May, 1997

Law From Order: Economic Development and the Jurisprudence of Social Norms

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by

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forthcoming in A Not-so-dismal Science: A Broader, Brighter Approach to Economies and Societies (Oxford University Press, forthcoming 1998), editors J. Mancur Olson and S. Kahkonen.

John M. Olin Working Papers in Law, Economics, and Institutions 96/97-4

Revised May 1997

Abstract:

Law ideally grows from social norms that create order. Consensus obligations are an important type of social norms. People who say that they ought to do one thing may be punished for doing something else. This paper models uniform signaling with punishment for strategic behavior. I will show that the conditions for uniform signaling differ for private and public morality, and the conditions for punishing strategic behavior requires overcoming the free-rider problem through the internalization of morality. I relate these results to the jurisprudence of social norms and to economic development.

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As an economy develops, state officials who make law and enforce it struggle to keep informed about rapid changes in business practices. To loosen these constraints on information, law must decentralize. Law can decentralize and modernize by following what business does, rather than telling business what to do. To illustrate from common law, Judge Mansfield is usually credited with modernizing English commercial law in the 18th century by scrutinizing business in order to identify and enforce the best commercial practices.[1] Similarly, when directing the drafting of America's Uniform Commercial Code (UCC), Professor Llewellyn tried to identify the best commercial practices of the day and write them into the code (Hillinger 1985).

In these examples, state law builds upon pre-existing social norms -- hence the phrase, "law from order." The social order determines the best law to make. Most business practices would not benefit from state enforcement, because of the latter's rigidity and high transaction costs. Consequently, the state should not enforce many social norms, such as the promise to be home by dinner time. For other norms, however, state enforcement increases the ability of parties to cooperate, such as the promise to deliver coal to a steel mill. The state should raise such norms to the level of law and enforce them.

So far I have mentioned beneficial norms. In an environment of open competition, business practices tend to evolve rapidly towards efficiency.

Without open competition, however, harmful business norms can create monopoly power or distort consumer information, and incomplete markets can impose external costs. The state should suppress harmful norms, such as the collusive practices of cartels that monopolize industries.

The decision of the state to ignore, stengthen, or undermine, social norms needs guidance from a theory with comprehensive vision. The existing literature on social norms is suggestive but not comprehensive. I have tried to develop a comprehensive vision based upon the view that law ideally should correct failures in the "market" for social norms, rather like regulations should ideally correct failures in the market for commodities. According to this approach, no law is required when the market for social norms works efficiently. Jurisprudence begins with failure in the market for social norms. When the market for social norms fails, law may improve the situation, either by enforcing a beneficial social norm or suppressing a harmful social norm.

In this paper, I generalize and extend some of my previous work on the jurisprudence of social norms (Cooter 1994) (Cooter 1996). I will briefly describe my fundamental conclusions. People use "social norm" to refer to different things. I focus upon a consensus in a community about an obligation.[2] A community has this type of social norm if its members agree that they ought to behave in a particular way in specific circumstances.

To construct an economic model, I need to operationalize "consensus obligation." A consensus resembles a uniform signal in an economic model, by which I mean a situation in which everyone signals that they will do the same

thing. One criterion for an obligatory act is that its omission elicits punishment. To illustrate, people who say that they will do one thing may be punished for doing something else. This paper models uniform signaling with punishment for strategic behavior. I will show that the conditions for uniform signaling differ for private and public morality, and the conditions for punishing strategic behavior require overcoming the free-rider problem through the internalization of morality. Having developed the formal model, I next explain its significance for the jurisprudence of social norms. Finally, I conclude with some remarks about the application of my results to economic development.

PRECURSORS

This paper has various intellectual precursors. Proponents of decentralization have long admired social norms because they arise spontaneously, outside the state (Hayek 1976) (Leoni 1991). The informality of social norms, however, caused scholars to under-estimate their importance relative to formal law, until empirical research proved that social norms often control behavior in spite of the law. To illustrate, American businesses frequently remain rationally ignorant of the legal consequences of the contracts that they sign (Macaulay 1963), borrowing by small business in Taiwan often occurs outside of formal law (Winn 1994), and many Peruvian businesses systematically break the law to circumvent excessive regulations (de Soto 1989).

