BOOK REVIEW

ARE THERE CRACKS IN THE FOUNDATIONS OF SPONTANEOUS ORDER?


Reviewed by Lewis A. Kornhauser*

INTRODUCTION

Is law important? How one responds to this question, of course, will depend on one’s conception of law and on what one considers important. Not surprisingly, lawyers and law professors almost invariably answer yes whether they examine the resolution of disputes or the regulation of behavior. Other social scientists are less certain. Economic analysts of law have argued that law is important only when “transaction costs” are sufficiently high. A growing literature in legal anthropology and sociology of law suggests that non-legal norms often have a greater impact on behavior than does the content of the law. In Order without Law, Robert Ellickson joins this debate over the extent and manner of law’s influence on individual behavior. As his title suggests, Ellickson concludes that, at least in some circumstances, individuals neither resolve disputes nor order their behavior according to legal rules.

Ellickson’s book contains two distinct and provocative parts. The two parts could easily stand alone as separate books. The first reports Ellickson’s empirical study of the resolution of disputes over wayward

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* Professor of Law, New York University. I thank Robert Ellickson, who in commenting on an earlier draft, generously sought to sharpen the points of controversy.

1 See Ronald Coase, The Problem of Social Cost, 3 J. L. & Econ. 1 (1960). Coase argued that, in the absence of transaction costs, the assignment of a liability rule does not affect behavior. This claim has often been interpreted loosely to imply that law is not important when transaction costs are zero. Coase’s argument, however, does assume that contracts between agents are enforceable. Unless one regards a “free contract regime” as a condition of “zero transaction costs,” law remains important even in the ideal world envisioned by Coase.

2 See, e.g., John Griffiths, What is Legal Pluralism?, 22 J. Legal Pluralism 1, 4 (1986); Sally Engle Merry, Legal Pluralism, 22 L. & Soc’y Rev. 869 (1988). The fact that non-legal norms determine behavior does not imply that law is unimportant. For instance, the incidence of deviance from non-legal norms might vary with the content of some related legal norm. Or, the content of the non-legal norms might depend on the content of related legal norms.

cattle in Shasta County, California. The second elaborates and defends the utilitarian hypothesis that informal social norms in closely knit groups maximize group welfare. The two parts of Ellickson's book, of course, are related. The empirical study in the first part provides a wealth of examples which motivate and support the theoretical claims of the second part.

Both parts of Ellickson's study raise questions central to our understanding not only of law, but also of social science in general. At the core of Ellickson's argument lies the claim that self-interest (or prudence) explains normative as well as market behavior. Although Ellickson hypothesizes that informal social norms maximize social welfare, his argument rests, sometimes overtly, sometimes not, on the behavioral assumption that individuals adhere to norms out of self-interest. He believes that individual agents conform to norms because of the market-like incentive structures that norms create, and that, conversely, the behaviors that norms specify are in the common self-interest of the agents who hold them.

Part I of this Review briefly summarizes Ellickson's empirical study and the argument for his hypothesis of welfare-maximizing informal social norms. Part II then raises questions concerning the scope and truth of the hypothesis. This Part contends that Ellickson's claim that informal norms maximize "objective" group welfare is inconsistent with his assumption that group members adhere to norms because it is in their self-interest to do so. Part III considers more broadly the character of normative behavior and the difference between norms and incentives. This Part suggests that self-interest does not provide an adequate account of normative behavior.

I

ELLIICKSON'S ARGUMENT

A. The Shasta County Study.

In his seminal article, The Problem of Social Cost, Ronald Coase develops much of his argument through the analysis of a hypothetical dispute between a rancher and a farmer. Coase compares the effects of two distinct legal regimes. In one regime, the farmer must bear the costs imposed by wayward cattle; in the other, the rancher must pay for damages caused by her animals. Ellickson, perhaps taking his cue from Coase himself, found a field site where he could examine empirically the

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4 See id. at 123.
5 Coase, supra note 1, at 2-8.
different effects of these two legal regimes. Ellickson chose Shasta County because California law gives Shasta County Commissioners the power to designate land within their County as open or closed range. Moreover, because the Commissioners have exercised their authority and declared one section of the county closed, the County provides a useful laboratory in which to study the differential effects of the two regimes. Broadly phrased, under an open range regime, those who suffer the damage imposed by wayward cattle must bear the costs. Under a closed range regime, in contrast, the cattle-owner bears these costs.

Ellickson studies three distinct types of “dispute” to support his claim that informal norms, not law, govern relations in Shasta County: (1) responsibility for damage caused by trespassing cattle; (2) the allocation of costs in the construction of boundary fences; and (3) responsibility for damage caused by auto accidents involving or precipitated by cattle on the highway. The statutory determination that the range is open or closed directly governs only trespass disputes. A separate statutory provision governs cost allocation for boundary fences, although the range rule might alter who initiates fencing. Automobile accidents are governed largely by a common law negligence rule unaffected by the range rule. Thus, if Ellickson’s claim is correct, informal norms govern

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6 Coase, somewhat gleefully, has indicted celebrated economists of the last two centuries for their armchair theorizing. For example, he takes John Stuart Mill, Henry Sedgwick, Arthur C. Pigou, and Paul Samuelson to task for their assumption that lighthouses could be supplied only by governments. See Ronald Coase, The Lighthouse In Economics, 17 J. L. & Econ. 357 (1974) (reprinted in Ronald Coase, The Firm, The Market and the Law 187-89 (1988)). Ellickson’s study reveals that Coase had no better view of cattle disputes from his armchair than these economists had of lighthouse funding from theirs.

7 As a laboratory, however, Shasta County was not ideal because Ellickson noted only a small number of transactions. It might have been more fruitful to supplement the inquiry in Shasta County with a comparison of behavior in California counties with wholly closed ranges and counties with wholly open ranges.

Ellickson notes that six northern counties in California are open range. See R. Ellickson, supra note 3, at 43. A comparative study would require that substantial cattle raising occurs in some counties with closed ranges.

8 The law of open and closed ranges is much more complex. See R. Ellickson, supra note 3, at 42-48.

9 Ellickson uses the term “dispute.” However, I have placed “dispute” in quotes because these transactions display little disagreement either over the facts or over the relevant norms governing these facts. When X delivers a gross of widgets to Y with payment expected in 30 days, we do not think that Y’s prompt payment constitutes a dispute. Nor do we necessarily view X and Y as disputing if, after Y returns the delivery as non-conforming to the contract specifications, X delivers a conforming gross.

10 See R. Ellickson, supra note 3, at 40-64.

11 See id. at 65-81.

12 See id. at 82-103.

13 See id. at 67 (citing Cal. Civ. Code § 841 (West 1982)).

14 See id. at 88.
behavior regulated by both common law and statutory rules.

Ellickson’s study of Shasta County is rich in insight and suggestive of various lines of inquiry; careful reading well repays the effort. Here I isolate five empirical conclusions that address the relative influence of law and informal social norms in resolving the three types of dispute. Of Ellickson’s many observations, these five bear most directly on the theoretical project that Ellickson pursues in Part II of the book.

