.”¹⁵⁹ In other words, the exercise of regulated firm discretion, by this account, will literally be arbitrary—reached “without

159. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (defining the standard for arbitrary and capricious decisionmaking).

consideration or adjustment with reference to principles, circumstances, or significance . . . [and] decisive but unreasoned"¹⁶⁰—or capricious: simply “freakish.”¹⁶¹

Yet this account also signals the insufficiency of existing top-down models of control. The behavioral account of firm decisionmaking indicates that the arbitrary exercise of regulatory discretion may be particularly resistant to control tools rooted in rational models. Indeed, the irrational decisions which trigger accountability concerns in this context arise specifically from purposive and adaptive processes geared to promoting coherent and efficient outcomes. The individuals structuring and participating in pathological decision processes often already believe that their behavior is rational, and that they are pursuing compliance with legal norms appropriately. In the words of one former CFO brought in to help restructure a company after it had been convicted for financial fraud, “no one ever thinks they work at a company where bad things happen.”¹⁶² In that case, a regime that relies principally on incentives to prevent “bad things” from happening will be stunted by the inaccurate cognitive frames of decisionmakers who erroneously believe that the desired result has already been achieved.

b. Failures of Responsiveness. The behavioral model of firm decisionmaking, however, suggests more than arbitrariness in the firm’s internal pursuit of regulatory goals. It also, in two distinct ways, reveals particular systemic resistance to the exercise of judgment in a way that is accountable to externally generated regulatory goals.

First, the structures and routines that guide behavior within firm boundaries provide an interpretive lens through which external environmental forces, such as government regulation, are translated inside the firm. Specifically, the mechanisms that permit the successful and efficient focus on internally generated firm goals also adapt external directives so as to minimize conflict with existing routines and practices. Second, firms project their internal way of looking at things, and the cognitive shortcomings reflected therein, to other parties with whom they interact, including the actors entrusted

160. *United States v. Carmack*, 329 U.S. 230, 244 n.14 (1946) (quoting WEBSTER’S NEW INTERNATIONAL DICTIONARY (2d ed. 1945)).

161. *Id.* (quoting WEBSTER’S NEW INTERNATIONAL DICTIONARY (2d ed. 1945)).

162. Telephone interview with Steve Tisdell, President, The Compliance Partners, in Nashville, Tenn. (Sept. 27, 2004).

with the responsibility for oversight and accountability. In combination, this double distortion of regulatory imperatives raises concerns about regulated firms' responsiveness to public goals.

i. Routines and the Distortion of External Regulatory Mandates inside Firm Boundaries. As described above,¹⁶³ firms shape relations with other organizations in order to secure resources they need. When these relationships are initiated because of particularized requirements identified in a “bottom-up” way by the firm itself (such as the need for supplies, know-how, or customers), the sensitivity to environmental factors develops in a way that is both integrated into the firm’s existing decision processes and reflects localized firm knowledge, culture, and goals.

In contrast, the integration of externally developed regulatory goals into existing firm routines poses greater challenges,¹⁶⁴ for “[al]though adoption of new structures and practices may smooth interactions *across* organizational boundaries, it may be disruptive to the internal workings of the organization.”¹⁶⁵ Regulatory aims often create tension with the corporate goals around which formally rational structures and routines have developed. For example, the aims on which efficient firm organization focuses will likely include competitiveness, cohesion, and growth, rather than the particularities of a regulatory regime. As a result, the established routines and mindsets within the firm will prompt decisionmakers to adapt external mandates in ways that most easily achieve the appearance of legitimacy, while minimizing the dislocation of existing practices. In this circumstance, the organizational capacity to reshape external rules to minimize disruption of established routines will undermine the efficacy of the regulation, rather than incorporate its norms.

In the language of organizational theory, the basic “resource” that firms seek from regulatory compliance is the ability to signal to

163. See *supra* text accompanying notes 121–26.

164. Institutional sociologists describe the process of assimilating procedures that have proven successful in similar organizations as “institutional isomorphism.” DiMaggio & Powell, *supra* note 124, at 149–50. Such external structures, when imported to a new context, may not provide the best local fit. The divergence between local fit and borrowed institutional forms is particularly pronounced when the rules in question result from “coercive isomorphism,” such as the imposition of legal rules by a regulator. *Id.* at 150–51.

165. Carol A. Heimer, *Explaining Variation in the Impact of Law: Organizations, Institutions, and Professions*, in 15 STUDIES IN LAW, POLITICS, AND SOCIETY 29, 41 (Austin Sarat & Susan S. Silbey eds., 1995).

others outside the organization (including government enforcers, business partners, and the market) that their pursuit of organizational goals is valid. Accordingly, they incorporate certain visible indicators of legitimacy. Such a process often results in the “ceremonial” adoption of rules.¹⁶⁶ Regulated firms incorporate structures that appear to prioritize the concerns of the law, but really change little about other activities in the organization. In the employment law context, for example, legal sociologists have illustrated how firms implement antidiscrimination protections by focusing compliance efforts on creating new legalistic processes. Such procedures signal “legality” but, because they are distinct from other firm structures, avoid fundamental alterations in existing workplace culture. The legal norm is therefore translated into the firm so that the “right to a nondiscriminatory workplace in effect becomes a ‘right’ to complaint resolution.”¹⁶⁷ The right to complaint resolution, notes one sociologist, “is far more superficial and entails fewer disruptions of routines than would a right to a nondiscriminatory workplace.”¹⁶⁸

A similar process can be seen in the traditional focus on audits as a central means for compliance with securities regulation. While there is no doubt that such safeguards comprise an important component of comporting with legal requirements, the capacity of audits is necessarily limited. They explicitly focus on certain factors that can be measured, such as whether data is presented in a universally recognized manner, rather than on substantive changes to firm practices.¹⁶⁹ Thus, the establishment of auditable controls often provides firms with ways to signal legitimacy without addressing deeper problems inherent in existing routines and structures.

166. John W. Meyer & Brian Rowan, *Institutionalized Organizations: Formal Structure as Myth and Ceremony*, 83 AM. J. SOC. 340, 340-41 (1977).

167. Lauren B. Edelman et al., *Internal Dispute Resolution: The Transformation of Civil Rights in the Workplace*, 27 LAW & SOC'Y REV. 497, 529 (1993); see also Lauren B. Edelman et al., *The Endogeneity of Legal Regulation: Grievance Procedure as Rational Myth*, 105 AM. J. SOC. 406 (1999) (discussing how organizations “construct rational responses to law, enabled by ‘rational myths’ . . . that are themselves modeled after the public legal order”).

168. Heimer, *supra* note 165, at 41.

169. See Lawrence A. Cunningham, *The Appeal and Limits of Internal Controls to Fight Fraud, Terrorism, Other Ills*, 29 J. CORP. L. 267, 269-70 (2004) (discussing how audits focus on measures that can be tested, rather than on those that are effective). See generally MICHAEL POWER, *THE AUDIT SOCIETY: RITUALS OF VERIFICATION* (1997) (tracing the explosion in auditing activity since the 1980s in the United Kingdom and North America to political demands for accountability and control).

The failure of externally derived regulatory goals to fully affect the decisions within the firm results in large part from the structural and perceptual pathologies within the firm. The ability of regulatory goals to reshape existing routines is significantly diminished if the implementation is assigned to a subunit that has only limited power. When legal rules remain one of a number of distinct and competing claims on decisionmakers, their effect is haphazard. Because their legitimacy is undermined, “it may be very difficult to produce decisions that generally seem as justifiable and capable of enforcement.”¹⁷⁰

ii. Extending Internal Pathologies outside Firm Boundaries.

Organizational structures do not simply provide the filter through which organizations interpret their environments. They can also extend pathologies of firm decisionmaking across organizational boundaries. Professor Langevoort’s thick description of corporate decisionmaking describes how organizational culture and the resulting perceptual filters can both lead to decisions to misrepresent information, and prevent discovery of distortions (whether purposeful or unconscious) before securities misrepresentations occur. This phenomenon, however, is further reflected by notable failures of the third-party gatekeepers and intermediaries on whom the system relies to keep corporations accountable.¹⁷¹ Indeed, in the words of the Senate Committee Report investigating the Enron failure:

[W]hat Committee staff discovered was deeply disturbing—not so much because they uncovered malfeasance or intentional wrongdoing on anyone’s part (although that seems to have been present in some cases as well), but because what emerged was a story of systemic and arguably catastrophic failure, a failure of all

170. Martha S. Feldman & Alan J. Levy, *Effects of Legal Context on Decision Making Under Ambiguity*, in THE LEGALISTIC ORGANIZATION 109, 113 (Sim B. Sitkin & Robert J. Bies eds., 1994).

171. See, e.g., John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 304 (2004) (suggesting an “explanation for the wave of accounting and financial reporting irregularities that surfaced in 2001–2002: namely, that the gatekeepers failed. That is, the professionals who serve investors by preparing, verifying, or certifying corporate disclosures to the securities markets acquiesced in managerial fraud”); John C. Coffee, Jr., *Understanding Enron: “It’s About the Gatekeepers, Stupid.”* 57 BUS. LAW. 1403, 1404–05 (2002) (arguing that the importance of the Enron debacle “lies [in] the market’s discovery that it cannot rely upon the professional gatekeepers—auditors, analysts, and others—whom the market has long trusted to filter, verify and assess complicated financial information”).

the watchdogs to properly discharge their appointed roles. Despite the magnitude of Enron's implosion and the apparent pervasiveness of its fraudulent conduct, virtually no one in the multilayered system of controls devised to protect the public detected Enron's problems, or, if they did, they did nothing to correct them or alert investors.¹⁷²

Some of this failure may be attributed to the incentive structures and resulting conflicts of interest that shaped the behavior of third-party monitors. Yet research suggests that behavioral effects played a significant role as well. In particular, the bias toward self-serving interpretations of ambiguous data, which has been well documented in outside auditor practice,¹⁷³ can facilitate the transmission of inaccurate information outside the bounds of the corporation. The increased willingness of individuals to endorse biased proposals made by others might also reinforce the information distortions coming out of the regulated firm.¹⁷⁴ Finally, the importance that accounting firms place on understanding regulated firm culture, and the closeness with which outside auditors work with teams internal to the corporation, create the danger that those auditors will be subject to groupthink judgment dynamics as well.¹⁷⁵

The failure of securities analysts to serve as corporate malfeasance watchdogs may, at least in part, be attributable to a similar phenomenon. Certainly, economic motives may underlie the practice. Securities analysts may give false or misleading favorable

172. STAFF OF S. COMM. ON GOVERNMENTAL AFFAIRS, *supra* note 10, at 2.

173. See Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight into Securities Fraud Litigation*, 95 NW. U. L. REV. 133, 168–70 (2000); Robert A. Prentice, *The SEC and MDP: Implications of the Self-Serving Bias for Independent Auditing*, 61 OHIO ST. L.J. 1597, 1629–53 (2000).

174. See Don A. Moore et al., *Conflicts of Interest and the Case of Auditor Independence: Moral Seduction and Strategic Issue Cycling* 17–18 (Am. Accounting Ass'n, Working Paper No. 03-115, 2004) (discussing the phenomenon, and concluding that “[t]he current system, in which auditors are charged only with assessing whether or not the client's reports comply with Generally Accepted Accounting Principles, is likely to exploit the tendency to 'go along' with the actions of another even when that action raises some questions or concerns”).