The formal analysis of social norms developed through the application of game theory (Ullmann-Margalit 1977) (Sugden 1984) (Hirshleifer 1987; Taylor 1987). The economic analysis of social norms draws upon a fundamental result in game

theory: One-shot games with inefficient solutions, such as prisoner's dilemma, often have efficient solutions when repeated between the same players (Fudenberg and Maskin 1986) (Axelrod 1984). This generalization grounds the "utilitarianism of small groups," by which I mean the tendency of small groups to develop efficient rules for cooperation among members.

The utilitarianism of small groups has been demonstrated for cattle ranchers (Ellickson 1991), Chinese traders (Landa 1981; Landa 1983), medieval merchants (Milgrom, North, and Weingast 1990) (Greif 1993), and contemporary diamond merchants (Bernstein 1992). Research on property rights has revealed variety and detail in the political arrangements by which small groups manage their assets (Eggertsson 1992) (McCloskey 1975b) (McCloskey 1975a), (Ostrom 1990), (Ellickson 1993). Note that utilitarianism applies to social groups in which people have repeated transactions with each other, but not to social categories that classify together people who seldom interact with each other (Posner 1996). For example, the Berkeley Chess Club is a social group, whereas chess players are a category. Furthermore, one group may develop norms that benefit its members by subordinating people from other groups (Akerlof 1980; Akerlof 1985) (McAdams 1995).

My analysis of social norms combines competing theories of externalities. Pigou viewed externalities as a market failure that law should correct (Pigou 1950). Samuelson's distinction between public and private goods increased the level of mathematical precision of Pigou's approach (Samuelson 1954) (Samuelson 1955) (Baumol 1972). This tradition has a clear prescription:

markets for private goods, government for public goods, taxes for externalities. Coase challenged this tradition by arguing that externalities can be cured in the market, provided that transaction costs do not obstruct private bargains (Coase 1960). My paper retains Coase's view that markets cure many externalities and rejects his view that bargaining provides the mechanism. Instead, I propose a mechanism with better empirical support: social norms.

AGENCY GAME

Production and exchange require people to cooperate with each other, such as stockholders and managers in a corporation, or managers and workers in a factory. The "agency game" depicted in Figure 1 is the paradigm developed in game theory for cooperation in business. In the agency game the first player to move, the "principal", decides whether or not to make an investment of 1. If no investment is made, the game ends and the players receive nothing. If an investment is made, the second player, the "agent," decides whether to cooperate or appropriate. Appropriation is merely redistributive: the agent appropriates the principal's investment of 1. Consequently, the sum of the payoffs in the northeast quadrant of Figure is 0. Cooperation by both players is productive: the investment of 1 grows to 2. When the agent cooperates, the principal recovers his investment and the players split the product (each player receives 0.5). Consequently, the sum of the payoffs in the northwest quadrant of Figure 1 equals 1. By definition, the most *efficient* cell in the table contains the highest sum of the payoffs, so investment and cooperation is the most efficient outcome.

Figure 1: Agency Game

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

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

An enforceable contract, in which the agent promises to cooperate, solves the problem of cooperation. Contract law typically requires the party breaching a contract to pay damages that restore the profits of the victim to the level expected from performance. In the agency game depicted in Figure 1, costless recovery of expectation damages gives the principal an incentive to invest, regardless of the probability of agent's breach of contract, and costless collection of expectation damages gives the agent a strong incentive to perform. Enforcement of contracts, however, typically requires coercion by a third party such as the state. Another solution can be found that does not require the state: commitment of principal and agent to an enduring relationship. Commitment solves the problem of cooperation through repetition of the game.[3]

TENTATIVE AGENCY RELATIONSHIPS

The fabric of modern business transactions, however, is not law or commitment. Instead, I will analyze the agency game with tentative relationships, which solve the problem of cooperation by using social norms. To model tentative relationships, repeat the agency game indefinitely often, but change the assumption about the number of players. Instead of assuming that there are only two players, assume that there are indefinitely many players, who form into pairs to play each round of the game.

