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SYMPOSIUM

DECENTRALIZED LAW FOR A COMPLEX ECONOMY: THE STRUCTURAL APPROACH TO ADJUDICATING THE NEW LAW MERCHANT

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The collapse of communism, decline of socialism, and deregulation of markets provoked rethinking of economic law. This Article carries that line of thought to law in general. I develop an account of decentralized law, which percolates up from the bottom, as opposed to centralized law, which is imposed from above. Decentralized law begins with customs and contracts. I use game theory to develop an analysis of custom. According to economic theory, the justification of regulation begins with the identification of a failure in the incentive structure of markets. Similarly, I argue that the justification for centralized law begins with the identification of

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a failure in the incentive structure of social norms. Much of this Article concerns why some norms succeed and others fail relative to the standard of fairness and efficiency.

Part I is an extensive introduction to my major themes. Part II sketches the foundations of a theory of social norms by combining philosophical concepts and game theory. Part III uses this theory to characterize conditions under which fair and efficient norms will evolve and then shows how judges and other lawmakers can use this information.

I. INTRODUCTION

A. *Legal Centrism*

The Soviet magazine *Crocodile* published a cartoon that depicted a cart containing one gigantic nail being pulled by some men, one of whom was saying to a bystander, "What's it for? We don't know what it's for, but it satisfies our nail quota for the month." This cartoon epitomizes the economic critique of central planning, according to which a planned economy does not generate the information or motivation required for economic efficiency.[1] Like the workers in the cartoon, the people and enterprises under socialism often lack the knowledge and the will to produce valuable goods.

Central planning is a way of making law, not just commodities. To implement the central plan, officials must have the power to allocate resources. To possess this power, the orders issued by planning officials at the top must trump the rights of property and contract enjoyed by people and enterprises at the bottom. Thus public law crowds out private law.

Only communist dictatorships have practiced central planning as a total system. Democracies, however, sometimes adopt procedures similar to central planning to solve specific economic problems. To illustrate, when Professor Richard Stewart stepped down from his position as the highest-ranking environmental lawyer in the Department of Justice, he remarked that "America's environmental laws are based upon Soviet-style centralized plan-

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[1] This critique was developed in the 1930s in the debate between Oscar Lange and Abba Lerner. *See* ABBA P. LERNER, THE ECONOMICS OF CONTROL: PRINCIPLES OF WELFARE ECONOMICS 23-40 (1944). *See generally* OSKAR LANGE, ESSAYS ON ECONOMIC PLANNING (2d ed. 1967); OSKAR LANGE & FRED M. TAYLOR, ON THE ECONOMIC THEORY OF SOCIALISM (Benjamin E. Lippincott ed. 1964).

ning."[2] He meant that America controls pollution through a system of quotas imposed upon businesses by federal officials. Such procedures have been called "command-and-control" regulations.[3]

The imperative theory of law, which has a long history in legal philosophy, defines "law" as a command backed by a threat.[4] This tradition builds upon the fact that many laws impose obligations and attach sanctions to their violation. Similarly, the paradigm for centralized lawmaking is a decree, in which government officials formulate the state's goal, embody the goal in a rule, and force people to conform to it. Information and motivation move along a one-way street from the top to the bottom.

Rather than proceeding from top to bottom, lawmaking can proceed from bottom to top.[5] Decentralized lawmaking has several forms. To illustrate, one form induces people to create a market by assigning property rights, such as the tradable emissions rights created by recent amendments to the Clean Air Act.[6] The subject of this Article is another form of decentralized lawmaking: enacting custom. To illustrate, courts may determine fault and liability for accidents by applying the norms of the community in which the

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[2] I am grateful to Professor Don Elliott of Yale University for this quotation.

[3] *See* CHARLES L. SCHULTZE, THE PUBLIC USE OF PRIVATE INTEREST 13 (1977) (describing a "regulatory apparatus" grafted "onto the system of incentive-oriented private enterprise"); *see also* STEPHEN BREYER, REGULATION AND ITS REFORM 1 (1982) ("Beginning in the mid-1960s . . . [t]he federal government began . . . to impose significant controls upon environmental pollution.").

[4] Alternatively, this tradition defines "law" as an *order* backed by a threat. For a review of this tradition, see JOSEPH RAZ, THE CONCEPT OF A LEGAL SYSTEM: AN INTRODUCTION TO THE THEORY OF LEGAL SYSTEM 95 (1970).

[5] Classic writings on decentralized law include 1 F.A. HAYEK, LAW, LEGISLATION AND LIBERTY 72-91 (1973); FRIEDRICH A. HAYEK, THE ROAD TO SERFDOM 72-87 (1944); BRUNO LEONI, FREEDOM AND THE LAW 95-111 (expanded 3d ed. 1991). For application to the integration of law in Western Europe, see MANFRED E. STREIT & WERNER MUSSLER, THE ECONOMIC CONSTITUTION OF THE EUROPEAN COMMUNITY—FROM "ROME" TO "MAASTRICHT" (Max-Planck-Institut zur Erforschung von Wirtschaftssystemen Jena Doc. IUE 72/94 (COL 23), 1994); MANFRED E. STREIT & WERNER MUSSLER, EUROPEAN LAW IN CONTEXT: CONSTITUTIONAL DIMENSIONS OF EUROPEAN ECONOMIC INTEGRATION (European University Institute Colloquium Papers Doc. IUE 72/94 (COL 23), 1994). For an application to Eastern Europe, see Paul H. Rubin, *Growing a Legal System in the Post-Communist Economies*, 27 CORNELL INT'L L.J. 1, 25-34 (1994).

[6] 42 U.S.C. § 7410 (1988 & Supp. V 1993). For a review of theory and practice, see TOM TIETENBERG, ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS 38-63, 263-343 (1984). Other examples of law-inducing markets are patent and copyright law and the allocation of the electromagnetic spectrum.

accident occurred. When courts apply community standards, they find law, rather than make it.

Many scholars have detected a movement in modern history from decentralized to centralized law. John Salmond concluded that customary law is important in the early stages of legal development, but gradually cedes its place to statutes when "the state has grown to its full strength."[7] In a recent article, Ott and Schafer point out that modern German law has moved away from customary law and toward statutes.[8] Many intellectuals believe that centralized law is inevitable, just as they once believed that socialism was inevitable.

In fact, centralized law, like socialism, is not even plausible for a technologically advanced society. The forces that reversed the trend toward socialism and destroyed central planning are also undermining legal centrism. An advanced economy involves the production of too many commodities for anyone to manage or regulate. As the economy develops, the information and incentive constraints tighten upon public policy. These facts suggest that efficiency requires decentralization to become more important, not less, as economies become more complex. Specifically, efficiency requires that as economies develop, the enforcement of custom in business communities becomes more important relative to the regulation of business.

B. *New Law Merchant*

A community of people is a social network whose members develop relationships with each other through repeated interactions. The modern economy creates many specialized business communities. These communities may form around a technology such as computer software, a body of knowledge such as accounting, or a particular product such as credit cards. Wherever there are communities, norms arise to coordinate the interaction of people.[9] The formality of the norms varies from one business to

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[7] GLANVILLE WILLIAMS, SALMOND ON JURISPRUDENCE 234 (11th ed. 1957).

[8] *See* Claus Ott & Hans-Bernd Schafer, Emergence and Construction of Efficient Rules in the Legal System of German Civil Law (1991) (paper presented to the European Law and Economics Association) (on file with author). In making these remarks, they are describing history, not passing judgment upon it.

[9] *See, e.g.*, MICHAEL TAYLOR, COMMUNITY, ANARCHY AND LIBERTY 65-90 (1982) (arguing that community is "a necessary condition for the maintenance of stateless social order"); MICHAEL TAYLOR, THE POSSIBILITY OF COOPERATION 21-30 (1987) [hereinafter TAYLOR, POSSIBILITY] (explaining that a group "can wield with great

another. Self-regulating professions, like law and accounting, and formal networks like Visa[10] promulgate their own rules. Voluntary associations, like the Association of Home Appliance Manufacturers, issue guidelines.[11] Informal networks, such as the computer software manufacturers, have inchoate ethical standards.

Following private international law,[12] I refer to all such norms of business communities as the "new law merchant."[13] The new law merchant arises outside of the state's apparatus for making law. Lawmakers, however, are pulled into the affairs of business communities by insiders who look to the state to resolve their disputes. Lawmakers are also pushed into the affairs of business communities by outside critics of private wealth and power. This Article concerns the appropriate response of the state's lawmakers to these pulls and pushes.

The traditional account of the "law merchant," from which the phrase "new law merchant" is adapted, provides a model for how lawmakers might respond. The merchants in the medieval trade fairs of England developed their own courts and practices to regulate trade.[14] The extent to which the medieval law mer-

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effectiveness a range of positive and negative sanctions, including the sanctions of approval and disapproval"); EDNA ULLMANN-MARGALIT, THE EMERGENCE OF NORMS 76 (1977) ("[N]orms solve recurrent co-ordination problems . . . ."). Eric Posner argues that groups, as opposed to categories of people, spontaneously regulate themselves. *See* Eric A. Posner, *Norms, Formalities, and the Statute of Frauds: A Comment*, 144 U. PA. L. REV 1697, 1699-1701 (1996); *see also* Rubin, *supra* note 5, at 7-13 (finding that laws "must also be consistent with existing institutions in an economy").

[10] The Visa payments network is actually divided into two corporations: one for American transactions and the other for international transactions. *See, e.g.*, John J. Duffy, *17-Nation Pact Unifies Payment Systems*, AM. BANKER, May 25, 1988, at 1, 1 ("In Europe, the Middle East, and Africa, Visa is now a local autonomous unit run by a board of Visa banks . . . [h]eadquarter[ed] . . . in London."). Each corporation has a set of operating rules, which are published proprietary documents.

[11] *See* DAVID HEMENWAY, INDUSTRYWIDE VOLUNTARY PRODUCT STANDARDS 83 (1975).

[12] For discussions of norms in private international law, see Yves Dezalay & Bryant Garth, *Merchants of Law As Moral Entrepreneurs: Constructing International Justice from the Competition for Transnational Business Disputes*, 29 LAW & SOC'Y REV. 27 (1995).

[13] The term has also been applied more restrictively to norms of international trade invoked in arbitration and mediation ("lex mercatoria"). *See* FILIP DE LY, INTERNATIONAL BUSINESS LAW AND LEX MERCATORIA 207-88 (1992) (outlining the development of the theory of "lex mercatoria" as applied to international business law).

[14] *See* Avner Greif et al., *Coordination, Commitment, and Enforcement: The Case of the Merchant Guild*, 102 J. POL. ECON. 745, 750-62 (1994); Paul R. Milgrom et al., *The Role*

chant was substantive, rather than procedural, is disputed, and its relationship with common law and admiralty law is difficult to reconstruct. In any case, as the English legal system became stronger and more unified, English judges increasingly assumed jurisdiction over disputes among merchants. The English judges often did not know enough about these specialized businesses to evaluate alternative rules.[15] Instead of making rules, the English judges allegedly tried to discover those rules that already existed among the merchants, and then selectively enforced them. Thus, the judges dictated conformity to merchant practices, not the practices to which merchants should conform.

A well-documented example concerns the assimilation of financial instruments, especially notes and bills of exchange, into the common law in the eighteenth century. Notes and bills of exchange, which circulated among eighteenth-century merchants as means of payment and credit, raised difficult questions of risk allocation. To illustrate, suppose that A delivers goods to B. Upon receipt of the goods, B gives a note to A promising to pay a certain sum of money on a future date. A sells B's note to C. In the mean time, B discovers a defect in the goods that he purchased. Now B holds defective goods, and C holds B's promise to pay for them. Can B refuse to pay C on the grounds that A delivered defective goods? Or, alternatively, must B pay C and then sue A for breach of contract?

Such legal questions became acute with the rapid expansion of commerce in the eighteenth century. Judge Mansfield is usually credited with supplying most of the answers. Mansfield knew that he did not understand fully how businesses use financial instruments. Consequently, he did not try to invent better rules than the ones in practice. Rather, he carefully scrutinized business transactions and tried to identify and enforce the best practices.[16] His elegant solutions were taught in courses on

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of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs, 2 ECON. & POL. 1, 1-23 (1990); *see also* Avner Greif, Reputation and Coalitions in Medieval Trade: Evidence from the Geniza Documents, Berkeley Seminar on Institutional Economics (Oct. 1989).

[15] Wolfgang Fikentscher once remarked to me, "The decisions of the Munich traffic court of appeals concerning motor vehicle accidents improved markedly after the judges learned to drive."

[16] The traditional account is developed in J.M. HOLDEN, HISTORY OF NEGOTIABLE INSTRUMENTS IN ENGLISH LAW 27-36 (1955). Holden is criticized in J.H. Baker,

commercial law long after the relevant financial instruments ceased circulating.[17]

In common law systems, intensive litigation alerts judges to the need to change the law.[18] Empirical evidence indicates an intensification of litigation around the time that judges adopt a new precedent.[19] Judges respond to a proliferation of novel disputes by making new law.[20] Thus, the priorities for legal development in a common law system are determined by litigation rates. When judges make common law, however, they cannot do as they please.[21] According to an old principle in jurisprudence, judges cannot make law except when they find a social norm worthy of enforcement by the state. This principle is embodied in the saying, "Judges must *find* common law."[22] Thus Judge Mansfield examined

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The Law Merchant and the Common Law Before 1700, 38 CAMBRIDGE L.J. 295, 296-99 (1979). A revised view, which stresses that Mansfield immersed himself in the minutiae of business practice in order to extract the best principles from it, is found in JAMES S. ROGERS, THE EARLY HISTORY OF THE LAW OF BILLS AND NOTES: A STUDY OF THE ORIGINS OF ANGLO-AMERICAN COMMERCIAL LAW 210-22 (1995). I benefited from discussions on this point with Dan Coquillette, James Gordley, and Jim Rogers.

[17] I refer especially to Article 3 of the Uniform Commercial Code, which was taught in American law schools long after the instruments to which it applied ceased to circulate.

[18] Models of the evolution of the common law toward efficiency are often based upon a bias in litigation favoring more intensive and extensive challenges to inefficient laws. The first paper developing this idea was Paul H. Rubin, *Why Is the Common Law Efficient?*, 6 J. LEGAL STUD. 51 (1977). For a review of proposed mechanisms and their mathematical testing, see Robert Cooter & Lewis Kornhauser, *Can Litigation Improve the Law Without the Help of Judges?*, 9 J. LEGAL STUD. 139 (1980).

