

LAW, ECONOMICS, AND INEFFICIENT NORMS

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INTRODUCTION

The recent law and economics literature on social norms focuses on two issues. The first issue concerns the conditions under which norms should be expected to be efficient. One well-known hypothesis, for example, states that efficient norms emerge in closely knit groups of well-informed and similarly endowed people whose cooperative behavior does not produce negative externalities.¹ The second issue concerns the attitude the state should take toward norms. There is some argument, for example, over whether courts should enforce as law the norms of apparently efficient groups or should instead insist that parties use formalities.² A related

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¹ See ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 167-83 (1991); Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1320-21 (1993).

² See, e.g., ELLICKSON, *supra* note 1, at 283 (arguing that the law should defer to group norms for everyday disputes between members); Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765, 1770 (1996) (stating that "transactors do not necessarily want the relationship-preserving norms they follow in performing contracts and cooperatively resolving disputes among themselves to be used by third-party neutrals to decide [their] cases" (footnote omitted)); Robert D. Cooter, *Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant*, 144 U. PA. L. REV. 1643, 1650 (1996) [hereinafter Cooter, *Decentralized Law*] (stating conditions under which law should defer to norms); Robert D. Cooter, *Structural Adjudication and the New Law Merchant: A Model of Decentralized Law*, 14 INT'L REV. L. & ECON. 215, 226-27 (1994) (same); Richard A. Epstein, *International News Service v. Associated Press: Custom and Law As Sources of Property Rights in News*, 78 VA. L. REV. 85, 85 (1992) [hereinafter Epstein, *Custom in Property*] ("The state's chief function is to discover and reflect accurately what the community has customarily regarded as binding social rules and then to enforce those rules in specific controversies."); Richard A. Epstein, *The Path to The T.J. Hooper: The Theory and History of Custom in the Law of Tort*, 21 J. LEGAL STUD. 3, 4 (1992) [hereinafter Epstein, *Custom in Torts*] (arguing that where the standard of liability is negligence, courts should regard custom as conclusive evidence of due care); Jason S. Johnston, *The Statute of Frauds and Business Norms: A Testable Game-Theoretic Model*, 144 U. PA. L. REV. 1859, 1863-64 (1996) (discussing the Statute of Frauds and the circumstances in which this formality is or is not needed).

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question concerns the extent to which courts should defer to or intervene in attempts by groups to resolve disputes using nonlegal mechanisms.³

This Article addresses both issues. First, it criticizes the view that the norms of closely knit groups are efficient, arguing that under a variety of plausible conditions those norms are likely to be inefficient, in the sense of failing to enable group members to exploit the full surplus of collective action.⁴ Second, it argues that under a variety of plausible conditions, the state—in particular, its legislatures and courts—produces rules that are more efficient than group norms and, furthermore, that help correct the deficiencies of group norms.

This Article uses theories about the efficiency of the common law and the efficiency of statutory law to shed light on the likelihood that norms are inefficient. Part I draws some preliminary distinctions between these three forms of social control and argues that the conventional claims regarding the efficiency of the common law and the inefficiency of statutes provide no support for the view that norms are efficient. Part II discusses phenomena that inhibit the evolution of efficient norms and suggests some conditions under which statutes or common law doctrines are more efficient than norms. The discussion focuses on the roles of information asymmetry, strategic behavior, and moral tradition in the development of inefficient norms. Part III discusses ways in which the state can transform, undermine, or minimize the impact of inefficient norms. Part IV provides some illustrations.

³ See, e.g., ELLICKSON, *supra* note 1, at 249 (discussing grounds for legal intervention); David Charny, *Nonlegal Sanctions in Commercial Relationships*, 104 HARV. L. REV. 373, 379 (1990) (“[L]egal decisionmakers should defer to the parties’ decision about whether their commitments may be legally enforced. Legal decisionmakers should, however, evaluate that decision in light of . . . the availability of nonlegal sanctions and the effectiveness of those sanctions in ensuring compliance.”); Eric A. Posner, *The Legal Regulation of Religious Groups*, 2 LEGAL THEORY (forthcoming 1996) (manuscript at 33-39, on file with author) (discussing conditions under which courts should adjudicate disputes between members of a religious group); Eric A. Posner, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 U. CHI. L. REV. 133, 155-61 (1996) [hereinafter Posner, *Regulation of Groups*] (discussing conditions under which courts should intervene in disputes between members of close-knit groups); Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 739-49 (1986) (discussing British and American courts’ enforcement and recognition of custom).

⁴ For an argument that comes to this conclusion using a theory of cultural evolution, see Jody S. Kraus, *Legal Design and the Evolution of Commercial Norms* 41-44 (Mar. 11, 1996) (unpublished manuscript, on file with author).

I. NORMS, STATUTES, AND COMMON LAW DOCTRINES

The concept of a “norm” is slippery, and scholars use it in different ways. I will begin by offering some definitions, and if they seem arbitrary, it at least can be said that this is a defect shared by all writings on this subject.⁵

A norm can be understood as a rule that distinguishes desirable and undesirable behavior and gives a third party the authority to punish a person who engages in the undesirable behavior. Thus, a norm constrains attempts by people to satisfy their preferences. In these ways, a norm is like a law, except that a private person sanctions the violator of a norm, whereas a state actor sanctions the violator of a law.

The rule-like nature of a norm should not disguise the fact that norms are not enacted and enforced like statutes. It is more plausible to say that when people observe some behavior, they more or less spontaneously approve or disapprove of it (or fail to react), and then reward, penalize, or ignore the actor. People might contemporaneously or subsequently describe their reactions as a rule (or “norm”), or they might formulate a rule by generalizing from these reactions and from reactions they and others have had in similar cases. Their reactions might even be influenced by such prior formulations. But this is different from “applying” a preexisting rule to the behavior.

Norms thus resemble common law doctrines more closely than they resemble statutes. When judges make decisions, they do not strictly apply a preexisting doctrine to the facts of the case; they are guided partly by their sense of justice. If judges or norm-enforcers simply applied preexisting rules, then the rules could not evolve: there must be some element of discretion that allows the decision-maker to revise the rules in light of new situations. But norms are not identical to common law doctrines. Judges are more self-conscious about making their decisions consistent with prior decisions, whereas norm-producers are more likely to be swayed by their sense of justice. This is why it is more difficult to describe a norm than it is to describe a doctrine of the common law. Norms are fuzzy.

⁵ Compare the definitions used in ELLICKSON, *supra* note 1, at 127 (defining norms as rules that emanate from social sources), Cooter, *Decentralized Law*, *supra* note 2, at 1656-57 (emphasizing the use of “norm” to refer to obligation, not to regularity in behavior) and other sources cited *infra*.

The use of the word "norm" in these ways could be criticized for being too narrow and for being too broad. It is narrow, as it excludes the rules self-consciously formulated and issued by private institutions, such as trade associations.⁶ The exclusion of this kind of rule sacrifices some generality, but it focuses attention on the issues that so far have driven the debates.⁷ The definition is also perhaps too broad: it blurs a variety of different rules that evolve through private enforcement. But I try to deal with these issues as they arise.

Norms and laws can be usefully distinguished according to their degree of centralization, that is, the extent to which the power to create and modify the rules is concentrated in the hands of a small number of people who can easily cooperate. Compared to decentralized rulemaking, centralized rulemaking is both (1) more effective and streamlined, in the sense that fewer agents must cooperate in creating and changing the rules; and (2) less responsive to the needs of the governed, in the sense that those governed by the rules do not have a direct hand in the formation of the rules.

Consider the first point. The creation of a statute requires the cooperation of a small number of professional politicians who have a great deal of contact with each other and who have the opportunity to create institutional mechanisms, such as committees, that facilitate the analysis of information and the coordination of legislative behavior. The creation of a common law doctrine requires the cooperation of a large number of judges, over long periods of time, who do not have much contact with each other and who do not actually communicate with each other, except indirectly through their opinions. Although sometimes judges appear to choose doctrines in the way a legislature enacts a statute, in fact the judge's choice is usually an attempt to unify a large number of earlier opinions, and whether his choice enters the common law depends on the willingness of other judges, in future cases, to

⁶ Examples include the institutions described by Bernstein, *supra* note 2, at 1771-72 (explaining the method of dispute resolution utilized by the national Grain and Feed Association); and J. Mark Ramseyer, *Products Liability Through Private Ordering: Notes on a Japanese Experiment*, 144 U. PA. L. REV. 1823, 1828 (1996) (discussing the development of a privately ordered, products liability regime in Japan). For a discussion of some problems with private lawmaking, see Alan Schwartz & Robert E. Scott, *The Political Economy of Private Legislatures*, 143 U. PA. L. REV. 595, 650-52 (1995).

⁷ See, e.g., ELLICKSON, *supra* note 1, at 177-82 (focusing on the evolution of norms in close-knit groups). Ellickson focuses on norms that spontaneously evolve, as opposed to norms self-consciously issued by private institutions.

recognize the doctrinal innovation. The creation of a norm requires the coordination of a large number of people who react more or less unconsciously to the conduct in question and to the accumulation of spontaneous reactions by others to that conduct.

Now consider the second point. When legislators enact laws, the laws affect everyone in their jurisdiction, not just the legislators. While voting and related institutions cause legislators to pay attention to the interests of their constituents, it is clear that voters do not have a direct hand in the formation of statutes. When judges create doctrine, the doctrine affects everyone in the jurisdiction, not just the judges. Although judges may pay attention to the interests of citizens, the citizens do not have a direct hand in the writing of judicial opinions. In contrast, all people participate in the creation of the norms that affect them—simply by reacting approvingly or disapprovingly to the behavior in question and taking other steps to impose nonlegal sanctions on violators.

These general distinctions help us focus on the main inquiry of this Article: whether norms are efficient. One way to pursue this inquiry is to analyze the extent to which the arguments about the efficiency or inefficiency of common law doctrines and statutes can be applied to norms.

The starting point for analyzing efficiency is to say that a rule or group of rules is efficient if it can plausibly be understood to maximize social benefits.⁸ But as this definition does not rely on any observables, more indirect tests are necessary. There are three alternatives that commonly arise in the literature. First, a rule is efficient if it has actually been chosen by rational actors under conditions in which they presumptively behave in a manner that maximizes social wealth (the choice test). Second, a rule is efficient if it would survive the competition of other rules in an evolutionary process that can be shown to produce efficient equilibria (the evolutionary test).⁹ Third, a rule is efficient if it seems consistent with a model of economically efficient behavior (the behavioral test). These tests may seem vague, but they will become clear as they are applied.

⁸ Because what really concerns us is the relative efficiency of norms, compared to that of other kinds of rules, the definition of efficiency will be refined in Part II of this Article.

⁹ Cf. Armen A. Alchian, *Uncertainty, Evolution, and Economic Theory*, 58 J. POL. ECON. 211, 211 (1950) (formulating this evolutionary approach as the “interpret[ation of] the economic system as an adoptive mechanism which chooses among exploratory actions” generated by adaptive pursuit of “success” or “profits”).

A. *Statutes*

Economists writing in the public-choice tradition generally argue that statutes are inefficient. Consider the choice test: On one model of legislative choice, utility-maximizing legislators maximize their chances of reelection by favoring those parties who can contribute most to their reelection. Concentrated interest groups are such parties. Because the gain to interest groups from legislation that transfers wealth to them exceeds the cost of successful lobbying, the interest groups have an incentive to lobby. And since the resulting loss to any member of the public is less than the cost of lobbying to *her*, members of the public have no incentive to resist the legislation. Legislation should therefore reflect the desires of interest groups, and because these desires are likely to be redistributive, statutes are unlikely to be efficient.¹⁰

A second argument—the evolutionary argument—is motivated by suspicion that the legislative-choice model depends too heavily on an assumption of legislative self-interest. But even if legislators tried to enact legislation in the public interest, one would still expect interest groups with more at stake to spend more on lobbying than people or entities with less at stake, such as members of the general public. Therefore, the special interest groups exert constant pressure on the legislature to reconsider laws that injure them and to consider enacting laws that would benefit them. Over time, these forces select for legislators with inclinations or ideologies consistent with the design of the interest groups, resulting in the inefficient redistributive statutes the groups desire.

The third argument is that statutes fail the behavioral test. For example, numerous studies show that the purported public policy arguments for regulation of the airline, trucking, shipping, and railroad industries are weak.¹¹ The statutes do not solve market failures as has been claimed. Instead, they transfer wealth and power to certain industries by protecting them from the competition of potential entrants.¹²

¹⁰ See generally DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE* 12-37 (1991) (discussing the theory of legislation as a manifestation of conflict among private interests); DENNIS C. MUELLER, *PUBLIC CHOICE II*, at 373-439 (rev. ed. 1989) (same).