After each round, some of these partnerships continue and others end. Partnerships end when the principal dissolves the relationship after the agent appropriates. Consequently, appropriators play only once with any particular principal. Cooperators repeat the game with the same partner. However, cooperative partnerships can end amiably after an unpredictable change in business conditions makes the relationship unproductive. Assuming stable business conditions, cooperators form relatively stable partnerships, whereas appropriators form relatively brief partnerships (Schussler 1993,) (Dawes and Orbell 1993).

The equilibrium concept for this game draws on evolutionary theory (Bannerjee and Weibull 1996). Think of players as hosts for competing behaviors and ask which of these behaviors will survive in competition with the others. Selection favors the behavior with a higher payoff. Assume that the proportion of players using a particular strategy increases as long as that strategy produces above-average payoffs. Conversely, the proportion of players

using a strategy decreases as long as that strategy produces below-average payoffs. Competition tends to eliminate all below-average strategies, so that every strategy surviving in equilibrium earns the same rate of return. In an internal equilibrium, some players cooperate and others appropriate, and both strategies earn the same expected payoff, as required to survive.

It is easy to see why both strategies might earn the same expected payoff. When a partnership dissolves, the players must search for new partners, which uses resources and time. Appropriating agents form unstable relationships and repeatedly search for partners, so appropriators expect a high payoff occasionally. In contrast, cooperating agents form stable relationships and seldom search for partners, so cooperators expect a modest payoff often.

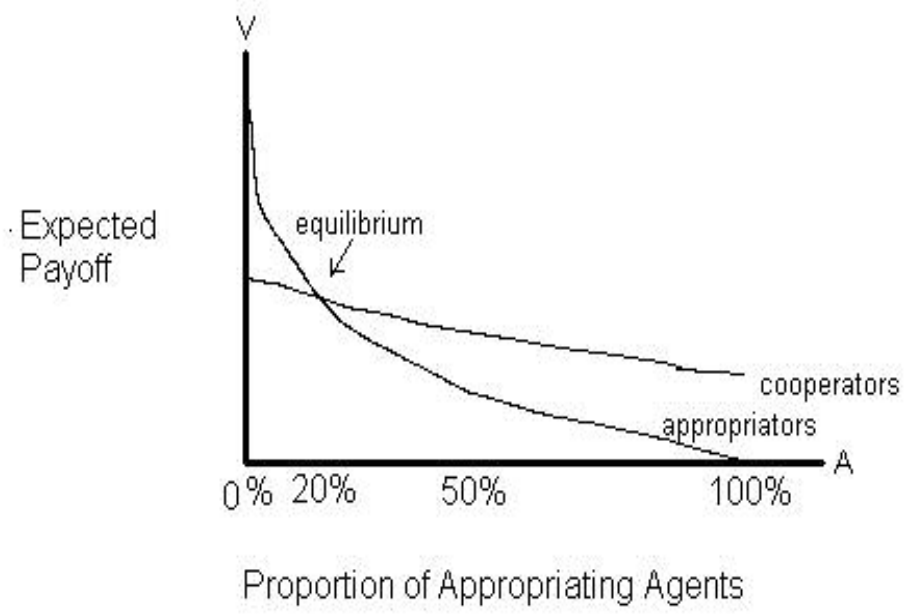
In commodity markets, a stable, internal equilibrium usually exists when an increase in the quantity of production causes the cost of production to increase. Similarly, in the agency game, a stable, internal equilibrium usually exists when an increase in the proportion of appropriators causes the expected payoff from appropriation to decrease. (The necessary conditions are straightforward to explain.[4])

A stable equilibrium is depicted in Figure 2. The vertical axis shows expected payoffs and the horizontal axis shows the proportion of agents who appropriate. As the proportion of appropriators increases, the payoff to cooperation falls a little, because cooperating agents who do not have a partner must search longer to find one. This effect, however, is much larger upon appropriators, who continually search for new partners, so the payoff to

appropriation falls quickly as the number of appropriators increases. The intersection of the curves in Figure 2 indicates that appropriators and cooperators expect the same payoff, as required for equilibrium, which occurs when approximately 20% of agents appropriate.