[19] *See* George Priest, *Measuring Legal Change*, 3 J.L. ECON. & ORGANIZATION 193, 193-225 (1987). Note, however, that the evidence is unclear as to whether intensified litigation precedes a new precedent, follows one, or both. *See* Robert D. Cooter, *Why Litigants Disagree: A Comment on George Priest's 'Measuring Legal Change'*, 3 J.L. ECON. & ORGANIZATION 227, 227-34 (1987).

[20] *See* MELVIN A. EISENBERG, THE NATURE OF THE COMMON LAW 5-6 (1988).

[21] This is the subject of a famous critique of H.L.A. Hart's theory of positive law by Ronald Dworkin. *See* RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 14-45 (1977); H.L.A. HART, THE CONCEPT OF LAW 181-207 (1961).

[22] For an exposition of this old view of lawmaking, see JOHN DAVIES, LE PRIMER REPORT DES CASES ET MATTERS EN LEY RESOLUES ET ADIUDGES EN LES COURTS DEL ROY EN IRELAND (1615), *reprinted in* DIVINE RIGHT AND DEMOCRACY: AN ANTHOLOGY OF POLITICAL WRITING IN STUART ENGLAND 131 (David Wootton ed., 1986). In a recent article, Edward Rubin traces this line of thought to a belief in medieval Europe that law is at once divine and natural. *See* Edward Rubin, Congress As a Bureaucratic Supervisor, Seminar on Law, Economics, and Organizations (Fall 1995); *see also* STANLEY CHODOROW, CHRISTIAN POLITICAL THEORY AND CHURCH POLITICS IN THE MID-TWELFTH CENTURY: THE ECCLESIOLOGY OF GRATIAN'S DECRETUM 211-46 (1972);

the commercial practices of his day in order to find the foundations of modern commercial law.

Since the eighteenth century, common law countries have developed new institutions to aid the law's evolution. Organizations conduct studies to scrutinize current law and issue reports recommending changes to it. In Britain, the law commissions perform these tasks,[23] and in America these tasks belong to the American Law Institute (ALI) and the National Commission on Uniform State Laws (NCUSL).[24] To illustrate the work of these bodies, the ALI periodically creates ad hoc committees of scholars and lawyers to restate the best practices of courts in particular areas of law, such as the *Restatement of Torts* or the *Restatement of Contracts*. Restatements serve as references for judges, thus increasing uniformity across jurisdictions and probably increasing the pace of legal change. As products and technology change, business communities continually generate new social norms. Organizations like the ALI and the NCUSL try to keep law current with developments in business communities.

C. *Codes and Regulations*

In the eighteenth century, a debate was joined in England over whether the common law was efficient or an archaic residue of obsolete practices.[25] The reforming spirit prevailed in continental Europe, where common law was identified with the losing side in the revolutions that brought Napoleon and his followers to power. The victorious revolutionaries, who regarded judges with suspicion for upholding the old regime, wanted to uproot "medieval" practices and replace them with "rational" ones.[26] The revolution-

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HEINRICH FICHTENAU, LIVING IN THE TENTH CENTURY: MENTALITIES AND SOCIAL ORDERS 403-39 (Patrick J. Geary trans., 1991); EWART LEWIS, MEDIEVAL POLITICAL IDEAS 1-87 (1954). This older view finds an echo in the jurisprudence of Ronald Dworkin, who asserts that courts should find rights and not make policy. *See* DWORKIN, *supra* note 21, at 184-205.

[23] *See* Anthony Ogus, *Economics and Law Reform: Thirty Years of Law Commission Endeavour*, 111 LAW Q. REV. 407, 409-12 (1995) (analyzing "law reform agencies and their goals").

[24] *See generally* Alan Schwartz & Robert E. Scott, *The Political Economy of Private Legislatures*, 143 U. PA. L. REV. 595 (1995) (explaining the role served by the ALI and the NCUSL and describing these organizations).

[25] This debate was joined in the famous attacks of Jeremy Bentham on the common law. For a modern discussion that rehashes this old debate, see Richard A. Posner, *Utilitarianism, Economics, and Legal Theory*, 8 J. LEGAL STUD. 103, 103-40 (1979).

[26] *See* PHILIP DAWSON, PROVINCIAL MAGISTRATES AND REVOLUTIONARY POLITICS

aries proclaimed that law derived its authority from the popular will as expressed through legislators, not from social norms as found by judges. The popular will was identified with rationality, whereas social norms were identified with arbitrary habits. Commissions were appointed to draft codes to supersede the common law. Scholars on the commissions examined pre-revolutionary law with a critical eye and retained some parts of it, rejecting the rest.[27] Legislators enacted the codes into law.

Compared to common law countries, the codifiers in civil law countries apparently have more influence and the judges less. Comparative lawyers, however, debate whether this apparent difference in the two systems is real or illusory.[28] Judges allegedly make law in civil systems by interpreting codes, not finding social norms. Interpreting some codes, however, looks a lot like finding social norms.

To illustrate, consider a code that I alluded to earlier. I already discussed the fact that the ALI and the NCUSL create committees to restate the common law in the United States.[29] In addition, these bodies create committees to draft model codes.[30] The most successful example is the Uniform Commercial Code (UCC), the vast majority of which applies to contracts among merchants, financial instruments, and bankruptcy. Its drafting was directed by Professor Karl Llewellyn, who tried to identify and articulate the

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IN FRANCE, 1789-1795, at 241-74 (1972).

[27] For the history and origins of civil law, see RENE DAVID & JOHN E.C. BRIERLEY, MAJOR LEGAL SYSTEMS IN THE WORLD TODAY: AN INTRODUCTION TO THE COMPARATIVE STUDY OF LAW (3d ed. 1985); PHILIP DAWSON, PROVINCIAL MAGISTRATES AND REVOLUTIONARY POLITICS IN FRANCE, 1789-1795 (1972); JOHN H. MERRYMAN, THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF WESTERN EUROPE AND LATIN AMERICA (2d ed. 1985); FREDERICK H. LAWSON, A COMMON LAWYER LOOKS AT THE CIVIL LAW (1953); KONRAD ZWEIGERT & HEIN KOTZ, INTRODUCTION TO COMPARATIVE LAW (Tony Weir trans., 2d rev. ed. 1992).

[28] The dispute is difficult to resolve because, in reality, neither system exists as a pure type. In common law countries, restatements and codes have legal authority, and judges in civil law countries are influenced by social norms. For alternative views, see Symposium, *Economic Analysis in Civil Law Countries: Past, Present, Future*, 11 INT'L REV. L. & ECON. 261 (1991); *see also* Christian Kirchner, *The Difficult Reception of Law and Economics in Germany*, 11 INT'L REV. L. & ECON. 277, 277 (1991) (analyzing and predicting "the future success of law and economics in the German legal order"); Ugo Mattei & Robert Pardolesi, *Law and Economics in Civil Law Countries: A Comparative Approach*, 11 INT'L REV. L. & ECON. 265, 265 (1991) (arguing that "only a false image of the differences between legal families leads one to believe that [economic analysis of the law] may find difficulties within the civil law orbit").

[29] *See supra* note 24 and accompanying text.

[30] *See* Schwartz & Scott, *supra* note 24, at 596.

best commercial practices in contemporary business communities, much like Judge Mansfield when he modernized British commercial law.[31] After Llewellyn's committees completed their work, the UCC was presented to the legislatures of the American states, all of which eventually enacted it into law. When legislation and common law apply to the same case, legislation prevails, so the UCC displaced much of the common law for commercial transactions. Judges continue to make commercial law by interpreting the UCC. Furthermore, many provisions of the UCC are based upon insight into the best commercial practices. Consequently, making law by interpretation of the UCC closely resembles the process by which common law evolved.

Both common law and civil codes rely heavily upon broad principles that apply in many different circumstances. These principles ideally abstract from particular practices, and the practices give specific content to the principles. To illustrate, the common law of torts typically holds injurers liable for accidents caused by their negligence; judges give this general principle specific content by reference to the actual standards by which particular communities evaluate accidents. Civil law judges can proceed on similar lines when interpreting general principles in a code. For example, "negligence" in civil law can receive specific content by reference to community practices. The reliance on specific practices to interpret general principles allows both systems of law to empower judges to make law from community norms.

In the twentieth century, a massive growth of new law in the industrial countries of Europe and America created the regulatory state. The regulatory state replaced some old laws with new regulations. For example, it hastened the substitution of criminal codes for the common law of crimes, and it instituted new bodies of law including administrative law. As before, I focus on the process of making regulations, not upon the substance.

As explained, a community of scholars, lawyers, and judges typically produces the common law and much of the civil law. In

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[31] *See generally* Ingrid M. Hillinger, *The Article 2 Merchant Rules: Karl Llewellyn's Attempt to Achieve The Good, The True, The Beautiful in Commercial Law*, 73 GEO. L.J. 1141, 1141-84 (1985). "Llewellyn sculpted the merchant rules to bring 'the beautiful' to commercial law and commercial practice. To Llewellyn's eye, legal beauty lay in functional rules—rules that could guide businessmen in conducting their business affairs . . . ." *Id.* at 1147 (footnotes omitted).

contrast, politicians and bureaucrats have more influence upon regulations. Regulations can come from the legislature, the executive, or the bureaucracy. Legislatures produce regulations by familiar processes: committee hearings, debates, bargaining, and majority voting. Executives promulgate rules directly by issuing orders or indirectly by having ministries issue regulations. Ministries usually follow procedures prescribed in legislation for making regulations, which differ across agencies as well as countries.[32] Thus, when agencies create new regulations, they must follow procedures stipulated in the legislation conveying authority upon them, or, in the absence of such stipulations, they must follow procedures prescribed in the Administrative Procedures Act (APA).[33] To illustrate, the Environmental Protection Agency (EPA) must follow procedures specified in the Environmental Protection Act when making regulations, or, in the absence of specific legislative instructions, it must follow the APA.

While the common law and codes rely heavily upon general principles whose specific content comes from community practices, regulations are imposed from the top—they lack a foundation in community practices. Without such a foundation, the regulators would create uncertainty by promulgating *general* principles. Thus, instead of promulgating general principles, regulations rely more heavily upon explicit, detailed instructions. For example, instead of requiring the rungs of ladders to be "reasonably strong" or "strong enough for their intended purposes," a regulation might specify exactly how many kilograms of vertical weight a rung must be capable of supporting.

According to settled legal principles, legislation trumps the common law whenever they conflict. Consequently, regulations crowd out private law in the common law countries. To illustrate, American workers typically work forty hours per week. Federal law requires workers to receive 150% for "over-time work," defined as more than forty hours per week. Regulation of the employment contract prevents the employer and employee from stipulating the

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[32] For a comparative study of German and American administrative law, see Susan Rose-Ackerman, *American Administrative Law Under Siege: Is Germany a Model?*, 107 HARV. L. REV. 1279 (1994).

[33] The APA distinguishes two fundamental types of procedures for two different types of regulations, called "adjudicatory regulations" and "legislative regulations." This distinction is developed especially in Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 401, 414 (1971) and Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 542 (1978).

terms of work that both of them prefer, such as working fifty hours one week and thirty hours the next week.[34]

D. *Structural Adjudication*

Many legal reformers have sought to replace custom with systematic statutes. Underpinning these reform proposals is a theory about why regressive customs should be replaced by progressive statutes. Hart distinguishes laws into rules controlling people ("primary rules") and rules controlling rules ("secondary rules").[35] Primary rules guide the behavior of citizens in a state as they go about their daily lives. For instance, motorists are forbidden to exceed sixty-five miles per hour on most American roads. Secondary rules guide the behavior of state officials as they make, revise, repeal, or apply primary rules. For example, a bill becomes federal law in America when enacted by both houses of Congress and signed by the president. According to Hart's theory, the union of primary and secondary rules defines law.[36] Unlike law, custom lacks secondary rules. Custom does not prescribe procedures for making, revising, or repealing itself. Custom has no constitution or judges. A person who wants to change custom must use whatever means are at hand to convince others to follow different norms.

To illustrate, the Tolai in Papua New Guinea formerly recognized the power of the "big man" in the village to allocate land. Once a market for land developed, this norm exposed villagers to the risk that the big man would sell land to outsiders for personal gain. So the Tolai stopped recognizing such power in the big man. The big man lost the power to sell land as soon as the Tolai no longer recognized it. Instead of the old norm, the Tolai recognized the new norm that everyone in the village must agree to the sale of its land. This change in customary law was endorsed by the land courts.[37]

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[34] *See* Fair Labor Standards Act, 29 U.S.C. §§ 201-219 (1994). The Act provides minimum wages for "covered" employees and also requires that certain employees (not necessarily the same ones) receive time and one-half their "regular rate" of pay for hours worked in excess of 40 in any "workweek."

[35] *See* HART, *supra* note 21, at 77-96.

[36] *See id.* at 114.

[37] *See* Robert D. Cooter, *Inventing Market Property: The Land Courts of Papua New Guinea*, 25 LAW & SOC'Y REV. 759, 788 (1991) (discussing a 1987 Papau New Guinea Land Court case called Malakit v. Tobung).

Customs arise, whereas laws are made.[38] Hart concluded that custom tends to be inflexible because it is not under anyone's rational control.[39] Hart correctly observed that the absence of a prescribed procedure for changing custom can frustrate its reform in some circumstances.[40] In other circumstances, however, the ability to change custom without going through formal procedures gives it more flexibility than law. To stand Hart's conclusion on its head, note that custom arises from consensus, not politics. A consensus can change without going through costly procedures that are vulnerable to special interests. Thus, a custom can disappear without being repealed or change without being amended. Thus, the Tolai did not have to launch a lobbying campaign or overcome political contributions by the big men in order to change their customs regulating the sale of land. From this perspective, customs should be more flexible than statutes.

Hart's critique of custom resembles a socialist's critique of markets. Socialists observe that prices arise, whereas plans are made, and conclude that markets must be inefficient because prices are not determined by deliberation and reasoning. The basic confusion concerns the difference between individual rationality and social efficiency. Individual rationality generally requires deliberation and planning, but social efficiency does not. Research in industrial organization shows that the efficiency or inefficiency of markets is often determined by their structure.[41] Similarly, the efficiency or inefficiency of custom often depends upon the incentive structure producing it. In the language of game theory, the payoff matrix determines the possible equilibria.