¹¹ See, for example, the studies collected in *CHICAGO STUDIES IN POLITICAL ECONOMY* (George J. Stigler ed., 1988).

¹² See *id.* at xii-xiv.

These arguments are crude and have been heavily criticized and qualified over the years.¹³ They do not account for the complicated motives of legislators, the institutional constraints on legislation,¹⁴ or the numerous statutes that seem to improve on the common law. But they are useful for our purposes in showing that statutes are criticized for their lack of responsiveness to the interests of those they govern.

B. *Common Law Doctrines*

Some economists have argued that common law doctrines are efficient. Again, one can look at three types of explanations. First, under a choice model one might argue that judges decide cases on the basis of efficiency considerations. Because judges enjoy more independence than do legislators, they feel less pressure than legislators to choose rules on the basis of their distributive effects.¹⁵ According to some, efficiency suggests itself as an attractive alternative. The problem with this argument is that in order to argue that judges choose efficiency as their standard of decision, one must provide a model that shows that such a choice is consistent with maximizing behavior. No one has suggested a plausible model.

Second, one might make the evolutionary argument that efficient rules survive over time, whereas inefficient rules die out. This argument does not assume that judges choose efficient rules. Because inefficient rules impose more costs on the affected parties than efficient rules do, the parties have a greater incentive to litigate disputes arising under inefficient rules and a greater incentive to settle disputes arising under efficient rules. Repeated litigation over inefficient rules puts pressure on them to change, even if judges act randomly. But because people are less likely to litigate over efficient rules, there is considerably less pressure to change *them*. Accordingly, efficient rules survive over time, while inefficient rules are litigated away.¹⁶

¹³ See, e.g., FARBER & FRICKEY, *supra* note 10, at 21-33 (noting that while special interests are influential in the legislative process, there are other factors such as ideology that shape legislation).

¹⁴ This is the subject of the emerging economic theories of political institutions. See, e.g., Terry M. Moe, *Political Institutions: The Neglected Side of the Story*, 6 J.L. ECON. & ORGANIZATION 213, 214 (1990) (stressing the importance of legislative institutions).

¹⁵ See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 523-24 (4th ed. 1992) (comparing the judicial and legislative systems and their concerns for efficiency and redistribution).

¹⁶ See John C. Goodman, *An Economic Theory of the Evolution of Common Law*, 7 J.

The principal difficulty with this argument is that actors who benefit more from inefficient rules than from efficient rules have every incentive to litigate the latter while settling disputes arising under the former. It is possible that the costs and benefits of rules are exactly symmetrical, so that the parties on either side have an incentive to settle disputes arising under the efficient rules and to litigate the disputes arising under the inefficient rules, and not vice versa. But there is no particular reason to believe that this is true and ample reason to believe that repeat players can exploit the institutional constraints binding courts in order to effect doctrinal changes that redistribute wealth to them.¹⁷

The third argument is that common law doctrines are consistent with a model of efficient behavior. Most economists believe that an efficient legal system would have fairly clear rules that enforce voluntary agreements and secure property rights against the intrusions of third parties. Some have argued that common law doctrines are generally consistent with this ideal.¹⁸ Many of the efficiency arguments offered for common law doctrines, however, have an *ad hoc* quality;¹⁹ and some common law doctrines have resisted all efforts to be rationalized on efficiency grounds.²⁰

LEGAL STUD. 393, 393-94 (1978); George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65, 67 (1977); Paul H. Rubin, *Why Is the Common Law Efficient?*, 6 J. LEGAL STUD. 51, 59-60 (1977).

¹⁷ See Robert Cooter & Lewis Kornhauser, *Can Litigation Improve the Law Without the Help of Judges?*, 9 J. LEGAL STUD. 139, 140 (1980) (arguing that, according to an evolutionary legal analysis, laws do not always achieve efficiency); Jack Hirshleifer, *Evolutionary Models in Economics and Law: Cooperation Versus Conflict Strategies*, 4 RES. L. & ECON. 1, 46-49 (1982) (discussing why the law might not evolve toward efficiency). For further criticisms and a discussion of the literature, see Gillian K. Hadfield, *Bias in the Evolution of Legal Rules*, 80 GEO. L.J. 583, 584-85 (1992) (criticizing the view that the common law tends toward efficiency); Paul H. Rubin & Martin J. Bailey, *The Role of Lawyers in Changing the Law*, 23 J. LEGAL STUD. 807, (1994) (arguing that the law is driven by the preferences of lawyers, not of litigants or of judges); Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641 (discussing barriers to the efficient evolution of the law).

¹⁸ See, e.g., POSNER, *supra* note 15, at 254-55, 523-24 (arguing that common law doctrines are efficient).

¹⁹ See, e.g., Gordon Tullock, *Two Kinds of Legal Efficiency*, 8 HOFSTRA L. REV. 659, 666-69 (1980) (arguing that asserted examples of efficiency in the common law could be merely the result of coincidence).

²⁰ See, e.g., Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach*, 77 COLUM. L. REV. 554, 566-68 (1977) (finding no plausible efficiency justification for the penalty doctrine); Eric Rasmusen & Ian Ayres, *Mutual and Unilateral Mistake in Contract Law*, 22 J. LEGAL STUD. 309, 320-21 (1993) (finding no plausible efficiency justification for the contract doctrine of mutual mistake).

Nevertheless, the view that the common law is *responsive* to the interests of litigants has some plausibility.

C. Norms

Are norms efficient? The question is difficult to answer for a variety of reasons, including the elusiveness of the concept of norm. Certain "general norms," which seem to apply to everyone, have efficiency-related aspects.²¹ Consider the norm of honesty. Honesty appears to promote efficiency by allowing people to depend on the commitments of others and to forego costly safeguards against opportunistic behavior. But honesty also appears to interfere with efficiency by preventing people from exploiting their investments in private information.²²

Jon Elster provides a useful discussion of some norms that seem either to decrease efficiency or at least not obviously to increase efficiency.²³ Two examples give a sufficient flavor of the discussion. Consider the norm against selling one's place in line. The bargain makes the buyer and seller better off without injuring anyone else in the line, but it would appear to violate a widespread norm. Likewise, consider the norm against selling services to one's neighbor. Although a person might be willing to mow her lawn in order to avoid paying \$10 to the lawn service, she would doubtless be offended if her neighbor offered to pay her \$10 to mow his lawn.

It might be said that the norm of honesty and the norms Elster discusses are stated too generally, and that more specific versions of them promote efficiency. Alternatively, one might argue that these norms are correctly stated and that they are more efficient in the aggregate, even if not in each individual case, than plausible alternatives. But it is difficult to evaluate these claims. There is little reason to believe that general, everyday norms promote efficiency.²⁴

²¹ For a highly tentative and qualified argument that general norms are efficient, see Kenneth J. Arrow, *Political and Economic Evaluation of Social Effects and Externalities*, in *FRONTIERS OF QUANTITATIVE ECONOMIES* 3, 22 (Michael D. Intriligator ed., 1971), and for a more vigorous, although qualified argument, see JAMES S. COLEMAN, *FOUNDATIONS OF SOCIAL THEORY* 260-64, 814-15 (1990).

²² See Anthony T. Kronman, *Mistake, Disclosure, Information, and the Law of Contracts*, 7 J. LEGAL STUD. 1, 17-18 (1978) (discussing the efficiency justification of allowing buyers not to disclose reasons for making purchases).

²³ See JON ELSTER, *THE CEMENT OF SOCIETY: A STUDY OF SOCIAL ORDER* 138-51 (1989).

²⁴ See *id.*

A more plausible and more testable claim is that of the efficiency of norms produced by closely knit groups of well-informed and equally endowed people.²⁵ Although this claim is more limited than the claim that general norms are efficient, it has important implications if true. Let us subject this proposition to our three tests of efficiency.

Consider an argument based on the choice test, namely, that people choose norms in a way that maximizes their welfare. The argument is not wholly implausible. More so than legislators and judges, people in a closely knit community internalize the costs of the inefficient rules they choose. Therefore, they have an incentive to choose norms that maximize their joint welfare.²⁶ The problem with that argument is that the norms I am discussing are not chosen, but evolve over time. Obviously, people cannot choose norms when norms, by assumption, are not chosen.²⁷

Behavioral arguments have been more influential than choice arguments. An example is Ellickson's claim that the cattle ranchers he studied acknowledge a norm that "an owner of livestock is responsible for the acts of his animals" when they trespass.²⁸ Ellickson suggests that the rancher is the cheaper cost-avoider than the farmer, because while many farmers are former city dwellers who have little expertise in fencing out animals, the rancher "can act on his own to fence in his herd."²⁹ This claim might be true. Yet, it could be argued that the farmer is the cheaper cost-avoider because she can act on her own to fence *out* livestock and might be able to do so at zero marginal cost if she needs to fence out pests anyway. She can also hire someone to build a fence if unable to do it herself. Ellickson's argument might be correct, but the ambiguity surrounding the evidence makes either story plausible and neither dispositive.³⁰

²⁵ Ellickson adds the qualifications that norms govern "workaday" affairs and float above a state-enforced or otherwise exogenous foundational regime that secures property rights. See ELLICKSON, *supra* note 1, at 174.

²⁶ They also have an incentive to choose norms that externalize costs on nonmembers, an argument that will be discussed *infra* part II.E.

²⁷ As noted earlier, I do not discuss rules issued by private institutions. See *supra* note 6. For a criticism of private law-making institutions on efficiency grounds, see Schwartz & Scott, *supra* note 6, at 597-98.

²⁸ ELLICKSON, *supra* note 1, at 53.

²⁹ *Id.* at 187.

³⁰ The lack of testability of Ellickson's theory has bothered some reviewers of Ellickson's book. See Mark Cooney, *Why Is Economic Analysis So Appealing to Law Professors?*, 45 STAN. L. REV. 2211, 2222-27 (1993) (reviewing ELLICKSON, *supra* note

The schematic nature of the efficiency arguments for norms recalls the schematic nature of the efficiency arguments for common law doctrines. The efficiency arguments for norms seem weaker, however, perhaps because norms are even more difficult to identify and describe than common law doctrines. So it is difficult to test the norms against a model of efficient behavior.

This brings us to the evolutionary argument. This argument typically assumes that because of the high cost of gathering information, it is more efficient for transactors to model their contractual terms on the terms used in previous transactions, rather than determining them anew. As a result, transactions follow patterns. Over time, some parties discover that modifications of the conventional transactions generate more wealth than do the conventional transactions. A new pattern of transacting will then crowd out the old pattern as more people recognize its superiority and those who do not are driven out of business. As the pattern of transacting thus evolves toward efficiency, so do the rules that define the pattern.³¹

A variant of one of Coase's examples can be used to illustrate this argument. Suppose that the law inefficiently holds that farmers have the entitlement to grow their crops, unharmed, next to railroad tracks, and that the farmers sell this entitlement to the railroad.³² The transfer of entitlements could hardly be called a rule or a norm; it is a deal. But if the parties consistently renew the deal over time, gradually the origin of an emerging pattern of

1 and stating that Ellickson's theory relies heavily on intuitive arguments that cannot be adequately tested); Barbara Yngvesson, *Beastly Neighbors: Continuing Relations in Cattle Country*, 102 YALE L.J. 1787, 1792-94 (1993) (reviewing ELLICKSON, *supra* note 1 and noting that his arguments lack conclusive empirical support).

³¹ See, e.g., David Charny, *Hypothetical Bargains: The Normative Structure of Contract Interpretation*, 89 MICH. L. REV. 1815, 1858-59 (1991) (discussing the evolution of custom toward efficiency); Epstein, *Custom in Property*, *supra* note 2, at 101-02 (discussing the role of custom and common practice in the newspaper business and the difficulty a newspaper would face if it deviated from these norms); Epstein, *Custom in Torts*, *supra* note 2, at 11-16 (discussing the incentives that allow custom to succeed); Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CAL. L. REV. 261, 276-79 (1985) (discussing the custom of standardization in contract formulation to reduce error and minimize cost); see also Robert Axelrod, *An Evolutionary Approach to Norms*, 80 AM. POL. SCI. REV. 1095, 1097-98 (1986) (explaining that an evolutionary approach, which assumes that actors keep what works well and discard what does not work well, does not rely on a rational calculation).

³² See Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 30-33 (1960) (setting forth the railroad and farmer example in which sparks from railway engines cause damage to the crops of farmers).

behavior is forgotten. Farmers instinctively keep their crops far from the tracks, and the railroads may or may not provide farmers some return benefit.³³ The efficient norm supersedes the inefficient law, transferring the entitlement to the party who values it most.