If enforcement were costless, the most efficient outcome would occur when 0% of the agents appropriate. Given costly enforcement, however, the efficient outcome occurs when a positive proportion of agents appropriate. Efficiency requires balancing the gain from more cooperation and the cost of deterring more appropriators.

Figure 2: Equilibrium Strategies of Agents



Now I turn from strategies to signals. In a community, people talk a lot about what everyone ought to do. What people say about morality may be used to signal their behavior.[5] In the agency game, some people will say that agents

ought to cooperate and an agent who disagrees may signal that he is likely to appropriate, in which case principals will not form a partnership with him. Every agent benefits by signaling "cooperation," regardless of whether his real strategy is cooperation or appropriation.

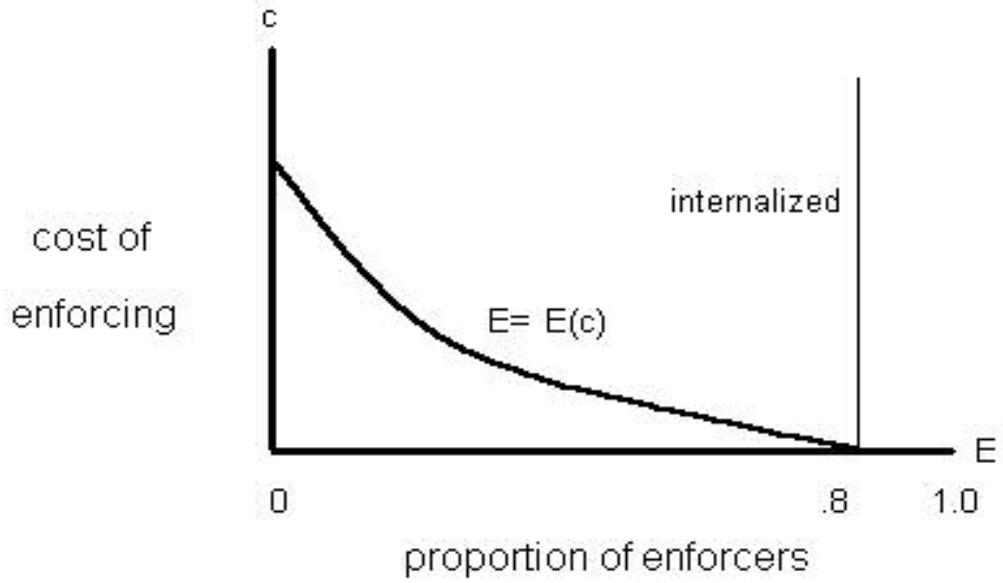
Since every agent must declare his fidelity, I call the signaling equilibrium a "fidelity race." If the fidelity race ends in a tie as in this case, everyone transmits a uniform signal. A uniform signal carries no information ("pooled equilibrium"). I suggest, and leave the explaining to psychologists, that a uniform signal has some value in socializing people and causing them to internalize the obligation. Other types of fidelity races, however, can waste resources and victimize people, as in political witch-hunts (Posner 1997).

In the agency game, a uniform signal represents a consensus about the strategy that agents *ought* to follow. People who believe that agents ought to cooperate may be willing to punish agents who appropriate. The informal punishments that people use to enforce norms include gossip, rebukes, and shunning. For example, people who break the norms of a profession may suffer loss of reputation, censure, or expulsion from professional organizations.