First, Ellickson concludes that two informal norms, unconnected to the range rule, govern cattle trespass situations: (a) “an owner of livestock is responsible for the acts of his animals;” and (b) “rural residents should put up with . . . minor damage stemming from isolated trespass incidents.” Second, Ellickson finds that the costs of boundary fences are also allocated according to informal rather than legal or contractual norms. The basic norm requires that “adjoining landowners . . . share fencing costs in rough proportion to the average density of livestock present on the respective sides of the boundary line.” This division is generally approximate and accomplished fifty-fifty, all-or-nothing, or labor in exchange for materials. Third, Ellickson observes that legal rules influence the allocation of costs of collisions between motor vehicles and cattle. He suggests, however, that the legal rule is important, not because residents are well-versed with legal doctrine, but because most livestock owners and vehicle drivers are insured, leaving the resolution of many of the disputes in the hands of insurance agents, and because the financial stakes of these disputes are often high enough to make litigation a credible threat.

Ellickson's fourth conclusion is that the informal norms governing trespass and boundary fence transactions exemplify a more general norm of cooperation. With respect to cattle trespass, Ellickson phrases this as a “conscious . . . commit[ment] to an overarching norm of cooperation among neighbors,” and his discussion of boundary fences uses the phrase “neighborly structure” of interaction to describe the cooperative norm. Ellickson suggests that the structure of cooperation arises because of repeated dealings in diverse contexts among neighbors, and that it is maintained by a “mental accounting” in which neighbors post debits for losses

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15 Id. at 53.
16 Id.
17 Id. at 71.
18 See id. at 72-73. Ellickson does note that certain institutional landowners are not governed by this norm and pay nothing regardless of the benefits that the boundary fence offers to them. Their passivity and general lack of involvement in the community apparently insulates them from the norm.
19 See id. at 95-100.
20 Id. at 52-53.
imposed and credits for benefits received.\textsuperscript{21}

Ellickson’s fifth conclusion concerns lay (and official) knowledge of the law. Ellickson found that the level of knowledge varied with the nature of the dispute. The average Shasta County resident knew roughly whether his land fell within open or closed range and also knew broadly the legal consequence of this.\textsuperscript{22} Few landowners, however, knew the statutory rules governing the allocation of costs of boundary fences,\textsuperscript{23} and very few residents understood that the range rule does not affect liability in vehicle accidents.\textsuperscript{24}

\textbf{B. Ellickson’s Theory of Informal Social Norms}

The theoretical section of \textit{Order without Law} is thick with ideas and examples. Ellickson provides extended discussion of the informal norms governing whaling in the nineteenth century\textsuperscript{25} and photocopying in academia.\textsuperscript{26} These discussions, as well as his use of the Shasta County data and other shorter examples, are always apt and provocative. In the elaboration of his argument, Ellickson suggests a variety of novel modifications to the formal game-theoretic analyses of cooperation, and these modifications merit detailed consideration.

The argument itself is simple and straightforward. Ellickson first presents a taxonomy of methods and mechanisms of social control. His taxonomy distinguishes among sanctions, rules, and “controllers” or those who enforce the rules.\textsuperscript{27} For Ellickson, “a system of social control . . . consist[s] of rules of normatively appropriate human behavior. These rules are enforced through sanctions, the administration of which is itself governed by rules.”\textsuperscript{28} Informal social norms, Ellickson’s primary concern, differ from other norms in that the controller is the group as a whole, rather than the state, an individual, or an organization.\textsuperscript{29}

\begin{itemize}
  \item \textsuperscript{21} Id. at 55-56.
  \item \textsuperscript{22} See id. at 49-50. Ellickson notes that attorneys and judges had an inaccurate understanding of the consequence of open and closed range. Id. at 50-51. The best informed individuals were animal control officers. See id. at 49. These findings are hardly surprising because of the infrequency with which trespass led to legal action. Those individuals with the most contact with the law have the clearest knowledge of it.
  \item \textsuperscript{23} See id. at 71.
  \item \textsuperscript{24} See id. at 95. Ellickson notes that this ignorance is not surprising given that vehicle/livestock accidents were infrequent and generally were resolved by insurance adjustors rather than the individuals involved. Ellickson states that the California Highway Patrol reported only 33 vehicle/livestock collisions in the 46-month period of August 1978 to May 1982. Id. at 83.
  \item \textsuperscript{25} See id. at 191-206.
  \item \textsuperscript{26} See id. at 258-64.
  \item \textsuperscript{27} Id. at 124.
  \item \textsuperscript{28} Id. at 124.
  \item \textsuperscript{29} See id. at 126-27. Ellickson defines sanctions as either rewards or punishments, see id. at 124, and he distinguishes between substantive, remedial, procedural, constitutive, and control-
son thus distinguishes informal social norms from laws (promulgated and enforced by the state), ethical scruples (self-promulgated and self-enforced), contract terms (consensually promulgated), and organizational rules (promulgated and enforced by organizational hierarchies).

Ellickson then puts forward his central hypothesis that "members of a close-knit group develop and maintain norms whose content serves to maximize the aggregate welfare that members obtain in their workaday affairs with one another." 30 Much of the second part of the book elaborates or qualifies this hypothesis. I note here two of Ellickson's elaborations and three of his qualifications.

Ellickson explains that his hypothesis posits that norm-makers use an "objective" measure of welfare. 31 The posited objectivity of welfare permits Ellickson to consider it interpersonally comparable and cardinal; that is, one can compare A's welfare to B's welfare not simply in qualitative terms but also in quantitative (or intensity) terms. 32 In theory, the norm-maker armed with an objective measure would be able to measure each individual's welfare in comparable units, aggregate the totals, and compare the combined total resulting from any given norm with the totals that would result if other norms were chosen. In Part IIB below, I discuss the difficulties posed by Ellickson's reliance on "objective" welfare. 33

In a further elaboration of his hypothesis, Ellickson equates the hypothesized welfare-maximizing effect of informal norms with the minimization of "the sum of deadweight losses and transaction costs [group members] objectively incur . . . when interacting with one another." 34 Ellickson thus implies that informal social norms reflect not only the difficulties inherent in the interaction that give rise to the norm, but also the costs of enforcement.

Ellickson qualifies his hypothesis in at least three important ways. The first qualification is embedded in the statement of the hypothesis: the claim primarily applies to the substantive norms of closely knit groups. 35 Ellickson subsequently articulates two other qualifications. Ellickson notes, first, that informal social norms maximize welfare within the group rather than globally. 36 A closely knit elite, then, might maintain informal norms that maximize its own welfare but require the ex-
ploitation of some external group.\textsuperscript{37}

Second, Ellickson offers an ill-defined distinction between \textit{workaday} and \textit{foundational} norms, and says that the welfare-maximization hypothesis covers only workaday norms.\textsuperscript{38} Workaday norms, he says, are norms that regulate everyday matters; foundational norms, he suggests, include (at least) basic rules that protect the person and property, as well as purely distributive norms that are the basis on which exchange occurs.\textsuperscript{39} By placing norms that protect the person and property outside the scope of his hypothesis, Ellickson hopes to render it "operational"; Ellickson believes that welfare can be objectively measured only against a baseline of basic entitlements.\textsuperscript{40}