There are some serious problems with this argument. One can start by distinguishing the demand for norms from the supply of norms.³⁴ Clearly, people demand efficient norms; but this demand does not effortlessly call forth a supply. If the farmer violates a norm and grows his crops near the tracks, the railroad will not necessarily have the ability to punish the farmer. Norms are usually enforced not just by the victim, but by third parties, such as the local villagers who impose sanctions (gossip, ostracism) on those who break the rules.³⁵ But what will be the reaction of the village gossips? If the farmer grows his crops near the tracks in violation of a deal, the village gossips would not disapprove, or if they do, it would not be because the farmer grows his crop near the tracks but because he breaks his word. Indeed, when we think of norms, we think that they succeed because whole communities believe in them and apply them. If the farmer grows his crop near the tracks in violation of a community norm, the village gossips would disapprove, regardless of whether a deal was involved. The hard question is why the village gossips would come to feel that the new pattern of behavior establishes a norm. To supply norms, members of a group must, at the minimum, have an incentive to recognize rules and sanction violators of those rules; to supply *efficient* norms, one must add the additional condition that some mechanism ensures that inefficient norms fall away and that efficient norms are produced and sustained.

The best explanations for these phenomena can be found in the game-theory literature. But these explanations are primitive. Under highly restrictive conditions, patterns of cooperative behavior arise and maintain themselves over time. The most successful models limit themselves to two-person games, of infinite or indeterminate length, involving players who care a great deal about

³³ Maybe the railroads become accustomed to giving the farmers discounts or to traveling slowly when passing by farms to reduce the danger of hitting livestock.

³⁴ See COLEMAN, *supra* note 21, at 261-99 (stressing this distinction).

³⁵ I discuss this in Posner, *Regulation of Groups*, *supra* note 3, at 155-61; see also *infra* part II.B (laying out the incentives that guide the norm-enforcers in their determination of socially undesirable behavior).

future payoffs, acting under highly stylized conditions of limited choice.³⁶ The extent to which these models can be extended to more complex group behavior is not resolved.³⁷ Imagining that third parties, like village gossips, play a role in the enforcement of norms helps one see that once one abandons the unrealistic assumption that parties have symmetrical positions, traditional theories of the efficiency of norms lose their power.

But even a complete game-theoretic account of cooperative behavior would miss some essential aspects of norms. We say about most norms that people bound by them feel an emotional or psychological compulsion to obey the norms; norms have moral force.³⁸ The compulsion might be slight or it might be overwhelming; it does not prevent people from violating a norm, necessarily, but violation does evoke feelings of shame or guilt. Game theory does not explain these phenomena. Explaining them requires a psychological theory.³⁹ There is, however, no such psychological

³⁶ See, e.g., DAVID M. KREPS, *GAME THEORY AND ECONOMIC MODELLING* 65-89 (1990) (discussing how cooperation can emerge in an iterated prisoner's dilemma); see also ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* 11-19 (1984) (same); David Hirshleifer & Eric Rasmusen, *Cooperation in a Repeated Prisoners' Dilemma with Ostracism*, 12 J. ECON. BEHAV. & ORGANIZATION 87, 90-93 (1989) (same).

³⁷ For a recent effort, illustrating both the possibilities of resolution and the complexity of the problem, see Michihiro Kandori, *Social Norms and Community Enforcement*, 59 REV. ECON. STUD. 63, 76-77 (1992).

³⁸ This observation was first made by Hume. See DAVID HUME, *ENQUIRIES CONCERNING HUMAN UNDERSTANDING AND CONCERNING THE PRINCIPLES OF MORALS* 285-94 (L.A. Selby-Bigge ed., 3d ed. 1975) (1777) (discussing moral compulsion and reasoning as motivating factors in human behavior); see also Robert D. Cooter, *Against Legal Centrism*, 81 CAL. L. REV. 417, 426-27 (1993) (reviewing ELLICKSON, *supra* note 1 and discussing the human tendency to internalize norms so that one feels morally obligated to comply with them).

³⁹ There have been attempts to deal with this problem. Robert Axelrod, for example, seems to suggest that the tit-for-tat norm has an evolutionary explanation. See AXELROD, *supra* note 36, at 88-105. The implication is that people obey norms (or certain norms) because obedience to norms is adaptive behavior. This theory, however, has not been fully articulated. See ROBERT H. FRANK, *PASSIONS WITHIN REASON* 134-45 (1988) (grounding cooperation in physiological and psychological theories of emotion); ROBERT SUGDEN, *THE ECONOMICS OF RIGHTS, CO-OPERATION AND WELFARE* 145-47 (1986) (speculating on the psychological basis of the inclination to obey norms); EDNA ULLMANN-MARGALIT, *THE EMERGENCE OF NORMS* (1977) (relying on game theory to explain cooperation and coordination but failing to explain the morally binding force of norms); Axelrod, *supra* note 31, at 1108-09 (emphasizing the importance of dominance and reputation in the origin of norms); Cooter, *Decentralized Law*, *supra* note 2, at 1662 (speculating on the psychological basis of the inclination to obey norms); Hirshleifer, *supra* note 17, at 10-13 (discussing possible role of the biological principle of adaptation); Jack Hirshleifer, *On the Emotions As Guarantors of Threats and Promises*, in *THE LATEST AND*

theory, and none looms on the horizon.⁴⁰ Because of the peculiar role of psychology in the emergence of norms, an evolutionary theory explaining the efficiency of norms is harder to imagine and harder to test than an evolutionary theory explaining the efficiency of statutes or of the common law, in which psychological elements play a smaller role.

The proponents of the efficiency theory can argue that the difficulty of developing a theory of the evolution of norms does not prove that their arguments are wrong. They can still point to studies that seem to show that norms in closely knit groups are efficient. To respond to this argument, it is necessary to examine more closely the reasons against believing that norms are likely to be efficient.

D. Conclusion

The literature on the efficiency of the common law and of statutes provides little support for the efficient-norms thesis. One problem is that the literature on its own does not produce determinate results. Beyond that, it does not transfer easily into the context of norms. The institutional settings of common law development and legislation differ too much from the institutional settings in which norms evolve. But certain general lessons are helpful. Most importantly, the literature on legislation and the common law teaches that nonmarket institutions are vulnerable to manipulation by interested parties. Norm-production more closely resembles these institutions than it does the competitive market where efficient outcomes can be predicted.

This discussion, however, leaves a host of unanswered questions, especially the question of the relative efficiency of these different rule-producing mechanisms. To answer this question, we must analyze in more detail the problems with norm-production, the subject of the next Part.

THE BEST 307, 322 (John Dupre ed., 1987) [hereinafter Hirshleifer, *Emotions*] (emphasizing the importance of ingrained emotional drives such as rage and gratitude in producing cooperation); Philip Pettit, *Virtus Normativa: Rational Choice Perspectives*, 100 ETHICS 725, 730 (1990) (assuming that most people want to avoid being subject to even the covert disapproval of others and that it is costless to disapprove of deviant behavior covertly); cf. RUSSELL HARDIN, ONE FOR ALL 86-88 (1995) (speculating on how norms emerge but acknowledging the difficulty of the question).

⁴⁰ See ELSTER, *supra* note 23, at 8-11; see also Jon Elster, *Norms of Revenge*, 100 ETHICS 862, 872-76 (1990) (rejecting rational choice explanations of revenge).

II. THE CAUSES OF INEFFICIENT NORMS

This Part discusses the reasons why inefficient norms might exist. One can sharpen the focus, and finesse the question of how norms arise, by investigating the conditions under which a norm that is efficient at time 0 might persist even after a change of conditions renders it inefficient at time 1. This discussion is limited to norms that arise within close-knit groups, although, for reasons that will become clear, I waffle a bit on what "close-knit" means.

A. *Information Costs and Lags*

Suppose a group has an efficient norm at time 0: For example, in a small community the farmers have the right to grow crops close to the tracks; the (local) railroad has an obligation to pay for damages arising from fires; and the farmers are the more efficient users of the space near the tracks. Assume also that all members of this group have roughly equal endowments and can easily observe each other's behavior. The railroad installs spark guards because the cost of being ostracized for starting fires exceeds the cost of the spark guards. By time 1, the norm becomes inefficient as a result of technological or economic changes, such as variations in the cost of crop-growing and spark-guarding.

As discussed earlier, the farmer might sell his entitlement to the railroad. As a result, the farmer stops growing crops near the tracks and the efficient result is obtained. But, as pointed out above,⁴¹ the fact that the parties reach a deal does not mean that the old norm (granting the farmer the entitlement) will change to a new norm (granting the railroad the entitlement), even though the new norm would have saved the parties the transaction costs of making the deal in the first place. This is important because the value of the norm lies in its regulation of the behavior of everyone, including potential entrants (such as new farmers and new railroads), and in its ability to invoke the power of third parties for the purpose of sanctioning violations. The village gossips may or may not approve of the deal, but there is no reason to believe that they would change their minds about the older norm. We need a mechanism to explain why the new efficient norm would arise.

The theory discussed in the prior Part suggests that the farmer and the railroad would abide by the deal for such a long time that

⁴¹ See *supra* text accompanying notes 34-35.

gradually the village gossips would forget about the old norm and accept the new pattern of behavior as reflective of a new norm (perhaps without even realizing that this norm or the pattern of behavior is new).⁴² Still, this story must be highly unsatisfactory for the believer in efficient norms. For during the period of transition the reigning norm is an inefficient one. Furthermore, one would expect that even as the old norm is gradually replaced by the new norm, continuing changes in the economy and in technology will render even the emerging new norm inefficient.

The problem is that it is unlikely that the village gossips could discover the change in relative costs as quickly as the farmer and railroad. Even if one assumes that the village gossips would or could change the norms if they had this information—an assumption that is questioned later in this Article—the passage of time during which they acquire this information represents a period during which inefficient norms prevail. Inevitably, the norms of any group will lag behind changes in the environment and technology, although one can argue about the extent of this lag for any given group.

Consider, for example, Harold Demsetz's theory of the development of property rights in land among native tribes in Canada. Demsetz argues that this system arose as a result of the demand for furs by French traders. Prior to this demand, there was no common-pool problem because furs were produced naturally at a rate great enough to satisfy the natives' needs. Once the traders arrived and began to offer valuables for furs, however, each native gained an incentive to seize animals at a much higher rate. This produced a common-pool problem: no one had an incentive to ensure that the furs remained a renewable resource. But the natives responded collectively to this problem by allotting land to different hunting groups, whose continuing interest in that land presumably prevented them from over-exploiting it.⁴³

Demsetz's theory may be correct. But note that the system of property rights did not emerge until the middle of the 1700s.⁴⁴ Fur trading had begun in the early 1500s and had reached signifi-

⁴² See *supra* text accompanying note 31.

⁴³ See HAROLD DEMSETZ, OWNERSHIP, CONTROL, AND THE FIRM 107-09 (1988). Demsetz relies for his data mainly on Eleanor Leacock, *The Montagnais "Hunting Territory" and the Fur Trade*, 56 AM. ANTHROPOLOGIST, Oct. 1954, Memoir No. 78, at 1-17.

⁴⁴ See DEMSETZ, *supra* note 43, at 109 (citing Leacock, *supra* note 43, at 15).

cant proportions by the middle of the 1500s.⁴⁵ Thus, the efficient norm may have lagged by *two centuries*.⁴⁶ State intervention at any time in the interim (if it had been possible) would have promoted efficiency.

Information lag is a simple reason why judges and legislators may produce better rules than groups. No doubt it takes time for information to reach legislators and judges, just as it takes time for information to reach members of a group. Nonetheless, legislators and judges are specialists at obtaining and processing information; further, they have the means and the motive to establish institutions that obtain and process information. Assuming that legislators and judges are properly motivated to choose the welfare-maximizing rules that are, according to the proponents of efficient-norms theories, reflected in the development of norms—an assumption that will be examined later—the lag problem afflicts norm-production more severely than it afflicts statute- and doctrine-production.

B. *Strategic Behavior*

Norms are rules that govern collective behavior and that are enforced nonlegally. One might imagine that enforcers, such as the village gossips, simply “apply” a norm to a given behavior, determining whether or not to punish the actor depending on whether the behavior violates a norm. But a moment’s reflection should reveal that this description is incomplete. If the gossips apply an already existing norm, that leaves open the questions of where and how *that* norm originated. It seems more likely that in approving or disapproving conduct, the enforcers rely mainly on a sense of justice or of the general good, which may or may not also involve the vindication of preexisting norms. After the enforcers sanction a person, actors generalize the sanctioning in the form of a rule, and this rule can be understood as a norm that guides future behavior.

Suppose, for example, that the railroad’s trains emit sparks. The village gossips must decide whether to punish this behavior. In making this decision, they may rely on their sense of the general good of the community, but not—at least not necessarily—on whether they have already recognized a norm against the emission

⁴⁵ See Leacock, *supra* note 43, at 10.