These facts suggest how lawmakers, especially courts, should respond to the new law merchant. I propose that modern lawmakers should respond to the new law merchant much like the

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[38] *See* HART, *supra* note 21, at 89-96.

[39] *See id.* at 89-91.

[40] *See id.* at 90-91.

[41] One of the intellectual foundations of American antitrust law is the distinction among industry structure, conduct of firms, and economic performance. *See* JOE S. BAIN, INDUSTRIAL ORGANIZATION 515-79 (2d ed. 1968); RICHARD E. CAVES, AMERICAN INDUSTRY: STRUCTURE, CONDUCT, PERFORMANCE 84-102 (5th ed. 1982). For applications to mergers, see Alan A. Fisher & Robert H. Lande, *Efficiency Considerations in Merger Enforcement*, 71 CAL. L. REV. 1580, 1587-1651 (1983); Lawrence A. Sullivan, *The New Merger Guidelines: An Afterward*, 71 CAL. L. REV. 632, 632-43 (1983). This distinction came under attack as game theory was applied to industrial organization. My term "structural approach" refers to the incentive structure of games, not to the competitiveness of markets.

alleged response of English judges to the old law merchant. Modern lawmakers, however, should take explicit account of insights from modern economics. First, lawmakers should identify actual norms that have arisen in specialized business communities. Second, lawmakers should identify the incentive structure that produced those norms. Third, the efficiency of the incentive structure should be evaluated using analytical tools from economics. Those norms arising from an efficient incentive structure, as ascertained by tests that economists apply to games, should be enforced. I call this procedure the "structural approach" to adjudicating social norms.

The structural approach conflicts with much writing in the economic analysis of law in two respects. First, lawmakers following the structural approach infer the efficiency or inefficiency of a norm, rather than measuring it directly. In contrast, much of the economic analysis of law commends the evaluation of legal rules by cost-benefit techniques. For example, at the end of his classic article, Ronald Coase recommends that judges choose among alternative liability rules by comparing their costs and benefits.[42]

Second, the structural approach that I develop applies to norms, not regularities. To illustrate the difference, men take off their hats when they enter a furnace room or a church.[43] Taking off your hat to escape the heat is different from taking off your hat to satisfy an obligation. The former is a regularity and the latter is a norm. A regularity results from an inclination, whereas a norm imposes an obligation.

Using "norm" to refer to obligations is standard usage among philosophers,[44] and some game theorists also use the term this way.[45] In contrast, social scientists sometimes use "norm" differently, to refer to average behavior. For example, sociologists sometimes use "norm" to mean what people normally do, as opposed to what deviants do. Similarly, statisticians talk about the "normal distribution." People commonly put on hats in a blizzard,

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[42] *See* Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 42-44 (1960). An exception to the enthusiasm for judicial cost-benefit analysis is Richard Epstein's view that judges ought not to have so much discretion. *See* Richard A. Epstein, *The Risks of Risk/Utility*, 48 OHIO ST. L.J. 469, 469-72 (1987).

[43] Equivalently, men put on a hat in a snowstorm or a synagogue.

[44] I adopt the language and much of the theory of norms developed by the philosopher GEORG H. VON WRIGHT, NORM AND ACTION: A LOGICAL ENQUIRY (1963).

[45] *See* ULLMANN-MARGALIT, *supra* note 9, at 12-13.

so this behavior is normal, but it is not a "norm" as I use the term in this Article.

What difference does this distinction make? Economic models seldom distinguish between inclinations and obligations. For the purposes of most studies of markets, the difference can be ignored. I will argue, however, that the difference cannot be ignored in studying behavior relevant to law. Without explaining the sense of obligation, a theory cannot explain the law. Norms arise in a game when the game creates, or evokes, a sense of obligation in the players concerning the strategies that they follow. I develop a predictive theory of "normative equilibria" in Part II by adapting some philosophical concepts to evolutionary game theory.

II. GAMES AND NORMS

Social norms can be regarded as a "public good" subject to the usual corrosive logic of the prisoner's dilemma. Members of a community collectively gain if they all adhere to the norms, but members individually gain if they violate them; therefore, the norms tend to unravel.[46] Reality, however, does not conform to this pessimistic prediction. In fact, many social norms arise and persist without enforcement by the state. I try to explain these facts in this Section of the Article.

A. *Agency Game*

I develop the "agency game" depicted in Figure 1 as the paradigm for cooperation in business. In the agency game, the first player to move, who is called the principal, decides whether or not to make an investment of 1. If no investment is made, the game ends, and the players receive nothing. If an investment is made, the second player, who is called the agent, decides whether to cooperate or appropriate. Appropriation is merely redistributive: the agent appropriates the principal's investment of 1. Consequently, the sum of the payoffs in the northeast cell of Figure 1 equals 0. Cooperation by both players is productive: the investment of 1 grows to 2. Consequently, the sum of the payoffs in the northwest cell of Figure 1 equals 1. When the agent cooperates, the principal recovers his investment and the players split the product (each player receives a profit of 0.5).

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[46] *See* MARY T. DOUGLAS, HOW INSTITUTIONS THINK 9-30 (1986).

FIGURE 1: Agency Game

		Agent: cooperate	Agent: appropriate
Principal: invest		0.5 / 0.5	1.0 / -1.0
Principal: don't invest		0 / 0	0 / 0

In each cell, the northeast number refers to the agent's payoff, and the southwest number refers to the principal's payoff.

If the agency game is played only once, the agent's best move is to appropriate. Knowing this, the principal's best move is not to invest. The one-shot game of investment has a unique solution, which is unproductive.

An enforceable contract can overcome this inefficiency by changing the agent's incentives. For example, recovery of expectation damages gives the principal an incentive to invest regardless of the probability of breach by the agent. Similarly, the costless collection of expectation damages from the agent gives him a strong incentive to perform. Enforcement of contracts, however, typically requires coercion by a third party such as the state. At this point, I want to analyze cooperation without state protection, so I turn to other solutions to the agency problem.

B. *Enduring Relationships*

Investment in a business network often occurs among people with enduring relationships, rather than as a one-shot transaction. To capture this possibility, assume that the agency game depicted in Figure 1 is repeated indefinitely, thus transforming a one-shot game into a super game. In any round of the super game in which the principal invests, the agent enjoys an immediate advantage from appropriating. A successful strategy for preventing such opportunistic behavior, called "tit-for-tat,"[47] occurs when the principal responds in the next round by refusing to invest, but begins investing again in a subsequent round. The experience of immedi-

[47] *See* ROBERT M. AXELROD, THE EVOLUTION OF COOPERATION 13-14 (1984).

ate punishment usually suffices to stop opportunistic behavior by the agent and restores cooperation.

The problem of opportunistic behavior is solvable in many repeated games when players commit to an enduring relationship—provided that they can observe each others' moves and they do not discount the future too heavily.[48] (The exceptions to this generalization need not concern us here.[49]) Enduring relationships can be based upon kinship, friendship, ethnicity, or religion, to name a few. Instead of analyzing the anthropology of business, however, I turn to another solution for the agency problem.

C. *Tentative Relationships*

Many relationships in a business network dissolve and reform easily. To model tentative relationships, assume as before that the agency game is repeated indefinitely. Change the assumption, however, that there are only two players. Instead, assume that there are an infinite number of players, who form into pairs to play each round of the game. At the end of each round, some of these partnerships continue into the next round, and others dissolve. When a partnership dissolves, the players must find new partners for the next round of the game by a random draw from the pool of available players.

Partnerships dissolve in two ways. First, the principal exits after an agent appropriates. Second, an unpredictable change in business

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[48] Maskin and Fudenberg have proven that in any game in which (i) players maximize the discounted sum of single-period utilities, (ii) the discount rate is not too high, and (iii) the players can observe the past history of moves in the game, any pair of payoffs which Pareto dominate the minimax can arise as average-equilibrium payoffs of the repeated game. *See* Drew Fudenberg & Eric Maskin, *The Folk Theorem in Repeated Games with Discounting or with Incomplete Information*, 54 ECONOMETRICA 533, 533-36 (1986). Thus, repetition of the game makes a Pareto improvement possible. *See id.* This theorem, however, still leaves unexplained why the probability of a Pareto efficient solution is as high as empirical studies suggest it to be.

[49] See especially the "weakest link in the chain" game, discussed by Glenn W. Harrison & Jack Hirshleifer, *An Experimental Evaluation of Weakest Link/Best Shot Models of Public Goods*, 97 J. POL. ECON. 201, 221-22 (1989), and Jack Hirshleifer & Juan C.M. Coll, *What Strategies Can Support the Evolutionary Emergence of Cooperation?*, 32 J. CONFLICT RESOL. 367, 394-98 (1988). *See also* Terry L. Anderson & P.J. Hill, *The Evolution of Property Rights: A Study of the American West*, 18 J.L. & ECON. 163, 178-79 (1975) (arguing that "the evolution of property rights is a function of the marginal decision making process"). *See generally* Jack Hirshleifer, *Evolutionary Models in Law and Economics*, RES. L. & ECON. 1, 50-52 (1982) (arguing that cooperative behavior largely depends upon the ecological situation).

conditions makes the relationship unproductive, so both partners agree to end it. If neither party ends the partnership, it continues into the next round of the game.

The equilibrium concept for this kind of game draws upon evolutionary theory.[50] Think of the "players" as hosts for competing behaviors and ask which of these behaviors will survive in competition with the others. Selection favors the behavior that enjoys a higher return. To model this fact, assume that the proportion of players using a particular strategy increases as long as it enjoys an above-average return. Conversely, the proportion of players using a particular strategy decreases as long as it suffers below-average returns. Competition tends to eliminate all below-average strategies, so that every strategy surviving in equilibrium earns the same rate of return.

When a payoff matrix, like the one depicted in Figure 1, is embedded in an evolutionary model, a familiar result to theorists is a mixed equilibrium in which most agents cooperate and some agents appropriate.[51] To see why this result occurs, consider the fact that cooperators form stable relationships, whereas non-cooperating agents only play once with any particular principal.[52] Consequently, the agent who follows the pure strategy of cooperation expects to enjoy a modest payoff in a high proportion of rounds, whereas the agent who follows the pure strategy of noncooperation expects to enjoy a high payoff in a low proportion of rounds. In a mixed equilibrium, these two strategies have the same expected value.

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[50] For an excellent review of evolution as applied to game theory, see Abhijit Bannerjee & Jorgen W. Weibull, Evolution and Rationality: Some Recent Game-Theoretic Results, Research Papers in Economics (Dep't of Econ., Univ. of Stockholm, 1993). For a discussion of the relationship between law and evolutionary theory, see E. Donald Elliott, *The Evolutionary Tradition in Jurisprudence*, 85 COLUM. L. REV. 38, 38-40 (1985); E. Donald Elliott et al., *Toward a Theory of Statutory Evolution: The Federalization of Environmental Law*, 1 J.L. ECON. & ORGANIZATION 313, 314-17 (1985). For a pioneering article on evolutionary models of law, see Hirshleifer, *supra* note 49. For a pioneering book on evolutionary models of economics, see RICHARD R. NELSON & SIDNEY G. WINTER, AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE (1982).

[51] *See* Rudolf Schussler, Anonymous Exchange Cooperation, Paper Presented at the 4th International Conference on Social Justice Research (July 1993).

[52] For this formulation, see *id.*; Robyn Dawes & John Orbell, Social Welfare, Cooperators' Advantages, and the Option of Not Playing the Game, Paper Presented at the 4th International Conference on Social Justice Research (July 1993).

D. *What Is a Norm?*

I have shown that relationships can solve the agency game through tit-for-tat or exit. In communities of people, however, such games usually generate norms. Before developing a theory of norms, I explain what they are. The question, "What is a norm?," is even more general than the question "What is a law?" These questions have been addressed by moral philosophers over many generations. Rather than reviewing the answers, I distill some conclusions relevant to behavioral theories.

Norms are practical in the sense that they direct behavior. To direct behavior effectively, a speaker ought to say who must do what and when. A complete norm provides these instructions explicitly. Thus the canonical form of a norm, according to one formulation,[53] states that each member of a certain class of people (norm's subjects) has an obligation (norm's character) to do something (norm's act) in certain circumstances (norm's conditions), subject to a penalty for noncompliance (norm's sanction). For example, drivers ought to remain within the posted speed limit in all circumstances or pay a fine.

The fact that a law was enacted provides a reason for citizens to do what it requires. Similarly, the fact that a norm was internalized provides a reason for the decisionmaker to do what it requires. To illustrate, suppose that I initially regard the decision to smoke as a purely personal preference, in which the individual should weigh immediate pleasure against future harm to his health. Someone subsequently convinces me, contrary to my previous beliefs, that smoking is morally wrong ("God forbids us to harm ourselves for pleasure's sake," "You risk orphaning your child," etc.). After my conversion, I have an additional reason for not smoking; smoking violates a moral rule that I now hold.

Psychologists have extensively researched the internalization of norms. Stages in the development of moral reasoning among children have been studied, notably by Piaget and Kohlberg.[54]

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[53] Here I follow the account of the "kernel" of a norm in VON WRIGHT, *supra* note 44, at 70-92. Other elements could be added to the canonical form of a norm, including the enforcer of the norm and whether the enforcer is permitted or obligated to enforce it.

[54] Piaget presented his ideas about stages in mental development in a series of books in French beginning in 1937, including the English translation JEAN PIAGET, THE MORAL JUDGMENT OF THE CHILD 13-108 (Marjorie Gabain trans., 1965). Kohlberg also developed his ideas in a series of books and articles over many years; see especially Lawrence Kohlberg, *The Philosophy of Moral Development: Moral Stages*

According to their theories, a child perfects the ability to internalize norms as she acquires a capacity for general reasoning. Their research, like my characterization of internalization as acceptance of a new reason for acting, makes the process sound cool and rational. In contrast, "depth psychology" often traces the internalization of morality to irrational processes that are hot and inchoate. According to these theories, internalization of morality ingrains new impulses in a child through emotional experiences. An example is Freud's theory that morality is the "ghost in the nursery," meaning the repressed memory of parental punishments.[55] Repression transmutes fear into guilt, which changes behavior.