At the outset of the book, Ellickson states his ambition to unify economic and sociological perspectives on law.\textsuperscript{41} His discussion, however, rests on a purely economic theory of social control\textsuperscript{42} generally and of informal social norms in particular. His theory is economic in three distinct senses. First, he assumes that individuals act rationally: in "decision problems," each individual maximizes her individual preferences, and in strategic situations, each follows the dictates of game theory.\textsuperscript{43} Second, Ellickson models social control mechanisms in an economic fashion. For Ellickson, social control, whether legal or informal, operates through rules, and a rule has its effect through its sanction.\textsuperscript{44} This

\begin{footnotesize}
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\item \textsuperscript{37} See id.
\item \textsuperscript{38} See id. at 174.
\item \textsuperscript{39} See id. at 174. Ellickson offers no definition of workaday norms, and suggests only two categories of foundational norms. Ellickson's example of a purely distributive norm, a norm of charity, hardly seems foundational. See id. at 176-77.
\item \textsuperscript{40} See id. at 175-76. This limitation, however, has a cost. Presumably, Ellickson does not purport to explain why some resources are governed by "common property" rules and others by "private property" rules.
\item \textsuperscript{41} See id. at 1.
\item \textsuperscript{42} Ellickson understands his theory as an elaboration of a portion of a theory of social control. See id. at 123. Ellickson uses the term "norm" to designate rules promulgated and enforced informally by social groups. This usage, it should be noted, does not conform to the usage in philosophy of law (or in philosophy more generally). In philosophy of law, "norm" is a generic term which encompasses informal social norms as well as legal and other norms. Moreover, norms in the philosophic sense do not exhaust the mechanisms of social control. In this Review I shall use norm in its philosophic sense. I shall refer to norms in Ellickson's sense as informal social norms (or informal norms).
\item \textsuperscript{43} In a decision problem, the consequences of choice depend only on the individual's own choice and on chance (or "nature's" choices); in strategic situations, the consequences of choice depend both on the individual's own choice and the choices of others. One can "reduce" a strategic situation to a decision problem by assuming that each agent has a (subjective) probability distribution over the actions of all other agents in the game. The agent then may treat the actions of other agents similarly to her treatment of "nature."
\item \textsuperscript{44} See id. at 124. Ellickson does not discuss at great length the concept of "rule" or the motivational effects it has. He states that a rule is a "guideline [that] actually influences the behavior either of those to whom it is addressed or of those who detect others breaching the guideline." Id. at 128.
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second economic aspect of Ellickson’s theory is the consequence of the assumed universality of the first aspect; only self-interest motivates individual action. There is no normative behavior, no sense that one’s “having an obligation”\(^4\) differs from “having a preference.” Nor does the existence of a sanction alter practical reasoning. Third, Ellickson's theory of informal social norms postulates that norms have an economic content: they maximize welfare.\(^6\)

II

A CRITIQUE OF ELICKSON’S WELFARE MAXIMIZATION HYPOTHESIS

To determine the truth of Ellickson's hypothesis one must examine the social world. If informal social norms maximize welfare (as Ellickson understands the term), then the hypothesis is true. Ellickson offers his study of Shasta County, the analysis of whaling in the nineteenth century, and other examples as evidence in support of his hypothesis. Unfortunately, the social world resists easy empirical study. Whether or not one quarrels with Ellickson’s interpretation of his examples and however much one applauds his venture into empirical research, as I do, the examples alone cannot substantiate the claim.

In this section, from the ease of a desk chair, I outline three theoretical concerns that raise questions about the validity of Ellickson’s argument. The first concern addresses the scope rather than the truth of the hypothesis. The second suggests that Ellickson’s assumption that individuals act in their self-interest is inconsistent with his “objective” conception of welfare. The final concern addresses the extent to which game-theoretic models of “cooperation” can help explain normative behavior.

A. The Scope of Ellickson’s Hypothesis

The scope of application of Ellickson’s hypothesis depends on how one answers two questions. First, one may ask whose norms are welfare maximizing. Second, one may ask which type of norm is covered by the hypothesis.

1. Whose Norms Are Covered by the Hypothesis?

Ellickson restricts his argument concerning the emergence of order without law to “close-knit groups.”\(^47\) He defines the key concept as

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\(^{45}\) See H.L.A. Hart, The Concept of Law, chapter V (1961) (criticizing earlier theories of legal positivism for their failure to distinguish “being obliged” from “having an obligation”).

\(^{46}\) See id. at 157-58 (discussing use of “rational-actor” model in social science).

\(^{47}\) It is not clear whether close-knittedness is meant to be a sufficient, necessary, or neces-
follows:

A group is close-knit when informal power is broadly distributed among group members and the information pertinent to informal control circulates easily among them.48

This definition probably encompasses Ellickson's three major examples. The academic community of the copyright example is the easiest case because of the disciplinary structure and nature of the individual interactions.49

Neighbors in Shasta County meet this definition if we believe that differences in wealth and influence are not significant for purposes of the analysis. Participants in the disputes over cattle in Shasta County include large and small ranchers as well as retirees and commuters.50 Without a thicker description of social relations in Shasta County, however, it is difficult to determine whether the residents actually constitute a closely-knit group.

Ships, rather than individuals, are the relevant "members" of the 19th century whaling community. Ellickson assumes that ships are equally situated in the whaling trade, although one would like to confirm that no one company or group of individuals owned (or had controlling interests in) a significant portion of the fleet.51

Even if these groups fit the definition, many others may not. Consider, for example, the family. Although information obviously circulates within the family circle, minor children have little power relative to parents and the relation between parents also may be unequal. Similarly, the informal norms that emerge in most hierarchical organizations may not fit the definition. These norms generally regulate not only relations among peers, but also relations between levels in the hierarchy.

2. What Types of Norms Are Covered by the Hypothesis?

Ellickson does not explicitly identify the type of norms to which his hypothesis applies. Although he does not limit his claim to substantive norms, two reasons argue for doing so. First, non-substantive norms, such as those relating to evidence of violations (procedural norms); the nature of sanctions for violations (remedial norms); or group boundaries (constitutive norms) do not bear directly on the welfare of group members. They merely treat matters concerning the appropriate application

48 R. Ellickson, supra note 3, at 177-78.
49 See id. at 258-64 (discussing informal norms governing widespread duplication of copyrighted materials despite a clear legal prohibition).
50 See id. at 19-21.
51 See id. at 191-206. In this example it also is unclear how deviants are sanctioned. Crews presumably shifted from voyage to voyage.
of substantive norms in particular situations. Second, even if one were to suppose that non-substantive norms indirectly maximize welfare, the hypothesis would be beset by a variety of difficulties that seem best avoided.

Consider, for example, a claim that the hypothesis explains the content of constitutive norms. Different norms would characterize different groups; does the hypothesis claim that the norms maximize total or average welfare? Maximization of total welfare would suggest that constitutive norms should be inclusive, broadening the membership of the group, rather than exclusive. An average welfare criterion, on the other hand, would predict that constitutive norms should be exclusive. More significantly, however, the claim might be false. Imagine a group G. Conceivably, membership in G could be defined by a number of different norms: all members of G might share certain linguistic peculiarities, religious practices, hair styles, and so on. Ellickson's hypothesis might claim that the constitutive norm actually adopted by the members of G is the one least costly to invoke or implement. This claim seems implausible because many constitutive norms require behavior that seems more complex than necessary to identify group members. Rules of etiquette, for example, often include complicated rules of deference, dress, and demeanor that, in effect, over-identify members.

A claim that the hypothesis explains the content of remedial norms might fail for similar reasons. To the extent that sanctions are costly to impose, welfare-maximization would require that the least costly sanction be used to effect any given aim. Again, many closely knit groups have remedial norms that do not appear to be welfare-maximizing. Many closely knit societies, for example, tolerate blood feuds, even though death often seems an excessive sanction for many of the acts it punishes.

These arguments suggest that, even if true, Ellickson's hypothesis may have a limited range of application.