⁴⁶ It might also have changed overnight; such is the nature of the evidence. But Leacock says that before 1670, furs in some areas were “seriously depleted.” Leacock, *supra* note 43, at 12 (suggesting that the common-pool problem had emerged no fewer than 30 years before the advent of this property-rights regime).

of sparks. The gossips' reaction can then be interpreted as the creation or application of a rule or norm (for example, "trains may not emit sparks onto crops") that maximizes the value of collective behavior (railroad transportation contiguous to farming). Actors determine their future conduct in light of the norm, for example, by installing spark guards in order to avoid punishment. The question we want to investigate now is what incentives the gossips have to decide that some behavior is socially undesirable and to punish a person for engaging in that behavior.⁴⁷

To set the stage for an answer to this question, it is useful to consider a simpler case, where cooperative behavior occurs even in the absence of third-party enforcers such as the gossips. Such two-party enforcement is often analyzed as a "coordination game," while multi-party enforcement can be analyzed as a "prisoner's dilemma."⁴⁸

In a standard version of the coordination game, each player, faced with a choice between two different moves, does better if both make the same move than if each player makes a different move.⁴⁹ For example, two cars approaching each other on a highway in the era before traffic laws do better if they both choose the move, "pass on the right" (or "pass on the left"), and neither car improves its position by trying to choose a move different from what the other party chooses. The crucial point about coordination games is that as long as each player knows about a convention (for example, "always pass on the right"), neither has an incentive to deviate from it.

In a prisoner's dilemma, each player does better by cheating if the other cooperates, and each player does better by cheating if the other player cheats. Thus, whether or not one player knows the strategy of the other player, each has an incentive to cheat. For example, each member of a striking union has an incentive to cross the picket line, whether or not other members cross the picket line. The reason is that if the others maintain the line, then the violator

⁴⁷ In suggesting some answers to this question, I can only scratch the surface of a subtle and complex literature on the evolution of norms. See, e.g., SUGDEN, *supra* note 39 (providing a game-theoretic account of the evolution of norms); ULLMANN-MARGALIT, *supra* note 39 (same); Hirshleifer, *supra* note 17, at 41-49 (same).

⁴⁸ For an introduction to these and related concepts, see DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* (1994).

⁴⁹ I simplify considerably: coordination games can also involve different but symmetrical moves. But this complication is not necessary for my analysis. For a discussion of these games, see SUGDEN, *supra* note 39, at 34-54.

obtains both the benefits the union obtains for its members (a better collective bargaining agreement) and the benefit of being able to work during the strike; if the others do not maintain the line, then the violator obtains nothing by striking by himself and so might as well go to work. The prisoner's dilemma is that because of private incentives, all actors cheat, but they do worse by cheating than they would if everyone cooperated.

Whether the coordination game or the prisoner's dilemma better represents the structure of collective behavior depends on context. The norms that arose to govern vehicular traffic are thought to have solved roadway coordination problems. The "right" move may be for both people to drive on the right (as in the U.S.) or both to drive on the left (as in England), but no one has an incentive to make the wrong move once the norm has become clear. In contrast, the norms that govern participation in a picket line solve a prisoner's dilemma. The "right" move is to join the picket line, but everyone has an incentive to cheat and cross the picket line—whether or not everyone else also cheats. The norm for traffic, once everyone knows the rule, is self-enforcing, since violation *directly* injures the violator as well as the victim. Enforcement of the norm for picket lines depends, even after everyone knows the rule, on everyone sanctioning everyone else, since violation in the absence of a risk of sanction benefits the violator.

The distinction between coordination games and prisoner's dilemmas is important because they have different implications for the likelihood that norms will evolve to solve a problem of collective behavior and the likelihood that the norms that evolve will be optimal (relative to laws that the state could supply).

As Robert Sugden and others have shown, under plausible conditions, coordination norms are likely to evolve in communities in which people have repeated contact with each other.⁵⁰ In the long run, as people experiment with strategies and gradually discover that certain moves are more likely to be beneficial than other moves, the coordinating strategies drive out the others. For example, a strategy of "always drive on the right" will crowd out strategies of always driving on the east side of the street or the north side of the street, because those who choose the first strategy will suffer fewer accidents (just with the second group) than those

⁵⁰ See *id.* at 42 (discussing the conditions under which norms will emerge among people who engage in repeated interactions); Hirshleifer, *supra* note 17, at 33-38 (same).

who choose the latter (with the first group *and* each other).⁵¹ As between the norm of driving on the right and the norm of driving on the left, the norm that prevails will generally be the one that, through chance, most people initially obey.

But neither Sugden nor anyone else claims that the prevailing norms are necessarily optimal. Sugden, for example, argues that the norms that prevail will be ones that exploit "focal points," features of the environment that are psychologically salient.⁵² Consider his argument that a norm of possession solves a coordination game respecting who, as between two strangers, has the right to exploit a given bundle of resources. The possession norm states that the person with possession plays the aggressive move, while the person without possession plays the passive move. In contrast, under anarchy, each party decides to play an aggressive or passive strategy without knowing in advance the strategy that the other party will play. The possession norm yields gains over anarchy because it allows the parties to avoid the worst case of mutual aggression.⁵³

Although the possession norm improves the position of parties relative to anarchy, legal rules improve their position relative to the possession norm. The problem with the possession norm is that it does not protect property in which a person has invested resources but cannot overtly possess—for example, large areas of land or chattels that are best used by third parties. The natural solution to this problem is a recording system, such as those used for real estate transactions and security interests in personal property. But a recording system cannot *evolve* through the spontaneous reactions of the village gossips; it must be created by an agency, such as a legislature.⁵⁴

Now consider collective action that is subject to the prisoner's dilemma. In this case, the norm (for example, "stand in the picket

⁵¹ A critical mass has to be achieved. For details see SUGDEN, *supra* note 39, at 51.

⁵² See *id.* at 47-52; see also Robert Sugden, *Spontaneous Order*, J. ECON. PERSP., Fall 1989, at 85, 97 (stating that patterns of behavior evolve simply "because they are more successful at replicating themselves" and concluding that "[t]hey do not serve any overarching social purpose" and are not "necessarily efficient"). The concept of the focal point originated with Schelling. See THOMAS C. SCHELLING, *THE STRATEGY OF CONFLICT* 53-80, 83-118 (1980) (examining the role of focal points in coordination when communication is impossible).

⁵³ SUGDEN, *supra* note 39, at 55-62, 166-67; Hirshleifer, *supra* note 17, at 16.

⁵⁴ Courts can develop rules, but it seems clear that legislatures have done a better job. Compare Article 9 of the Uniform Commercial Code with the tangle of judge-made doctrines it replaced. For descriptions, see generally GRANT GILMORE, *SECURITY INTERESTS IN PERSONAL PROPERTY* (1965).

line" or "do not emit sparks onto crops") is not self-creating or self-enforcing because the demanded behavior is too complex to be governed by focal points and because actors have no incentive to cooperate in the manner the focal points, if they existed, would demand.

To see why, think of the main obligations of the norm-enforcers. Each must determine the social utility of the unacceptable behavior in question and punish individuals who engage in that behavior, supposing it is socially costly. In the farmer-railroad example, the village gossips must individually incur the cost of deciding whether the railroad's emission of sparks is socially costly behavior; then, each must individually incur the cost of sanctioning the railroad (supposing the behavior is socially costly) by refusing to do business with the railroad. Whereas in coordination games deviation from the desired rule results in automatic punishment (such as a car accident), in prisoner's dilemmas deviation results in punishment only if the enforcers take the trouble to act.

The enforcers have strong incentives not to act in the optimal way. Suppose plausibly that each enforcer has some, but not complete, information about the social costs and benefits of spark emission and that the information aggregated is more accurate than the information disaggregated. If the social context is such that each gossip simultaneously and independently acts upon his decision (by, for example, ostracizing the railroad), then the benefits of aggregation are lost. If the social context is such that the gossips discuss their views before acting (by, for example, gossiping), then the problem of herd behavior arises:⁵⁵ Because a gossip receives the benefits of information aggregation whether or not he makes a contribution, he has an incentive to follow a leader rather than to incur the cost of coming to an independent judgment (including a loss of reputation or other sanction if he is wrong). But this gives the leader's decision too much weight (as he has only partial

⁵⁵ See Abhijit V. Benerjee, *A Simple Model of Herd Behavior*, 107 Q.J. ECON. 797, 798 (1992) (defining "herd behavior" as "everyone doing what everyone else is doing, even when their private information suggests doing something quite different" and concluding that such behavior leads to suboptimal resource allocation); Sushil Bikhchandani et al., *A Theory of Fads, Fashion, Custom, and Cultural Change As Informational Cascades*, 100 J. POL. ECON. 992, 994 (1992) (stating that "[a]n informational cascade occurs when it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information" and using this theory to explain "rapid and short-lived fluctuations such as fads, fashions, booms, and crashes").

information, by assumption), and leads to a failure of aggregation.⁵⁶

This information problem exists even if all the gossips *know* that the railroad's behavior is socially costly. The problem exists because even if they know that the behavior is socially costly, they might not know that everyone else knows this. For fear that others will incorrectly sanction the person who makes the first move, everyone has an incentive not to act. And a further pathology arises because even when everyone knows that the behavior is socially costly, and everyone knows that everyone knows this, each actor will be reluctant to incur the cost of sanctioning the railroad. If sanctioning the railroad means ostracizing it, then the sanctioner as well as the railroad lose a business opportunity. The prisoner's dilemma reproduces itself at every level of sanctioning behavior.

It might seem that it would be impossible for the gossips to overcome these prisoner's dilemmas, but experience suggests otherwise.⁵⁷ It seems more likely that the prisoner's dilemmas affect behavior on the margin, indicating (1) that norm-production will be based on a suboptimal use of available information because of failures of information aggregation; and (2) that it will suffer from a great deal of variance because of herd behavior.

The creation of legislation and judicial doctrine is also subject to strategic behavior, but it is important to distinguish the way their creation is subject to strategic behavior from the way norm-production is. Common to all three forms of rule-production is their vulnerability to attempts by people to exert pressure on the decisionmakers to create rules that favor their private interests. Legislatures are vulnerable to the pressures of lobbyists. Courts are vulnerable to the pressures of repeat litigators. And norm producers are vulnerable to the pressures of interested members of a group. For example, the farmers have powerful incentives to try to convince or even force the village gossips not to condemn the old and inefficient pro-farmer norm because the farmers are not compensated for the redistribution to the railroad caused by the recognition of the new and efficient pro-railroad norm. It might be

⁵⁶ This problem resembles that of network effects. For discussions, see DOUGLAS G. BAIRD ET AL., *supra* note 48, at 208-13; Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 772-824 (1995). Cf. Goetz & Scott, *supra* note 31, at 276-79, 286-89 (discussing how network effects influence contract default rules).

⁵⁷ For a discussion, see Posner, *Regulation of Groups*, *supra* note 3, at 137-44.

the case that norm producers are more resistant to these public-choice-type pressures—that they are more *responsive* to the general interest than are legislatures and courts—but that argument is difficult and it is not the focus of this analysis.

My argument has focused on the mechanisms by which preferences for various rules are transformed into a rule that actually governs behavior, be it a statute, doctrine, or norm. With respect to the effectiveness of these mechanisms, the three forms of rule production clearly differ. All three institutions solve coordination games just by publicizing the strategies that are most common. But legislatures, more so than courts, and courts, more so than norm-producers, are less dependent on the preexistence of focal points. Legislatures can create focal points (as through the recording system) with which actors can coordinate their behavior, whereas norm-producers must take focal points as given features of the psychological or social environment. Good norms depend on luck.⁵⁸

In addition, whereas norm-producers have powerful incentives to free-ride when aggregating information and inflicting sanctions, legislatures and courts have institutional mechanisms that mitigate these prisoner's dilemmas. Legislatures use committees for aggregating information and voting rules for preventing the first-move problems discussed above. Courts rely on rules of evidence, appeal, and precedent to aggregate information and judgments and to minimize variance. None of these mechanisms is perfect; but they seem to be straightforward improvements over the anarchy of norm-production, where no institutional mechanism prevents free-riding in the aggregation of information and the enforcement of sanctions, and where the actors are nonspecialists, whose incentives to cooperate depend on their ever-varying opportunity costs.⁵⁹ When collective behavior depends heavily on information aggregation—as opposed to when enforcers can adequately rely on private information—legislatures and courts can be expected to use information more effectively in determining rules so that statutes and the common law are substantively superior, clearer, and more stable than norms.

⁵⁸ This fact is clear from Schelling's examples, where, for instance, the success of the parachutists in finding each other depends on whether there happens to be one crossroads rather than two, and so on. See SCHELLING, *supra* note 52, at 54-58.