Both types of internalization—accepting a new reason and ingraining a new impulse—create a new motive, which can tip the individual's motivational balance. Economic models often view motivation as a calculus of psychological benefits and costs.[56] From this perspective, internalization attaches a "guilt penalty" to violating a norm, which can change the sign of the net psychological benefits.[57] To illustrate, consider how the payoffs in Figure 1 might change if the agent internalizes a norm forbidding the appropriation of the principal's investment.[58] In Figure 2, the

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and the Idea of Justice, *in* 1 ESSAYS ON MORAL DEVELOPMENT 1, 409-12 (1981), in which the appendix outlines his account of the six stages of moral development. Flaws in Kohlberg's approach have generated much criticism from feminists, notably CAROL GILLIGAN, IN A DIFFERENT VOICE: PSYCHOLOGICAL THEORY AND WOMEN'S DEVELOPMENT 18-23 (1982). *See also* Nona P. Lyons, *Two Perspectives: On Self, Relationships, and Morality*, *in* MAPPING THE MORAL DOMAIN 21 (Carol Gilligan et al. eds., 1988)

[55] In Freud's account, morality is the repressed memory of punishment and threats from a child's father. In technical terms, the super-ego emerges when a child represses his Oedipal fears and identifies with his father. *See* SIGMUND FREUD, THE EGO AND THE ID 18-29 (James Strachey ed. & Joan Riviere trans., W.W. Norton & Co. 1960). A clear explanation is in RICHARD WOLLHEIM, FREUD 177-218 (1971).

[56] Antiutilitarian philosophers typically reject the theory that conforming to a principle of morality involves weighing alternative reasons and balancing them. For example, see the account of "exclusionary reasons" in JOSEPH RAZ, THE MORALITY OF FREEDOM 267-87 (1986).

[57] On the use of a "guilt penalty" to change the payoff matrix in a game, see MARK CASSON, THE ECONOMICS OF BUSINESS CULTURE: GAME THEORY, TRANSACTION COSTS, AND ECONOMIC PERFORMANCE 29-52 (1991).

[58] The following is a rare example of a discussion of internalization by a law-and-economics scholar:

> [A] player who had been punished in tit-for-tat fashion x-times in succession for unprovoked defections in a Prisoner's Dilemma game would, at that point, internalize the punishment. After internalization, the player would, like Pavlov's dog, automatically deduct the expected amount of punishment

agent enjoys a payoff of 1 from appropriating. After internalizing the norm, however, the agent might experience a cost of 0.7 from violating it. After internalization, the net payoff from appropriating now equals 0.3. Cooperation is the dominant strategy for both players in Figure 2.

FIGURE 2: Internalization and Agency Game

		Agent: cooperate	Agent: appropriate
Principal	invest	0.5 / 0.5	0.3 / -1.0
	don't invest	0 / 0	0 / 0

In each cell, the northeast number refers to the agent's payoff, and the southwest number refers to the principal's payoff.

Figure 2 depicts how internalization can tip the motivational balance of a decisionmaker who maximizes his net benefits. Some moral theorists, especially those in the tradition of Kant, object to the characterization of motivation in terms of benefits and costs. The precise account of how internalization can tip the motivational balance, however, does not matter for purposes of this Article.

Instead of analyzing moral motivations, however, I want to describe an important connection between morality and business. Max Weber argued that the emergence of capitalism depended upon an ethic, first perfected among Protestant Christians, in which the individual internalized an occupational role.[59] "Internalization" here means accepting the norms of an occupation so intimately that they become part of the individual's self-conception, thus altering his perceived self-interest. Internalization of an occupational role, according to Weber, increases the dedication and creativity with which individuals pursue business goals.

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from the payoffs he previously perceived to be associated with his unprovoked defections.

Robert C. Ellickson, *Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics*, 65 CHI.-KENT L. REV. 23, 46 (1989).

[59] *See* MAX WEBER, THE PROTESTANT ETHIC AND THE SPIRIT OF CAPITALISM 27 (Talcott Parsons trans., 1958).

Similarly, Durkheim asked how a modern society can divide labor so finely and still hold itself together.[60] He found the answer in the internalization of occupational roles. Occupational roles combine technical skill and social norms. According to Durkheim, complimentary roles coordinate the work of strangers and allow them to develop specialized skills that result in a high level of efficiency.[61]

By dispensing with the need for state enforcement, internalization of norms is the ultimate decentralization of law. Consequently, the internalization of occupational roles is critical to decentralizing economic law. This view has been revived by Casson in a recent book applying game theory to business practice.[62] Modelling business norms can give new vitality to an old vision of what makes capitalism possible.

E. *Existence*

How can an observer tell whether a norm or law exists in a community of people? According to the positive theory of law,[63] a norm or law exists in a community when it achieves a minimum level of effectiveness in directing behavior. Otherwise, the community does not have the norm or law in question. This conclusion provides a building block in the theory of norms and games. The many refinements and criticisms of the positivist theory of norms need not concern us.[64]

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[60] *See* EMILE DURKHEIM, THE DIVISION OF LABOR IN SOCIETY 68-87 (W.D. Halls trans., 1984).

[61] *See id.*

[62] Casson states:

> This book has a simple point to make. Overall economic performance depends on transaction costs, and these mainly reflect the level of trust in the economy. The level of trust depends in turn on culture. An effective culture has a strong moral content. Morality can overcome problems that formal procedures—based on monitoring compliance with contracts—cannot. A strong culture therefore reduces transaction costs and enhances performance—the success of an economy depends on the quality of its culture.

CASSON, *supra* note 57, at 3.

[63] A summary of the positive theory of law is in DWORKIN, *supra* note 21, at 14-22.

[64] This theory is vulnerable to the criticism that a norm might satisfy the positivist existence conditions in one community, whereas people in other communities regard it as thoroughly immoral. To illustrate, many tribes impose an obligation on their members to revenge the death of a relative, even though clan revenge seems abhorrent to most modern people. Thus, critics have argued that a rule must satisfy certain minimal conditions of morality before it can be called a law, regardless of

The requirements for the effectiveness of social norms are different than for state laws. As explained, someone who has internalized a norm feels guilt from violating it and pride from obeying it.[65] Consequently, internalization may tip the balance for a decisionmaker in favor of obeying a norm. In addition, norms are necessarily general in their application. It follows that someone who has internalized a norm feels that others ought to obey it as well and, therefore, tends to criticize or punish people who violate it. The threat of criticism and punishment deters some people from violating a norm. Consequently, when a significant proportion of people in a community internalize a norm, it becomes effective in directing behavior. Thus, a social norm or custom exists in a community when enough people internalize it to make it effective.

This analysis suggests a prescription for the empirical investigation of customary norms. First, formulate the hypothesis that a norm exists. To do so, state the norm in canonical form and describe the community in which it allegedly exists. Second, to test whether the hypothesis is true or false, collect information from the community concerning the internalization of the norm. The hypothesis that a customary norm exists in a community is true if a sufficient number of its members internalize the norm.

State law is different from social norms in an important respect. As explained, a social norm is ineffective in a community and does not exist unless people internalize it. Similarly, if citizens internalize state laws, then states laws are effective. State law can be effective, however, without its internalization by the citizens. Earlier I mentioned the fact that the state has rules for making rules.[66] (The secondary rules prescribe how to make the primary rules.) When making a rule, the state attaches sanctions to obligations, and officials must apply the sanctions to rule-breakers. If official

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whether or not it satisfies positivist existence conditions. For one of the grand, eloquent debates in jurisprudence concerning this subject, see LON L. FULLER, THE MORALITY OF LAW (2d ed. 1964); Lon L. Fuller, *Positivism and Fidelity to Law–A Reply to Professor Hart*, 71 HARV. L. REV. 630 (1958); H.L.A. Hart, *Positivism and the Separation of Law and Morals*, 71 HARV. L. REV. 593 (1958).

[65] These feelings manifest themselves in various behaviors that signal to others what the actor did and change the optimal strategies in games. For example, a person may prefer to cooperate in a game because involuntary emotional responses increase the risk of detection for "cheaters." For an account of emotional responses as signals, see ROBERT H. FRANK, PASSIONS WITHIN REASON: THE STRATEGIC ROLE OF THE EMOTIONS 1-19, 43-70 (1988).

[66] *See supra* notes 35-36 and accompanying text.

sanctions are effective, state law may control behavior, even though citizens do not internalize the law. For example, the intermittent enforcement of a speed limit of fifty-five miles per hour may slow the traffic down to sixty-five miles per hour, in which case behavior is controlled by a law that few people internalize and obey.[67]

F. *Emergence*

Having discussed how individuals internalize norms, I turn to the question of how norms arise in a business community. Recall the agency game in which the principal gives the agent control over an asset. More cooperation increases the level of trust, which increases the expected value of the game to all of the players. Consequently, everyone enjoys a positive externality when more agents cooperate and fewer agents appropriate. Conversely, all players suffer a negative externality when more players appropriate.[68]

The principal will invest if he thinks that his agent is a cooperator, whereas he will not invest if he thinks that his agent is an appropriator. The players in games often provide signals concerning the strategies that they follow. In the agency game, every agent has an incentive to provide signals that induce principals to invest. Every agent will signal "cooperation," regardless of whether his real strategy is cooperation or appropriation. Consequently, a consensus will arise in the community about how agents ought to act. Such a consensus will convince some members of the community to internalize the norm and to ingrain it in the young. Thus a new norm will emerge in the community.[69]

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[67] This example is especially interesting because, while almost everyone disobeys the law, most people may still believe that it is the best law to have. For example, it may be better to set the speed limit at "55" so people drive at "65" than to have the law say "65" so people drive "75."

[68] Cooperators also create a negative externality by soaking up the pool of available business partners, whereas appropriators increase the pool because their partnerships dissolve quickly. Cooperation thus produces a positive externality and a negative externality, and I implicitly assume that the former is larger than the latter.

[69] Arguing along similar lines, Pettit says that norms will be "resilient" when nearly everyone approves of those that benefit others and disapproves of those that harm others. *See* Philip Pettit, Virtus Normativa: *Rational Choice Perspectives*, 100 ETHICS 725, 753-55 (1990).

For a similar account of the emergence of norms, expressed in the language of philosophy, see Allan Gibbard, *Norms, Discussion, and Ritual: Evolutionary Puzzles*, 100 ETHICS 787, 799-802 (1990). Gibbard states:

G. *Marginal Cooperator*

How does the emergence of a business norm affect the equilibrium level of investment and production? I will demonstrate that individuals typically change the equilibrium by punishing violators of the norm, but not by obeying it themselves.

In the agency game, people who internalize the norm will cooperate, not appropriate, even if the objective payoff for cooperating is slightly lower than for appropriating. I call this behavior "principled" conformity to the norm. In contrast, people who do not internalize the norm will cooperate only if the objective payoff for cooperation is at least as high as for appropriation. I call this "adventitious" conformity to the norm.

In a mixed equilibrium, some players pursue the strategy of cooperation, and others pursue the strategy of appropriation. In an evolutionary equilibrium, all strategies that persist yield the same objective payoff. When all strategies yield the same payoff, some people conform to the norm adventitiously. Equilibrium is reached by adjusting the number of people who conform adventitiously to the norm. Consequently, the presence of people who conform from principle does not affect the equilibrium.

For example, assume the rate of return for players in the agency game equalizes when eighty players cooperate and twenty players appropriate. Furthermore, assume that sixty players cooperate from principle and that twenty players cooperate adventitiously. Now assume that one of the appropriators is convinced to change his evil ways and start cooperating. The change in his behavior causes a disequilibrium in which eighty-one players cooperate and nineteen players appropriate. Equilibrium will be restored by one of the

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> My hypothesis is this: There is a special kind of psychic state, *accepting a norm*, that serves to coordinate actions through discussion. How might this work? Think of a norm simply as an imperative saying what to do in some kind of situation, or how to feel. . . . One needed characteristic is a tie to action: a person who accepts a norm tends to abide by it when he encounters a situation to which it applies. I call this *normative governance*. Other motivations may overcome this tendency, but the tendency, I speculate, has some force nevertheless. A second needed characteristic is responsiveness to discussion, a kind of responsiveness that will lead to consensus. I hypothesize two kinds of responsiveness. One is sheer influenceability: in normative discussion, a person will avow norms. Others exposed to these normative avowals will tend to accept the norms avowed. A second kind of responsiveness is to demands for consistency; this limits one's ability to tailor the norms one avows to one's own case.

Id. at 791.

adventitious cooperators changing his strategy from cooperation to appropriation. Thus, the internalization of the norm by one more player changes the identity of the cooperators, but not their number.

Marginal players change their behavior when objective payoffs change by a small amount, whereas inframarginal players persist in their current behavior. The argument in this Section can be summarized by stating that adventitious conformity is marginal and principled conformity is inframarginal in a mixed evolutionary equilibrium. A change in the number of inframarginal players does not change the equilibrium, which is determined by marginal players.

H. *Cheap Pain*

I will now explain how the emergence of a norm changes the equilibrium levels of production and investment. A person who internalizes a norm may be willing to devote modest amounts of his resources to enforcing it for the benefit of others. Informal sanctions like gossip and ostracism are cheap pain.[70] These

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[70] In discussing the problem of sanctioning wrongdoers by gossip, Pettit writes:

> But people do not have to identify violators intentionally; they just have to be around in sufficient numbers to make it likely that violators will be noticed. And equally, people do not have to discipline violators intentionally, going out of their way for example to rebuke them or report them to others; they just have to disapprove of them—or at least be assumed to disapprove of them—whether that attitude ever issues in intentional activity.

Pettit, *supra* note 69, at 739 (citation omitted).

Pettit's argument is based on the motivation assumption that people are moved by a concern that others not think badly of them. For a more pessimistic assessment of informal sanctions, see Douglas D. Heckathorn, *Collective Action and the Second-Order Free-Rider Problem*, 1 RATIONALITY & SOC'Y 78, 80-81 (1989). For a discussion of how overenforcement might arise from the interdependence of enforcement actions by private property owners, see David de Meza & J.R. Gould, *The Social Efficiency of Private Decisions to Enforce Property Rights*, 100 J. POL. ECON. 561, 561-63 (1992). For an argument that markets will generate new technologies for enforcing property rights, see Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347 (1967). For theories of ostracism, see OSTRACISM: A SOCIAL AND BIOLOGICAL PHENOMENON (Margaret Gruter & Roger D. Masters eds., 1986).