175. David B. Kahn & Gary S. Lawson, *Who's the Boss?: Controlling Auditor Incentives Through Random Selection*, 53 EMORY L.J. 391, 404–05 (2004) (“[A]uditors are subject to many of the same cognitive biases that plague all people, and many of those biases work in favor of complicity with management.”); see also PriceWaterhouseCoopers Recruiting Website, http://www.pwcglobal.com/us/eng/careers/car-inexp/opportunities_mcs_career.html (last visited Oct. 28, 2006) (“You'll work as part of a team at the client's office—often for months at a time—side-by-side with the client's staff. . . . Being on site also enables you to experience each client's culture firsthand, which in turn helps us create the most appropriate solution for each situation.”).

evaluations of corporate securities in order to attract or retain the issuing corporations as investment banking clients. Yet research demonstrates an even stronger correlation between optimistic earnings and price forecasts and the length of time an analyst has covered a stock. A study of over 4,500 analysts determined that analysts at firms with underwriting and trading businesses are actually less optimistic than those at pure brokerage houses, which perform no underwriting.¹⁷⁶ In contrast, “forecasts are more optimistic for analysts with more experience covering a stock, suggesting that over time, analysts develop relations with management that makes it difficult to be independent.”¹⁷⁷ Thus, the watchdog failures may have been less attributable to economic conflicts of interests, than to shared social cognition.¹⁷⁸

In sum, the structures and routines within firms both distort regulatory goals within the firm, and extend such distortions outside the firm. This phenomenon poses systemic barriers to a firm’s responsiveness to regulatory goals.

c. *Failures of Reviewability.* Finally, the importance of routines and cognitive filters in firm decisionmaking points to a failure of reviewability. Because the routines that structure much firm behavior are often unwritten, unarticulated, and even unconscious, they are largely insulated from external review by administrative agencies, the courts, or the public. External observers unfamiliar with internal company workings lack the means to delve beyond formally rational structures. They may be able to identify the existence of efficient firm

176. See Paul Healy et al., *Which Types of Analyst Firms Make More Optimistic Forecasts?* 1 (Regulatory Policy Program at the Ctr. for Bus. & Gov’t, John F. Kennedy Sch. of Gov’t, Harvard Univ., Working Paper No. RPP-2004-08, 2004).

177. *Id.* at 6.

178. In her discussion of how what she refers to as “groupthink” hindered the independent judgment of the Enron Board of Directors, Marleen O’Connor describes a similar extension of firm knowledge structures across watchdog lines within the firm itself. The U.S. Senate and special committee reports investigating Enron’s collapse revealed that its directors “were as surprised as anyone by the company’s collapse,” because, through pathological decisionmaking within the firm, the Board “felt swept along in disregarding warning signs and believing irrational predictions.” Marleen A. O’Connor, *The Enron Board: The Perils of Groupthink*, 71 U. CIN. L. REV. 1233, 1240–41 (2003).

This conclusion provides an added dimension to the infamous comment of Salomon Smith Barney analyst Jack Grubman—celebrated for his close ties to corporate managers—that “what used to be a conflict is now a synergy.” ARIANNA HUFFINGTON, PIGS AT THE TROUGH: HOW CORPORATE GREED AND POLITICAL CORRUPTION ARE UNDERMINING AMERICA 161 (2003).

organization, but they lack the logic to assess when formal structures might lead to pathological outcomes, or to identify such structures buried deep within the firm. Given these restraints, little is revealed about whether a firm's discretion will ultimately be exercised in a responsive manner.¹⁷⁹

The inability of administrative agencies to review firm decisions meaningfully, in particular, can foster patterns of agency-firm interactions that threaten to eliminate the benefits of enlisting firms as partners in regulation in the first place. Specifically, agencies and firms can settle on a shared construction of externally verifiable ways to satisfy regulatory dictates; these shared understandings, ironically, may simply reproduce the very type of unthinking compliance behavior that regulatory delegation was intended to replace.

When accorded discretion to implement legal mandates, regulated firms reasonably seek and expect reliable guidance from regulators.¹⁸⁰ In the information security context, for example, private

179. Indeed, attempts to monitor strictly the exercise of discretion can actually exacerbate the decisionmaking pathologies they seek to uncover. The literature on cognition demonstrates that individuals who already have an internally generated propensity to obey the law (a "duty heuristic") will unconsciously overestimate the probability of detection, and therefore perceive legal compliance to be in their self-interest. See John T. Scholz & Neil Pinney, *Duty, Fear and Tax Compliance: The Heuristic Basis of Citizenship Behavior*, 39 AM. J. POL. SCI. 490, 491 (1995). Yet that research also demonstrates that such "internal motivation" can be "crowded out" by a system that relies only on external motivation, see, e.g., Bruno S. Frey & Reto Jegen, *Motivation Crowding Theory*, 15 J. ECON. SURVEYS 589, 591–96 (2001), such as aggressive monitoring, see Langevoort, *supra* note 61, at 96, or threat of punishment. Specifically, crowding-out can diminish the sense of responsibility for decisions implementing regulation, reduce the inclination to share relevant private information with other decisionmakers, and impede identification with the legal goal. See Margit Osterloh & Bruno S. Frey, *Motivation, Knowledge Transfer, and Organizational Form* 10–12 (Institute for Empirical Research in Economics, University of Zurich, Working Paper No. 27, 1999). More generally, antagonistic methods for guiding firm behavior tend to "make every interaction a contest of wills, encouraging defiance and resistance among even those people who are not initially inclined to defy or resist." Tom R. Tyler, *Trust and Law-Abidingness: A Proactive Model of Social Regulation*, 81 B.U. L. REV. 361, 371 (2001); see also IAN AYRES & JOHN BRAITHWAITE, *RESPONSIVE REGULATION* 49–50 (1995) (examining empirical evidence suggesting that level of punishment is inversely related to level of law-abiding behavior). Rather than encourage the accountable exercise of judgment, such approaches threaten contrary results.

180. See, e.g., SECURITIES AND EXCHANGE COMMISSION, OFFICE OF THE CHIEF ACCOUNTANT, DIVISION OF CORPORATE FINANCE, MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND CERTIFICATION OF DISCLOSURE IN EXCHANGE ACT PERIODIC REPORTS FREQUENTLY ASKED QUESTIONS (revised Oct. 6, 2004), <http://www.sec.gov/info/accountants/controlfaq1004.htm> (last visited Sept. 8, 2006) (answering "frequently asked questions" about the implementation of the Sarbanes-Oxley Act).

firms are “hungry for a streamlined compliance blueprint.”¹⁸¹ Such appetite is neither surprising nor inherently problematic. Indeed, rule-of-law values demand that law—particularly law enforceable by criminal sanction—include sufficient detail to provide fair notice of prohibited conduct,¹⁸² and policy studies emphasize the role of agency advice in facilitating compliance with complex regulatory regimes.¹⁸³

The development of detailed guidance by agencies, however, can exacerbate the problems of routinized decisionmaking. Agencies, like any other organization, may themselves suffer from similar pathologies of routinization. The organizational development of acceptable conditions for compliance freezes those procedures in place; commitment to static routines then shapes regulators’ understandings of what is acceptable, and filters out ways in which those routines may be insufficient in varied or changing circumstances. The more formal the guidance, moreover, the greater the procedural and resource barriers to revisiting accepted routines, which increases their “ossification”¹⁸⁴ and resistance to change.

The resulting dynamic of “organizations regulating organizations,” moreover, exacerbates the poor exercise of firm discretion. Agency attempts to give content to broad delegations runs into the same problems of rule-bound governance that prompted the wide scope of regulatory discretion initially. Once agencies settle on the specific behavior they believe will constitute compliance, a similar mindset is likely to be integrated into firm practices and cultures. The feedback loop between firms and regulators becomes a one-time event, resulting in a shared knowledge structure that guides and entrenches the behavior of each.

181. Bill Brenner, RSA 2006: A one-size-fits-all approach to compliance? (Feb. 10, 2006), http://searchsecurity.techtarget.com/originalContent/0,289142,sid14_gci1165786,00.html (last visited Sept. 8, 2006) (attributing observation to Chrisan Herrod, Chief Security Officer of the SEC).

182. See, e.g., *City of Chi. v. Morales*, 527 U.S. 41, 51 (1999) (holding Chicago gang congregation ordinance unconstitutional because it failed to provide fair notice of prohibited conduct or establish minimal guidelines for enforcement).

183. See, e.g., Ruhl & Salzman, *supra* note 18, at 831 (urging a policy focus on ways regulators can increase compliance assistance).

184. Administrative law scholars have, especially in the context of rulemaking, explored a widespread concern that ossification has resulted in the failure of the administrative state to govern efficiently and responsively. See, e.g., Richard J. Pierce, Jr., *Seven Ways to Deossify Agency Rulemaking*, 47 ADMIN. L. REV. 59, 60–62 (1995); Mark Seidenfeld, *Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking*, 75 TEX. L. REV. 483 (1997).

This phenomenon, in turn, emasculates administrative agency review as an accountability mechanism for enhancing reasoned and thoughtful pursuit of regulatory goals. When decisionmakers know in advance the particular views of their reviewer, they behave as “cognitive miser[s],” “avoid[ing] mental calculations that require sustained attention, effort or computing power.”¹⁸⁵ Their decisions will be governed by an “acceptability heuristic,” whereby they will settle on socially acceptable behavior without considering alternatives, or interpreting complex or contradictory environmental information. Once firm decisionmakers know the particular rules for reaching a regulatory safe harbor, and once those approaches have been integrated into corporate understandings of the compliance environment, agency review is likely to exacerbate, rather than ameliorate, pathologies of routinized behavior.

The failure of existing control tools to prevent unresponsive ceremonial adoption of legal forms is aggravated by weak agency review mechanisms and threatens the efficacy of regulation through internal compliance structures.¹⁸⁶ By permitting routinized “check the box” compliance to supplant the reasoned exercise of discretion, dominant models of regulatory control permit firm decisionmaking to be subverted by predictable pathologies that undermine the range of public law accountability norms.

A deeper understanding of organizational decisionmaking suggests: (1) that administrative law must pursue additional accountability tools to guide the regulatory decisions of firms, just as it does with agencies; and (2) that these tools must reflect actual decision structures and processes. The next Part, accordingly, explores the lessons that the literature on firm decisionmaking offers for remedying decision pathologies, and suggests ways to integrate these lessons into mechanisms for rendering private regulators accountable.

185. See, e.g., Philip E. Tetlock, *Accountability: The Neglected Social Context of Judgment and Choice* in 7 *RESEARCH IN ORGANIZATIONAL BEHAVIOR* 297, 311 (Barry M. Staw & L.L. Cummings eds., 1985).

186. Kimberly D. Krawiec, *Cosmetic Compliance and the Failure of Negotiated Governance* 81 *WASH. U. L.Q.* 487 (2003) (arguing that these models of regulation “do not deter prohibited conduct within firms and may largely serve a window-dressing function that provides both market legitimacy and reduced legal liability”); see also Kimberly D. Krawiec, *Organizational Misconduct: Beyond the Principal-Agent Model* 32 *FLA. ST. U. L. REV.* 571 (2005) (arguing that organizations have perverse incentives to implement ineffective compliance programs).

III. ADMINISTRATIVE ACCOUNTABILITY FOR REGULATED FIRMS

If traditional methods for controlling the exercise of regulatory discretion by private firms prove incomplete, how might policymakers develop additional tools to render firm regulatory discretion accountable? One way would be to apply the specific accountability mechanisms that govern administrative agencies. Indeed, a growing body of scholarship has explored applying such mechanisms to standard-setting bodies like the Internet Corporation for Assigned Names and Numbers (ICANN),¹⁸⁷ and private government contractors that administer social services, prisons, and other programs.¹⁸⁸

Such accountability tools, however—including public notice and comment, broad judicial review, and the expansion of the state action doctrine to cover the administration of public programs by private actors—are ill suited to manage regulated firm behavior. They would impose great costs with little payoff.¹⁸⁹

Specifically, opening firm processes generally to public comment and broad judicial review would impose costly and time-consuming procedures on every regulated firm, with even more detrimental consequences for the broader economy. It would strain both privacy commitments rooted in constitutional property protections, and policies of corporate secrecy intended to encourage vigorous competition and promote innovation. Such a fundamental policy shift, even if politically tenable, would endanger the very private-sector initiative that broad regulatory delegation seeks to harness for public ends.