B. Rationality and Group Welfare in Ellickson's Hypothesis

Ellickson assumes that individuals are rational in the sense that they unwaveringly and intelligently pursue their self-interest. On his account, a person adheres to a norm because it is in her self-interest to do so. Individuals systematically will violate a norm only if the benefits of violation exceed the costs of sanction. Ellickson's interpretation of welfare maximization, however, is at odds with his assumption of self-interested behavior. Ellickson argues that informal social norms will maximize

52 Id. at 156-58.
53 Id. at 128. If violation of the norm does not invoke a sanction then it is not, on Ellickson's definition, a norm.
“objective,” not “subjective,” welfare, and he contends that welfare maximization is indifferent to the distribution of welfare among members of the group. These two positions are at least superficially at odds with the rational actor model because the incentives faced by a rational actor are structured by her subjective evaluation of her share of the payoff in any given situation. Subjective evaluation and distribution matter to rational actors.

1. Individual Self-Interest and “Objective” Group Welfare

According to Ellickson’s theory, informal social norms in closely knit groups will be welfare-maximizing. Standard economic usage attributes a subjective content to welfare; each individual has subjective preferences representable by a “utility” function. These subjective preferences are personal and ordinal. They are personal in the sense that A’s preference of one consumption package C over another consumption package C’ is not comparable to B’s preference between the two packages: one cannot say (without additional assumptions) that A prefers C to C’ more than (or twice as much as) B prefers C’ to C. Ordinal preferences reflect individual judgments that C is preferred to C’ without a measure of the intensity of that preference. Social welfare maximization requires the maximization of some weighted sum of these individual indices of welfare; different weights reflect differing judgments about the intensity of each individual’s preferences, how to make interpersonal comparisons, and the relative value that society places on the welfare of each.

As Ellickson observes, however, articulation of norms that maximize subjective welfare requires that the individual or group promulgating and enforcing the norm be able to measure it. In a world of “perfect” competition, the action of the market assures this maximization. Economic theory argues that perfectly competitive markets reveal the nature and intensity of subjective values (given the initial distribution of wealth). The social contexts which Ellickson investigates are not “per-

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54 Id. at 167.
55 See David M. Kreps, A Course in Microeconomic Theory 156-64 (1990). Kreps offers a lucid introduction to these ideas. He begins with assumptions concerning individual preferences and then proves “representation theorems” which provide conditions under which preferences can be represented by a “utility function.” Chapter 2 sets out the theory of individual choice under certainty and presents a representation theorem. See id. at 29, proposition 2.7. Chapter 3 develops the theory of individual choice under uncertainty; propositions 3.1 and 3.7 state the relevant representation theorems. See id. at 76, 107. Chapter 5 discusses welfare economics generally and “social welfare maximization” more specifically. See id. at 156-64.
56 The First Theorem of Welfare Economics states that every competitive equilibrium is a Pareto optimum. See id. at 286. That is, no individual can be made better off without making some other individual worse off. Every Pareto optimum maximizes social welfare (defined as the sum of the welfare of individuals in the society) for some set of weights. See id. at 161.
fectly competitive,” however, and Ellickson thus argues that groups promulgating informal norms must abandon a subjective interpretation of welfare for a partially objective one.57

The method of valuation that Ellickson postulates is only partially objective because he relies on market prices as measures of welfare.58 Because prices depend in part on the subjective preferences of individuals, the interpretation is not fully objective. Moreover, the “objective” portion of price presents its own difficulty. The prevailing price reflects the subjective valuation of the marginal consumer of the product. Those who have not purchased the good at all value the good less than the price while inframarginal consumers59 value the good above the price.

Ellickson’s method of valuation parallels the contract remedies of market price less contract price and of cover. Because contract law cannot reliably measure the breach victim’s subjective valuation of performance, it offers the victim the opportunity to replace the performance and thereby replace the lost subjective valuation. This approach works well when the subject matter of the contract is a fungible good traded on a thick market. When the good is unique or custom-made, however, the court has difficulty determining what the victim has lost as a result of the breach. Ellickson’s solution to the problem faced by his “controllers” confronts the same difficulties that contract law confronts in these unique goods cases.

Ellickson justifies this objective interpretation of welfare by noting, correctly, that the community as a whole rarely will know how particular members within it subjectively value different options available to them.60 Consequently, norms that maximize subjective welfare are not implementable. Ellickson, however, overlooks the fact that individuals may not have appropriate incentives to adhere to norms that maximize objective welfare. The reasons for this divergence are analogous to those that may lead to inefficient breach when contract law inaccurately measures the promisee’s expectation.61

The following analysis of Ellickson’s

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57 R. Ellickson, supra note 3, at 170-72.
58 See id. at 172.
59 The marginal consumer is one who is indifferent between purchasing and not purchasing the good at the market price. An inframarginal consumer strictly prefers to purchase the good than not to purchase it.
60 R. Ellickson, supra note 3, at 170-71.
61 See Lewis A. Kornhauser, An Introduction to the Economic Analysis of Contract Remedy, 57 U. Colo. L. Rev. 683, 715 (1986) (observing that “[i]f the court underestimates the expectancy, a party will tend to breach too often, while if it overestimates the expectancy breach will occur too infrequently”). Similar problems arise in takings cases when the court
treatment of cooperation provides a clearer exposition of this inconsistency.

Ellickson bases his analysis of cooperation on the study of two simple games, one of which, "The Prisoner's Dilemma," is presented in Matrix 1. Under the standard game theoretic interpretation, the numbers in each cell represent the subjective payoffs of the parties.

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In the prisoner's dilemma each player has two choices: "cooperate" or "defect," and the payoffs to each party depend on the choices of both. In Matrix 1, the first number in each cell represents the pay-off to Row and the second number the payoff to Column. (Cooperate, Cooperate) is, in Ellickson's terms, the cooperative outcome because the sum of the payoffs in that cell is highest; it is welfare-maximizing. Ellickson argues that informal social norms in a closely-knit group require that each player cooperate.

As Ellickson understands, rational players will not cooperate in a one-shot game. Therefore, (Defect, Defect) is the only Nash equilibrium of this game. The equilibrium pair of strategies (Defect, Defect) in the prisoner's dilemma, however, has a stronger justification than simple Nash equilibrium because for each player, "Defect" is a dominant strategy: regardless of what Row does, Column is always better off must value individual property. If the courts systematically under-value property the government will take property more often than it ought because the price is too low. Conversely, if the courts systematically over-value property, the government will take property less often than it ought because the price is too high.

The prisoner's dilemma has been used as a model of many social phenomena. Its name arises from an early interpretation that goes roughly as follows. Two individuals are arrested at the scene of a crime. The state has enough evidence to convict each for a misdemeanor, but, in order to convict either for a felony, the state must obtain a confession from at least one individual.

The two "prisoners" are interrogated separately. Each is told that if she confesses to the felony and implicates her co-defendant, but the other prisoner does not, she will be rewarded with a suspended sentence. Conversely, if she does not confess, and the other prisoner does, she will receive a heavy sentence. If both confess, the sentence of each will be reduced slightly. Each prisoner prefers the outcome (she confesses, other does not) to (neither confesses) to (both confess) to (she doesn't confess, the other does). In Matrix 1, the action "defect" corresponds to the prisoner's confessing and "cooperate" corresponds to not confessing.

Strategies are in Nash equilibrium if and only if no actor can unilaterally improve her payoff; in Nash equilibrium, no actor has an incentive to change her behavior.

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62 The prisoner's dilemma has been used as a model of many social phenomena. Its name arises from an early interpretation that goes roughly as follows. Two individuals are arrested at the scene of a crime. The state has enough evidence to convict each for a misdemeanor, but, in order to convict either for a felony, the state must obtain a confession from at least one individual.