Consider this instructive example of the use of reputation to achieve a policy goal at the EPA during the Bush administration. Having identified the Monsanto Corporation as the worst chemical polluter in the nation, the director of the EPA got the director of Monsanto to pledge major reductions in emissions to avoid bad publicity and possible legislation. The EPA then used "logrolling" to get other firms to match the percentage reductions by Monsanto. This program of voluntary compliance was highly successful with larger firms, but not with smaller firms. *See* Personal Communication with E. Donald Elliott, General Counsel of the EPA.

sanctions increase the expected cost of violating the norm, which increases conformity to it. Thus, the emergence of a business norm increases cooperation by deterring agents from appropriating.

I will illustrate this point through use of the agency game. Immediate self-interest provides sufficient reason for principals to exit from relations with appropriating agents. Enforcement, however, often goes beyond the narrow self-interest of the enforcer. The possibility of principled enforcement can be captured in the agency game by introducing reputation.

Assume that partnership is selective, not random, and that selection is based upon the reputation of a potential partner. Someone's reputation consists of information about his past behavior that disseminates among other players. Thus, the benefits of accurate reputation diffuse among the players of the game.

While benefits diffuse, the costs of disseminating information about the reputation of others falls upon the disseminator. People who have internalized the norm are prepared to bear the modest costs of enforcing it for the benefit of others. Consequently, the internalization of norms promotes the dissemination of information about wrongdoers. In technical terms, internalization of norms overcomes the tendency to "free ride" on the enforcement efforts of others.

I. *Dynamics*

I have explained that people who internalize a norm increase the equilibrium level of cooperation by punishing appropriators. I will develop this argument in a dynamic setting.

People who internalize a norm will, presumably, pay something to enforce it. As the cost of enforcing the norm increases, however, fewer people are willing to pay the higher costs. This situation is depicted in Figure 3. According to Figure 3, eighty percent of the population has internalized the norm, and twenty percent has externalized it. The function E(c) slopes down to indicate the decline in enforcers E from eighty percent as the cost of enforcing c increases.[71]

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[71] Here is a strict definition of terms, using the density function f(s) over willingness-to-pay to enforce the social norm:

$$E = 1 - \int_0^c f(s) .$$

FIGURE 3: Proportion of Enforcers

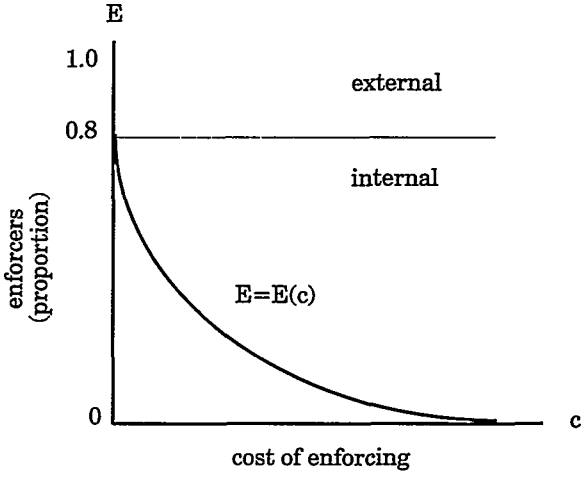

Figure 3 depicts how much individuals are willing to pay to enforce a norm. Now consider the amount that enforcement actually costs. The informal punishments that people use to enforce norms include criticism, shunning, and force. To illustrate, people who break rules of social etiquette may experience gossip, ostracism, and vandalism. Similarly, people who break the norms of a profession may suffer loss of reputation, expulsion, or predatory competition. The person who spontaneously punishes someone in these ways usually runs some risk of confrontation or revenge, as well as any direct monetary costs. The risk of confrontation and revenge, however, tends to fall as the proportion of people willing to act as punishers increases. In other words, the enforcer's cost of punishing decreases as the proportion of enforcers increases.[72] Thus informal enforcement, like state enforcement, enjoys increasing returns to scale.

These facts are depicted in Figure 4, which graphs the relationship between the cost of punishing someone who breaks a social norm and the proportion of people willing to bear that cost. As the proportion of enforcers E rises towards the maximum possible value 1, the cost of enforcement falls to its minimum value $\underline{c}$. Conversely,

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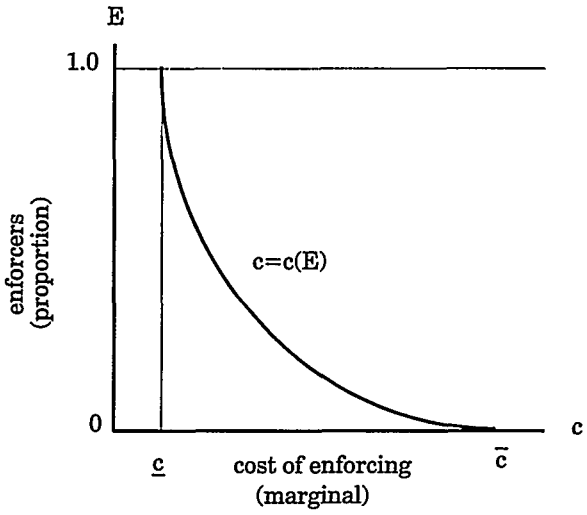
[72] Peter Huang constructs a similar model in which people are more inclined to do their duty when others do theirs. *See* Peter H. Huang & Ho-Mou Wu, *Emotional Responses in Litigation*, 12 INT'L REV. L. & ECON. 31 (1992).

as the proportion of enforcers E falls toward 0, the cost of enforcement rises to its maximum level $\bar{c}$. So, the cost of enforcement rises at an indefinite rate from $\underline{c}$ to $\bar{c}$ as the number of enforcers falls (the curve need not be perfectly smooth as depicted in Figure 4).

FIGURE 4: Enforcement Costs



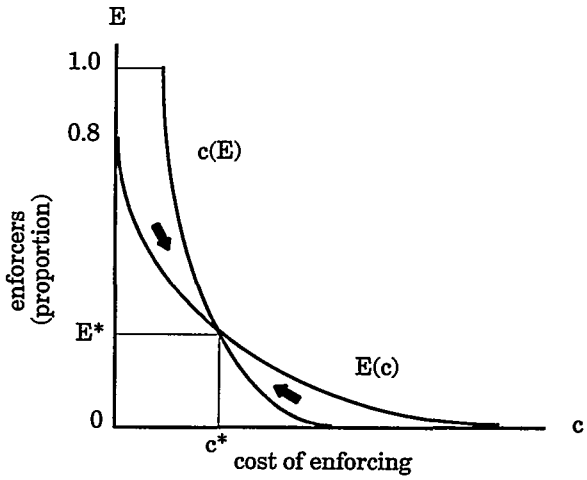
Now let us compare the two preceding figures. Figure 3 takes the cost of enforcement as given and depicts how many people actually enforce the norm. Figure 4 depicts how many enforcers are required to sustain a given cost of enforcement. If the actual number of enforcers equals the number required to sustain the current cost of enforcement, then the cost of enforcement remains constant. In other words, an intersection of the curves graphed in Figures 3 and 4 indicates an equilibrium in the number of enforcers and the cost of enforcement.[73]

Graphing several different equilibria helps to explain some actual cases observed in social life. I begin with the common situation discussed in preceding sections, in which some proportion of the people who internalize the norm enforce it on others. In Figure 5, an equilibrium occurs where the two curves intersect at (E*, c*). The dynamic behavior of the system is easily explained.

[73] To be precise, an equilibrium is a pair of values (E*, c*) such that E* = E(c*) and c* = c(E*).

If the actual number of enforcers exceeds the number required to sustain the current cost of enforcement, then the cost of enforcement will fall. This situation occurs in Figure 5 for values of the variables less than (E*, c*). The directional arrows in Figure 5 indicate the direction of change. Conversely, if the actual number of enforcers falls short of the number required to sustain the current cost of enforcement, then the cost of enforcement will rise. This situation occurs in Figure 5 for values of the variables greater than (E*, c*), as indicated by the directional arrow. Notice that the directional arrows in Figure 5 point toward the intersection of the two curves at (E*, c*), indicating that this equilibrium is stable.[74]

FIGURE 5: Stable Equilibrium



Now I turn to another case with two extreme possibilities: Either everyone who internalizes the norm enforces it, or else no one enforces it.[75] This situation occurs in an internal equilibrium as depicted in Figure 6. In Figure 6, for values of the variables

[74] The stability conditions are as follows: If E(c) cuts c(E) from below, then the equilibrium is stable. If E(c) cuts c(E) from above, then the equilibrium is unstable.

[75] This possibility is discussed by Taylor, who writes: "*Cooperation may still be rational* . . . provided that there are *some* players who Cooperate conditionally on the Cooperation of *all* the other Cooperators, both conditional and unconditional, and that all the Cooperators' discount rates are not too great." TAYLOR, POSSIBILITY, *supra* note 9, at 104. Similarly, Casson writes: "If the leader can just 'prime the pump' by getting a few more people to be honest, then learning effects will increase optimism and cause a further improvement in integrity. . . ." CASSON, *supra* note 57, at 83.

exceeding (E*, c*), the actual number of enforcers exceeds the number required to sustain the current cost of enforcement. The cost of enforcement therefore falls, as indicated by the directional arrow pointing away from (E*, c*). Similarly, for values of the variables falling short of (E*, c*), the actual number of enforcers falls short of the number required to sustain the current cost of enforcement, so the cost of enforcement rises. The directional arrow pointing away from (E*, c*) indicates this fact. According to the directional arrows in Figure 6, any slight movement away from the unstable equilibrium at (E*, c*) will send the system to the upper corner, denoted (0.8, $\bar{c}$), or to the lower corner, denoted (0, $\underline{c}$). In the upper corner, everyone who internalizes the norm enforces it, and in the lower corner no one enforces the norm.

FIGURE 6: Unstable Equilibrium

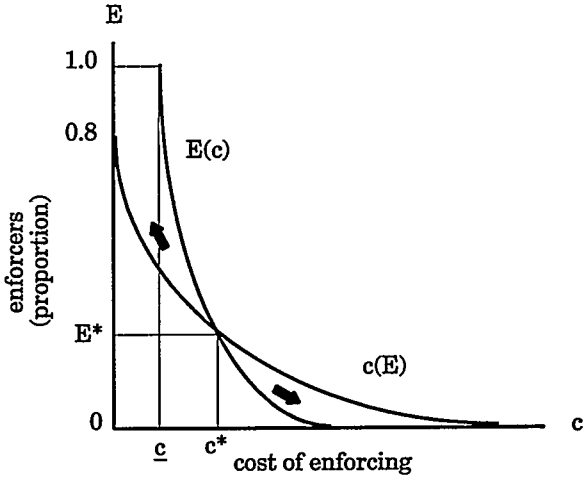
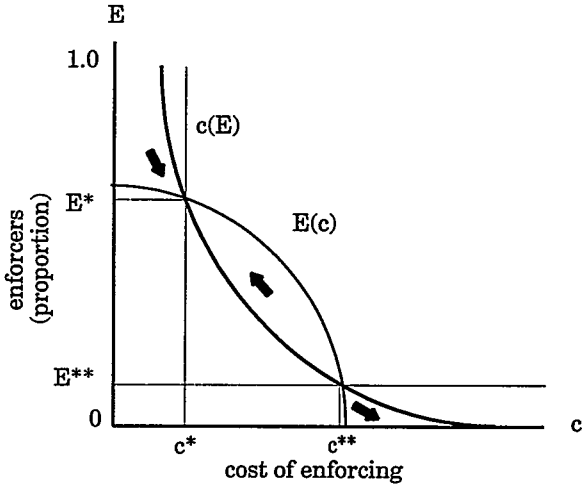


Figure 6 depicts a social norm that can only exist at a high level of enforcement. (E*, c*) is the tipping point. If the system begins above the tipping point, it "tips in" to a high level of enforcement of the norm. Conversely, if the system begins below the tipping point, it "tips out" and the norm disappears. Many variations of this theme are possible by modifying the shapes of the curves. For example, in Figure 7 most people enforce the norm, unless enforcement falls below the tipping value, in which case few people enforce it. The instability occurs when (i) a small increase in the number of enforcers causes a large decrease in the cost of enforce-

ment[76] and (ii) a small decrease in the price of enforcement causes a large increase in the number of enforcers.[77]

FIGURE 7: Most Conform or Few Conform



If the system has "tipped out," a policy that causes the system to "tip in" can dramatically increase conformity to the norm. This fact can provide a justification for Durkheim's expressive theory of the state.[78] This theory asserts that the state should express the commitment of society to fundamental values by recognizing them in law. State enactment, without formal enforcement, can sometimes tip the social system into conformity with the law by causing citizens to believe correctly that more of them will enforce the norm.

To illustrate such a self-fulfilling prophesy, many states have enacted ordinances prohibiting smoking in public buildings such as airports. Officials almost never enforce these rules. The posting of the ordinances, however, apparently causes citizens to enforce the rules against violators. Knowing this, most smokers conform to the rules. In terms of the preceding figures, enactment of the anti-

[76] In other words, the cost of enforcement is highly elastic with respect to the number of enforcers.

[77] In other words, the number of enforcers is highly elastic with respect to the cost of enforcement.

[78] An insightful account of Durkheim's theory is in DAVID GARLAND, PUNISHMENT AND MODERN SOCIETY: A STUDY IN SOCIAL THEORY 23-46 (1990).

smoking ordinance lowered the perceived cost of confrontation in complaining to smokers, which shifted c(E) down and caused the system to tip into a new equilibrium with a high level of conformity.[79]

A personal anecdote provides another example. The city of Berkeley recently enacted an ordinance requiring owners to clean up after their dogs (the "pooper-scooper" law). Enactment of the law clarified vague social norms concerning courtesy. After the law's passage, people became more aggressive about enforcing what common courtesy demands. Apparently it is easier to say, "Obey the law," than to say, "Don't be so rude." The ordinance tipped the balance in favor of private enforcement of the norm and changed the behavior of dog owners.

In these two examples, the law solves the problem it addresses without formal enforcement. In other cases, however, state enforcement may be required to tip the balance toward conforming to a social norm. The possibility of state enforcement provides a credible threat to citizens who complain about the violation of social norms. The threat is credible insofar as the state will enforce its laws against those who violate them.