⁵⁹ Whether and how the gossips enforce norms depends, for example, on whether they happen to be employed at the time the violator acts.

C. *Morality*

Norms often reflect nonefficiency and, more generally, non-consequentialist values. This can be seen by reflecting on the ways in which the railroad might try to convince the community to abandon an old norm. The railroad might argue that the norm granting the entitlement to the farmer is not welfare-maximizing. One can imagine a number of responses. Some people would exhibit a kind of unreflective intuitionism, arguing that the existing structure of entitlements is simply "right." Traditionalists would appeal to the authority of age: the entitlement is proper because the entitlement is grounded in history. Some people would invoke ideals of distributive justice: the farmer deserves the entitlement because he is poorer than the railroad. Deontologists would argue that the existing structure of entitlements is proper because the train is the cause of the fire; in contrast, the farmer is passive.

Some moralists, especially deontologists, would not object to a contract in which the railroad purchased the entitlement from the farmer, but would still insist on the propriety of the initial inefficient allocation of entitlements. Others, especially intuitionists, might both object to such a contract and insist on the propriety of the inefficient allocation of entitlements. Although to varying degrees, all of the moral arguments sustain the inefficient norm and inhibit welfare-maximizing behavior.

It might be argued that apparently inefficient norms that reflect moral, rather than economic, concerns are not really inefficient. If moral attachment to an old norm prevents its transformation in response to economic changes, that might signal that the psychic loss that would result from abandonment of the old norm exceeds the material gain that would result from adoption of the new norm. But, as will be seen, there is no reason to believe that the psychic loss is greater than the material gain; moreover, under some conditions, state intervention can transform norms so that the material gain can be obtained without any psychic loss.⁶⁰

One would also expect moral values to influence statutes and common law doctrines. The important distinction is that legislators and judges face constraints against allowing their *own* moral feelings to influence their law-making; norm-producers face no such constraints. Legislators are constrained by their desire for reelection and thus by the interests of constituents. Judges are con-

⁶⁰ See *infra* part III.B.2.

strained by precedent and the requirement of reasoned decision-making. The importance of this distinction will become clear in Part III.

D. *Envy*

An envious person incurs disutility when others possess something that the envious person cannot have. The envious person may therefore incur costs to prevent those others from obtaining that good.⁶¹

In our example, envy of the railroads may prevent people from abandoning the old, inefficient norm that grants the entitlement to the farmers—even if the people recognize that the norm is outdated. Because they do not want the already rich railroad to become even richer, they continue to condemn the railroad every time it causes a fire.

Envious people, unlike deontologists and distributivists, but perhaps like intuitionists and traditionalists, would object to attempts by the railroad and the farmer to contract around the old, inefficient norm, because the contract would make the railroad better off. Envious people also, unlike distributivists, would not care whether the old norm helped the farmers or not. Finally, envious people, unlike intuitionists and traditionalists, would seek to change an old, efficient norm into an inefficient one if the new norm injured the objects of their envy. Accordingly, envy can produce even more inefficient norms than does morality.

It might be argued that if one takes into account the envy of observers, even apparently inefficient norms are really efficient, just as inefficient norms become efficient if one takes into account the moral feelings of observers. But again, envy can prevent the evolution of efficient norms by giving certain people motives to resist change, even if change would increase total wealth. It might

⁶¹ See GARY S. BECKER, A TREATISE ON THE FAMILY 285-92 (enlarged ed. 1991) (stating that “[a]n effective envier wants to maximize his envy income and takes all actions that raise the difference between his own income and the incomes of [his] victims” and asserting that such an envier “would be willing to lower his income if [the victims’] incomes were lowered more”); ELSTER, *supra* note 23, at 252 (stating that “[t]he basic source of envy is that when we attempt to take stock of ourselves, the first impulse is to look at others”); FRANK, *supra* note 39, at 15 (noting that “people who feel envious will accept different jobs, earn different salaries . . . and vote for different laws than predicted by self-interest models”); Richard H. McAdams, *Relative Preferences*, 102 YALE L.J. 1, 14-18 (1992) (discussing the theory that because of envy, an increase in societal income may not result in increased welfare).

be the case that the envious can be paid off out of the surplus or that the envied could give up some of their wealth, but this is not necessarily the case.

The role of envy in the legislative and judicial arenas is restricted in interesting ways. An argument in which one appeals nakedly to envy will not be taken seriously in those settings. Arguments based on envy must be disguised as arguments grounded in authentic doctrinal, moral, or economic considerations. The reformulation of an argument in this way is a cost, albeit sometimes a trivial one. Since public argument plays a greater role in legislative and judicial action than in norm-generation, envy may have less influence on statutes and common law doctrines than on norms.

E. *Negative Externalities*

Norms may be socially inefficient when they support activities that injure third parties. A criminal gang's norm of loyalty is socially inefficient if it enables the gang to commit crimes effectively. A cartel's norm governing price-fixing is socially inefficient if it enables the cartel to fix prices. An aristocracy's norms of exclusion are socially inefficient if they limit the availability of offices and other privileges to aristocrats and exclude more skilled citizens.⁶²

Not all negative externalities are so obvious and thus not all socially inefficient norms are readily identifiable. Richard Arnott and Joseph Stiglitz note that when failures in the insurance market cause people to seek insurance in close-knit social groups, the provision of insurance by these groups may further unravel the insurance market.⁶³ Accordingly, the norms that govern the group

⁶² See HARDIN, *supra* note 39, at 72-106 (discussing norms of exclusion).

⁶³ See Richard Arnott & Joseph E. Stiglitz, *Moral Hazard and Nonmarket Institutions: Dysfunctional Crowding Out or Peer Monitoring?*, 81 AM. ECON. REV. 179, 179-81 (1991). The argument begins with the observation that insurance companies do not meet the demand for insurance because of moral hazard. Because the insurers cannot observe all of the insured's actions and thus make the insurance premium a function of care, the insured has an incentive to engage in reckless behavior. Insurance companies can mitigate this problem by refusing to provide full insurance, requiring the insured to bear some of the risk himself. As a consequence of the undersupply of insurance, however, the insured has an incentive to seek out additional insurance from other, nonmarket sources, such as families, religious groups, and social networks. If the members of the nonmarket group do not monitor each other effectively, the insured will act carelessly (as a result of being fully insured), the total number of accidents will rise, higher costs will be borne by market insurers, and a reduction in market insurance will result. Since people must then rely to a greater degree on nonmarket

might be inefficient.

Groups have a stronger incentive to adopt or develop norms that externalize costs than those that merely maximize joint welfare without producing negative externalities. Therefore, one should be wary about assuming that group norms are efficient. In contrast, statutes and common law doctrines cover large jurisdictions and can be challenged by anyone within those jurisdictions who is injured by them. Because the jurisdiction of a legislature or a court is larger than the jurisdiction of a small, closely knit group, the legislatures and courts have less powerful incentives to externalize costs. Of course, the large size of the populations governed by state agencies means that some individuals will have no incentive to protest laws that injure them slightly, leading to attempts by interest groups to obtain redistributive laws. It is not obvious, however, that the optimal balancing of this disadvantage with the advantage of size leads to a conclusion that small groups, rather than legislatures or courts, produce the superior rules.

F. *A Note on Biology and Social Norms*

Some scholars argue that norms have a biological source. Some or many norms prevail because of emotional propensities produced by genetic structures subject to evolutionary pressures.⁶⁴ In support of this view, some norms appear to prevail in all known cultures, including norms against murder and rape, norms demanding greater loyalty between family members than between strangers, and so on.⁶⁵ While the universality of these norms may reflect the universality of certain social or economic constraints (such as scarcity), they may also reflect universal aspects of human nature.

If some norms have biological origins, the believer in the efficiency of norms must provide a biological argument for the efficiency of norms. Such an argument would presumably draw on evolutionary biology in order to show that efficient norms are adaptive. Such an argument would face substantial difficulties.

First, most human evolution occurred during a period when economic, demographic, environmental, technological, and other

insurers, which are poorer risk-poolers, total welfare declines. If the nonmarket insurer is an efficient risk-monitor, however, aggregate wealth would rise. *See id.*

⁶⁴ *See generally* François Nielsen, *Sociobiology and Sociology*, 20 ANN. REV. SOC. 267, 291-92 (discussing evolutionary theories of collective action).

⁶⁵ *See* DONALD E. BROWN, HUMAN UNIVERSALS 1 (1991) (arguing that "there [are] generalizations . . . that really do hold for the wide array of human populations").

conditions differed from those that prevail today. The supporter of efficient norms would have to explain how norms that evolved in primitive conditions would be efficient in modern society.⁶⁶ This is a variation of the lag problem.⁶⁷ If norms that are efficient at time 0 are hard-wired into the brain, then they must persist at time 1, when environmental conditions have changed.

Second, it is widely recognized that evolutionary forces may produce maladaptive traits. An example is the peacock's tail, which results from competition for mates, but decreases the survivability of the population as a whole.⁶⁸ As an analogue, consider norms that require family loyalty over loyalty to a larger political group. Interfamily competition within a group, such as a tribe, may favor families that develop strict norms of family loyalty, but these same norms may weaken the survivability of the group. If evolution produces maladaptive traits, then it might also produce maladaptive norms.⁶⁹

G. Conclusion

The preceding sections have shown that norms are likely to be "inefficient," in the sense that while they enable people to cooperate for the purpose of producing a collective good, they do not enable them to exploit the full cooperative surplus that would exist if cooperation were costless.⁷⁰ In addition, the preceding sections

⁶⁶ Think of the norms of aid and usury that evolved under primitive conditions. See ELSTER, *supra* note 23, at 149-50.

⁶⁷ See *supra* notes 43-46 and accompanying text.

⁶⁸ See Hirshleifer, *supra* note 17, at 11-13.

⁶⁹ A related source of inefficient norms is cognitive error, about which much is already written. See, e.g., ELLICKSON, *supra* note 1, at 104-20 (discussing the sources of the cattlemen's false belief that in automobile-cattle collisions, motorists are strictly liable for injuries to cattle in open ranges and cattlemen are strictly liable for injuries to motorists in closed ranges, while noting that negligence principles govern both types of disputes).

⁷⁰ The argument has focused on "substantive" norms, that is, norms that directly govern cooperative behavior. Ellickson identifies other sorts of norms, such as "procedural" norms, which govern the process by which groups modify substantive norms, and "enforcement" norms, which govern the process by which groups enforce substantive norms. See ELLICKSON, *supra* note 1, at 132-36. He argues that the efficiency of a substantive norm cannot be analyzed in isolation. A group chooses norms to maximize its welfare so that, for example, the optimal procedural norms might sometimes prevent the group from choosing the most efficient substantive norm, as when it is too costly to identify the latter. See *id.* at 173-74. Although my argument has focused on substantive norms, it applies equally to any other sort of norm. All kinds of norms must evolve. The processes that hinder the efficient evolution of substantive norms also hinder the efficient evolution of procedural,

have shown that the state can, in theory, produce laws that enable people to obtain a larger share of the potential cooperative surplus than they would be able to achieve through private creation and enforcement of norms. The reason is that, given a demand for a particular collective good, the state has access to institutional mechanisms that aggregate information, achieve coordination, and minimize opportunism more effectively than do private mechanisms.

The prior analysis discusses the efficiency of private versus state mechanisms in translating a given set of preferences for rules into a set of rules that are actually enforced as norms or laws. It does not discuss in detail how one set of preferences rather than another set of preferences comes to influence the mechanism. It is possible that state mechanisms reflect the preferences of citizens poorly, as the public-choice model of statutes suggests, more poorly than do private mechanisms. But it seems just as possible that private mechanisms do as poor a job as state mechanisms—because, for example, the more powerful members of a group have more influence on the creation and enforcement of norms than the less powerful, but more numerous, members. As previously discussed, because legislation is more centralized than norm-production, the process of rule creation is likely to be more streamlined and effective; however, this feature of legislation may make it less responsive than norm-production to the interests of those governed by the rules. A theory that accounted for these influences would be considerably more complex than the theory I present here.

But before the present analysis is completed, more must be said about the ways in which the state can influence behavior. By uncovering both the advantages and problems of state regulation of behavior, a more adequate comparison of state and private creation of rules can be made.

III. THE STATE'S RESPONSE TO INEFFICIENT NORMS

A welfare-maximizing state should try to change inefficient norms where it finds them, or at least provide mechanisms that blunt their impact. But two problems emerge. First, how can the state discover whether a norm is inefficient? This problem arises from the fact that usually the group's members, not the state, have the best information about the optimal form of collective action.

enforcement, and other kinds of norms.

Second, even if the state can discover whether a norm is inefficient, the proper legal response may be difficult to determine.