The two "prisoners" are interrogated separately. Each is told that if she confesses to the felony and implicates her co-defendant, but the other prisoner does not, she will be rewarded with a suspended sentence. Conversely, if she does not confess, and the other prisoner does, she will receive a heavy sentence. If both confess, the sentence of each will be reduced slightly. Each prisoner prefers the outcome (she confesses, other does not) to (neither confesses) to (both confess) to (she doesn't confess, the other does). In Matrix 1, the action "defect" corresponds to the prisoner's confessing and "cooperate" corresponds to not confessing.

63 Strategies are in Nash equilibrium if and only if no actor can unilaterally improve her payoff; in Nash equilibrium, no actor has an incentive to change her behavior.
choosing "defect" rather than "cooperate" and, similarly, regardless of what Column does, Row is always better off choosing "defect" rather than "cooperate." 64

Ellickson argues that cooperation is in each actor's self-interest. 65 If the game were played only once, this outcome would be inconceivable: mutual defection is a dominant strategy for each actor. Ellickson's argument for the self-interested nature of cooperation relies on an indefinitely repeated series of interactions. 66 Repeated interaction allows for the possibility that individuals who fail to cooperate will be punished; the possibility of punishment suggests that cooperation may be in each actor's self-interest. 67

Ellickson's analysis of the equilibria of the repeated game, however, is inconsistent with his claim that the measure of welfare must be objective. In game theory, each payoff usually represents the player's subjective—not objective—payoff because, in game theory as in economics, subjective value is the presumed motive of action. Thus, although each pair of actions may yield some "objective" physical outcome, the payoff to player i represents i's subjective valuation of that outcome. Otherwise, the payoff matrix would not present an accurate picture of the incentives players face because players evaluate objective outcomes from their own subjective perspective.

Ellickson, however, wants to interpret payoffs in game matrices as objective. Under this interpretation, the matrix no longer will represent necessarily the strategic situation of either party. Individual action then will depend on the subjective payoffs of each player rather than on the objective payoffs in the matrix. Some, perhaps many, pairs will have subjective payoffs that differ from the objective payoffs that define mutual cooperation as the informal social norm. Suppose, for example, that Row fears the outcomes from cooperation more than the "objective" observer, while Column values the outcomes from defection more highly than the objective amount. These changes yield Matrix 1'. In this game,

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64 On the definition of Nash equilibrium, see R. Duncan Luce & Howard Raiffa, Games and Decisions 56, 114-52 (1957), or any contemporary text on game theory such as Drew Fudenberg & Jean Tirole, Game Theory 11-36 (1991) or Roger Myerson, Game Theory 91-108 (1991).
65 I discuss the game-theoretic literature relied on by Ellickson in Part IIC below. See text accompanying notes 72-77 infra.
66 See R. Ellickson, supra note 3, at 164-66.
67 Note that cooperation forever, however, is only one of many possible equilibria. See discussion in notes 73-75 infra. This sketch of the argument also suggests why the game must be repeated indefinitely. If the players know that the nth repetition will be the last, they will have no incentive to cooperate in that period because there will be no subsequent interactions and thus no possibility of punishment. A "backwards induction" then causes cooperation to unravel completely; the only equilibrium is to defect in every period. For a more complete discussion, see D. Fudenberg & J. Tirole, supra note 64, at 72-76.
as in the original Prisoner's Dilemma, the choice of "defect" by each player is a Nash equilibrium; indeed, as before, defection is a dominant strategy for each player. In an indefinite repetition of this modified game, however, mutual cooperation is not an equilibrium because mutual defection is at least as preferred as mutual cooperation by both players and Column strictly prefers mutual defection. Thus, the only equilibrium of the indefinitely repeated game is mutual defection. Adherence to the norm of "cooperation" would require that both Row and Column act contrary both to their self-interest and to their "mutual" interest.

2. Distributional Concerns and Self-Interest

Ellickson states that, for purposes of his hypothesis, welfare maximizing choices are ones that maximize "total" welfare without regard to how welfare is distributed among group members. Ellickson explicitly excludes purely distributional norms from his hypothesis. But why does he believe distributional differences do not undermine cooperation?

Ellickson's theory does not address conflicts of interest within his closely knit groups. He states:

The outcome of a game will be referred to here as "cooperative," or "welfare maximizing," when the players' choices have combined to de-

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68 To be fair, Ellickson undoubtedly has a more complex game in mind, although he does not explicitly offer a description of one. For instance, Ellickson might have in mind a game with the following structure: suppose the group has \( n \) members who interact pairwise an indefinite number of times. Suppose further that Row sometimes interacts with Column and sometimes with each of the other \( n-2 \) group members. Each interaction may present a distinct payoff matrix and, on average, these may have the structure of the prisoner's dilemma presented in Matrix 1. If Row and Column are punished (or believe they will be punished) in their interactions with the other \( n-2 \) group members for playing defection against each other (even if they know that in their interaction mutual defection is the only equilibrium of the repeated game), mutual cooperation might be an equilibrium of the repeated game. To be certain, we would have to specify this game more precisely and then undertake its analysis, a task which I leave for another occasion.

69 This distributional problem arises whether we define welfare subjectively or "objectively" in terms of market prices. Equilibrium prices will depend on the distribution of wealth in the economy, and it is not clear why this distribution, unless otherwise justified, should serve as the normative baseline for the society. The subjective preferences of individuals with little wealth have less influence on market prices. Why should they adhere to norms that disfavor their interests? In the text, I assume, for clarity of exposition, that welfare is subjective.
This definition of cooperation is unproblematic in the simple games he examines. In the prisoner's dilemma, for example, the single outcome in which both players cooperate is the welfare maximizing outcome. This outcome also treats the two players symmetrically. Thus, although mutual cooperation is not an equilibrium outcome, it is the only non-equilibrium outcome which offers both parties an improvement over the equilibrium outcome of mutual defection.

Not every game has this characteristic. Consider instead the game of Chicken,\textsuperscript{71} represented in Matrix 2. Chicken has two Nash equilibria in pure strategies (Straight, Swerve) and (Swerve, Straight). Both of these equilibria are welfare maximizing. If we altered the payoffs for one party slightly as in Matrix 2', Ellickson's theory would identify the unique equilibrium (Straight, Swerve) that should be enforced by an informal social norm. It is not clear why Column should accede to this norm as it strongly disfavors her.

Ellickson's argument might implicitly maintain that closely-knit groups are characterized by the absence of gross conflicts between individuals. Conflicts might not arise either because, in all situations in which members of the group interact, they are equally situated and equal

\textsuperscript{70} R. Ellickson, supra note 3, at 159.

\textsuperscript{71} Chicken is modeled on a children's game. It has many variants. In one variant, two children ride toward each other on bicycles; the person who swerves loses. If neither swerve both lose. A version of this game, played with cars racing toward a cliff, appears in the movie Rebel Without a Cause (Warner Bros. 1955). For a detailed analysis of Chicken and the infinitely repeated version of Chicken, see R. Myerson, supra note 64, at 324-31.
distributions are possible, or because for each situation in which one person is disadvantaged, there is another situation in which that person is advantaged. Few groups, however, will satisfy these criteria. Scarcity and indivisibility often demand that equality be interpreted not as equal outcomes but as equal chances. Similarly, few groups are so homogenous that the values of the members converge in all essential matters.