Furthermore, such mechanisms would be largely ineffective. As an initial matter, concerns about regulated firm discretion fall below the state action doctrine’s constitutional radar. Moreover, judicial standards arising from the APA and tailored to agencies are simply inapplicable in the private firm context. Judicial review separated from evaluative principle offers no logic to guide the external

187. See A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17 (2000) (critiquing the formation and use of ICANN as a means to avoid public rulemaking).

188. See Metzger, *supra* note 13.

189. See generally Freeman, *Private Role*, *supra* note 12, at 593 (discussing examples of contexts in which private actors participate in regulation that “underscore the limitations of traditional accountability mechanisms and suggest alternative incentives, checks, controls, and monitoring tools that might supplement or supplant them”).

monitoring of the substance of firm decisions. Finally, a broad public comment requirement provides a blunt instrument, inapt for guiding regulatory delegation. The costly procedures would neither further the regulatory goal of enlisting firms to tap into their superior knowledge about the workings of their company, nor target pathologies that lead to irrational decisions.

The mismatch between certain traditional accountability mechanisms and the regulated firm context, however, does not mean that administrative law is silent as to how firm decisionmaking might better be guided by public law norms. Indeed, a number of scholars, led by Jody Freeman, have suggested a version of accountability that varies according to the specific “administrative arrangement,” and is tailored according to a context-specific assessment of the dangers inherent in a particular regulatory structure.¹⁹⁰

This Part takes up Freeman’s suggestion in the context of regulatory delegations to private firms. Guided by the accountability model’s emphasis on rationality, responsiveness and reviewability as pertinent measures when observable outcomes are unavailable or insufficient for assessing discretion’s exercise, this Part suggests frameworks for thinking about regulated firm behavior in light of the particular accountability shortcomings discussed in Part II. More specifically, it first examines the ways in which decisionmaking pathologies that distort the effects of the regulatory environment might be mitigated by that same environment. It then suggests three ways in which mitigation tools can be integrated into the regulatory structure, with particular reference to regulatory initiatives, like the Sarbanes-Oxley Act, that show promise as accountability tools, and others that do not.

This Part does not claim to offer a complete or exclusive accountability schema for regulated firm decisionmaking. It addresses only the cognitively rooted threats to administrative law values in firm decisionmaking, and is intended only to supplement other approaches. Moreover, it only provides examples of the types of “cognitive accountability” tools that might be employed by

190. *Id.* at 665 (“The appropriate response to shared governance instead requires highly contextual, specific analyses of both the benefits and the dangers of different administrative arrangements, together with a willingness to look for informal, nontraditional, and nongovernmental mechanisms for ensuring accountability.”); *see also id.* at 580 (discussing how the application of the state action doctrine fails as a general accountability mechanism because it does not “tailor procedural protections to the specific threats posed by a particular regulatory regime in which both public and private decisionmakers play a significant role”).

regulators. Yet these examples suggest more general approaches that can guide administrative agencies when integrating cognitive understandings into the regulation of private decision processes, and policymakers in more accurately gauging the costs and benefits of regulation.

A. *Administrative Law Lessons and Decision Pathologies*

As discussed in Part I, administrative law responds to the stumbling blocks inhibiting good agency decisionmaking by including a variety of differently situated actors in the decision structure, thereby using outside influences on internal decision processes to promote public norms. This focus on process, rather than just substantive outcomes, further provides a measure by which external parties can assess the administrative exercise of discretion, permitting meaningful review through at least some modicum of decisional transparency. In sum, administrative law relies on relationships and interactions *across* organizational boundaries to shape regulatory decisions *within* them.

Research into the ways in which firms overcome decisionmaking pathologies suggests the promise of such an approach for regulatory delegation. Although firm structures generate systemic pulls toward irrationality in decisionmaking, corporate behavior does not usually end in disaster. That is because decision structures, while robust, are not static. Firms, and the individuals within them, learn. Their routines change and their culture develops, often because of—rather than in spite of—relationships with their environments.

The literature on social cognition identifies two types of organizational learning. The first, “single-loop” learning, refers to the type of learning associated with the adaptive side of firms. In a single-loop process, organizations respond to experience by adjusting their routines and standard operating procedures in light of unanticipated mismatches between expected or desired outcomes and reality.¹⁹¹ Decisionmaking evolution at Nut Island,¹⁹² for example, reflected this sort of learning. As in that case, although single-loop adaptation is often efficient—and usually promotes formal decision rationality—it can ultimately lead to the decisionmaking pathologies that distort internal responses to external regulation.

191. CHRIS ARGYRIS ET AL., ACTION SCIENCE 85–88 (1985).

192. See *supra* text accompanying notes 154–58.

In contrast, “double-loop” learning describes learning at a “meta” level. Such learning occurs when decisionmakers recognize at a conscious level, and then affirmatively question and challenge, the routines, assumptions and understandings that inform their decisions.¹⁹³ This type of learning, which creates the mental distance necessary to identify and address cognitively rooted decisionmaking pathologies, can sometimes be initiated by actors within organizational boundaries. But because those actors’ perceptions are usually shaped by the same shortsighted knowledge structures they hope to uncover and transform, internal change alone can be elusive. The greatest possibility for learning, therefore, results when *external* forces disrupt insular ways of thinking.

The remainder of this Part first draws on the organizational learning literature to identify tools that hold promise for overcoming decisionmaking accountability failures. It then suggests ways that those tools could be combined to improve rationality, responsiveness, and reviewability through regulatory design, restructuring relations with third-party gatekeepers, and rethinking the interactions between regulated firms and the agency.

B. Identifying Accountability Tools

1. *Tools for Enhancing Decisionmaking Rationality.* Just as individual cognition provides the basis for understanding firm behavior, it also grounds theories of firm learning. The administrative and knowledge structures that govern organizational behavior are developed to simplify the decisions made by individuals with limited attentional and perceptual facility. Yet these very simplification tools are the source of irrational decisions. Thus, for firm behavior to change, certain decisions must be made more complex. At certain junctures, individuals must be directed away from decision heuristics, their attention focused on the task at hand, and their perception attuned to the unfamiliar rather than the recognizable.

External shocks, of the type that occur naturally in the market, provide the model for purposive attempts to improve decisionmaking through direct measures. Whereas routines, by means of the Nut Island Effect, mask gradual change through adaptation, rapid

193. ARGYRIS, *supra* note 191, at 85–88.

environmental transformations—external shocks—focus attention.¹⁹⁴ A bankruptcy within a sector, the merger of a competitor, or the introduction of a new product in an industry all serve to shake up existing assumptions and focus attention on the resulting competitive effects. By creating new and memorable events, they also alter the effect of the “availability heuristic,” supplementing the closed set of information that had previously shaped the way decisionmakers made sense of situations with additional considerations that force routines to be consciously examined and reworked.

a. *Assigning Responsibility.* The simplest way to reproduce the attentional effect of an external shock is to instruct a decisionmaker, at a discrete point in time, to focus on a particular decision. Psychological evidence suggests that even self-induced reflection can change one’s perception of a situation,¹⁹⁵ as can explicit recognition of the knowledge structures governing one’s outlook.¹⁹⁶ Indeed, “[s]imply thinking about an attitude object has been shown to affect the representation of that object in memory.”¹⁹⁷

Making individuals personally accountable for tasks signals the importance of the task and fosters a sense of responsibility for the outcome.¹⁹⁸ In such circumstances, decisionmakers employ more analytic and complex judgment strategies, and perceive the decisions under consideration to be more significant and less reversible should

194. Martti Ala-Härkönen & David Rutenberg, *The Dawn of Organizational Learning in the Mining Industry*, 19 RESOURCES POL. 205, 211–12 (1993) (discussing how a German mining company used the “confusion and fatigue of an external shock as an opportunity for strategic change”).

195. See Murray G. Millar & Abraham Tesser, *Thought-Induced Attitude Change: The Effects of Schema Structure and Commitment*, 51 J. PERSONALITY & SOC. PSYCHOL. 259 (1986); Angelo C. Valentini & Abraham Tesser, *On the Mechanism of Thought-Induced Attitude Change*, 9 SOC. BEHAV. & PERSONALITY 17 (1981).

196. Walsh, *supra* note 117, at 293–94, discusses Colin Eden, *On the Nature of Cognitive Maps*, 29 J. MGMT. STUD. 261 (1992) and Rex Mitchell, *Team-Building by Disclosure of Internal Frames of Reference*, 22 J. APPLIED BEHAV. SCI. 15 (1986). Professor Eden discusses how cognitive mapping “may act as a tool to facilitate decision-making, problem-solving, and negotiation within the context of organizational intervention.” Eden, *supra*, at 262.

197. Walsh, *supra* note 117, at 283 (citation omitted).

198. Chris Argyris, *Good Communication That Blocks Learning*, HARV. BUS. REV., July–Aug. 1994, at 77–78 (discussing the importance of individual accountability, and communication structures that surface, rather than mask, “the kinds of deep and potentially threatening or embarrassing information” that leads to change, in organizational learning).

they turn out incorrect.¹⁹⁹ When it is made clear at the point of action that an individual is actively responsible for a decision whether to commit fraud, for example (rather than whether to *permit* fraud), the likelihood of misrepresentation decreases significantly.²⁰⁰

b. Expanding the Types of Information Considered. Prompting decisionmakers to collect information systematically before making a decision,²⁰¹ to consider types of information they would not usually contemplate, or to take account of “counterfactual” approaches, can also mediate the biasing effects of preexisting knowledge structures.²⁰² In particular, the literature on organizational learning has identified intrafirm benchmarking measures as particularly effective tools in prompting decisionmakers to take account of information that their knowledge structures might otherwise filter out. Intrafirm comparisons overcome the effects of structural secrecy by transferring information between subunits, and by comparing the performance of subunits across the firm, which makes subunit routines more visible.²⁰³ They permit the operation of several other debiasing techniques, such as making knowledge structures more explicit, and informing decisionmakers throughout the firm of data that may refute as well as confirm existing beliefs. Indeed, benchmarking programs have been identified as a particularly powerful means of prompting

199. P.W. McAllister et al., *The Contingency Model for the Selection of Decision Strategies*, 24 ORG. BEHAV. & HUM. PERFORMANCE 228 (1979); Tetlock, *supra* note 185, at 316.

200. See Steven T. Schwartz & David E. Wallin, *Behavioral Implications of Information Systems on Disclosure Fraud*, 14 BEHAV. RES. ACCT. 197 (2002) (comparing the decisions to issue fraudulent disclosures, and to allow an information system to issue fraudulent reports at a given rate, and concluding that “making subjects more closely involved with the disclosure reduced the rate of fraudulent disclosures by 30 percent”).

201. Chip Heath et al., *Cognitive Repairs: How Organizational Practices Can Compensate for Individual Shortcomings*, 20 RES. ORG. BEHAV. 1, 13 (1998) (discussing processes in organizations ranging from Motorola to hospitals).

202. See, e.g., Laura J. Kray & Adam D. Galinsky, *The Debiasing Effect of Counterfactual Mind-sets: Increasing the Search for Disconfirmatory Information in Group Decisions*, 91 ORG. BEHAV. HUM. DECISION PROCESSES 69 (2003); O’Connor, *supra* note 178, at 1241 (proposing the establishment of the rotating role of “devil’s advocate” on corporate boards in an attempt to avert “Groupthink”); Heimer, *supra* note 16, at 27 (“A practical adaptation to regulatory risk and the regulatory cost of continuous innovation, then, that still addresses the human incapacity to imagine alternatives is an insistence that an organization consider at least one or a small number of alternatives.”).