Part A discusses the problem of identifying inefficient norms. Part B discusses three approaches to the problem of dealing with inefficient norms. First, under the "norm-violation" approach, the state overrides inefficient norms by enacting laws that provide incentives for people to violate those norms. Second, under the "norm-transformation" approach, the state transforms inefficient norms by giving groups incentives to modify those norms or by influencing individuals' attitudes toward behavior the state seeks to promote or suppress. Third, under the "norm-circumvention" approach, the state facilitates attempts by parties to bargain around inefficient norms.

A. Identifying Inefficient Norms

The state can identify inefficient norms in a variety of ways. The following list suggests some possibilities.

First, group members may tell agents of the state that the norms are inefficient and that state intervention is desired. For example, users of a common pool sometimes seek legislation or consent decrees to give legal effect to an agreement they have worked out for themselves.⁷¹ The problems with relying on self-reporting are (1) group members may be mistaken about a norm's efficiency and (2) group members may claim that efficient norms are inefficient in order to obtain state assistance in erecting entry barriers.

Second, the existence of extensive bargaining around a norm is evidence that the norm may be inefficient. For example, sometimes people in communities with strong norms against usury bargain around the norms by disguising loans as sales.⁷² A problem is that people may bargain around efficient norms when the norms protect third parties from negative externalities. Another problem is that some norms that stimulate bargaining because they do not reflect

⁷¹ See, e.g., ELINOR OSTROM ET AL., RULES, GAMES AND COMMON-POOL RESOURCES 284-89 (1994) (discussing efforts by water users in California basins to obtain judicial and legislative approval of their agreements).

⁷² See Eric A. Posner, *Contract Law in the Welfare State: A Defense of the Unconscionability Doctrine, Usury Laws, and Related Limitations on the Freedom to Contract*, 24 J. LEGAL STUD. 283, 312-14 (1995) (discussing the persistence of usury ceilings in 17th, 18th, and 19th century England and parties' attempts to contract around the usury ceiling).

average preferences may enhance efficiency by forcing the disclosure of information.⁷³

Third, rapid economic or technological change may suggest that unchanged norms have become inefficient. Medical innovations with respect to public health, contraception, and surrogacy may have outstripped norms regarding adoption and other child-related practices. The state, however, is not necessarily better at understanding economic and technological trends than are private groups.

Fourth, highly unequal endowments of group members may be evidence of inefficient norms. The more powerful members may prefer and enforce norms that redistribute wealth to them, even when those norms are inefficient.⁷⁴

Fifth, the state, as a result of its ability to exploit economies of scale in the collection and analysis of information, may detect actual or potential inefficiencies before the group does. For example, the state may recognize—from trends extrapolated from other fisheries—that a particular fishery is heading toward depletion before that fishery's own management does.

This brief list gives a flavor of the opportunities and problems of state intervention. A further problem should be mentioned, if only in passing. Whether a norm should be considered "inefficient" cannot be determined in isolation; the norm must be analyzed in connection with related norms. For example, suppose a community has an inefficient norm that permits violent resolution of disputes—a norm of honor. It might seem that the state could identify this norm as inefficient and take steps to change it.⁷⁵ But the norm of honor is related to other norms, such as a norm that favors self-help over cooperation (so that conflicts are frequent) or a norm against government interference (whereby people disapprove of police interference with violent resolution of disputes). It is possible that to achieve the collective good of more peaceful resolution of disputes, transformation of one or both of these latter two norms would be cheaper than transformation of the norm of honor. Thus, the state's attempt to identify "the" inefficient norm may be very difficult.⁷⁶

⁷³ Cf. Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 97-100 (1989) (discussing how contract rules may promote efficiency by forcing parties to disclose information through bargaining).

⁷⁴ For an example from the common pools literature, see *infra* text accompanying note 117.

⁷⁵ See my discussion of dueling, *infra* part IV.A.

⁷⁶ I thank Cass Sunstein for raising this point with me. See Cass Sunstein, *Social*

B. *Legal Responses to Inefficient Norms*

1. Norm-Violation

The state can diminish the influence of inefficient norms by enacting laws that give parties incentives to violate them. Returning to Coase's example, suppose that the prevailing norm inefficiently assigns the entitlement to the railroad. In practice, this might mean that when sparks set fire to crops, farmers' complaints fall on deaf ears. The state could enact a law providing farmers with the right to sue the railroad for damages arising from such fires.⁷⁷

The effects of this law may vary. On the one hand, the village gossips might hound farmers who exercise their right of action. If the costs from loss of reputation that result exceed the value of saving the crops, the farmers would not sue. The new law would have no effect. On the other hand, the village gossips might not care if the farmers exercise their right of action. Moreover, even if farmers who use this right do sustain reputational damages, the state can overcome this disincentive by making the award sufficiently generous.

The reaction of the village gossips depends on both their reasons for supporting the old norm and their interpretation of the state's intervention. Welfare-maximizing gossips would not ostracize the farmers for exercising their rights of action if they assumed that the state's intervention was based on efficiency considerations they had not perceived or if they believed that the state's intervention overcame problems of strategic behavior they could not solve on their own. But the same gossips might ostracize the farmers if they assumed (incorrectly, under this hypothesis) that the state's intervention was wrong. Traditionalists and intuitionists would ostracize the farmers for exercising their rights of action. Conversely, envious or distributivist gossips would not ostracize the farmers under such a scenario provided that the railroad was wealthier than the farmer.

A further consideration concerns the visibility of the norm-breaking behavior and the costliness of imposing sanctions. It might be costless for the village gossips to ignore the farmers'

Norms and Social Roles, 96 COLUM. L. REV. (forthcoming May 1996) (manuscript at 53-54).

⁷⁷ Other examples include the criminalization of duels in the face of the powerful norms supporting them and the prohibition of traditional practices respecting common-pool resources. See *infra* parts IV.A to IV.B.

complaints prior to the creation of the new right of action; but it might also be costly to ostracize farmers who exercise the new right of action because ostracism involves giving up valuable business opportunities.

A final consideration is that if the state encourages people to violate the norm through rewards and penalties, the force of the norm may decline, for two reasons. First, as discussed in more detail subsequently, if people attach independent moral force to actions by the state, then the force of the norm for many people will in part be a function of the state's approval of it. Second, the force of the norm for many people may be a function of the number of people who obey it. While many people may initially prefer to obey the norm rather than comply with the law, others may attach a greater degree of importance to the state sanction. Once this latter group violates the norm, the force of the norm declines for the core group who were initially loyal to the norm and they violate it as well. In this way, a norm may unravel.⁷⁸

The efficiency implications of these considerations are straightforward. The use of rewards and penalties to encourage people to violate norms will enhance efficiency if the increase in social wealth achieved through the change in behavior exceeds the state's administrative costs and the psychic costs to those who continue to value the norm. The existence and amount of the increase in social wealth depend on the legal sanction being powerful enough to overcome countervailing nonlegal sanctions. The amount of psychic cost depends on the kind and intensity of moral values held by observers.

2. Norm-Transformation

Another way that the state can encourage efficient behavior in the face of inefficient norms is by effecting a change in the norms themselves. Two methods are possible: First, the state could seek to convince actors that the norms are inefficient or otherwise

⁷⁸ This has an analogy in the heuristic of social proof, according to which people take other people's beliefs as evidence of the truth of the belief. This phenomenon can convert a rumor into a conviction and can shield widespread, but mistaken, beliefs from rational argument. See ROBERT B. CIALDINI, *INFLUENCE: THE NEW PSYCHOLOGY OF MODERN PERSUASION* 114-66 (1993). The unraveling of norms is also related to the phenomenon of information cascades. See *supra* note 55 and accompanying text.

undesirable. Second, the state could manipulate groups in such a way that causes the groups to adopt new norms.

a. *Individuals*

It might seem hopeless for state officials to try to convince the village gossips that the railroad deserves the entitlement or that the farmer deserves the entitlement. But this kind of state action is more plausible in other contexts. In the case of racially discriminatory norms, for example, the state can try to prevent children from adopting these norms by teaching them in public school not to discriminate on the basis of race.⁷⁹ State officials can also try to persuade adults to abandon discriminatory norms through a variety of public and symbolic acts of nondiscrimination, such as the use of nondiscriminatory hiring practices for government employment and the celebration of the achievements of minorities.⁸⁰

The likelihood that any approach will be successful depends on the causes of the inefficiency. Suppose, for example, that employers would like to hire minorities but defer to discriminatory community norms. If all employers in unison started hiring minorities, it is possible that the village gossips could not punish the employers adequately as a group. Nonetheless, each employer may decline to make the first move, fearing that if the others back out at the last minute, it would bear the brunt of the community's wrath. The government, however, can counteract this coordination problem. If government agencies—especially agencies competing with local businesses for the same employees—hire minorities, then the risks attending the first move are reduced.⁸¹

These state practices, however, will not always change inefficient norms. For example, if the discriminatory norm is the result of deeply felt sentiments, then government action is unlikely to change the norm, and may even strengthen it. Rather than undermining

⁷⁹ See, e.g., Ellen Graham, *Schools Try Lessons in Tolerance to Battle Bias*, WALL ST. J., Apr. 10, 1995, at B1 (describing school-imposed detention and "behavior modification" exercises for students who are caught teasing minority students); cf. John R. Lott, Jr., *An Explanation for Public Provision of Schooling: The Importance of Indoctrination*, 33 J.L. & ECON. 199, 201 (1990) (arguing that indoctrination in public schools lowers the cost of wealth transfers by instilling views that rationalize them).

⁸⁰ For a discussion of a variety of such strategies, see Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. CHI. L. REV. 943, 1008-14 (1995).

⁸¹ See *id.* at 965-67 (explaining how the Civil Rights Act of 1964 might have eliminated the first move problem and enabled businesses to engage in more efficient hiring).

the *norm*, the government's opposition to the norm undermines the *government*.

Although most people acknowledge that the state, through public schools, should play a role in inculcating children with certain norms, many people resist attempts by the state to play a similar role with respect to adults. But, once one acknowledges that laws inevitably strengthen or weaken social norms by signaling an official stance toward them,⁸² it becomes important for legal analysis to account for this phenomenon.

b. *Groups*

The state can also undermine inefficient norms by manipulating the groups in which those norms prevail. To achieve this goal, the state can attempt to suppress groups or it can attempt to influence their leaders.

An attempt to undermine a group in which inefficient norms prevail may involve penalizing members of the group for cooperating, rewarding them for free-riding, and independently supplying the collective goods which members seek from the group.⁸³ For example, the state could penalize (with criminal sanctions) members of a group (such as a criminal gang) in which inefficient norms prevail, reward them for defecting (witness protection), and independently provide the collective good that members seek from the group (employment and training programs). As I discuss the legal regulation of groups elsewhere, I need not go into detail here.⁸⁴

⁸² See *id.* at 957 (explaining how governments affect "social meanings to advance state ends"); Richard H. Pildes, *The Unintended Cultural Consequences of Public Policy: A Comment on the Symposium*, 89 MICH. L. REV. 936, 938-39 (1991) (arguing that analyses of public law should include an account of its cultural consequences); Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 820-24 (1994) (discussing the "expressive power" of law to affect social norms); Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021, 2036-43 (1996) (discussing how "participants in law compare the statement made by law with the consequences produced by law"). Lessig's article contains several useful examples of government efforts to change sex and smoking norms. See Lessig, *supra* note 80, at 1019-34.

⁸³ See generally Posner, *Regulation of Groups*, *supra* note 3, at 144-55 (discussing different methods by which the state can modify group behavior and how these methods affect efficiency and wealth distribution).

⁸⁴ Other examples include state approaches to the problem of dueling (providing judicial resolution of disputes, penalizing duelers, and rewarding antidueling societies) and common-pool degradation (licensing groups). See *infra* parts IV.A to IV.B.

A useful example comes from the problem of assigning liability to medical practitioners after an operation that tortiously injures the patient. As is well known, powerful norms dictate that none of those present at the operation disclose the identity of the tortfeasor. The norms benefit all members of the group, even the innocent members, as long as there is a chance that anyone could commit a tort in any given operation. These norms defeat the norm-violation approach of simply penalizing the tortfeasor. When the norms succeed, the courts cannot assign liability and the parties have no legal incentive to take care (although they may have a market incentive).