C. Game Theory in Ellickson’s Argument

Ellickson believes that the study of repeated games, particularly simple games like the prisoner's dilemma, can offer insight into the conditions under which “cooperation” emerges. Two difficulties arise, however, in the way in which Ellickson develops these insights. First, Ellickson avoids the problem of equilibrium selection. Second, game theory does not offer a normative account of cooperation. The next two subsections suggest why a complete theory of the emergence of cooperation would address each of these difficulties.

1. Equilibrium Selection

The brief discussion of the prisoner's dilemma, represented in Matrix 1, and of Chicken, represented in Matrix 2, implicitly assumed that each game was played exactly once by players who faced no further interactions with each other. In most social contexts, individuals have repeated and varied interactions. These repetitions offer the individuals strategic opportunities not available in one-shot games. The study of repeated games analyzes these more complex and realistic situations.

Most analyses focus on the repetition of a single “stage” game. One assumes, for example, that players repeatedly will play the prisoner's dilemma (or repeatedly play Chicken). A player now may follow a more complex strategy because she can condition her play in some period $t$ on her opponent’s play in all prior periods. For example, Column might adopt the strategy known as “tit-for-tat” in which she cooperates in the first period and then in period $t$ adopts the strategy that her opponent Row played in period $t-1$. If the game is repeated infinitely (or an indefinite number of times) then tit-for-tat played by both parties is an equilibrium of this game.

When each player values future payoffs sufficiently highly the gains from deviating in any one period are offset by the punishment that the deviator will suffer in future periods. As a consequence, tit-for-tat maximizes each player’s overall payoff from the game so long

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72 R. Ellickson, supra note 3, at 164-66.
73 The concept of equilibrium is discussed in note 63 supra. The conclusion in the text requires several additional assumptions. Most prominently, each player must value future payoffs sufficiently highly.
as all other players also adopt tit-for-tat.

In general, many equilibria exist in infinitely repeated games. For example, Row and Column might each play a grim trigger strategy in which each player cooperates in round one and then cooperates until the other deviates; as soon as one deviates, the other defects forever. These trigger strategies are also in equilibrium and they also yield the cooperative (or welfare maximizing) payoff forever.\footnote{Recall that in the prisoner's dilemma, (Cooperate, Cooperate) maximizes the sum of the welfares of the two players and is consequently welfare maximizing.}

Other equilibria, however, do not yield the cooperative payoff. Also in equilibrium, for example, are the "defect forever" strategies, namely "defect in round one and all subsequent rounds." More generally, as Ellickson notes, all individually rational, feasible payoff pairs can be sustained as an equilibrium by some pair of strategies if players care sufficiently about the future.\footnote{See R. Ellickson, supra note 3, at 166. Individual rationality means that each player does at least as well as her "guarantee level," the payoff that she can assure herself by unilateral action regardless of what the other players do; in the prisoner's dilemma, each player can guarantee herself a payoff of one by defecting. A pair of payoffs is feasible if some pair of strategies actually realizes that pair of payoffs. See generally D. Fudenberg & E. Maskin, The Folk Theorem in Repeated Games with Discounting and with Incomplete Information, 54 Econometrica 533 (1986); A. Rubinstein, Equilibrium in Supergames with the Overtaking Criterion, 21 J. Econ. Theory 1, 1-9 (1979). See also D. Fudenberg & J. Tirole, supra note 64, at 146-203 for a clear exposition of current understanding of repeated games.} Put differently, in infinitely repeated games, many pairs of strategies are stable in the sense that no player can unilaterally improve her payoff. Moreover, most of these equilibrium pairs do not maximize the total payoff (and hence do not yield the cooperative outcome). A successful game-theoretic explanation of cooperation must therefore address the problem of how an equilibrium is selected.

Ellickson recognizes the problem of equilibrium selection, but he avoids it in two ways. First, he argues that empirical evidence may substitute for deductive logic as confirmation of his hypothesis:

That a result cannot be deduced from axioms does not mean that it cannot be induced from observations.\footnote{R. Ellickson, supra note 3, at 166.}

Second, although he often refers to the literature on the evolution of cooperation,\footnote{Id. at 164-66, 178, 180-81, 225-29.} he does not articulate (or even sketch) any mechanism that would explain the emergence of these norms.

Much of our knowledge is empirical, and logically Ellickson is correct: he need provide neither a deductive argument nor an evolutionary explanation for the emergence of informal social norms that maximize welfare. Deductive arguments and evolutionary explanations, however, would make his assertion more compelling for several reasons.
First, the evidence for the hypothesis is ambiguous and subject to manipulation. In each of his examples, Ellickson offers a rhetorically convincing account of the desirability of the informal norm in question. But each of these accounts depends on implicit or explicit assumptions about how the parties value the outcomes and about the nature of the "transaction costs" involved. Here, as elsewhere in economic analysis of law, the concept of transaction costs remains poorly specified and overly malleable.

Second, informal social norms do not usually arise from conscious deliberation and choice. Indeed, those subject to informal norms may be unable to articulate the informal norms to which they adhere. This absence of conscious intent to create welfare-maximizing norms renders Ellickson's hypothesis both more striking and more doubtful. An explanation of how these welfare-maximizing norms emerge would therefore bolster the argument.

The situation is parallel to that created by Posner's analogous hypothesis concerning the efficiency of common law rules. The debate over Posner's hypothesis also centered on the malleability of the evidence and the "unconscious" character of hypothesized efficiency of common law rules. Posner's hypothesis did not seem to account for the fact that judges consciously invoke non-economic considerations in rendering their decisions, and that, therefore, the conscious intent of judges may even be at odds with the spontaneous results that the hypothesis assumes. Eventually, this debate led to attempts to increase the plausibility of the claim with arguments that efficient rules evolved through a process of "natural selection." Although these natural selection arguments are


80 Rubin and Priest have argued that efficient rules were selected because inefficient rules were litigated more frequently and hence were more likely to be replaced by efficient rules. See Rubin, supra note 79, at 51-55; Priest, supra note 79, at 65-75. Differential litigation in this argument plays the role of differential fitness in evolutionary biology. Commentators have shown that differential litigation is not sufficient to ensure that efficient rules emerge and have
themselves controversial, they do assist in evaluating the initial claim that the common law is efficient: each argument makes certain claims about what features the common law must exhibit for efficient rules to emerge, and these claims can be tested empirically.

2. Incentives for Cooperation

The second difficulty with the role of game theory in Ellickson's argument derives from the nature of the equilibria of the games he examines. Repeated games enforce cooperation in a straightforward manner. Consider again the infinitely repeated prisoner's dilemma. Suppose Column adopts a tit-for-tat strategy. If Row defects in round \( t \), Column punishes this defection by defecting in subsequent rounds. If Row repents, and chooses to cooperate once more, Column reverts to cooperation. The cooperative arrangement is personally enforced by the victim of the defection. This enforcement mechanism is not social because no third party enforces the norm. Nor is the mechanism normative in an obvious way. Instead, it relies on an incentive structure that differs little from the incentives created by market prices.