J. *Bargaining Game*

I have shown that people who internalize a business norm cause more cooperation in a community, not by obeying the norm themselves, but by punishing others who violate it. This conclusion follows from the fact that the people who internalize the norm are inframarginal with respect to conformity and marginal with respect to enforcement. Now I turn from norms of cooperation to norms of distribution.

In the agency game characterized by Figure 1, cooperation by both players creates a valuable product. An equal division of the product was prescribed by assumption in Figure 1.[80] In business, however, the parties usually bargain over shares of a cooperative product which involves a problem of distribution. Now I want to

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[79] For a fascinating collection of studies on public policy toward smoking, see ROBERT L. RABIN & STEPHEN D. SUGARMAN, SMOKING POLICY: LAW, POLITICS, AND CULTURE (1993).

[80] Strictly speaking, the payoff matrix stipulates an equal division of the surplus from cooperation in each round of the game. Even without side payments, however, a player who wants a larger share can insist on appropriating rather than cooperating in some proportion of rounds.

explain the obstacle to the emergence of norms of distribution. I will superimpose a bargaining game upon the agency game.

In the agency game, the parties can make a cooperative product of 1, but they must first agree on how to divide it. Assume the parties bargain for a finite amount of time over the agent's share of the cooperative product, denoted b, where $0 < b < 1$. If the parties agree before time expires, the cooperative payoffs equal ((1-b), b). If time expires without an agreement, the game ends with payoffs (0, 0). If a bargain is struck, the principal promises to invest and the agent promises to cooperate, and both players agree on their shares of the product.

Soft bargaining is a public good in the sense that everyone enjoys a positive externality when other players bargain soft. The positive externality manifests in a higher probability of cooperation and a larger expected share of its benefits. Conversely, hard bargaining is a public bad in the sense that everyone suffers a negative externality when other players bargain hard. In spite of this fact, a business community is unlikely to develop a norm requiring soft bargaining. No such norm can emerge because of the incentives to signal, as I explain.

An evolutionary equilibrium in the bargaining game typically has a mixed solution, with some players bargaining hard and others bargaining soft. To drive a hard bargain, a player must signal that he is a hard bargainer. People who represent themselves as hard bargainers are likely to defend hard bargaining in principle. Even soft bargainers may gain an advantage by representing themselves as hard bargainers. Consequently, many people will signal that they follow a hard-bargaining strategy. Given this fact, no consensus will emerge that people *ought* to bargain soft. Instead of a consensus, a mixture of opinions about the ethics of bargaining will mirror the mixture of equilibrium strategies actually followed.

Notice that incentives for signaling are the opposite in the agency game and bargaining game. In the agency game, players represent themselves as cooperators, and cooperation is a public good. In the bargaining game, many players represent themselves as hard bargainers, and hard bargaining is a public bad. My theory predicts that community norms will emerge when signaling and public goods converge, whereas divergence between them will yield a stew of public opinion. Thus, my theory predicts the emergence of business norms approving of cooperation and disapproving of appropriation. My theory predicts, however, that no norm will emerge disapproving of hard bargaining.

These predictions seem broadly consistent with the facts. In general, business communities do not seem to develop substantive rules stipulating fair prices. "Fair prices," such as an interest rate ceiling, have usually been imposed upon businesses. Instead, bargaining norms tend to be procedural. For many procedures, public representation converges with the public interest. For example, everyone has an incentive to denounce fraud, including the people who practice it. Consequently, my theory predicts that a business community will have norms prohibiting fraud, but no norm prohibiting hard bargaining.

III. STRUCTURAL ADJUDICATION

This Part applies the theory of norms and games to the role of the state in decentralized lawmaking. In democracies, coercive laws are typically justified by the principle of majority rule. The justification for enforcing social norms, however, is quite different. Social norms are selectively enforced by judges in common law countries. I call this "structural adjudication" by judges. In the remainder of the Article, I develop a theory of the social structures that should guide adjudication.

A. *Serendipity*

According to the utilitarian tradition, people typically feel obligated to do what is socially efficient and to avoid doing what is socially inefficient.[81] In so far as this generalization is true, the efficient equilibria in a game will become norms and the inefficient equilibria will not even persist as regularities. According to recent empirical research in sociology, games tend to settle into equilibria that satisfy the sense of fairness among the players.[82] Combining these two predictions leads to the conclusion that perceived fairness and efficiency are necessary and sufficient for the evolution of a social norm. Structural adjudication begins

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[81] *See generally* JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION 13 (J.H. Burns & H.L.A. Hart eds., 1970) (discussing utilitarian theory). For a modern utilitarian theory of social norms, see ROBERT ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 123-264 (1991).

[82] For a review of this research, see generally Robert B. Chaldini, Carl A. Kallgren & Raymond R. Reno, *A Focus Thoery of Normative Conduct: A Theoretical Refinement and Reevaluation of the Role of Norms in Human Behavior*, *in* 24 ADVANCES IN EXPERIMENTAL PSYCHOLOGY 201 (M.P. Hanna ed., 1991).

with the observation that business communities generate norms to encourage cooperation and discourage appropriation. The benefits of these norms diffuse throughout the community, so individuals tend to free ride on the enforcement efforts of others. Internalization of norms partially overcomes the problem of underenforcement. Enforcement by the state can sometimes improve the situation still further.[83] In these conditions, enforcement of social norms is fair by the norms of the community to which they apply and efficient by the standards of economics. Fairness and efficiency are strong justifications for the state to enforce a social norm.

If the serendipity of utilitarianism characterized social life, the adjudication of social norms would be easy. In fact, social norms sometimes fail to emerge when needed, or they emerge when not needed for fairness or efficiency. I explore some "community failures" in the remainder of this Article.

B. *Formalization and Information*

State enforcement does not always improve the efficiency of a social norm. State enforcement requires formalization. Revising or repealing formal law usually requires adjudication or a collective decision. In contrast, changing customs requires individuals to behave differently, without adjudication or a collective decision. Consequently, social norms can be flexible. For this reason, excessive or premature formalization of a law is inefficient.

The flexibility of judges depends upon their information. To illustrate, consider the difference between the cost-benefit approach to adjudication and the structural approach as exemplified by the contrast between Judge Hand's decision in *United States v. Carroll Towing Co.*[84] and Judge Posner's decision in *Rodi Yachts, Inc. v. National Marine, Inc.*[85] In both cases, a barge broke loose from its moorings and caused subsequent collision damage to other vessels. In the former case, Judge Hand could find no community standard applicable to the bargee, so he applied his own cost-benefit test, as

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[83] Notice that this account corresponds to Locke's thesis that rights exist in nature, but the state is needed to remove vagueness and provide adequate enforcement. *See* JOHN LOCKE, THE SECOND TREATISE OF CIVIL GOVERNMENT 16-29 (Thomas P. Peardon ed., 1952) (1690).

[84] 159 F.2d 169 (2d Cir. 1947).

[85] 984 F.2d 880 (7th Cir. 1993).

embodied in the "Hand Rule."[86] According to this rule, a defendant's untaken precaution is negligent if the burden of precaution is less than the expected savings in liability ("B < PL"). This mathematical formulation, which made the case into the all-time favorite of economists, was enshrined in the definition of negligence in the Second Restatement of Torts.[87] In other cases where industry standards exist, the courts have used the Hand Rule, or similar cost benefit approaches, to criticize industry standards. For example, *The T.J. Hooper*, also decided by Judge Hand, has come to stand for the principle that compliance with custom is no defense to a tort claim.[88]

Unlike Judge Hand, Judge Posner believes that "the judge and the parties should not feel compelled to conduct a cost-benefit analysis of barge transportation from the ground up."[89] Instead, Judge Posner examined the incentive structure for the industry and the markets in which it operated. He reasoned that compliance with a community standard should be a defense for an industry that has a market relationship with its tort victims, but not otherwise.[90] When the victims are the injurer's potential customers, the bargain that they strike in the market will reflect the cost of accidents and their prevention. When the victims are not the injurer's potential customers, no market relationship exists between them, so the industry standard will usually be inefficient.[91]

"Is the price and quantity of shoes efficient?" A direct answer can be found through a cost-benefit analysis of shoe production. Economists know, however, that the necessary information is usually

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[86] *See Carroll Towing Co.*, 159 F.2d at 173 (determining liability based on whether the burden is less than the probability multiplied by the loss).

[87] *See* 1 RESTATEMENT (SECOND) OF TORTS § 282 (1977).

[88] *See The T.J. Hooper*, 60 F.2d 737, 740 (2d Cir. 1932).

[89] *Rodi Yachts*, 984 F.2d at 889.

[90] *See id.* at 888-89.

[91] Judge Posner explained:

> [T]he principal function of tort law, it could be argued, is to protect customers' reasonable expectations that the firms with which they deal are complying with the standard of care customary in the industry . . . . [T]he standard of care in the inland trade with regard to preventing runaway barges might be too low because it ignored some of the accident cost to which such runaways give rise . . . . Since, however, these customs appear to reflect an undistorted market determination of the best way to minimize runaway-barge accidents, we think the focus of the district court's inquiry should be on the parties' respective compliance with and departures from the customs . . . .

Id.

unavailable to perform such an analysis. Consequently, economists try to answer the question indirectly, by discussing market structure and firm behavior. Unfortunately, the proponents of economic analysis do not show the same respect for information constraints applicable to law. "Is a community standard of precaution efficient?" Theorists typically recommend that judges answer this question directly by applying cost-benefit techniques like the Hand Rule. This prescription often demands more information than judges possess.

I have explained that structural adjudication often requires less information than cost benefit analysis. This discussion leads to a slightly different question: How can courts conserve upon the information required for adjudication by appropriate choice of a liability rule? Liability can be contingent upon causation ("strict liability") or fault ("negligence"). Economic analysis has extensively explored the differences in the incentive effects of strict liability and negligence.[92] Either rule can provide incentives for efficient precaution under ideal conditions, but small errors in the two rules have different consequences. A court that applies a negligence rule must set the legal standard of care. The expected costs of a potential injurer usually jump when behavior falls below the legal standard because of the abrupt assumption of liability. As a consequence of this jump in costs, most potential injurers will continue obeying the legal standard, even if damages are modestly underestimated by the courts. If the legal standard is set at an inefficient level by the courts, most potential injurers will conform to it anyway. Thus, under a negligence rule, a modest error in setting the legal standard affects the level of precaution taken by potential injurers, whereas a modest error in setting the level of damages has little effect.

In contrast, under strict liability, potential injurers balance the cost of precaution against expected liability at the margin. There is no legal standard for courts to set under a rule of strict liability, but the court's computation of damages affects the marginal expected liability of potential defendants. Even a modest error in setting the level of damages under a rule of strict liability affects the level of precaution taken by potential defendants.

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[92] *See* Guido Calabresi & Jon T. Hirschoff, *Toward a Test for Strict Liability in Torts*, 81 YALE L.J. 1055, 1055-85 (1972); Richard A. Posner, *Strict Liability: A Comment*, 2 J. LEGAL STUD. 205, 205-21 (1973); Steven Shavell, *Strict Liability Versus Negligence*, 9 J. LEGAL STUD. 1, 1-25 (1980).

The best liability rule for a court to adopt depends in part upon the errors that it will make in applying the rule under conditions of imperfect information. If courts are more inclined to make errors in setting damages than in determining the efficient standard of care, a negligence rule is preferable. If the converse is true (courts are more inclined to make errors in determining the efficient standard of care than in setting damages), a strict liability rule is preferable.[93]

The structural approach suggests how courts can determine their susceptibility to error. If the game that produces social norms has a structure that yields efficiency (long-run relations, observable moves, low time-discounting, no spill-overs), the court can enforce the norms with confidence. If the game does not have this structure, the court will have to balance benefits and costs in order to determine an efficient legal standard. Courts are more likely to make errors when balancing benefits and costs than when observing social norms. The courts may avoid this balancing act by adopting a rule of strict liability. Strict liability requires the courts to determine the harm caused by accidents, but not to balance the harm against the cost of avoiding it. Thus, a negligence rule may be appropriate for social norms produced by the prescribed structure, and a rule of strict liability may be appropriate when social structure does not yield efficient norms.

This argument may explain part of the reason why courts have adopted a strict liability rule for consumer product injuries. The relationship between a particular consumer and producer may not persist beyond the transaction. Even if it does, the value of the future surplus is usually small relative to the stakes in a consumer product injury suit. Consequently, the industry may not evolve efficient norms. To impose an efficient legal standard of care, the court would have to compute benefits and costs directly. Large errors would result. Applying a rule of strict liability, however, requires less information. The judge must only make a determination of causation and a computation of damages.[94]

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[93] *See* Robert D. Cooter, *Prices and Sanctions*, 84 COLUM. L. REV. 1523, 1538-42 (1984) (discussing how difficult it is for the courts to set an efficient legal standard of care by using successive approximations of the incremental costs and benefits certain precautions will create).

[94] These remarks should not be taken as an endorsement of the present institution of strict product liability, which is riddled with inefficiencies. My views on this subject are developed in Robert D. Cooter, *Towards A Market in Unmatured Tort Claims*, 75 VA. L. REV. 383, 400-05 (1989).

C. *End-Game Examples*

Specialized business is often organized so that efficient norms emerge from repeated transactions. Informal threats such as tit-for-tat and exit are sufficient to cause most people to conform most of the time. To illustrate, gold miners in nineteenth-century California apparently developed effective property rules for disputed claims, and these rules were subsequently adopted by California courts.[95] Ranchers and farmers in the western United States apparently developed efficient rules for allocating liability for straying cattle, independent of the legal process.[96] Nineteenth-century whalers apparently developed efficient rules for determining ownership of whales harpooned by more than one ship.[97]

From time to time, a player will cheat on the industry practice. The cheater is typically someone whose time horizon is so short that the immediate gain from appropriation outweighs the advantages of future cooperation. In these circumstances, the court can benefit the industry and improve its efficiency by enforcing its norms against the deviant.