Now consider a law that makes all present at the operation jointly and severally liable for the injury. The law could have two effects. First, it could cause norm-violation: the innocent actors squeal on the wrongdoer in order to avoid liability (supposing there is a doctrine of contribution). Second, it could cause norm-transformation. The group develops a norm of due care because the desire to avoid liability gives every actor an incentive to monitor the care with which others act and to punish them with nonlegal sanctions if the care is insufficient.⁸⁵

The interesting point about the group-based approach is that although it is risky and difficult for the state to try to transform norms directly, for example, through propaganda, it may be less risky and difficult to transform norms through the intermediate participation of a group. Because group members have more information about each other and more control over each other's behavior than does the state, they are in a better position to impose effective sanctions in such a way that transforms norms.

c. *Efficiency Implications of Transforming Norms*

If the state successfully uses the technique of norm-violation to cause people to violate an inefficient norm, then it produces a surplus. But an enhancement of efficiency occurs only if the surplus exceeds the size of the negative externality imposed on those who value the norm. The transformation of an inefficient norm into an efficient norm differs from the technique of norm-violation in two significant ways.

⁸⁵ For a discussion, see Saul Levmore, *Gomorra to Ybarra and More: Overextraction and the Puzzle of Immoderate Group Liability*, 81 VA. L. REV. 1561, 1562-63 (1995).

First, new efficient patterns of behavior, because they are consistent with the new efficient norm, generally impose no negative externalities on the observers. Under the norm-violation approach, the traditionalist is distressed to see the repeated and state-sanctioned violation of an important norm. Under the norm-transformation approach, however, the traditionalist, the intuitionist, and perhaps the deontologist do not see the new pattern of behavior as a violation of a norm because they endorse the new norm that permits the behavior. Nonetheless, envious people will suffer as much under the norm-transformation approach as under the norm-violation approach if both approaches increase the wealth of the sources of their envy.

Second, under the norm-transformation approach, the state does not have to continually expend resources to cause people to engage in the desired pattern of behavior. In contrast, under the norm-violation approach, the state must engage in constant rewarding and penalizing. The norm-transformation approach, however, in order to effect the transformation, may require a large initial investment that exceeds the continuing costs associated with norm-violation. Of course, the village gossips must incur the costs of norm enforcement even if the state does not.

3. Norm-Circumvention

The Coase theorem implies that inefficient laws do not necessarily lead to inefficient outcomes. If transaction costs are low, parties bargain around the laws to a deal that allocates entitlements efficiently.⁸⁶ By the same token, inefficient norms do not necessarily lead to inefficient outcomes because, if transaction costs are low, parties strike a deal that allocates entitlements efficiently.

If it is expensive for the state either to override or transform inefficient norms, the Coase theorem suggests that the welfare-maximizing state should remain passive when parties can cheaply bargain around the inefficient norms. But when high transaction costs prevent such bargaining, and when the cost of undermining or transforming inefficient norms exceeds the cost to the state of reducing those transaction costs, the state should reduce the transaction costs.

The most obvious method of minimizing parties' transaction costs is to enforce contracts as drafted and to choose efficient

⁸⁶ See Coase, *supra* note 32, at 2-8.

default rules. This analysis is identical to the conventional economic analysis of contract law and so need not be repeated here.⁸⁷ It should be noted, however, that judicial enforcement need not be the only legal recognition of such contracts; legislative solutions may also be appropriate.⁸⁸

In the context of inefficient norms, another method of minimizing transaction costs is to refine the property rights granted by norms. This method recommends itself because norms are often formulated retroactively in a way that is hard to anticipate. For example, whether the farmer has the (normative) entitlement in a particular case may not be determined until the crowd is moved (or not) to criticize the railroad for the fire it caused; whether members of the crowd are so moved might depend on factors unrelated to the efficiencies of the case (such as whether or not the crowd is currently employed). In light of these uncertainties, it might be difficult for the farmer and the railroad to bargain over the entitlement *ex ante*. A law that granted a clear entitlement to one party or the other, but which attempted to conform to the vague (and inefficient) normative entitlement, would facilitate bargaining to the efficient outcome. The law does not transfer the entitlement through a system of rewards and penalties (norm-violation) or propaganda (norm-transformation). Indeed, it confirms and clarifies the entitlement. But by clarifying it, the law facilitates a voluntary transfer to the more-valued use.⁸⁹

A useful example comes from the problem of reducing air pollution. There seems to be a weak norm against polluting the air—weak in the sense that most people think that air pollution is undesirable, but nonlegal sanctions do not suffice to deter it. Straightforward norm-violation approaches, such as legal punishment of polluters, have been criticized for being rigid and inefficient.⁹⁰ Norm-transformation in this context seems unlikely to be effective. No amount of education and government-sponsored television commercials are going to prevent paper mills from

⁸⁷ See generally ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 228-41 (1988) (presenting an economic theory of contract law).

⁸⁸ For example, common-pool users sometimes seek legislative confirmation of their deals. See OSTROM ET AL., *supra* note 71, at 284-89.

⁸⁹ Cf. COOTER & ULEN, *supra* note 87, at 100 (stating that "[o]ne well-confirmed result in the literature on bargaining is that bargainers are more likely to cooperate when their rights are clear, and less likely to agree when their rights are ambiguous").

⁹⁰ See STEPHEN BREYER, *REGULATION AND ITS REFORM* 263-71 (1982) (criticizing command-and-control environmental regulation).

spewing forth pollution. These failures have led to efforts to encourage norm-circumvention—in the form of the market in tradeable emission rights such as that authorized by the 1990 amendments to the Clean Air Act.⁹¹

The easiest way to understand this argument is to imagine that there is a general norm not to pollute “too much.” Firms are entitled to pollute a bit, especially when they employ a lot of people and produce valuable goods. But if firms exceed a certain threshold of pollution, neighbors complain, consumers boycott, and so on. This norm is inefficient, the argument goes, because it does not distinguish clearly between high-value polluters and low-value polluters and thus does not allow citizens to attain the optimal mix of production and clean air. Even supposing firms want to obey the norm, it is difficult to predict in advance, when capital investments are made, how much pollution is enough to provoke sanctions. The Clean Air Act, however, transforms a firm’s norm-grounded entitlement to pollute “a little” into a property right that can be traded on the market. In doing so, the Act creates predictability and (in theory) a cheaper form of pollution control.

One source of the high cost of bargaining around inefficient norms is community disapproval. As suggested earlier, the village gossips may or may not object to attempts by parties to bargain around an inefficient norm, depending on the source of their support for that norm. Envious people and traditionalists may object to circumvention; deontologists would probably be indifferent. If people object to a given circumvention, then bargaining around it might be prohibitively expensive.

The importance of community disapproval of bargaining depends on the observability of the bargain. The state can thus facilitate bargaining by helping the parties structure the bargain in such a way that makes the violation of the norm hard to observe. This phenomenon is illustrated vividly by the history of governmental responses to usury norms. Norms prohibiting the charging of interest interfered with governments’ attempts to raise money and support commercialization.⁹² People often tried to bargain around

⁹¹ See PETER S. MENELL & RICHARD B. STEWART, ENVIRONMENTAL LAW AND POLICY 255 (1994).

⁹² For a discussion, see Posner, *supra* note 72, at 312-13; see also BENJAMIN N. NELSON, THE IDEA OF USURY (2d ed. 1969) (tracing the history of usury norms); R.H. Tawney, *Introduction* to THOMAS WILSON, A DISCOURSE UPON USURY 1, 106-21 (R.H. Tawney ed., 1925) (discussing the influence of medieval religious doctrine on attitudes toward usury).

usury norms by structuring loans as sales, leases, profit-sharing agreements, and other morally neutral transactions. Many governments encouraged this behavior by enforcing the transactions—and this willingness to enforce, rather than to look through the form to the substance, is an example of legal facilitation of contractual circumvention of inefficient norms.⁹³

The efficiency implications of enhancing the parties' ability to bargain around an inefficient norm are similar to those of the norm-violation and norm-circumvention strategies. If bargaining around the norm is itself a violation of a norm, then encouraging bargaining has the same efficiency implications as encouraging norm-violation. If bargaining around the norm is not itself a violation of the norm, then encouraging bargaining does not injure any third parties, except perhaps the envious.

IV. SOME ILLUSTRATIONS

The purpose of this Part is to illustrate, in a general but suggestive manner, the propositions that: (1) important inefficient norms have prevailed within relatively close-knit groups; and (2) forms of state intervention can be understood as attempts to transform the norms or blunt their impact.

A. *Dueling*

Dueling norms prevailed in many close-knit groups, such as the aristocracies of European countries (and the Old South) and the officer corps of their armies.⁹⁴ Scholars have proposed two general theories of dueling norms. Under the "cartel theory," dueling norms acted as an entry barrier to the market for offices. When dueling is an accepted means for resolving disputes between people who hold offices, skilled duelists have an advantage in the market for offices over unskilled duelists. Because the aristocrats were better able to educate their children in dueling than commoners, the dueling norms gave an advantage to the aristocracy.⁹⁵ Under the "efficiency theory," dueling norms served to ensure

⁹³ For a discussion of bargaining around usury norms, see Posner, *supra* note 72, at 301-03.

⁹⁴ See FRANÇOIS BILLACOIS, *THE DUEL: ITS RISE AND FALL IN EARLY MODERN FRANCE* (Trista Selous ed. & trans., 1990); V.G. KIERNAN, *THE DUEL IN EUROPEAN HISTORY* 92-115 (1988); EDWARD MUIR, *MAD BLOOD STIRRING: VENDETTA AND FACTIONS IN FRIULI DURING THE RENAISSANCE* 247-52 (1993).

⁹⁵ See HARDIN, *supra* note 39, at 92-93.

cooperation among aristocrats. Dueling norms required members of the aristocracy to enforce general norms of cooperation.⁹⁶

Let me focus on the efficiency theory. When societies are not sufficiently wealthy or organized to support powerful, centralized governments, rules of conduct must be enforced in a decentralized way. At the most basic level, people can deter opportunistic or predatory behavior simply by retaliating.⁹⁷ The problems with retaliation are: (1) the predator might defeat the person who tries to retaliate; (2) the retaliator might, by intention or accident, sanction too harshly the predator (in effect, becoming a predator himself); and (3) a destructive cycle of feuding might result.

A society with dueling minimizes these problems by reducing the risk of injury—elaborate formalities often inhibit violence—and by providing means for the publication of predatory behavior (dueling codes provide for witnesses and often for advertisement of the conflict and its source) so that deterrence will result.⁹⁸ In essence, dueling prevents disputes from exploding into feuds by formalizing and channeling the means of enforcement.⁹⁹ The efficiency theory thus does not claim that dueling is the optimal means of social organization, but that, given the times, it represented an improvement over prior means of organization.

When the state finally obtains a monopoly on legitimate force and the means to use it, however, dueling ceases to be an efficient institution. The superior efficiency of police and courts can be seen in many ways. The bureaucratized state uses experts in law enforcement, whereas the duelist is an amateur. The state obtains economies of scale in the use of force, whereas dueling does not

⁹⁶ See Warren F. Schwartz et al., *The Duel: Can These Gentlemen Be Acting Efficiently?*, 13 J. LEGAL STUD. 321, 332-43 (1984). I simplify the authors' more subtle argument.

⁹⁷ See MUIR, *supra* note 94, at 278 (discussing feuding as "a rational and systematic means of resolving conflict" in traditional societies). Elster criticizes the theory that revenge or retaliation is socially efficient. See Elster, *supra* note 40, at 876-81. I assert only that dueling is probably a more efficient means of social control than is feuding.

⁹⁸ See Schwartz et al., *supra* note 96, at 323 n.9. Some of the most interesting aspects of duels are the elaborate practices that surround them that ensure proper evaluation and publication of the underlying dispute. See, e.g., MUIR, *supra* note 94, at 258-59 (noting that in 16th century Italy, the duel was observed by a judge, who afterward "made two different kinds of determinations: who was the superior fighter and who was correct in the quarrel" and that "the findings had to be written up, signed by a judge, and certified by a notary").

⁹⁹ See MUIR, *supra* note 94, at 276-82.

keep order when large factions obtain power. The state's officials enforce rules impartially, whereas people can enforce dueling norms opportunistically—to obtain advantages rather than just to resolve disputes.

It seems likely that in many countries, dueling norms lasted long after they ceased to be efficient. In the old South, dueling lasted until the Civil War; in many European countries, including France and Germany, it persisted through most of the nineteenth century and even into the twentieth.¹⁰⁰ But commentators had begun to condemn dueling, on practical as well as on moral and religious grounds, as early as the Middle Ages. By the 1600s and 1700s, commentators, the general public, and government officials saw dueling as an anachronism, and states tried to stomp it out.¹⁰¹ And yet the norms persisted.

Why did dueling norms persist beyond the time that changing social and political conditions had undermined their efficiency? First, dueling norms depended initially on deeply internalized norms and beliefs; people could not shed them in an instant.¹⁰² Second, dueling norms favored certain people over others: the good duelists over the bad, and those whose interests were bound to the old order over those whose interests were bound to the new.¹⁰³ Those favored resisted efforts to eliminate dueling, and as long as dueling norms dominated, those disfavored could not openly oppose them and could not refuse challenges without losing status.¹⁰⁴ Third, dueling vindicated the moral outrage provoked

¹⁰⁰ See KIERNAN, *supra* note 94, at 271-92; Schwartz et al., *supra* note 96, at 348-49.