203. See Carla O’Dell & C. Jackson Grayson, *If Only We Knew What We Know: Identification and Transfer of Internal Best Practices*, 40 CAL. MGMT. REV. 154, 157 (1998) (contrasting internal benchmarking with “[o]rganizational structures that promote ‘silo’ behavior”).

decisionmakers to replace routinized identification and interpretation of information with what has been called “mindful scanning” of the environment. Benchmarking data can affect “mindfulness” in the approach to knowledge; it prompts individuals “to include that which is learned from experimentation on the fringes of current operations.”²⁰⁴ This information, which dominant knowledge structures might mask as an anomaly, may be the best indicator of change, risk, or opportunity facing an organization.²⁰⁵

The benefits of spurring mindful individual cognitive processes can be leveraged by the relevant decisionmaker’s power within the firm. Research on the decision process development suggests that a leader’s articulation of a new vision for an organization or team can provide the type of altered information environment that changes knowledge structures more broadly.²⁰⁶ Moreover, when individuals central to the chain of command are prompted to think differently, they can more easily integrate their new learning into existing firm decision structures, which heightens its legitimacy and chance of success within the firm.²⁰⁷ Further, as discussed in the following subsection, mindful decisionmakers—particularly if they have access to other firm leaders—can widely influence decisionmaking indirectly, by exposing others to a competing structure for making sense of circumstances.²⁰⁸

2. Tools for Enhancing Responsiveness to Public Norms. Indirect means of focusing attention and broadening perception

204. C. Marlene Fiol & Edward J. O’Connor, *Waking Up! Mindfulness in the Face of Bandwagons*, 28 ACAD. MGMT. REV. 54, 63 (2003).

205. See Karl E. Weick et al., *Organizing for High Reliability*, 21 ORG. BEHAV. 81, 92 (1999) (discussing how mindful organizations create processes to view localized failure as a sign of generalizable problems).

206. Daniel J. Isenberg, *Drugs and Drama: The Effects of Two Dramatic Events in a Pharmaceutical Company on Managers’ Cognitions*, COLUM. J. WORLD BUS., Spring 1987, at 43 (discussing instances in which dramatic events cause managers to focus on problem-definition and problem solving and lead to revised images of individual and organizational abilities).

207. See Sim B. Sitkin & Robert J. Bies, *The Legalistic Organization: Definitions, Dimensions and Dilemmas*, 4 ORG. SCI. 345 (1993) (contrasting the success of organizational rules that are easily included in the existing chain of command with those that violate routinized order and the chain of command).

208. Cf. ALEXANDER L. GEORGE, *PRESIDENTIAL DECISIONMAKING IN FOREIGN POLICY: THE EFFECTIVE USE OF INFORMATION AND ADVICE* 191–93 (1980) (proposing a “multiple advocacy” system for designing organizational systems of accountability, in which those at the top remain neutral while those from different subunits, governed by different routines, make competing proposals).

provide equally important tools for firm learning. Principal among these is interaction with others whose thought processes are not governed by the same culture or knowledge structures as the decision maker.²⁰⁹ Indeed, changes in decisionmakers' "information environment" provide some of the most powerful sources of learning, whereas environmental stability impedes learning and encourages the ossification of routines.²¹⁰ Thus, hiring new personnel unfamiliar with organizational routines—or even creating teams with representatives from different subunits within the firm—prompts changes in knowledge structures, whereas long tenures with an organization enhance the perceptual screens related to decisionmaking pathologies.²¹¹

The strength of this organizational learning technique is reflected in the effects of firms' participation in interorganizational relationships such as joint ventures, strategic alliances, and other networked affiliations.²¹² These are collaborations on which firms increasingly rely for adaptation and learning.²¹³ These relationships form a locus of innovation precisely because the participants bring

209. See Heath et al., *supra* note 201, at 20 ("Often, organizations ensure that individuals weigh information effectively by forcing them to interact with others who might weigh the information differently."); Walsh, *supra* note 117, at 291 ("[R]esearch on the process of knowledge structure development suggests that a dramatically altered information environment is often the locus of knowledge structure change.").

210. Compare Jay W. Lorsch, *Strategic Myopia: Culture as an Invisible Barrier to Change*, in GAINING CONTROL OF THE CORPORATE CULTURE 84 (R.H. Kilmann et al. eds., 1985) (recommending job rotation across functional areas as an antidote to "strategic myopia") and Ralph Katz, *Managing Careers: The Influence of Job and Group Longevities*, in CAREER ISSUES IN HUMAN RESOURCES MANAGEMENT 154, 165 (1982) (same, as an antidote to "functional fixedness"), with Gordon Walker, *Network Position and Cognition in a Computer Software Firm*, 30 ADMIN. SCI. Q. 103, 121 (1985) (finding that "industry veterans gradually failed to distinguish between the different ways of achieving short- and long-term goals"). See also Anil K. Gupta, *Contingency Linkages Between Strategy and General Manager Characteristics: A Conceptual Examination*, 9 ACAD. MGMT. REV. 399, 406 (1984) (arguing that managers with functionally diverse career histories will make the greatest contribution to the firm).

211. Indeed this is the very problem that plagued the Nut Islanders. See *supra* text accompanying notes 154–58.

212. See, e.g., Walter W. Powell et al., *Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology*, 41 ADMIN. SCI. Q. 116, 142 (1996) (discussing knowledge creation as the product of interorganizational relationships which are fluid and evolving, rather than intraorganizational ones that are tightly bound or static).

213. *Id.* at 119 ("A firm's value and ability as a collaborator is related to its internal assets, but at the same time, collaboration further develops and strengthens those internal competencies."); Christine M. Beckman & Pamela R. Haunschild, *Network Learning: The Effects of Partners' Heterogeneity of Experience on Corporate Acquisitions*, 47 ADMIN. SCI. Q. 92, 97 (2002) ("[F]irms tend to learn more from outsiders than insiders.").

different experiences, and therefore different knowledge structures, to the venture.²¹⁴ Firms in strategic alliances “explore their experiences by collaborating with other organizations that are different enough to create variety in their experiences.”²¹⁵ This exposure to experiential diversity, in turn, effects intrafirm changes, as “[t]he organization internalizes what has been jointly explored with other organizations.”²¹⁶ By this process, the “[l]earning takes place as a transformation of exploration between organizations to exploration within the single organization.”²¹⁷

The pattern of learning through joint ventures underscores the type of external interactions that best promotes good internal decisionmaking. Such “networked” interactions involve collaborative, yet relatively discrete, relationships between firms and other wholly independent entities: entities who also pursue a variety of goals and projects unrelated to—and sometimes in direct competition with—those of their partners. Their position external to the firm, but cooperating with it, places them in a position to serve a boundary-spanning function.²¹⁸ They serve as bridges to different ways of understanding situations and making decisions; they make visible by contrast routines that had remained unexamined within firm culture; and they call attention within the firm to external data points that can be used for benchmarking purposes.²¹⁹ Moreover, because of their independence from the firm, the knowledge that outside partners

214. See, e.g. Beckman & Haunschild, *supra* note 213, at 93 (documenting the benefits of partner heterogeneity).

215. Mikael Holmkvist, *A Dynamic Model of Intra- and Interorganizational Learning*, 24 ORG. STUD. 95, 112 (2003).

216. *Id.* See generally C. Marlene Fiol, *Consensus, Diversity, and Learning in Organizations*, 5 ORG. SCI. 403 (1994) (emphasizing the importance of diversity in outlook on “the processes of modifying one’s ‘cognitive maps or understandings,’ thereby changing the range of one’s potential behaviors” (citation omitted)).

217. Holmkvist, *supra* note 215, at 112.

218. See generally Mark S. Granovetter, *The Strength of Weak Ties*, 78 AM. J. SOC. 1360 (1973) (hypothesizing, in the context of social networks, that those with “weak ties” in the network provide a bridge between groups with “strong ties”); Mark S. Granovetter, *The Strength of Weak Ties: A Network Theory Revisited*, 1 SOC. THEORY 201 (1983) (reviewing the empirical studies testing the “weak ties” hypothesis); W. RICHARD SCOTT, *ORGANIZATIONS: RATIONAL, NATURAL, AND OPEN SYSTEMS* 203–13 (5th ed. 2002) (discussing “Bridging Tactics,” in the context of “Boundary Setting and Boundary Spanning”).

219. See Andrew H. Gold et al., *Knowledge Management: An Organizational Capabilities Perspective*, 18 J. MGMT. INFO. SYS. 185 (2001) (discussing the use of collaboration and benchmarking to assesses the current state of organizational processes and to capture knowledge for use internally).

introduce within firm boundaries claims particular legitimacy among insiders across firm subunits.²²⁰

The promise of a network structure for overcoming decisionmaking pathologies is demonstrated explicitly in studies of firms for whom the interest in accountable and reliable decisionmaking is paramount. These types of organizations, such as nuclear power plants, hospitals, and aircraft carriers, reflect particular sensitivity to the ways that efforts to simplify decisions can create irrational outcomes. They therefore promote the thoughtful pursuit of important goals by doing just the opposite: by making decision processes more complex. This is achieved by incorporating in decision structures a network of different actors and organizations with different viewpoints. In this model of “negotiated complexity,” formal and informal interorganizational agreements about how decisions are made are repeatedly renegotiated and renewed, ensuring that the homogeneity, specialization, and standardization that organizations usually develop in the interest of efficiency are supplemented by diversity, duplication, overlap, and a varied response repertoire, which promote substantive reliability.²²¹

3. Tools for Enhancing Accountability Through Review. Research into the psychology of accountability indicates that the review of firm behavior by entities whose monitoring criteria are both well specified and known to firm decisionmakers exacerbates the substitution of cognitive shortcuts for reasoned judgment, and promotes routinized “check the box” compliance.²²² Yet that same research identifies ways in which review can be structured to “motivat[e] cognitive misers to be thoughtful.”²²³ Specifically, decision pathologies are mediated in situations in which decisionmakers do not know the socially “acceptable” response—or more precisely, when those decisionmakers need to explain themselves to others

220. See Tanya Menon & Jeffrey Pfeffer, *Valuing Internal vs. External Knowledge: Explaining the Preference for Outsiders*, 49 MGMT. SCI. 497, 505 (2003) (finding that managers prefer knowledge obtained from outsiders).

221. See Martin Landau & David Chisolm, *The Arrogance of Optimism: Notes on Failure Avoidance Management*, 3 J. CONTINGENCIES CRISIS MGMT. 67, 68 (1995) (discussing the differences in patterns needed for efficiency, and those needed for reliability); Paul R. Schulman, *The Negotiated Order of Organizational Reliability*, 25 ADMIN. & SOC. 353, 361–62 (1993) (discussing negotiated reliability); Wieck et al., *supra* note 205, at 81.

222. See *supra* Part II.B.2.c.

223. Tetlock, *supra* note 185, at 314.

whose views they do not know in advance. This type of accountability motivates people to become more vigilant, complex, and self-critical information processors.²²⁴

In particular, such accountability “motivates people to consider arguments and evidence on both sides of issues in order to prepare themselves for a wide variety of critical reactions to their views.”²²⁵ It develops tolerance for cognitive inconsistency, so that a decisionmaker recognizes good features of rejected policies and bad features of accepted policies. It fosters a greater awareness of the cognitive processes underlying the decision. And finally, it counters the reliance on “existing knowledge structures in interpreting new information,” making decisionmakers more willing to revise initial impressions of the situation in response to changing evidence.²²⁶ Incorporating this type of review into structures for monitoring the exercise of firm discretion, then, offers a useful tool for meaningful “cognitive accountability.”

C. *Learning from Organizational Learning: Three Administrative Law Approaches to Cognitive Accountability*

The combination of direct and indirect ways that external forces overcome decision pathologies that would otherwise thwart environmental influences offers a model for regulators. Decisionmakers can step outside existing knowledge structures when external stimuli prompt them to devote attention to particular situations they confront, to account for unexpected information, and to consider unfamiliar implications. They are particularly open to learning as part of a dialogue with outside organizations informed by different viewpoints—organizations that interact repeatedly but not constantly, so that each retains its independent culture, approach, and way of thinking. And these processes and interactions must not be isolated, but recurrent and developing, so that new patterns of decision resist ossification. In sum, internal firm decisionmaking is rendered more accountable by outside influence on decision processes and structural design.

This indicates the possibility of influencing the substance of private firms’ exercise of regulatory discretion in ways familiar to

224. *Id.* at 314–21 (reviewing research evidence).