A concrete example is provided by the check-collection process. A buyer pays for goods by making a check out to the seller. The seller deposits the check at his bank, and the check must find its way to the maker's bank to be presented for payment. Before reaching its destination, the check may pass through several intermediate banks, called "collecting banks." To make this process quick and cheap, banks have formed a variety of corporations, associations, and networks that include branch banks, clearing houses, correspondent banks, and the regional Federal Reserve Banks. Corporate law, private contracts, the rules of private associations, and public laws and regulations govern the collection process in the United States.[98]

When accident or fraud in the collection process causes funds to be lost, these rules sometimes become the subject of litigation. Sometimes a bank would like to violate the industry's rules in order to avoid a large one-time loss. The theory developed in this Article provides guidance to such litigation. The banks involved in the

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[95] *See* RICHARD O. ZERBE, FAIRNESS AND EFFICIENCY IN THE CALIFORNIA GOLD FIELDS (University of Washington GSPA Working Paper, 1996).

[96] *See* ELLICKSON, *supra* note 81, at 40-64.

[97] *See id.* at 191-206.

[98] *See* EDWARD L. RUBIN & ROBERT D. COOTER, THE PAYMENT SYSTEM: CASES, MATERIAL, AND ISSUES 160-68 (2d ed. 1994).

collection process have long-run relationships with each other. There is a strong presumption that the private agreements and norms generated by these relations are efficient. The courts can enforce the industry norms as applied among banks in the confidence that they are efficient.[99]

Many other examples are similar to check-collection losses. To illustrate, accounting firms tend to have repeat customers among businesses who are knowledgeable about finance. These relationships presumably channel the development of the accounting standards promulgated by professional associations.[100] An accountant who fails to comply with these standards usually does so by accident. Occasionally, however, an accountant with an unusually short time horizon, who, for example, is planning to retire or expecting to go bankrupt, may violate the standards deliberately. When allocating any resulting losses, the courts would do well to enforce the professional standards.

Some legal rules can be understood as helping to foster long-run relationships. To illustrate, consider damage rules for breach of commercial contracts. In routine cases, American courts make one party bear all the costs of an unforeseen contingency. In some very large commercial contract disputes, however, the courts require the parties to share the costs of an unforeseen contingency.[101] The structural approach suggests that clear rules for allocating routine losses, like loser-pays-all, will promote long-run relationships. Large losses, however, may exceed the surplus from future cooperation. In this situation, a loser-pays-all rule might induce the parties to scuttle the relationship and fight over loss-allocation; in contrast, a

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[99] *See* Robert D. Cooter & Edward L. Rubin, *A Theory of Loss Allocation for Consumer Payments*, 66 TEX. L. REV. 63, 86-97 (1987).

[100] Accounting standards for the United States are formally set by the Financial Accounting Standards Board ("FASB"). It consists of seven members, five of whom must agree in order to promulgate a new rule. *See* Allison L. Cowan, *The $290,000 Job Nobody Wants*, N.Y. TIMES, Oct. 11, 1990, at D1, D9. In recent years, the Board has consisted of three accountants, two businessmen, an academician, and a "representative of the investing public." *Id.* International accounting rules are set by the London-based International Account Standards Committee. After 18 years of work, it was reportedly nearing its goal of proposing some systematic, uniform accounting rules for all countries. *See* Allison L. Cowan, *International Accounting Rules Advance*, N.Y. TIMES, Dec. 2, 1991, at D1.

[101] *See* Clayton P. Gillette, *Commercial Relationships and the Selection of Default Rules for Remote Risks*, 19 J. LEGAL STUD. 535, 541-46 (1990) (describing cases where the courts have viewed certain long-term commercial relationships as necessarily cooperative and, therefore, required parties to share the costs of unforeseen contingencies).

loss-sharing rule might preserve the relationship. So the difference in treatment between ordinary losses and very large losses can be understood in the context of long-run relationships among commercial parties.

D. *Spill-Overs, Exploitation*

Given serendipity, social norms evolve as required by fairness and efficiency, and the state improves the situation further by enforcing norms when the gain from better enforcement exceeds the cost of formalization. Sometimes, however, social norms fail to emerge where needed, or the wrong norms emerge relative to the standards of efficiency and fairness. I next consider these "community failures" by analogy to market failures.

In some circumstances, state enforcement of social norms is unfair. Some norms that are good for one community are bad for another community. For example, one community may develop a norm that externalizes cost on another community, or one community may develop a norm that inhibits competition from another community. Such a norm is unfair from the viewpoint of the community harmed by it. The state cannot justify enforcing a norm that harms one community on the grounds that it arose from a consensual process in another community.

To illustrate, neither accountants nor the businesses who hire them have a direct interest in tailoring rules to increase the efficiency of tax collection by the Internal Revenue Service. Norms prescribing racial discrimination are a more sinister example of how one community can impose costs on another. Discrimination permits one community to reduce competition from another, which benefits the dominant group at the expense of the subordinate group. The stability of racial cartels, however, depends upon a high level of internalization of the discriminatory norm in the dominant group. Instead of internalizing the discriminatory norm, if many people in the dominant group conform adventitiously, free-riding will dilute the enforcement effort and eliminate discrimination's aggregate effects, even though a significant group of people continue to discriminate. Like other cartels, racial cartels suffer from instability, which is why discriminators seek to enact their practices into law.[102]

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[102] *See* Robert D. Cooter, *Market Affirmative Action*, 31 SAN DIEGO L. REV. 133, 153 (1994).

Sexual discrimination is more perplexing to the theory of norms because men and women belong to the same community. How is it possible for social norms prescribing the subordination of a group of people to arise in the community to which they belong? I suspect that in order for a discriminatory norm to arise in a community that includes its victims, the injurers must have power over the means of representation. Power over the means of representation enables the dominant group to frame the public debate by which norms evolve. For example, control over communication and schooling filters the content of moral debate and moral education. Limitations of space prevent me from developing this suggestion more fully.

E. *Individual Against Community*

The preceding discussion of spill-overs raises the possibility that enforcing community norms could contribute to the exploitation of one group by another. Similarly, enforcing community norms could deprive individuals of their rights. A profound meditation on this problem is contained in a series of papers on defamation by Robert Post. According to Post, a community consists of people who take shared norms into their personal identity, including rules of civil speech. Civility rules protect both the community's identity and the reputation of its members. Incivility that threatens the community is (or was) a common law crime, and incivility that damages someone's reputation is a tort.[103]

Post goes on to argue that a free market for ideas, in which different conceptions of the public good contend for the allegiance of citizens, is central to democracy. Community norms of civility restrict the market for ideas. Consequently, democracy and community collide in the courtroom when adjudicating the First Amendment. The "primary dynamic" that underlies development of First Amendment law, according to Post, "is the separation of

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[103] According to Robert Post, the defendant originally carried the burden of proving the truth of defamatory speech. The burden shifted around the turn of this century, after which the plaintiff had to prove falsity of uncivil speech. *See* Robert C. Post, *The Constitutional Concept of Public Discourse: Outrageous Opinion, Democratic Deliberation, and* Hustler Magazine v. Falwell, 103 HARV. L. REV. 601, 619 (1990) [hereinafter Post, *Constitutional Concept*]. Furthermore, the truth of the speech is a complete defense against an alleged tort of defamation, whereas the truth of the speech was no defense against an alleged invasion of one's right to privacy. *See* Robert C. Post, *The Social Foundations of Privacy: Community and Self in the Common Law Tort*, 77 CAL. L. REV. 957, 980 (1989) (citing Brents v. Morgan, 299 S.W. 967, 969 (Ky. 1927)).

public discourse from the domination of civility rules that define the identity of communities."[104]

Community norms abrade individual rights in other areas of law besides defamation and free speech, as illustrated by a case involving a religious sect in a small town in Ohio in 1947. Andrew Yoder sued four officials of the Amish Church, who had ordered its members to shun him ("meidung") for leaving the church and purchasing a car. Yoder argued that shunning deprived him of free exercise of religion and ruined his health (he had stomach ulcers). The jury awarded $5000 in damages, and the judge ordered church officials to withdraw their order to shun Yoder. When church officials did not respond, the sheriff seized the property of one of the them and sold it to satisfy a portion of the debt. The sheriff was in the process of seizing the property of another church official when the officials caved in, paid the debt, and removed the ban, although Yoder's isolation apparently continued even without the ban.[105]

The Amish form "ultimate communities," whereas businessmen form instrumental communities. My main topic is business communities. Even so, my theory has something to say about the conflict between individuals and communities. Specifically, my theory points to two natural limits on the coercion of individuals by communities. In my model of the agency game, the option to "exit" enabled the players to find congenial partners. Similarly, an individual who feels repressed by one community can often move to another. Through mobility, an individual can escape coercion by one community and find another community that is more congenial. In contrast, the creation of a mass society through the destruction of communities reduces the alternatives available to everyone. The limits of self-help should be assessed before a court grants a legal remedy to an individual who feels repressed by his community.

These arguments also apply to corporate culture. Different organizations have different ways of going about their business. Diversity among corporations increases the scope and vigor of their competition for workers and wealth. The imposition of uniform laws regulating the employment contract and conditions of work reduces diversity in corporate culture. Thus the overzealous extension of individual rights against communities and corporations

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[104] Post, *Constitutional Concept*, *supra* note 103, at 684.

[105] *See* Margaret Gruter, *Ostracism on Trial: The Limits of Individual Rights*, 7 ETHOLOGY & SOCIOBIOLOGY 271, 271-79 (1986).

reduces the scope for exercising the freedom allegedly being protected.

F. *Nonconvexity*

If economies of scale are large relative to the size of a market, then competition tends to eliminate all producers except the largest. A more technical term for "economies of scale" is "nonconvexity." I will explain the meaning of nonconvexity and show how nonconvexity can trap the players in a game.

Decentralized processes economize on information by making local improvements. One kind of evolutionary trap occurs when local progress is global regress. To illustrate, suppose that some climbers try to ascend a mountain in a fog by following the rule "Always keep going up." If the mountain has a single peak, this rule will get them to the summit. If the mountain has several false peaks, this rule will get the climbers to a local peak but not necessarily to the summit. A mountain with a single peak is a convex surface, whereas a mountain with several false peaks contains nonconvexities. Local improvements lead to a global maximum on a convex surface, whereas local improvements lead to a local maximum on a nonconvex surface.

An historical example shows the problem that nonconvexity creates for decentralized law. Everyone in a country drives on the same side of the road, but historical accident determined whether it is the left, as in Britain, or the right, as in most other countries. Given a world economy, it would be better for the British to drive on the right, like almost everyone else. Driving on the left, however, is a stable equilibrium that will not change without central direction. Similarly, common law countries could benefit from abandoning the old British system of weights and measures in favor of the metric system. Yet such a change apparently requires centralized lawmaking, at least for consumers as opposed to businesses.[106] The critics of the common law claim, in effect, that it is a vast collection of rules similar to "Drive on the left."

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[106] When the U.S. Federal Trade Commission put a rule into effect that expanded the scope of mandatory metric measurement on consumer goods in 1994, experts predicted that it would have almost no impact, just like the Metric Conversion Act of 1975. "[B]ecause the law only suggested that we switch to metric, there was no real incentive to change. And government, in the face of overwhelming unpopularity, declined to force the issue." Steve Johnson, *Metric System Proponents Quietly Insert Foot in U.S. Door*, CHI. TRIB., Feb. 28, 1994, at C1.

Humans have a strong protection against evolutionary traps that ensnare animal communities. The human advantage comes from the fact that norms arise from discussion and debate, which prompt insight. Insight enables a community to distinguish between a false summit ("local maximum") and the true summit ("global maximum"). A community that understands an evolutionary trap may avoid it by withholding normative sanction from inefficient equilibria. Thus, internalization filters norms for efficiency.[107] To illustrate, the problem of nonconvexities often arises in setting industrial standards. Private firms have been successful at setting standards voluntarily, even in international business.[108]

G. *Intermediate Institutions*

I have developed a theory of the spontaneous evolution of norms. In reality, however, many norms are made by intermediate institutions, rather than evolution. Organizations make rules for members, typically by following a legislative process such as majority vote. The forms of representation are quite distinct from one organization to another. To illustrate, the Visa Corporation is a for-profit nonstock company in which the member-banks vote in proportion to their billings through the system.[109] In contrast, the American Economics Association governs itself by a board of directors elected by members from slates proposed by the current board of directors.

A theory of intermediate institutions would have to characterize different types of organizations and then predict how different governance structures will perform. While I cannot develop a detailed theory here, I will offer a few generalizations.

Theories of collective choice, which have progressed in describing how states govern, provide the basic tools for analyzing intermediate institutions.[110] These theories assume that people

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[107] Taylor reaches a similar conclusion:

> I shall take the view that, if a game has multiple equilibria (as the Assurance game does) but one of them is strictly preferred to all the others by everyone, then the Pareto-preferred one will be the outcome. On this view, rational action in an Assurance game does *not* lead to a Pareto-inferior outcome, so that this game is not a collective action problem.

TAYLOR, POSSIBILITY, *supra* note 9, at 19.

[108] *See generally* ALAN SYKES, PRODUCT STANDARDS FOR INTERNATIONALLY INTEGRATED GOODS MARKETS (1995).

[109] *See* RUBIN & COOTER, *supra* note 98, at 714-15.

[110] *See* DENNIS C. MUELLER, PUBLIC CHOICE 11-18 (1979) (describing the reasons

exercise political power in their own interests. Voting averages the interests of the electorate, giving more weight to those who control the agenda or invest resources in influencing elections. Governance of intermediate organizations give them direction and purpose.

Disagreements persist about the goals pursued by intermediate institutions. On the one hand, intermediate institutions can be viewed as providing detail and meaning to broad principles of property and contract law, as in the preceding discussions of the new law merchant. On the other hand, intermediate institutions can be viewed as creating local monopolies to inhibit competition. To illustrate the latter view, Mancur Olson asserts that, as a society ages, intermediate institutions pursue political rents with increasing effectiveness until "sclerosis" clogs the arteries of economic competition.[111]

The structural approach to adjudicating spontaneous norms needs modification to apply to the rules of intermediate institutions. While I cannot develop the structural approach to intermediate institutions in this Article, I will briefly describe the fault-line in it. In reality, organizations that seek to maximize the wealth of members will pursue efficiency and monopoly. The organization will seek to create monopoly power for members in dealing with nonmembers. Monopoly power is achieved by the standard devices of a cartel–price fixing, exclusive territories, and withholding information from the public. The organization will also seek to minimize agency costs that members incur in dealing with each other. To minimize agency costs, the organization must create efficient property rights and contracts among members. Thus a general principle of motivation for intermediate organizations can be stated: Efficiency for interests encompassed by the organization, monopoly for outsiders. In an ideal situation, competition among organizations deprives outsiders of monopoly power, thus limiting the organization to the goal of efficiency among members. In the worst situation, organizations form tight cartels to control local markets.