¹⁰¹ In 1563, the Council of Trent decreed the excommunication of duelists and governments that did not seek to suppress dueling; this decree apparently influenced law and practice in Italy and Spain. See KIERNAN, *supra* note 94, at 92. In France, the first serious antidueling law was enacted in 1602. See BILLACOIS, *supra* note 94, at 97. Louis XIV may have successfully stomped out dueling during his reign in the late 1600s and early 1700s—the penalty for violation was death. See KIERNAN, *supra* note 94, at 95-96. But see BILLACOIS, *supra* note 94, at 175-81 (questioning the view that Louis XIV ended the practice of dueling). James VI of England declared dueling a capital crime in 1600, but his law did not have much effect. See KIERNAN, *supra* note 94, at 104. In Austria, dueling was criminalized at the end of the 18th century. See *id.* at 193.

¹⁰² Kiernan discusses internalization throughout his book. See KIERNAN, *supra* note 94.

¹⁰³ This is the cartel theory. See HARDIN, *supra* note 39, at 93.

¹⁰⁴ See MUIR, *supra* note 94, at 260-61; see also HARDIN, *supra* note 39, at 93-95 (quoting Montesquieu for the proposition that if a person is challenged to a duel, he cannot win: "If he obeys the laws of honor, he perishes on the scaffold; if those of justice, he is banished forever from the society of men").

by opportunistic behavior and may have seemed more morally satisfying to the observer than the dry and technical operations of the state.

In sum, information problems (which prevented the speedy realization by large numbers of people that dueling had exhausted its advantages), strategic behavior, and moral tradition inhibited the abandonment of dueling norms even after the state became a more efficient institution for resolving disputes. This is why *both* the efficiency theory and the cartel theory are plausible: what may have begun as an efficient mechanism of social order ended up as a barrier to change supported by those who benefited from it disproportionately.¹⁰⁵ As dueling lost its original justification, it became an anachronism, and pressure mounted for state intervention.¹⁰⁶

Why did the dueling norms disappear? Perhaps information about the duel's relative ineffectiveness at achieving social order in comparison to the modern criminal justice system finally became widespread; perhaps the old guard died out; and perhaps moral traditions lost their force. The role of the state is obscure, but two points can be made. First, states attempted to use the norm-violation approach in order to undermine dueling norms. This approach must have had an effect at the margin, but the magnitude of this effect cannot be known. Second, states may have used the norm-transformation approach. An example, discussed by Lessig, is a law that denies offices to convicted duelists, as opposed to a law that punishes them with execution or imprisonment. Lessig conjectures that the first law enables a person to avoid a challenge by claiming a higher obligation to serve his country or class (by holding office), rather than by admitting an interest in saving his skin (from execution).¹⁰⁷ If dueling norms derived their power

¹⁰⁵ See KIERNAN, *supra* note 94, at 115, 127, 135, 148, 158, 325, 329.

¹⁰⁶ See *supra* note 101. Of course, the effectiveness of government attempts to suppress dueling was always uncertain: enforcement was rare and royal pardons were frequent, but sometimes (as, according to some historians, under Louis XIV) enforcement was nevertheless effective. Moreover, even though the death penalty was rarely carried out, duelists were often (as in France) banished, and exile seriously injured their wealth, status, and careers. See BILLACOIS, *supra* note 94, at 109-11. Monarchs were ambivalent: they sought to replace duels with the machinery of the state, but because they also depended on the aristocracy for political support, they could not ignore its interests. A similar ambivalence appeared in the Old South, where dueling was subject to heavy criminal punishments; but duelists were often spared. See Schwartz et al., *supra* note 96, at 326-29.

¹⁰⁷ See Lessig, *supra* note 80, at 968-72.

from the view that they supported a class whose sense of superiority lay (in part) in its political power and obligation, then Lessig's conjecture is plausible.¹⁰⁸

B. *Common Pools*

The literature on common pools provides a vast resource for testing ideas about norms. The modern development of this literature begins with an article by Garrett Hardin, which points out that rational actors will overexploit commons, such as fisheries, groundwater systems, and forests.¹⁰⁹ Hardin's argument initially seemed to support government intervention. Field work, however, has suggested that government intervention has sometimes been the cause of overexploitation, not the solution, and that the communities of people who control common pools often develop norms and nonlegal sanctions that solve the common-pool problem.¹¹⁰

Still, the literature has not produced a clean resolution and now consists of efforts to identify the conditions under which common-pool problems are solved. The efficient-norm view predicts that common pools are governed by efficient norms when (1) only a close-knit group has access to the common pool; (2) the state enforces underlying property rights; and (3) endowments are relatively equal.

Evidence for this argument at first appears strong: communities that govern common pools often display an impressive level of cooperation. The literature contains many examples of communities that develop intricate norms for regulating common pools, even in cases where the common pools would seem to involve intractable

¹⁰⁸ I have found no evidence of state encouragement of norm-circumvention. There were, however, private attempts. People formed antidueling societies in which members pledged not to engage in duels and which pressured states to outlaw dueling. See KIERNAN, *supra* note 94, at 216-17. It would be interesting to know whether governments encouraged these societies, as the strategy of norm-circumvention would suggest.

¹⁰⁹ See Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243, 1244-45 (1968); see also H. Scott Gordon, *The Economic Theory of a Common-Property Resource: The Fishery*, 62 J. POL. ECON. 124, 128-35 (1954) (discussing the incentives for overexploitation of fisheries).

¹¹⁰ See, e.g., ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 143-81 (1990) [hereinafter OSTROM, GOVERNING] (analyzing successes and failures in common-pool resource exploitation); OSTROM ET AL., *supra* note 71, at 225-316 (discussing data obtained in the field on the irrigation, inshore fisheries, forestry, and groundwater sectors); see also Rose, *supra* note 3, at 742 (discussing custom as a means of managing a commons).

problems of measurement and enforcement.¹¹¹ The studies often show that the communities exploit the resource at just the level that ensures renewal and that they are able to adjust their level of exploitation in response to moderate changes in environmental conditions.¹¹² Moreover, failures of these arrangements often occur not because of the community's inability to solve the common-pool problem, but because of clumsy and unnecessary government intervention that undermines the delicate network of cooperative norms.¹¹³

But there are several problems with the efficiency thesis.¹¹⁴ First, communal regulation of common pools is vulnerable to sudden changes in technology and the environment. In a study of a Sri Lankan fishery, the author concluded that although the community had solved the common-pool problem at various periods of history, rapid technological change (such as the invention of superior nets and the introduction of mechanized boats) and economic change (such as demand surges caused by World War II and subsequent economic development) undermined these arrangements, causing overexploitation problems.¹¹⁵ The availability of the superior nets, for example, led to overinvestment by the fishermen, who did not realize that the common pool could support only a small number of the nets.¹¹⁶ Sudden changes produce lags, during which the system slowly struggles toward a new equilibrium.

Second, communal regulation is vulnerable to opportunistic behavior. Most noticeable in the common-pool literature is the ability of wealthy, powerful, high-status, or simply violent members of the group to push through rules that favor them at the expense of the group and of the pool. In a study of six village-run community forest systems located in the Himalayas, for example, the factor that seemed to distinguish the successful villages from the unsuccessful was the presence of powerful figures in the latter who were

¹¹¹ See OSTROM ET AL., *supra* note 71, at 225-316; *see also id.* at 327-28 (discussing the various case studies).

¹¹² *See id.* at 327-28.

¹¹³ See OSTROM, GOVERNING, *supra* note 110, at 8-28.

¹¹⁴ A methodological problem with the thesis is that renewal of a common pool is not decisive evidence of *efficient* behavior, although it is evidence of *cooperative* behavior. Renewal is consistent with underexploitation of the common pool for the purpose of creating above-market prices.

¹¹⁵ See PAUL ALEXANDER, SRI LANKAN FISHERMEN: RURAL CAPITALISM AND PEASANT SOCIETY 261-62 (1982).

¹¹⁶ *See id.* at 97-102.

able to insist on an auction system for the right to forage. The auction system allowed the wealthy figures to obtain and overforage the best lands, leading to overexploitation. Meanwhile, in the successful villages, an intricate system of rules prevented anyone from overforaging.¹¹⁷

Third, envy, resentment, and morality—especially traditionalism—could play a role in the management of common pools.¹¹⁸ While the influence of these factors is generally not studied, and it is always difficult to decide whether they simply reflect economic strategies, their effect cannot be ignored.

The implications of these problems for government regulation are complex. Ellickson's hypothesis that the norms of close-knit groups are efficient generally assumes government enforcement of basic property rights.¹¹⁹ Some communities are so closely knit, however, that they can solve common-pool problems even without government enforcement of basic property rights.¹²⁰ Others, although apparently closely knit, quite clearly need greater governmental involvement. In a study of a Turkish fishing community, for example, the author found that the community overexploited its fishery in part because it was not able to limit fishing by its own members.¹²¹ In cases such as this one, government licensing may deter overexploitation.

Government response to common-pool problems has taken several forms. First, governments sometimes impose their own regulations on the pool (norm-violation). For example, they issue licenses or they regulate production and price.¹²² Second, govern-

¹¹⁷ See Arun Agrawal, *Rules, Rule Making, and Rule Breaking: Examining the Fit Between Rule Systems and Resource Use*, in OSTROM ET AL., *supra* note 71, at 267ff.

Ellickson excludes from his efficient-norms hypothesis groups that contain members who are unequally endowed, but by doing so he risks making his hypothesis irrelevant since this condition rarely obtains. See ELLICKSON, *supra* note 1, at 177-78.

¹¹⁸ A flavor of this is given in ELLICKSON, *supra* note 1, at 22-25 (describing the differences in outlook between the "traditionalist" and "modernist" cattle ranchers); *id.* at 52-64 (describing moral attitudes and resentment); *id.* at 114-15 (describing conflict between moral attitude and law).

¹¹⁹ See *id.* at 174-76. Ellickson also suggests that such "foundational" rights could be established nonlegally, but he does not elaborate on this idea.

¹²⁰ See, e.g., Margaret A. McKean, *Management of Traditional Common Lands (Iriaichi) in Japan*, in MAKING THE COMMONS WORK 63, 70 (Daniel W. Bromley ed., 1992) (national control "[f]or the most part . . . [did] not affect the governing of common lands, which were managed freely and independently by the villagers").

¹²¹ See Fikret Berkes, *Success and Failure in Marine Coastal Fisheries of Turkey*, in MAKING THE COMMONS WORK, *supra* note 120, at 161, 178-79.

¹²² See OSTROM, GOVERNING, *supra* note 110, at 213-14.

ments sometimes allow the group a great deal of autonomy, but still influence the group in subtle ways—for example, by providing the group with information about the resource and encouraging cooperation (norm-transformation).¹²³ Third, governments create tradeable property rights in the common pool (norm-circumvention).¹²⁴

CONCLUSION

The recent work on law and social norms is best understood as an investigation of the ways in which the state can support and hinder attempts by people to cooperate for the purpose of producing collective goods. Against an old, albeit much criticized, tradition in economics of assuming that state intervention is a necessary condition of the production of collective goods, scholars like Ellickson have argued that people can produce collective goods without state intervention. They can do so because they are frequently governed by norms that maximize the surplus produced by cooperative behavior.

The purpose of this Article has been to complicate the Ellicksonian view. It has done so by showing that even close-knit groups are likely to produce inefficient norms and that these norms may be less efficient than the rules produced by the state. This Article has argued that the proper approach to the problem of collective behavior is a systematic comparison of private and state mechanisms, with attention to the ways in which each solves problems of information, coordination, and opportunism. The comparison is inevitably a messy business, depending to a great extent on context. But theory is helpful for identifying factors that are most likely, in a given case, to be relevant.

The analysis raises more problems than it solves. Let me identify two that seem most urgent and should provide the basis of future research. First, there is not yet a precise understanding of the way norms work and evolve. Part of the problem is that the word “norm” is used to describe many different kinds of phenomena. This might just be because the concept of “norm” is intrinsically slippery in a way that the concept of, say, “statute” is not. Second, there is a need for a positive theory that relates the

¹²³ See *id.* at 212-13 (discussing groundwater basins).

¹²⁴ See *supra* text accompanying note 91 (discussing the 1990 Clean Air Act amendments).

evolution of norms to the development of statutes and common law doctrines. Most of the existing work is normative. But conclusions about the desirability of state intervention must await a more complete understanding of how norms evolve and of how legal institutions evolve with and in response to them.