A more appropriate conception of a social mechanism would use a community enforcement scheme in which defection against one party is enforced by others who are not victims. In community enforcement models, each member of a population of agents repeatedly confronts other agents one-on-one. If an agent cannot identify her opponent (or is ignorant of how her opponent has behaved in prior plays), then personal enforcement cannot occur. A grim form of community enforcement, however, will sustain cooperation. Suppose every agent adopts a strategy in which she cooperates unless some opponent defects, in which case she then defects forever. If each agent values future rewards sufficiently highly and the population is sufficiently small, then these strategies are in equilibrium and agents always cooperate. Agents must value the future sufficiently highly because they receive the benefits of defection immediately, while the punishment occurs later. The size of the population matters because the larger the population, the less quickly, on average, a defector will be punished. Community enforcement schemes require higher valuations of future payoffs to sustain cooperation than do personal enforcement schemes, because community enforcement both increases the expected benefits of defection and delays the date at which punishment for defection begins. In a regime of personal enforcement,

asserted that the assumption of differential litigation rests on an unlikely assumption concerning the settlement process. See Cooter & Kornhauser, supra note 79, at 150-56; Kornhauser, supra note 79, at 136-37.

The terms "personal enforcement" and "community enforcement" are from Michihiro Kandori, Social Norms and Community Enforcement, 59 Rev. Econ. Stud. 63, 63-80 (1992).
punishment occurs in the next period. Under community enforcement, however, the initial defector may not confront his first victim on the next play of the game. In fact, on average, he may confront several "innocent" victims against whom continued defection is profitable before he confronts someone who has learned that cooperation is a dangerous choice. If the population is large enough, and if future payoffs are discounted at all, the benefits of defection will outweigh the costs of the long-delayed punishment.\footnote{Kandori, supra note 81, at 71.}

Community enforcement, of course, works better if agents have some information about the prior history of their opponents' behavior. Various reputational mechanisms then will permit community enforcement to sustain cooperation. These models are appealing because they suggest that one might be able to determine what properties the reputational mechanism must have. Ellickson, for example, suggests that gossip serves as an effective reputational mechanism in Shasta County,\footnote{See, e.g., R. Ellickson, supra note 3, at 232-33.} and his claim might usefully be evaluated in terms of these models.\footnote{See generally Kandori, supra note 81.}

Neither community enforcement nor personal enforcement has a particularly normative cast to it. The models are austere, the agents repeatedly facing the single question of whether or not to cooperate. As Ellickson understands, small communities express their disapproval of deviant actors in myriad ways.\footnote{Ellickson suggests a repeated game (which he calls "even-up") that modifies the repeated prisoner's dilemma in three ways. First, he assumes that in odd periods the parties face a prisoner's dilemma, and in even periods they face another two-person game (called "specialized labor") in which non-cooperation (or "shirking") is also a dominant strategy for each party. R. Ellickson, supra note 3, at 225. One easily can see that this modification does not alter the analysis of the repeated game because it simply repeats a two-stage game in which there is only one equilibrium in dominant strategies: defect in the prisoner's dilemma and shirk in specialized labor.}

Second, Ellickson assumes that the amount at stake in the prisoner's dilemma periodically varies. Id. Although this change, again, does not substantially alter the analysis, one must worry about defection in the high value periods. These defections are harder to deter because the player gains more from them. Consequently, each player must have a higher discount rate to sustain a cooperative equilibrium.

Third, Ellickson assumes that, between periods, each player can make a monetary transfer to even accounts. Id. This modification is intended to introduce the possibility that agents might "erroneously" defect in some period. The precise strategic consequences, however, are unclear because, in analogous models in which players cannot distinguish "bad luck" from the intentional defection of their opponents, equilibrium prescribes retaliation. See, e.g., Robert Porter, Optional Trigger Price Strategies, 29 J. Econ. Theory 313 (1983).
Order without Law offers a theory to explain the content of informal social norms. This project, at least in principle, leaves open the question of how informal social norms (or norms generally) influence individual behavior. In Part II, I asserted that Ellickson’s argument about the content of informal social norms at times was at odds with his assumption about the way in which norms influence behavior. In this Part, I directly address the question of how norms influence behavior. I suggest that an economic theory that treats norms as incentive structures (or prices) fails to capture normative phenomena.

A. Norms Defined

The concept of “norm” has long defied adequate characterization. To get a clearer conception of the phenomenon, it may help to consider various other phenomena with which it contrasts. First, consider the common distinction between normative behavior and market behavior (based, in turn, on the distinction between norms and prices). This distinction might simply reflect a difference in the actor’s reason for action. X, who receives unreported income, may declare it all on her tax return because she has determined that the expected costs of detection through audit exceed the expected benefits of non-reporting; or she may declare all her unreported income because she believes she ought to do so, either on utilitarian or other ethical grounds. Alternatively, the distinction between market and normative phenomena might reflect a difference in the actor’s emotional motivation, distinguishing, for example, acts done out of fear of punishment or with hope of reward from those done out of shame or guilt. Finally, the distinction might point to differences in the expected response of individuals to a particular stimulus. For instance, although all market participants face the same price, they all are not expected to respond identically to those prices; a norm, by contrast, demands the same behavior from all (although not all will conform).

Second, it is useful to contrast norms with economic rationality more generally. This contrast might be understood as one between consequentialist and non-consequentialist reasons, or as one between future-regarding and past-regarding reasons. In general, economic rationality evaluates an action in terms of its future consequences. Although history may have determined which options are currently available, history does

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not provide a reason for choosing one of these options over another on the grounds, for example, that the designated action better comports with tradition. Only the future consequences of the actions are relevant to choice. Non-consequentialist reasons, by contrast, might consider tradition as relevant or distinguish among actions on the basis of who does them.\textsuperscript{87}

Third, normative behavior differs from habitual behavior. Again, the distinction apparently rests on the attitude the actor has towards the behavior. Suppose that J begins each morning with a cup of coffee. If she does this habitually, she may have no reason for or attitude towards her behavior at all. If it is normative, however, she will think her behavior both appropriate and required.\textsuperscript{88}

Despite the difficulty of adequately characterizing normative behavior, it is clearly distinct from other forms of behavior. The distinction between criminal penalties and taxes provides an illuminating example. Imagine two different legal regimes designed to control the emission of air pollutants. In regime $T$, those who emit a given pollutant face a tax of $D$ dollars per unit. In regime $P$, those who emit the identical pollutant face a criminal penalty of $D$, the same amount per unit. Despite the fact that both regimes create identical incentives not to pollute, most people would regard those who pollute in regime $T$ differently than those who pollute in regime $P$. Regime $P$ proscribes pollution while regime $T$ permits it. Regime $P$ has a norm against pollution while $T$ does not.

One may understand this difference in various ways. $P$ and $T$, I claimed earlier, present identical incentives to a would-be polluter. Consider polluter $t$ in $T$ and $p$ in $P$. Suppose each derives a constant per unit benefit $B$ from pollution. If $B$ exceeds $D$, most people would find it acceptable for $t$ to pollute in regime $T$ but not for $p$ to pollute in regime $P$.

One cannot explain this difference in acceptability of polluting behavior on differences in the regularity of enforcement of the governing rule. One can suppose that the tax and the fine are enforced with equal zeal. Regularity of enforcement does not convert the tax in $T$ into a norm against pollution because a polluter in $T$ has not acted in a fashion

\textsuperscript{87} The distinction between consequentialist and non-consequentialist reasoning can be subtle because it depends on a characterization of "consequence." One might always redescribe the "states of the world" which result from given actions to include features that non-consequentialists view as important. See generally J.J.C. Smart & Bernard Williams, Utilitarianism: For and Against (1973).