225. *Id.* at 316.

226. *Id.*

administrative law: process and structure. It further offers a renewed capacity for agencies to promote the exercise of delegated discretion in a rational manner constrained by public norms and amenable to outside review, while still drawing on firms' superior knowledge about their internal workings. In light of the research on firm decisionmaking, promising features of existing regulation, examples of individual firm regulatory decisions, and innovative suggestions for regulatory design developed in other contexts, the following discussion suggests three specific accountability approaches that regulators might use to supplement existing control measures: (1) administrators can regulate the attention of decisionmakers directly; (2) they can promote networked decision processes that enhance accountability; and (3) administrative agencies can develop the capacity to participate in such decision processes themselves, enhancing their role as educators promoting firm learning.

1. *Directly Regulating the Decisionmakers' Focus: Improving Accountability Through "Attention Regulation."* The Sarbanes-Oxley Act of 2002, the principal legislative response to a perceived wave of financial misconduct, focused on two primary areas: "enhancing disclosure and altering incentives to change behavior."²²⁷ The first focus was intended to improve the transparency and accuracy of information provided to the market; the second sought better to align the incentives of firm actors and third-party gatekeepers with regulatory goals. The Act has been subject to a host of criticisms on both fronts. Scholars have argued both that the additional disclosures added no information above what was already available to investors, and that wrongdoers such as Enron had already satisfied many of the Act's substantive requirements governing the independence of directors, audit committees, and auditors.²²⁸ Yet several aspects of the Act, and some early indications of the response among regulated firms, suggest its promise as a means of overcoming harmful cognitive

227. Cynthia A. Glassman, Comm'r, SEC, Speech by SEC Commissioner: Remarks at the Practicing Law Institute—SEC Speaks (Feb. 28, 2003), <http://www.sec.gov/news/speech/spch022803cag.htm> (last visited Sept. 8, 2006).

228. Professor Roberta Romano developed an early comprehensive critique, rooted in the empirical literature, of Sarbanes-Oxley as "Quack Corporate Governance." See Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance* 97–98, (Yale Univ. Int'l Ctr. for Fin., Working Paper No. 04-37, 2004), available at <http://ssrn.com/abstract=596101> (arguing that the market had adjusted on its own to the information conveyed by opaque financial statements).

shortcuts in firm decisionmaking, and improving both rationality and responsiveness in the exercise of regulatory discretion.

a. Improving Rationality and Responsiveness Through Attention Regulation. The simplest way to overcome harmful cognitive shortcuts is by providing external shocks that direct individuals to devote their attention to, and feel responsible for, a particular decision. When those individuals hold a central position within the firm power structure, this direction of attention more easily translates into systemic avoidance of decisionmaking pathologies. Attention regulation, therefore, provides the most straightforward way for regulators to promote the mindful exercise of regulatory discretion.

Section 404 of the Act²²⁹ mandates an annual evaluation of internal controls and procedures for financial reporting. It specifically requires, among other things, that management publish an assessment of, and vouch for, the effectiveness of these controls. Section 302 further requires frequent reporting in periodic financial reports of any deficiencies in the internal controls.²³⁰ The SEC's implementing rules require management to acknowledge its responsibility for the adequacy of the company's internal control framework and procedures for financial reporting.²³¹ The rules added new Item 308 to Regulation S-K, which requires that the company's management include a report on the company's "internal control over financial reporting" in its annual report filed with the SEC.²³² The recommended revisions to the Organizational Sentencing Guidelines would further define an "effective program to prevent legal violations" as one in which a specific "high-level" individual or individuals were identified as having overall program responsibility.²³³ They would also require periodic reporting on the program to governing authorities by both those individuals and the people with day-to-day responsibility for the program.²³⁴ Indeed, the existing

229. Sarbanes-Oxley Act of 2002 § 404, 15 U.S.C. § 7262 (2000 & Supp. 2003).

230. *Id.* § 302, 15 U.S.C. § 7241.

231. 17 C.F.R. §§ 210, 228, 229, 240, 249, 270, 274 (2003).

232. 17 C.F.R. § 210.

233. *Report of the Ad Hoc Advisory Group on the Organizational Sentencing Guidelines*, 1417 PLI/CORP 219, 225 (2004).

234. *Id.* at 229.

Guidelines mandate periodic assessment of the efficacy of compliance systems, albeit without reporting requirements.²³⁵

An organizational learning perspective suggests four important elements for promoting rationality and responsiveness in the enactment of these provisions of section 404, the implementing regulations, and in certain aspects of the corresponding proposed Guidelines. First, the high level of publicity surrounding the Act's passage alone, and prominent enforcement efforts,²³⁶ suggests that it will draw decisionmakers' attention on the issue of compliance as they consider "available" contextual factors that should guide their decisions. The prominence of the issue further strengthens the legitimacy of those parties within regulated firms—lawyers, compliance officers and others—who advocate more comprehensive attention to developing control systems, which facilitates integrating such systems into existing decision structures and enhances their effectiveness.

Second, for the first time, the certification requirements of section 404, and the language of the proposed Guidelines, explicitly place responsibility for thinking about control systems on particular officers, who must articulate the reasoning behind choices made in structuring the programs and attest to their adequacy in public documents.

Third, section 404, by targeting the attention of powerful officers, takes advantage of the fact that the benefits of mindful individual cognition can be leveraged by the relevant decisionmaker's leadership role within the firm.

Finally, by requiring periodic evaluations, the Act and the proposed Guidelines take steps to ensure that organizational learning processes repeat at distinct and episodic intervals (rather than adapt continuously). This is a demonstrated tool for preventing adaptive routines from masking decisionmaking flaws and increasing risks.

This form of regulation, then, suggests a means for moving beyond ongoing debate as to which types of ex post liability best deter wrongdoing.²³⁷ Instead "attention regulation" aims to foster good

235. *Id.* at 220.

236. See, e.g., Complaint, SEC v. Cedric Kushner Promotions, Inc., Case No. 04 CV 2324 (S.D.N.Y. Mar. 24, 2004) (charging individual defendants with, *inter alia*, false certifications under Sarbanes-Oxley), available at <http://www.sec.gov/litigation/complaints/comp18638.htm>.

237. On this question see Arlen & Kraakman, *supra* note 51; James D. Cox, *Private Litigation and the Deterrence of Corporate Misconduct*, 60 LAW & CONTEMP. PROBS. 1

decisions *ex ante*, by choosing to promote responsibility in predetermined officers, rather than threatening to assess blame amongst all involved individuals after failures have occurred.

b. Improving Reviewability Through Attention Regulation. The literature on organizational learning further suggests that the end product of these attention-focusing requirements—the public report assessing the company's internal control—suggests additional promise for promoting accountability through improved reviewability, with attendant benefits for promoting the rational exercise of regulatory discretion.

As discussed in Part II, the implementation of regulation most often evades review, because it occurs through structures and processes largely hidden within firm boundaries. The requirement that these structures be examined, explained and assessed has two effects. First, it promises to reveal at least the conscious and formal compliance processes to scrutiny by both markets and regulators for the first time. The internal control disclosures filed under section 302, which report “material weaknesses or significant deficiencies in internal controls,”²³⁸ display an encouraging degree of candor about structural factors typical of pathological decisionmaking such as communication blocks, poor segregation of duties, and corporate culture.²³⁹

Second, the very process of reporting promotes the type of cognitive accountability that results from reviewability. Regulatory disclosure requirements, including those contained in Sarbanes-Oxley, are usually justified in terms of empowering market or

(Autumn 1997); V.S. Khanna, *Corporate Liability Standards: When Should Corporations Be Held Criminally Liable*, 37 AM. CRIM. L. REV. 1239 (2000); Lewis A. Kornhauser, *An Economic Analysis of the Choice Between Enterprise and Personal Liability for Accidents*, 70 CAL. L. REV. 1345 (1982).

238. *Internal Control Disclosures From September*, COMPLIANCE WK., Oct. 12, 2004 (on file with the Duke Law Journal).

239. See, e.g., *id.* (“Companies continue to provide greater detail on problems identified during internal control assessment and testing phases.”); *June 2005 Internal Control Report: All About Remediation*, COMPLIANCE WK., July 6, 2005 (on file with the Duke Law Journal) (“Companies are describing extensive details about the measures undertaken to remediate internal control weaknesses . . .”); *92 Internal Control Disclosures in August*, COMPLIANCE WK., Sept. 8, 2004 (on file with the Duke Law Journal) (“The number of August disclosures is the largest monthly number . . . this year . . .”).

political actors by providing them with information.²⁴⁰ Yet regulatory disclosure requirements can motivate firm officers to step outside routinized mindsets, to consider alternatives and contrary evidence, and to defend their choices in light of a wide variety of responses. This can occur because individuals are forced to focus on, collect information about, and assess the effectiveness of internal controls in firm-specific contexts, and then to justify the choices to a variety of political and market actors whose views may be unknown. Mark Jensen, National Director for Venture Capital Services at Deloitte & Touche and a member of the SEC's Advisory Committee for Smaller Companies, puts this even more strongly: "In thirty years as an auditor, the one thing I could point to that changed management's behavior is 404. . . [I]t created a sense of urgency on the part of senior executives in a company to take their financial reporting seriously."²⁴¹ Previously, he describes, he had trouble getting the attention of CFOs and CEOs: "I can't tell you how many times as an auditor you ask to meet with the CEO and the CEO doesn't want to meet with you, and yet they're the person who ultimately . . . is responsible for what they're telling the public. In some cases it's even hard sometimes to get to the CFO, because especially in the late 90's the CFOs many times w[ould] tell you: they're 'not accountants.'"²⁴²

Not surprisingly, given the absence of thinking about cognitive accountability during its passage, Sarbanes-Oxley provides an incomplete model of attention regulation. Most notably, it fails to take advantage of a number of straightforward organizational learning tools geared toward overcoming decision pathologies. It could, for example, have required that internal control assessments compare yearly performance benchmarks, or explain alternatives considered and rejected. It could also have identified other types of information that must be taken account of in specific contexts, such as the Treasury Department's requirement that regulated insurers consider a number of specific factors in a detailed risk assessment to comply with money-laundering statutes.²⁴³ Only more detailed

240. See generally Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. PA. L. REV. 613 (1999) (discussing those compelled disclosures that are meant to affect market responses and those meant to affect political responses).

241. Mark Jensen, Panel Presentation, Conference on Post-Enron Corporate Regulation: Has the Pendulum Swung Too Far (or Not Far Enough)? at the University of California at Berkeley, Boalt Hall School of Law (Mar. 17, 2006) (on file with the author).

242. *Id.*

243. 31 C.F.R. § 103.137 (2006).

analysis of Sarbanes-Oxley's effects on internal cognition can illuminate fully the ways these changes have affected firm decisionmaking.

Yet the combined effects of these and other section 404 requirements on identifying and disclosing internal control efficiencies missed just months before Sarbanes-Oxley's implementation,²⁴⁴ provide at least tentative support for the notion that the certification process (at least as a newly implemented requirement) can prompt thoughtful and accountable decisionmaking. In the words of one former CFO, "linking your name to the program really puts it on the front burner of what you're thinking about."²⁴⁵

2. Encouraging Rationality, Responsiveness and Reviewability Through Boundary-Spanning Relationships: Diversifying the Third-Party Monitor Model. Knowledge structures both distort the incorporation of external regulatory goals within firm boundaries and diminish a firm's responsiveness to the external organizations meant to monitor the firm's pursuit of such goals. The literature on learning through exposure to different organizational cultures and mindsets suggests a framework for using firm interactions across boundaries to achieve the opposite: enhanced decision rationality and responsiveness.

This account highlights two critical characteristics of successful interorganizational relations that differ from firms' distorted relations with third-party or government monitors discussed in Part II.²⁴⁶ First, the relation is collaborative rather than adversarial. The perception that cross-boundary cooperation directly furthers organic corporate goals mediates intrafirm resistance to learning and the detrimental effect on creative thinking that arises from antagonistic monitoring. Participant firms are more open to the debiasing effects of external stimuli, just as they are to the wholly internal learning benefits accrued when new personnel are recruited who bring different experiences and cultural filters to decisionmaking.