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for collective choice and noting the effect collective choice theories have on a society's selection of democratic rules).

[111] *See* Mancur Olson, *Dictatorship, Democracy, and Development*, 87 AM. POL. SCI. REV. 567, 567-76 (1993).

H. *Competition and Common Law*

Adam Smith suggested, and general equilibrium theory proved, that competition for wealth in markets allocates resources efficiently.[112] A competitive market is a social machine that allocates resources efficiently without anyone consciously striving for that goal. Are there such mechanisms for making law, rather than commodities? Many laws are statutes enacted by democratic assemblies. Democracy is a system of competition for control of the state's monopoly on force. Unfortunately, political competition in a democracy does not generally produce efficient laws. The "impossibility theorems" prove that democratic constitutions cannot be designed in principle to achieve economic efficiency.[113] In modeling more specific political institutions, collective choice theory has shown that politicians who pursue power have strong incentives to redistribute wealth to influential groups and weak incentives to achieve economic efficiency. Thus legislation has been depicted as the realm of "rent-seeking," not efficiency.[114]

A complete theory of decentralized lawmaking includes a detailed account of legislation. I have suggested that legislatures will be very active in redistribution, where social life creates a stew of conflicting opinions, rather than a normative consensus. I have also suggested that legislatures can appropriately make law when nonconvexities or spill-overs cause games to fail. My view that failures are rare in business games and norms, and that rent-seeking by lobbyists is common, lies behind my claim that much business law should be found, not made, by the state. Others may find that failures in business games and norms are frequent, not rare. In any case, the debate would be far advanced if its participants would accept the structural approach as an intellectual framework, just as most economists accept a common framework for debating the regulation of industry.

The discouraging facts about legislation prompt a search for alternative ways of making law. Much research among economists has focused upon judge-made law, or, more specifically, common law. Economic models have demonstrated a degree of consistency

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[112] *See* KENNETH J. ARROW & F.H. HAHN, GENERAL COMPETITIVE ANALYSIS 75-106 (1971).

[113] *See* KENNETH J. ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES 46-60 (1951).

[114] For a review of the collective choice literature, see ROBERT D. COOTER, COLLECTIVE CHOICE THEORY: A REVIEW (John M. Olin Working Paper in Law and Economics, School of Law, University of California at Berkeley No. 91-4, 1991).

between the common law and economic efficiency that almost no one anticipated when the intellectual enterprise of law and economics first began.[115] Since judges seldom explicitly decide cases on grounds of economic efficiency, these facts raise the question, "What is the hidden hand that directs the common law toward efficiency?"

Litigation, especially in American courts, has many features of a market. Litigation is costly and investing in it is often motivated by material self-interest, like buying or selling a commodity. Is competition between plaintiff and defendant the "hidden hand" that directs American common law toward efficiency? Several models have proposed mechanisms by which competition among litigants might cause common law to evolve toward efficiency without judges or juries consciously adopting that goal.[116] These mechanisms are more clever than convincing, as a review of them will show.

One such mechanism is negative correlation between a rule's efficiency and the probability that litigants will challenge it in court. Several hypotheses have been proposed that predict such a negative correlation.[117] One hypothesis is that inefficient laws cause more legal disputes than efficient laws. For example, a law that provides insufficient incentives for precaution causes more accidents and more litigation than an efficient law.

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[115] Citing all the efficiency models would require footnoting almost the entire economic analysis of law. For summaries, see ROBERT D. COOTER & THOMAS ULEN, LAW AND ECONOMICS (1988); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW (1992). For a critical review, see Mark Kelman, *On Democracy-Bashing: A Skeptical Look at the Theoretical and "Empirical" Practice of the Public Choice Movement*, 74 VA. L. REV. 199 (1988).

[116] This possibility was first raised by Rubin, *supra* note 18, at 51-63 (noting how the common law derives efficient rules). *See also* John C. Goodman, *An Economic Theory of the Evolution of the Common Law*, 7 J. LEGAL STUD. 393, 393-406 (1978) (advocating a theory whereby efficiency in the common law is driven by private litigants); George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65, 65-82 (1977) (arguing that "efficient rules will be more likely to endure as controlling precedents regardless of the attitudes of individual judges toward efficiency, [or] the ability of judges to distinguish efficient from inefficient outcomes"). For a review and rigorous formulation of these theories, see Cooter & Kornhauser, *supra* note 18.

[117] *See* Goodman, *supra* note 116, at 394 (explaining the relationship as a result of the amenability of judges to persuasion by litigants who have unequal incentives to win a favorable decision, with the litigant subject to the inefficient legal rule); Priest, *supra* note 116, at 65 (proposing that the relationship is driven by the greater costs imposed on litigants subject to the inefficient rules); Rubin, *supra* note 18, at 51 (noting the inverse relationship between the efficiency of a legal rule and the likelihood that litigants will challenge it).

Another hypothesis is that settling out of court is more difficult when the rule of law is inefficient than when it is efficient. To illustrate, vague laws create uncertainty over legal entitlements, which inhibits bargaining aimed at resolving disputes. Experimental evidence supports the belief among litigators that bargaining games are hard to settle when the parties do not know each others' threat points.[118] An implication is that laws whose inefficiency derives from their vagueness will tend to be litigated until the courts clarify the underlying entitlements.[119]

Yet another mechanism concerns cooperation in clarifying the law. Allocative efficiency requires resources to be owned by the people who value them the most. If the law allocates legal entitlements to parties who do not value them the most, the inefficiency can often be cured by private exchange.[120] Transaction costs may block private exchange, however, in which case the allocative inefficiency must be cured by changing the law. The parties who stand to gain may cooperate in attempting to change it. An implication is that inefficient laws will be litigated when transaction costs obstruct private exchange of the underlying entitlements.[121]

So far, I have discussed a possible correlation between efficiency and litigation rates. Another form of bias toward efficiency is a positive correlation between the efficiency of a litigated rule and the probability that it will survive a court challenge. The litigation market could create such a correlation even though judges give no intrinsic weight to efficiency.

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[118] *See* Elizabeth Hoffman & Matthew L. Spitzer, *The Coase Theorem: Some Experimental Tests*, 25 J.L. & ECON. 73, 91-98 (1982) (noting experimental evidence which seems to suggest that bargaining games with numerous parties seem to be aided by full information).

[119] George Priest tried to test whether changes in doctrine by judges, which increase uncertainty, cause an increase in the scope of disagreement among litigants. His data apparently show that doctrinal change and increased disagreement occur in the same year, but not which occurs first. The facts that he observed are consistent with his hypothesis or with the rival hypothesis that changes in doctrine resolve uncertainties that cause litigants to disagree. *See* George Priest, *Measuring Legal Change*, 3 J.L. ECON. & ORGANIZATION 193, 193-225 (1987); Robert D. Cooter, *Why Litigants Disagree: A Comment on George Priest's 'Measuring Legal Change'*, 3 J.L. ECON. & ORGANIZATION 227, 227-34 (1987).

[120] Coase, *supra* note 42, applied this reasoning to law and concluded that inefficient allocations of legal entitlements will be cured by private exchange provided that the parties can contract around the legal rule at low cost. There are many commentaries, including Robert D. Cooter, *The Cost of Coase*, 11 J. LEGAL STUD. 1 (1982).

[121] This is apparently Rubin's line of thought in his pioneering article. *See* Rubin, *supra* note 18, at 59.

To see why, consider the fact that a litigant who is willing to spend more on a case can obtain more effort from better lawyers. More effort from better lawyers results in higher quality legal arguments. Judges are favorably influenced by the quality of legal arguments. Larger litigation expenditures thus increase the probability of winning a case. If people are willing to invest more to challenge inefficient rules than to defend them, the responsiveness of judges to high quality legal arguments may cause them to overturn inefficient rules. This mechanism could operate even in the absence of any commitment on the part of judges to efficiency as a legal value.

There is a reason why people may be willing to spend more to challenge an inefficient rule than to defend it. An inefficient rule allocates a legal entitlement to someone who values it less than someone else. The party who values the entitlement more will be inclined to spend more to challenge the rule and obtain the entitlement than the other party will be inclined to spend to defend the rule and retain the entitlement.[122] So an inefficient allocation of an entitlement may provoke more expenditure on litigation to challenge it than to defend it.

The preceding hypotheses imply that inefficient laws will be litigated more extensively and more intensively than efficient laws. Unfortunately, all hypotheses based upon selective-litigation pressure fail because of a common flaw. To understand the flaw, consider an analogy between legal precedents and scientific discoveries. Some scientific discoveries, including basic principles, are unpatentable. Insofar as scientific discoveries are unpatentable, investors in research cannot capture the full value of their discoveries. Rules of law are like basic scientific research in this respect. A law is general in the scope of its application. Challenging a law affects everyone who is, or will be, subject to it. The effects of a new, more efficient precedent spill far beyond the litigants in the case in which it is set. Consequently, most plaintiffs appropriate no more than a fraction of the value the new precedent creates and redistributes.

Litigants, however, typically have little regard for the social costs that inefficient rules impose on others. The tendency of selective litigation toward efficiency may be overwhelmed by the inclination

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[122] For the first systematic development of this argument, see Goodman, *supra* note 116.

of plaintiffs to challenge laws when they can capture a large share of the precedent's value. Plaintiffs typically sue when they expect the redistributive gains of successful litigation to be large, regardless of the law's efficiency or inefficiency. The problem with viewing litigation as a market is that redistribution is more important than efficiency. The market for litigation, like the market for basic scientific research, fails badly relative to the standard of economic efficiency.

I have shown that selective-litigation pressure and blind evolution fail to explain the level of efficiency observed in common law. If law is not directed toward efficiency by the hand of the judge or the hidden hand of competition, why are efficiency models so successful in explaining common law rules? The traditional conception of the common law provides an answer. According to the traditional conception, courts enforce social norms that arise outside of the legal system. The common law tends toward efficiency because the underlying social norms tend toward efficiency. The absorption of the medieval law merchant into common law is a case in point. Thus, the efficiency of the common law rests upon the efficiency of social norms, whose existence precedes the law. If this argument is correct, law-and-economics scholars have been looking in the wrong place for the law's hidden hand of efficiency. The right place to look is the theory of games and norms.

CONCLUSION

The theory developed in this Article argues that the lawmaker's role is to find community norms, apply the structural test, and enforce the norms that pass the test. To formulate the hypothesis that a norm exists, the norm should be stated explicitly. An explicit statement includes the norm's subjects, character, act, conditions, and sanction. To test the hypothesis that the norm exists in a community, the lawmaker must assess evidence concerning its internalization. For some forms of cooperation, but not all, everyone has an incentive to signal cooperation. When signaling converges with the public good, some people will become convinced that they should conform to the practice, and they will train the young to conform. The people who represent themselves as obeying the practice will say that it is fair. If everyone represents himself as obeying the practice, a consensus will form that the practice is fair. When enough people internalize the obligation, a

norm emerges in the community. Economics, which lacks a compelling theory of endogenous preferences, has much to learn from sociology and psychology about the process by which individuals internalize norms.

Internalizing a norm has two significant effects upon behavior. First, people who have internalized a norm would obey it even when doing so does not serve their narrow self-interest. This kind of behavior has little effect upon the aggregate level of conformity to a business norm. Since competition eliminates behavior involving substantial self-sacrifice, little of it is required by the norms that evolve in a business community. Second, people who feel that a norm should be obeyed tend to criticize or punish others who violate the norm. A significant proportion of people violate many norms. Punishment of violators increases their expected costs, thus increasing the aggregate level of conformity to the norm.

Once the lawmaker confirms the hypothesis that a norm exists, the next step in adjudication is to apply structural tests to determine whether the norm should be enforced. The structural tests combine the theory of games and the theory of norms. Production involves cooperation, and cooperation creates the risk of appropriation. Individuals attempt to solve the problem of cooperation informally through relationships and promises. The level of cooperation, however, tends to be lower than required for economic efficiency. An increase in the proportion of cooperators benefits everyone. Thus more cooperation is socially efficient.

Economic specialization constantly widens information deficits for courts. To overcome the deficit, adjudication requires a structural approach. In a structural approach, the courts decide whether to enforce a social norm by inquiring into the incentives by which it arose, rather than attempting to weigh costs and benefits directly. A structural approach is more decentralized because lawmakers must rely upon specialized institutions to create norms for themselves. The incentive structure producing a social norm determines whether its enforcement by the state is efficient and fair. From this viewpoint, a "community failure," analogous to a "market failure," can leave a normative gap. The majority might fill the gap by legislation. The incentive structure for the evolution of social norms will determine where such gaps occur. Thus, the role of majority rule is to correct for failures in the "market for norms."

The structural approach bears upon an old debate in jurisprudence about whether judges make law or find it. The finding of law, not the making of it, is alleged to be the original conception of

the common law process.[123] Scholars generally accept, however, that American courts now make law in light of public policy. The older conception that judges find law has been largely abandoned, but the theory of games and norms can revitalize that older conception. According to the theory developed in this Article, a common law court should find that a social norm is law if it evolved from an appropriate incentive structure. An appropriate incentive structure is one in which incentives for signaling by individuals align with the public good (long-run relations, convexity, no spill-overs). Social norms that evolve from an appropriate incentive-structure already have the community's authority in them. Recovering this conception grows more urgent as the economy's complexity increases.

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[123] According to the original conception of English common law, the King's court supplied rules of pleading, but there was no body of substantive law distinct from custom. The original "structural approach" emphasized that enforceable customs existed from "time immemorial" and that they were "reasonable." GERALD J. POSTEMA, BENTHAM AND THE COMMON LAW TRADITION 3-38 (1986); *see also* DAVID LIEBERMAN, THE PROVINCE OF LEGISLATION DETERMINED: LEGAL THEORY IN EIGHTEENTH-CENTURY BRITAIN 122-43 (1989) (detailing the development of common law under Judge Mansfield, and claiming that Mansfield "provided a most forceful vindication of the common law's continued capacity to develop legal remedies in response to new social needs"). For another view of the common law, see A.W.B. Simpson, *The Common Law and Legal Theory*, *in* OXFORD ESSAYS IN JURISPRUDENCE 77, 80 (2d ed. 1973). I benefitted from discussions of this issue with David Lieberman.