\textsuperscript{88} This description of habitual behavior ignores a variety of complexities. Although habits require regular behavior, much regular behavior is not habitual (or normative). For example, every morning J might have a different reason for having her cup of coffee; it is merely coincidental that her behavior is regular. Alternatively, J might be addicted to caffeine, her addiction neither normative nor habitual.
that merits disapprobation. Nor can one explain this difference on the grounds that the "true" incentive in $P$ includes not only the per unit cost $D$ but also the costs imposed by the general condemnation of polluting behavior. Unless these additional costs $C$ are infinite, there always will be some level of benefit, $B$, that exceeds $C + D$. When $p$ violates the norm, the fact that its benefit exceeds the costs that $p$ incurs may explain $p$’s behavior, but it neither justifies nor excuses it; $p$ ought to have complied and, facing the same incentives, many indeed may comply.

B. How Norms Influence Behavior

Ellickson rests his theory of the content of informal social norms on the premise that individuals respond to norms as they respond to prices. Thus he would assume that, in the above-mentioned example, individuals like $p$ would refrain from pollution when and only when the per unit benefits $B$ were less than costs $C + D$ of violation. If one could measure $C$, then one could in principle test this premise by comparing the benefits of those who polluted in $P$ to those who refrained from pollution.

Norms, however, might influence individual behavior in at least three different ways. Two of these are consistent with the standard decision-theoretic framework of economics. First, norms might influence the preferences or values of individuals. Perhaps the prohibition of pollution in regime $P$ alters how individuals trade off environmental quality for wealth. They come to prefer days of quiet contemplation of nature to other forms of consumption. Second, norms might alter the beliefs that an individual holds. For example, an individual who learns of the prohibition in regime $P$ might revise her beliefs about the health risks that pollution creates.

The third way in which norms might influence behavior assumes a very different form of practical reasoning than that assumed by economists. In economics, individuals are assumed to choose the action that is

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89 However, there may be a norm in $T$ that requires polluters to pay their taxes. If $J$ pollutes in $T$ but fails to pay his tax, $J$ very well may face some criminal sanction.

90 For convenience, I assume that the costs $C$ are the per unit costs of pollution.

91 This premise underlies most of economic analysis of law which regards legal rules as incentives. See, e.g., Lewis A. Kornhauser, Legal Rules as Incentives, in Law and Economics 27, 30-32 (Nicholas Mercuro ed., 1989). Another example may clarify the distinction. Consider two people $X$ and $Y$ each of whom initially prefers meat to fish. Suppose $X$’s preference is based on the different tastes of the two dishes while $Y$’s preferences are derived from her belief that meat is lower in cholesterol than fish. If $Y$ learns that fish is lower in cholesterol than meat, this will alter her preference between meat and fish (although not her preference for health). Health plays no role in $X$’s choices. His tastes, however, might change so that he might come to prefer fish to meat. Many causes might prompt the change: as he ages, his physiology might change, or the change might be arbitrary.
best for them, all things considered. What is best for them depends on their preferences (or values) and their beliefs about the world. On some accounts, however, norms implicate a very different form of practical reasoning. Joseph Raz has argued that norms are particular types of reasons, ones that give a first-order reason for action and have a second-order exclusionary force. A first-order reason weighs directly for or against an action; a second-order reason bears on the process of evaluating first-order reasons. Suppose X asks Y to assist her with a job that afternoon. Y might weigh various first-order reasons: she enjoys working with X, she will receive a reasonable wage; the task, however, is noxious; she will be unable to meet with Z. While norms provide a first-order reason for action, they also provide a decisive reason not to consider some class of first-order reasons in making a decision. They have exclusionary force. To continue the example, suppose Y has promised to spend the afternoon with her aged relative W. The promise provides a first-order reason for her to refuse X's offer. But it also functions as a second-order exclusionary reason. It directs her to ignore various of her other first-order reasons, such as the enjoyment she derives from work with X, the wage she received, and so on. Individuals who adhere to norms in this sense will exhibit regular behaviors only if the first-order reason for action provided by the norm generally prevails.

Note that this characterization of norms as exclusionary reasons is not equivalent to an explanation of normativity as the result of a complex process of socialization. Many theories of socialization explain how individuals develop the specific preferences or values that they have. The

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93 Economics places an additional restriction on these judgments; it requires that they be transitive. If J prefers action A to action B and prefers action B to action C, then J must also prefer action A to action C.

94 See Joseph Raz, Practical Reason and Norms 49-106 (1975); see also H.L.A. Hart, Commands and Authoritative Legal Reasons, in Essays on Bentham 243, 244 (1982).

95 In fact, although it probably excludes all the reasons listed above, it might not exclude all possible reasons. Suppose completion of the task that afternoon would provide enormous and otherwise unavailable benefits to humanity; if these benefits were sufficiently great they might override the promise.

96 The norm will determine action only if various conditions are met. The actor, for example, must not suffer weakness of will. Alternatively, the norm may not exclude all other first-order reasons and those first-order reasons which are not excluded point to action prohibited by the norm.

97 Ellickson suggests that individuals may internalize "norms" and then enforce compliance with these norms through "internal sanctions." R. Ellickson, supra note 3, at 126-32. In conversation, Ellickson equated the process of internalization with socialization processes that produced feelings of guilt and shame. He then suggested that these processes accounted for normativity.

98 Some difficulty arises in placing a theory of norms as exclusionary reasons within a taxonomy of theories of socialization. On some accounts, not only one's preferences, but one's beliefs, emotions, and cognitive processes, are wholly or partially determined by processes of socialization. From this perspective, one might understand the cognitive process summarized
theory of norms as exclusionary reasons, by contrast, does not offer an explanation of what values or preferences an individual has; rather it offers a cognitive theory of how an individual chooses among actions in light of a complex, often conflicting, set of values and desires. Thus, to view practical reason in this fashion, rather than as pure economic rationality, may alter radically one's analysis of behavior. In economic rationality, individuals maximize; when norms are understood as exclusionary reasons, individuals do not maximize, or at least do not do so directly. Action governed by the form of practical reason described by Raz is not economically rational.

Although such action need not be economically rational, it may be welfare-maximizing in either Ellickson's objective or the economist's subjective sense. After all, a dash of appropriate irrationality, judiciously timed, may improve the welfare of both individuals and groups. Informal social norms thus might be welfare maximizing and Ellickson's hypothesis true, but the hypotheses would require a different argument to sustain it.

**CONCLUSION**

*Order without Law* provides many provocative examples and arguments. Most importantly, the book prompts reflection on two problems that too often are ignored or forgotten. First, Ellickson reminds us that any understanding of the power and limits of law must include an appreciation of how legal rules interact with informal social norms. Economic analysis of law directs attention to the ways in which the self-interest of citizens and officials may constrain the ability of law to control behavior. Legal rules and markets, however, do not exhaust the social structures that may influence behavior. Other social norms exist. To the extent that they demand behaviors contrary to legal norms or provide more appropriate resolutions of disputes, they at least will influence and possibly control the behavior that the law seeks to regulate. Both social scientists seeking to understand individual behavior and policy makers seeking to change it ignore these informal norms at their peril.

Ellickson's analysis of informal social norms, of course, does not abandon self-interest; it merely extends its domain to norms generally. This extension prompts reflection on a second important problem area, one concerning the power of self-interest to explain normative phenomena. One should not underestimate the power of models of infinitely re-
peated games to illuminate the emergence and persistence of cooperative norms. The nature of repeated interactions, the extent of information players have concerning "deviations" from norms, and the mechanisms of enforcement all provide insight into cooperative behavior.

The elegance of these models, however, should not distort our perception of the phenomena we seek to explain. In many instances, individuals apparently respond to norms differently than economic rationality predicts. To understand how norms differ from incentives may require that we examine, or build, models of a different form.