Second, firms participating in interorganizational partnerships remain what sociologist Karl Weick terms "loosely coupled," in that

244. See *infra* notes 247–66 and accompanying text.

245. Telephone Interview with Stephen Tisdell, President, The Compliance Partners, in Nashville, Tenn. (Sept. 24, 2004).

246. See *supra* Part II.B.2.c.

they are responsive to one another, but preserve their separateness and identity.²⁴⁷ Because of this characteristic, they often resist the cultural co-option that can affect auditors in a more tightly coupled relationship with the firm. Precisely because of their relative independence, other organizations in a network can disrupt intrafirm routines and improve decision structures by providing boundary-spanning knowledge of contrasting experiences, cultures, mindsets, and habits.

The model of loose coupling between “partners” in implementing regulation offers at least three lessons for structuring regulated firm accountability.

First, it suggests the importance of reexamining and experimenting with the role of existing gatekeepers—another element of Sarbanes-Oxley. Section 404 of the Act requires the independent auditor who prepares or issues the audit report on financial statements attest to, and report on, the internal controls assessed by management.²⁴⁸ Thus, for the first time, third-party auditors are involved in making public assessments of internal decisionmaking processes and structures, in addition to substantive financial reporting. Such involvement provides two related types of accountability: (1) frequent input by an independent party about the rationality of decisionmaking structures and their public objectives—as well as the attendant benefits of such review for prompting good decisionmaking; and (2) reporting to the general public by an actor (the auditor) with direct access to internal firm workings permitting a type of review generally unavailable to either regulators or the market.

Data about the Act’s early effects indicate that section 404’s provisions show promise as examples of learning tools for regulatory design more generally. In 2005, the first full year of Sarbanes-Oxley’s effectiveness, over 1,250 publicly held companies (of a total 15,000) disclosed material weaknesses in internal controls, while 1,200 restated earnings. Earnings mismanagement, which pre-Sarbanes-Oxley was “endemic, and not due to ‘a few bad apples,’” especially in poorly performing industries, “reversed abruptly” after the Act’s

247. Karl E. Weick, *Educational Organizations as Loosely Coupled Systems*, 21 ADMIN. SCI. Q. 1, 3 (1976).

248. Sarbanes-Oxley Act of 2002 § 404, 15 U.S.C. § 7262 (2000 & Supp. 2003); *see also supra* notes 229–30 and accompanying text.

passage.²⁴⁹ And the biggest factor in 2005 restatements was errors discovered through section 404 compliance.²⁵⁰

Most strikingly, 94 percent of companies that disclosed a “qualified” opinion as to the effectiveness of internal controls after the 404 deadline had certified them as effective *as recently as the previous quarter.*²⁵¹ Prior to section 404’s effect, “thousands of executives made these claims with not only limited support, but contradictory evidence.”²⁵² Control problems were discovered, however, once accountability tools—executive certification, auditor assessment and reporting requirements—were implemented. These discoveries arose independent of any change in the substantive financial disclosure regime. New studies, in turn, reflect positive effects on the market’s faith in the accuracy of Sarbanes-Oxley reporting.²⁵³

This conclusion alone cannot indicate whether Sarbanes-Oxley itself is wise policy. A balancing of the potential benefits with the massive compliance costs imposed by the Act falls outside the scope of this Article.²⁵⁴ It does, however, suggest promising paths for future

249. Daniel A. Cohen, Aiyasha Dey & Thomas Lys, Trends in Earnings Management and Informativeness of Earnings Announcements in the Pre- and Post-Sarbanes-Oxley Periods (Feb. 1, 2005) (unpublished manuscript, available at <http://ssrn.com/abstract=658782>). The Act’s efficacy as an attention-focusing measure was enhanced by highly publicized enforcement actions, which the authors of this study identify as a source of likely damping effect on opportunistic behavior. *Id.*

250. Melissa Klein Aguilar, *Restatements Should Subside as 404, Lease Issues Fade*, COMPLIANCE WK., Feb. 14, 2006 (on file with the *Duke Law Journal*) (quoting Lynn Turner, former chief accountant of the SEC, and managing director of research, Glass Lewis & Co.).

251. See Leah Townsend & Mark Grulhe, *Control Deficiencies—Finding Financial Impurities: Analysis of the 2004 and Early 2005 Deficiency Disclosures*, CONTROL DEFICIENCIES TREND ALERT, June 24, 2005, at 1; Melissa Klein Aguilar, *SOX 404 Deficiencies Preceded by “Effective” 302 Reports*, COMPLIANCE WK. (July 26, 2005) (on file with the *Duke Law Journal*).

252. Aguilar, *supra* note 251 (quoting Tim Leach, the chief methodology officer for Paisley Consulting).

253. Jeffrey Doyle et al., Determinants of Weaknesses in Internal Control over Financial Reporting and the Implications for Earnings Quality (unpublished manuscript, available at <http://www0.gsb.columbia.edu/accounting/seminars/McVay.pdf>) (concluding that the existence of a material weakness *per se* results in lower earnings quality); Jacqueline S. Hammersley et al., Market Reactions to the Disclosure of Internal Control Weaknesses and to the Characteristics of Those Weaknesses Under Section 302 of the Sarbanes-Oxley Act of 2002 (Oct. 2005) (unpublished manuscript, available at <http://ssrn.com/abstract=830848>) (finding that returns are significantly negative when material weaknesses are disclosed, and more negative when management claims that the control system is effective, despite the presence of a material weakness).

254. See Robert C. Clark, *Corporate Governance Changes in the Wake of the Sarbanes-Oxley Act: A Morality Tale for Policymakers* Too 31 (Harv. L. & Econ. Discussion Paper No.

experimentation and research about the ways in which a host of private actors with whom firms are already used to sharing information about internal firm workings—from accountants to insurers—might be enlisted to improve decisionmaking.

Second, the loose coupling/partners model points to the importance of enhancing regulatory-gatekeeper independence—a theme evident in recent corporate law scholarship. This literature focuses largely on remedying the skewed financial incentives that can compromise the monitoring function. Certainly, the elimination of economic inducements that create conflicts of interest provides an essential component for ensuring independent gatekeeper judgment. Additionally, it ameliorates some of the cognitive forces that skew behavior, such as the self-serving bias that renders auditors vulnerable to distorted firm mindsets. Yet an organizational behavior understanding further urges policymakers explicitly to assess whether proposals will enhance the structural and cultural independence of third-party regulatory actors, as a means of spurring better decisionmaking in the firms they monitor. This organizational lens, for example, suggests the merit of simple requirements that firms rotate auditors,²⁵⁵ and more sweeping reforms that would strengthen the cultural independence that auditors as a group could bring to the table.²⁵⁶

Third and finally, the model of responsive learning counsels experimentation with—combined with systemic and empirical

525, 2005), available at <http://ssrn.com/abstract=808244> (calculating the aggregate compliance costs for American firms at \$35 billion). The compliance burden is particularly great for small firms. See Ehud Kamar, Pinar Karaca-Mandic & Eric Talley, Going-Private Decisions and the Sarbanes-Oxley Act of 2002: A Cross-Country Analysis (unpublished manuscript, available at http://www.law.ucla.edu/docs/talley_012306.pdf) (providing evidence that Sarbanes-Oxley is driving small firms to exit the public capital markets).

255. See, e.g., Strengthening the Commission's Requirements Regarding Auditor Independence, Securities Act Release No. 8183, Exchange Act Release No. 47,265, Public Utility Holding Company Act Release No. 27,642, Investment Company Act Release No. 25,915, Investment Advisors Act Release No. 2103, 68 Fed. Reg. 6006 (Feb. 5, 2003), available at <http://www.sec.gov/rules/final/33-8183.htm> (describing how rules implementing Sarbanes-Oxley § 203 provide that an accounting firm will not be independent if either the lead audit partner or the concurring partner performs audit services for more than five consecutive fiscal years of an audit client).

256. See generally John C. Coffee, Jr., *The Acquiescent Gatekeeper: Reputational Intermediaries, Auditor Independence, and the Governance of Accounting* (Colum. L. Sch., Ctr. for L. & Econ. Stud. Working Paper No. 191, 2001) (proposing establishment of self-regulation structure within the accounting profession as a means of developing self-discipline), available at http://papers.ssrn.com/paper.taf?abstract_id=270994.

analysis of—the formal involvement of novel types of third parties into regulatory implementation networks.

Insurers offer one promising paradigm for third-party involvement in regulatory networks. Because insurers possess significant data on risk across firms and industry sectors, they offer an independent perspective on risks that may be missed by those internal to any individual firm's mindset. Moreover, insurers' historical practice of encouraging (by premium pricing), or requiring (as a condition of coverage), risk-reduction measures on the part of insureds²⁵⁷ offers an example of third-party involvement distinct from the usual antagonistic monitoring model.

The activities of the Ethics Resource Center (ERC) provide a second model for experimentation.²⁵⁸ The ERC is a nonprofit compliance and ethics promotion organization which publishes the biannual "National Business Ethics Survey" (NBES),²⁵⁹ a publicly available survey of over 150,000 workers across industry. The survey compiles, in a detailed manner, data on employee experiences with risk assessment, misconduct, values, reporting, and compliance systems in firms. The ERC also consults with firms seeking to evaluate their own compliance and ethics systems. It conducts similar surveys within those individual companies, the data from which can be compared to the NBES benchmark, as well as against benchmark surveys performed previously within the same firm. Over the years, ERC clients have included two-thirds of the corporations in the Standard & Poor's Global 100 Index.

ERC's paradigm suggests a number of ways in which third-party networks can help overcome internal decisionmaking pathologies' subversion of regulatory norms. First, the cooperative nature of the relationship between the firm and the nonprofit permits access to large number of employees working at various levels of the firm. Such access can unearth types of information otherwise unavailable to

257. PAUL K. FREEMAN & HOWARD KUNREUTHER, MANAGING ENVIRONMENTAL RISK THROUGH INSURANCE 24 (1997) ("The insurer, taking a cue from the nineteenth century mutual companies, will often require its potential policyholders to undertake specific loss reduction activities before receiving insurance coverage. In fact, insurance companies have often been the driving force behind the implementation of safety procedures.").

258. Information on the Ethics Resource Center comes from Telephone Interview with Pat Harned, Acting President, Ethics Res. Ctr., in Wash., D.C. (Sept. 13, 2004), and Telephone Interview with Cherie Raven, Analyst, Ethics Res. Ctr., in Wash., D.C. (Sept. 27, 2004). The details of the defense contractor example come from the Raven interview.

259. ETHICS RES. CTR., NATIONAL BUSINESS ETHICS SURVEY 2005.

either outside regulators or third-party monitors performing an audit function.

Second, ERC's collection of external benchmarks gives it the ability to direct firm decisionmakers to consider information that they had previously missed. This information, in turn, may make visible the structural and perceptual decisionmaking pathologies prevalent in their firm. An ERC survey of a large defense contractor, for example, revealed—despite the company's technical legal compliance with filing and other formal requirements—a relatively high percentage of employees observing what they feared constituted misconduct or other compliance problems (56 percent), but a comparatively low level of reporting up the line. The survey's detailed questions discovered that, although coworkers felt strong trust between one another, they lacked trust that supervisors would take complaints seriously, that they would be believed, and that firm routines and systems actually reflected the articulated emphasis on ethical reporting over performance measures.

Third, ERC's relations with firms are structured so as to leverage the impact of its findings. Not only does the nonprofit consult from the position of an outsider, it also seeks to maximize the perceived legitimacy of its advice by working only for senior officers with firmwide management responsibility. These two elements provide means to avoid the phenomenon by which similar concerns voiced internally may be devalued as reflecting the internal politics of one department, such as human resources or “legal.”

The power of network relationships between loosely coupled organizations, each informed by different cultures and knowledge structures, is suggested more broadly by Susan Sturm's study of corporate compliance in the employment discrimination context.²⁶⁰ Although Professor Sturm's research does not explicitly focus on social cognition, it discusses attempts to address “second generation manifestations of workplace bias”²⁶¹—bias which results not from overt discrimination, but from firm-specific patterns of behavior that are in many ways similar to the decision procedures and knowledge frameworks discussed here. This type of bias, she describes, is also not readily susceptible to rule-based regulation and monitoring. Externally developed rules, general enough to apply across firms, will

260. Sturm, *supra* note 15, at 492–519.

261. *Id.* at 460.

not “be sufficiently sensitive to context or integrated into the day-to-day practice that shapes their implementation.”²⁶² Success in shaping firm behavior, as evidenced by a number of case studies she presents, derives instead in large part from the participation of “[a] set of intermediate actors, operating within and across the boundaries of workplaces.”²⁶³ These intermediaries—professionals like lawyers, human resource specialists, and compliance consultants, as well as other interested parties such as unions and insurers—each belong to “broader communit[ies] of practice.”²⁶⁴ They bring different sets of norms to problem solving, provide pooled information about best practices and the behavior of different organizations, and can introduce external benchmarking techniques into firm decisionmaking. Together, they “foster[] the development of hybrid forms of relationships between public and private norms, legal and informal incentives, and contextual and general learning.”²⁶⁵ With the participation of these mediating institutions, the employers Sturm studied were able to “self-consciously design[] or revis[e] their systems of conflict resolution and problem solving to address their particular culture, power dynamics, and patterns of daily interaction.”²⁶⁶

Consistent with companies’ market response of developing networks to improve the effective implementation of legal mandates, established patterns of organizational learning suggest that regulators might enhance the responsiveness of firm decisionmaking by involving other capable but independent market actors in networks of accountability.

3. Encouraging Responsiveness and Reviewability Through the Agency-Firm Relationship: Agencies as Educators. Finally, an organizational approach challenges regulators to conceive of ways to restructure their interactions with regulated firms to promote accountability in the exercise of regulatory discretion. As discussed in Part II,²⁶⁷ the natural pattern by which regulator and regulated develop shared understandings of compliance can lead to routinized

262. *Id.* at 475–76.

263. *Id.* at 523.

264. *Id.* at 522–36 (discussing different intermediaries).

265. *Id.* at 537.

266. *Id.* at 519.

267. See *supra* Part II.B.2.c.

behavior on the part of each, hindering the very exercise of independent firm judgment that regulatory delegation seeks to initiate. Indeed, a regulator-firm relationship in which agencies and firms reach a static accord constitutes a paradigmatic example of single-loop learning, with all of its strengths and weaknesses. The unitary burst of mutual feedback typical of a regulatory rulemaking process, for example, may spur the attentive development of compliance routines. But without repeated interactions, it can lead to cognitive complacency that masks insufficiencies over time. The literature on social cognition and firm behavior challenges regulators to develop double-loop learning techniques that prompt both parties to make mindful decisions over time.

Sarbanes-Oxley, not surprisingly, rates poorly in this respect. The SEC's rules implementing section 404 of Sarbanes-Oxley, for example, are both general and static. They require only that management base its evaluation of the effectiveness of the company's internal controls on a suitable, recognized control framework that is established by a body or group that has followed due process procedures, and that the framework be distributed for public comment.²⁶⁸ The rules do not mandate the use of a particular framework, but explicitly identify the one established by the Committee of Sponsoring Organizations of the Treadway Commission (commonly known as COSO) as satisfying the SEC's criteria.²⁶⁹ Although these rules, by requiring general control structures developed after public comment, nod in the direction of the administrative law norm of public responsiveness, the COSO framework contains few specifics to promote the rational exercise of firm discretion. The framework generally requires oversight of financial reporting by the board and an audit committee, highlights good accounting standards, and emphasizes the importance of "management philosophy and operating style,"²⁷⁰ but in the end, it provides few additional means for achieving its recommendation that "[p]ublic companies should maintain internal controls that provide

268. See, e.g., Strengthening the Commission's Requirements Regarding Auditor Independence, Securities Act Release No. 8183, Exchange Act Release No. 47,265, Public Utility Holding Company Act Release No. 27,642, Investment Company Act Release No. 25,915, Investment Advisors Act Release No. 2103, 68 Fed. Reg. 6006 (Feb. 5, 2003), available at <http://www.sec.gov/rules/final/33-8183.htm>.

269. *Id.* at 6013.

270. REPORT OF THE NATIONAL COMMISSION ON FRAUDULENT FINANCIAL REPORTING 34 (1987).

reasonable assurance that fraudulent financial reporting will be prevented or subject to early detection.”²⁷¹

The 2003 prosecutorial guidelines concerning internal controls released jointly by the Department of Justice and the SEC at least suggest the importance of dynamic firm decisionmaking.²⁷² They link compliance with general criteria implicated by decision pathologies, such as the prevailing corporate culture, and whether a company has a “responsive and evolving” compliance program under the supervision of upper-level management.²⁷³

The question is how agencies can provide guidance as to the contours of a “responsive and evolving” program without reverting to the static prescriptions like the COSO framework. The lessons of organizational learning suggest that, without abandoning their traditional functions as rulemakers and enforcers, agencies might enhance their own role as a loosely coupled participant in a learning network with regulated firms. Indeed, if top-down control techniques are insufficient in light of systemic firm decisionmaking pathologies, and the articulation of compliance requirements is similarly compromised in promoting the exercise of bottom-up firm judgment, then perhaps these approaches can be supplemented by side-to-side involvement by regulators participating in networked accountability relationships. While this suggestion merits more comprehensive analysis beyond this Article’s scope, several approaches in regulatory practice and scholarly literature hint at the direction that research might take.

a. Learning from Incomplete Starts. Steps have been taken in this direction, both through experimentation with more cooperative models of regulation and through the individualized arrangements put into place by settlement agreements following enforcement actions. Both of these contexts provide suggestions for reconceiving the agency-firm accountability relationship, although they do not provide fully replicable models for across-the-board implementation.

Through regulatory negotiation schemes, for example, agencies have negotiated the very content of administrative rules with

271. *Id.* at 33.

272. See Memorandum from Larry D. Thompson, Deputy Attorney General, Regarding Principles of Federal Prosecution of Business Organizations (Jan. 20, 2003), available at http://www.usdoj.gov/dag/cftf/business_organizations.pdf.

273. *See id.*

regulated parties.²⁷⁴ The “enforced self-regulation,” model associated with Ian Ayres and John Braithwaite more generally sets forth a paradigm in which individual firms develop self-regulation schemes, which are reviewed and approved by regulators individually, and then enforced against firms in the same way as governing law generally.²⁷⁵ Indeed, the SEC has emphasized that the “hallmark” of internal controls are firm-specific “written policies and procedures,”²⁷⁶ and could enhance its involvement and review of these documents accordingly.

Regulatory negotiation addresses some of the accountability problems of firm decisionmaking. Specifically, cooperative models link regulatory design to the type of firm-specific information often unavailable to regulators, but necessary for effective regulation. They further mediate some of the distortive effects of decisionmaking pathologies on regulatory inputs, like the damage that monitoring can do to the intrinsic motivation to comply with the law, and the adverse response to rules imposed externally.²⁷⁷

Yet although these approaches provide some depth to the accountability toolbox,²⁷⁸ they do not specifically address the breadth of behavioral problems that distort the decisions delegated to regulated parties.²⁷⁹ Because regulatory negotiation is often a single-

274. See Freeman, *Collaborative Governance*, *supra* note 12, at 33–35; Philip J. Harter, *Negotiating Regulations: A Cure for Malaise*, 71 GEO. L.J. 1, 42–112 (1982) (proposing a detailed “reg-neg” process largely adopted by the Administrative Council of the United States).

275. AYRES & BRAITHWAITE, *supra* note 179, at 101–32.

276. Lori A. Richards, Speech at the Investment Company Institute/Independent Directors Council Mutual Fund Compliance Programs Conference, The New Compliance Rule: An Opportunity for Change (June 28, 2004), available at <http://www.sec.gov/news/speech/spch063004lar.htm>.

277. See *supra* note 179 (discussing intrinsic and extrinsic motivation); Cunningham, *supra* note 169, at 294 (discussing how framing monitoring as cooperation is a “deliberate reorientation[] of the trust-suspicion model of internal controls”).

278. At the same time, others have noted, these approaches create other accountability problems. See, e.g., Cary Coglianese, *Is Consensus an Appropriate Basis for Regulatory Policy?*, in ENVIRONMENTAL CONTRACTS: COMPARATIVE APPROACHES TO REGULATORY INNOVATION IN THE UNITED STATES AND EUROPE 93, 97–98 (Eric Orts & Kurt Deketelaere eds., 2001) (criticizing the shift in power from accountable government administrators to private parties).

279. Moreover, even supporters of the collaborative model recognize the limited situations in which it can be applied. See, e.g., Freeman, *Private Role*, *supra* note 12, at 652–53 (discussing the “fragile conjunction of ingredients” on which the success of audited self-regulation rests, such as strong stakeholder representatives, shared understandings among stakeholders, and intensive agency involvement with the process of implementation). See generally Parker, *supra* note 23, at 542 (citing many individual self-regulation schemes that “have been shown to have

shot event, it alone cannot address the cognitive frames, routinized responses, and systemic pulls to myopic judgment that shape both organizational behavior generally and the implementation of legal norms more specifically. Indeed, by definition, even enforced self-regulation ultimately rests on external monitoring. Its reliance on ex post audit diminishes the model's ability to curb decisionmaking pathologies before they occur, and requires an assessment of decisions by third parties without meaningful access to the routines buried deep within a firm's decision structures.²⁸⁰

The benefits of enforced self-regulation are preserved, and the shortcomings diminished, in settlement agreements reached after initiation of an enforcement action. In these instances, agencies have the leverage to work on an ongoing basis to ensure that they remain part of a continuing dialogue with errant regulated parties seeking to reconstruct internal processes to better comply with legal mandates. The agreement entered earlier this year by the SEC and Warnaco, Inc., for example, required that the company hire an independent third-party consultant to perform a complete review of firm inventory systems, internal audit, financial reporting and other accounting functions, and required that the company adopt the recommendations of the independent consultant within 180 days.²⁸¹ Other settlements

failed"); Mark Seidenfeld, *Empowering Stakeholders: Limits on Collaboration as the Basis for Flexible Regulation*, 41 WM. & MARY L. REV. 411, 413 (2000) (suggesting that collaborative approaches be limited to "a facility-by-facility basis, in situations characterized by participants who form a community of individuals with some common interests, and in which those participants who represent the interests of stakeholders in the regulatory process are accountable to those stakeholders").

280. See, e.g., Langevoort, *supra* note 61, at 74 (discussing the ways in which a system that sanctions firms for having poor compliance systems and gives bonuses for having good ones "necessarily means that a fact-finder has to make a reasonableness determination with respect to any given system"); Mark Seidenfeld, *Bending the Rules: Flexible Regulation and Constraints on Agency Discretion*, 51 ADMIN. L. REV. 429, 452 (1999) (noting, in the context of ex post review of agency decisions by experts, that "[g]enerally, it is difficult for an agency or an external monitor to know when use of a norm is justified").

281. See Press Release, SEC, SEC Announces Settlement with Warnaco, Former Warnaco Executives, and PwC for Financial Disclosure Violations (May 11, 2004), available at <http://www.sec.gov/news/press/2004-62.htm>.

Settlements involving environmental violators have reflected particular creativity. In the case of Balzers Corporation of Hudson, New Hampshire, for example, the EPA agreed that a regulatory fine could either be paid directly to the government or used toward capital improvements that reduced pollution. The firm chose the latter option, which involved integrating the plant process development staff into the environmental compliance structure. Together the integrated team discovered that it could reduce the costs of cleaning optical components, semiconductors, and compact discs by as much as \$100,000 per year—as well as

have more explicitly involved placing agents approved by the SEC, such as former SEC Chairman Richard Breeden, within the firm to supervise compliance implementation.²⁸²

These examples, however, cannot be reproduced directly as a universal model for SEC regulation. Outside the enforcement context, agencies neither wield the power nor claim the resources necessary to work with regulated firms so intensively and individually. However, in their focus on actors inside the firm and on dynamic agency involvement in firm-specific compliance, individual settlements suggest tools that might be reproduced more broadly.

b. A More Sustainable Model—Double Agents and Agency Educators. The tools of organizational learning, the model of networked decisionmaking, and the partial successes of the negotiated and settlement models, suggest a two-track paradigm for agency action as a loosely coupled participant in developing responsive and evolving compliance programs.

First, agencies can take advantage of the professionalization of compliance to cultivate “double agents” within firms, boundary-spanning carriers who can bring independent mindsets to bear during firm decisionmaking. Certainly, the SEC cannot place a Richard Breeden within each firm’s boundaries. Yet it can consciously exploit the general counsel in each firm, and increasingly, the professional compliance officer. Agencies can nurture agents inside the firm who can help mitigate systemic decisionmaking pathologies through a variety of means: nurturing relations with professional compliance organizations as it does with the American Bar Association, increasing public awareness and education in ways that accord compliance officers greater legitimacy within the firm, and

achieve significant environmental improvement—by switching technologies from a Freon-based to a water-based system. Because established structural arrangements within the firm did not allow for a compliance strategy with process department input, the potential for mutual gain was not previously explored. See Max H. Bazerman & Andrew J. Hoffman, *Sources of Environmentally Destructive Behavior: Individual, Organizational, and Institutional Perspectives*, 21 RES. ORG. BEHAV., 39, 49 (1999).

282. See, e.g., Former SEC Chairman Richard Breeden to Supervise Distribution of SEC’s Civil Penalty Against WorldCom, SEC Litigation Release No. 18451 (Nov. 10, 2003), available at <http://www.sec.gov/litigation/litreleases/lr18451.htm>; Christopher Traulsen, *RS Funds: Proceed with Caution*, MORNINGSTAR REPORTS, Oct. 30, 2004, <http://advisor.morningstar.com/articles/doc.asp?s=1&docId=3841&pgNo=1> (describing, as part of the settlement, the departure of the former CFO, the hiring of new COO Terry Otton, and the transfer of certain compliance oversight functions to him for twelve months).

establishing regular lines of communication with individual compliance officers. Indeed, in the summer of 2004 the SEC explicitly announced, in light of the mutual fund scandals, a new compliance rule grounded on the repeated premise that the Commission “will look to the Chief Compliance Officer as [its] ally.”²⁸³ In the words of Lori Richards, Director of the Office of Compliance Inspections and Examinations, “[W]e will develop that alliance—we will speak often to the Chief Compliance Officer, utilizing her knowledge to more completely understand the fund’s compliance program, to hear concerns, and to understand emerging issues and the ways in which they are being handled.”²⁸⁴

Director Richards’ comments suggest a more general role for agencies as educators. Through periodic, but rather informal, communication with firms, regulators can regularly update their understandings of compliance challenges, and the ways in which such challenges are overcome in heterogeneous environments. They can then incorporate these lessons in evolving understandings of compliance and communicate them back to firms, counseling when appropriate about ways they may be adapted locally. This model draws in important ways on the “Democratic Experimentalism”²⁸⁵ approach explored by Charles Sabel and Michael Dorf. Reflecting that approach, agencies could take advantage of their vantage point on the behavior of multiple firms to develop “rolling best practices” by collecting data from regulated entities about what works and what does not, and then disseminating that information back, through education and capacity building.²⁸⁶ Understood in terms of organizational learning, a central job of administrative agencies in this model would be to collect, and then to focus the attention of firm managers on, different ways of thinking about problems. This serves as a means of both learning about alternate approaches and making visible the assumptions and structures governing existing firm practice. As the “rolling” process repeats, firms are periodically

283. Richards, *supra* note 276.

284. *Id.*

285. Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 314–23 (1998).

286. *Id.* at 350; see also Bradley C. Karkkainen et al., *After Backyard Environmentalism: Toward a Performance-Based Regime of Environmental Regulation*, 44 AM. BEHAV. SCIENTIST 692, 692–709 (2000) (providing, in the environmental context, a model in which administrative agencies develop the architecture for gathering and analyzing information across local contexts as a part of the regulatory and education process).

confronted with performance standards that “are continually ratcheted up as local experimentation reveals what is possible.”²⁸⁷

Professors Sabel and Dorf’s pathbreaking work focuses on developing and exploring bottom-up voluntary solutions to governance problems, and largely concerns ways that public institutions can improve information flows to and from local experimenters. Its primary inquiry, however, is not the accountability of local decisionmakers.

The challenge, then, is to develop ways to include a multiplicity of accountability tools in agency-educator experiments. The experimentalist model itself combines some of negotiated regulation’s strengths in tailoring local responsiveness to public norms with the direct dialogue benefits of the settlement paradigm. Yet its priority is not the reviewability component—the “accountable to whom?” element—that provides the impetus for permitting the regulator privileged access inside the firm in the first place. Both negotiated regulation and settlements, it might be said, are characterized not just by cooperation, but by cooperation “in the shadow” of enforcement. Thus, attempts to develop analogous broader-based models should draw not only on the agency’s vantage point on the comparative practices of other firms, but on the agency’s ability to leverage enforcement threats as a means to bargain for cooperative engagement.

Two regulatory initiatives suggest such models, although both are nascent. The first, the Customs Trade Partnership Against Terrorism (C-TPAT) is a voluntary port security initiative premised on the cooperation of private U.S. and select Mexican companies.²⁸⁸ The program provides streamlined processes, as opposed to burdensome security enforcement, for firms that meet certain security minima, including “attention regulation” requirements that certain managers be actively involved in developing and implementing security measures. The program, for example, contains a requirement that CEOs and corporate boards review security measures

287. Michael C. Dorf, *The Domain of Reflexive Law*, 103 COLUM. L. REV. 384, 399 (2002).

288. U.S. GEN. ACCOUNTING OFFICE, CONTAINER SECURITY: EXPANSION OF KEY CUSTOMS PROGRAMS WILL REQUIRE GREATER ATTENTION TO CRITICAL SUCCESS FACTORS 9 (2003); U.S. Customs and Border Protection. Customs-Trade Partnership Against Terrorism (C-TPAT): Partnership to Secure the Supply Chain, http://www.cbp.gov/xp/cgov/import/commercial_enforcement/ctpat (last visited Oct. 23, 2006) (U.S. Customs Service website containing resources related to program).

periodically, approve them, and remedy deficiencies that may exist.²⁸⁹ Customs then shares the best practices of these firms with other C-TPAT firms, including them in requirements for streamlined security burdens.²⁹⁰

The second example, analyzed by Paul Schwartz and Edward Janger as an example of the experimentalism model,²⁹¹ involves the “Interagency Guidance” implementing Title V of the Gramm-Leach-Bliley Act regarding data security breaches.²⁹² The Guidance requires customer notice in cases of a reasonable likelihood of “misuse” of leaked personal information—a disclosure that can result in extremely costly reputational and monetary damages.²⁹³ But the Guidance also provides for a “second track,” providing for disclosure to the financial institution’s supervisory regulatory agency for a lower level security breach: when a reasonable likelihood exists of “unauthorized access” to the data. Thus Chief Privacy Officers are given an initial “opportunity” (albeit mandated) to open the doors of the firm to the regulator to “assess the effectiveness of an institution’s response plan”²⁹⁴ before the decision regarding public disclosure is reached. Regulators are thus provided with internal information, involved in overseeing the critical decision regarding disclosure, and given “an opportunity to consider steps other than notice to help mitigate the harm caused by the breach.”²⁹⁵

Neither C-TPAT nor the GLB Interagency Guidance offer perfect models for broader restructuring of agency-firm relations. The C-TPAT, in its implementation, has fallen short in assessments of its success in providing effective review.²⁹⁶ The Guidance, like the

289. See, e.g., U.S. CUSTOMS AND BORDER PROTECTION, SUPPLY CHAIN SECURITY BEST PRACTICES CATALOG, CUSTOMS-TRADE PARTNERSHIP AGAINST TERRORISM 4 (2006), available at http://www.cbp.gov/linkhandler/cgov/import/commercial_enforcement/ctpat/ctpat_best_practices.ctt/ctpat_best_practices.pdf.

290. *Id.*

291. Schwartz & Janger, *supra* note 33.

292. Interagency Guidance on Response Programs for Unauthorized Access to Customer Information and Customer Notice, 70 Fed. Reg. 15,736 (Mar. 29, 2005).

293. See generally Dominique Levin, *Compliance—Burden or Opportunity?*, SARBANES-OXLEY COMPLIANCE J., Mar. 23, 2006, available at <http://www.s-ox.com/feature/detail.cfm?articleID=1688> (calculating possible costs of remediation, legal risk and “brand damage” at \$5–20 million per incident).

294. Interagency Guidance on Response Programs for Unauthorized Access to Customer Information and Customer Notice, 70 Fed. Reg. at 15,752.

295. Schwartz & Janger, *supra* note 33, at 23.

296. U.S. GEN. ACCOUNTING OFFICE, *supra* note 288.

settlement agreement examples it resembles, is only triggered *after* a regulatory failure. Yet they—as well as nascent moves like New Jersey’s announced intent to make chemical facility security best practices collected by state regulators mandatory—do suggest ways in which agencies, acting as the ultimate “double-loop” educator, can promote the exercise of regulatory discretion consistent with public norms. By learning in an ongoing manner about tools that are effective in offsetting decision pathologies—such as particular uses of benchmarking and other data to assess the effectiveness of control systems—and incorporating those insights into guidance for firms, they can better promote the rational exercise of regulatory discretion. By providing a different cultural filter for looking at specific regulatory problems in discussions with compliance officers, or communicating effective ways in which other firms have cooperated with external organizations like insurers or industry groups, they can improve responsiveness to regulatory goals. And by embracing evolving, rather than static, understandings about compliance, they may be able to avoid the traps of “check the box” compliance, prompting mindful thinking processes through review, and enhancing accountability.

CONCLUSION

The delegation of decisionmaking to regulated parties presents a conundrum. Regulators need to rely on private actors to assess and manage risk. The costs of failure are significant, in terms of harm to specific individuals, injury to faith in markets, and risk to persons and property more generally.

At the same time, the structure of firm-specific decisions does not lend itself to regulation by top-down command; nor do regulators have a clear yardstick by which to assess firms’ bottom-up efforts at governance. Such delegation, then, in the words of one prominent administrative law scholar, “misleads us into thinking that the firm is being supervised or controlled, while in actuality it can violate applicable public norms with impunity.”²⁹⁷

By integrating a public accountability approach with understandings of decisionmaking in the private sector, this Article provides a starting point for research in thinking about these issues. Incorporating organizational learning approaches into regulatory and

297. Rubin, *supra* note 83, at 2109.

agency design offers a means to spur more rational, responsive, and accountable decisionmaking without having to rely exclusively on the imperfect and costly tools of monitoring and punishment. Moreover such approaches offer the potential to improve the efficacy of internal control processes on which firms are already expending substantial resources.

In proposing a suite of accountability tools, this Article looks to research on individual judgment and organizational behavior. In so doing, it focuses scholarly attention on the cognitive dimension of existing regulatory structures, to ensure that social cognition will be considered when developing future policy. It then sketches three contexts in which this cognitive dimension might be brought to bear. This blueprint is intended to provide direction for empirical analysis that can indicate the relative successes and costs of such policy approaches. The hope is that policymakers in a host of contexts in which risk plays a role, will be armed not only with accurate information about the costs of requirements intended to guide the exercise of regulatory discretion, but also information about their efficacy in promoting the accurate and accountable implementation of public goals.