By punishing wrongdoers, a person may risk confrontation or retaliation, as using such resources as time, effort, money, or convenience. People who have internalized the norm may be willing to pay such a price to enforce it. Figure 3 depicts the fact that some people are willing to pay more than others to enforce a norm. The vertical axis represents costs of enforcement, c, and the horizontal axis represents the proportion of players, E, who enforce the norm. As the cost

of enforcing the norm increases, fewer players are willing to pay the higher cost. Thus the function E=E(c) slopes down to indicate that the expected cost of enforcing c must decline in order for enforcers E to increase.[6] According to the figure, 80 percent of the players will pay something to enforce it, which implies that they have internalized the norm, whereas 20 percent will pay nothing to enforce it.

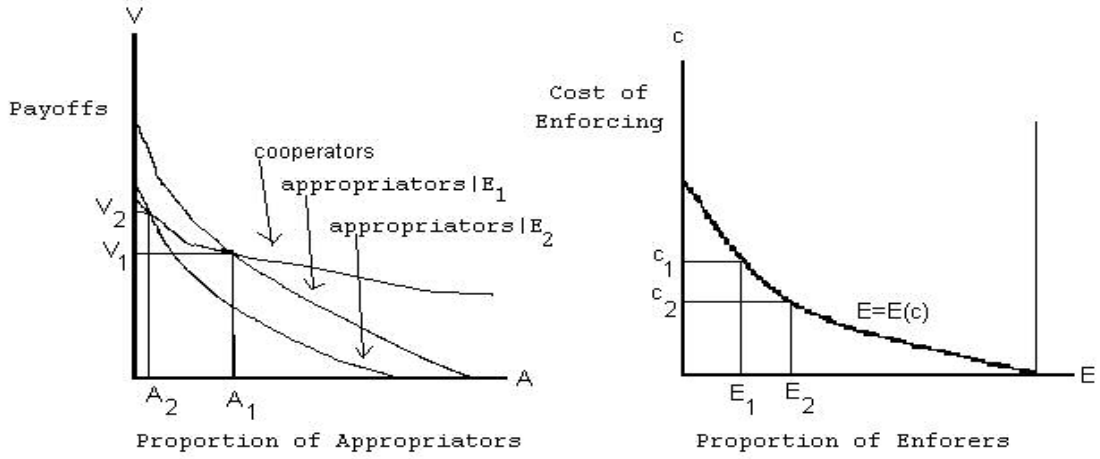
Figure 3: Willingness to Punish



Now I relate the three elements of the analysis of social norms: strategy, signal, and punishment. For any level of enforcement E in Figure 3, there exists a curve indicating the expected rate of return to appropriators in Figure 2. To depict this connection between punishment and strategy, Figure 4 combines Figure 2 and Figure 3. Assume that punishing appropriators costs c_1 as shown in the right side of Figure 4, which results in enforcement E_1. In the left side of

Figure 4, the curve labeled "expected payoff|E_1" corresponds to enforcement level E_1. Given this expected payoff curve, the equilibrium proportion of appropriators equals A_1 and the expected payoff to agents equals V_1.

Figure 4: Appropriation and Punishment



Now consider the effects of a fall in the cost of punishment. If the cost of punishing appropriators falls to c_2 as depicted in Figure 4, enforcement rises to E_2, which results in "expected payoff|E_2" for appropriators. The fall in the expected payoff for appropriators causes the equilibrium proportion of appropriators to fall to A_2 and the expected payoff for agents rises to V_2. Thus an increase in the willingness of players to punish appropriators in the agency game causes more cooperation and production, which benefits everyone. The benefits even extend to appropriating agents, whose expected payoff inevitably rises to the same equilibrium level as cooperating agents.

The agency game achieves the highest level of production when everyone cooperates and no one appropriates. I have shown that the level of cooperation

and production in the agency game depends upon the willingness of players to punish appropriators. Self-interested principals may punish appropriators in order to discourage future partners from appropriating. Self-interested players, however, do not consider the general deterrence value of punishing appropriators. General deterrence benefits everyone by increasing aggregate cooperation. Thus self-interest leads to free-riding on the enforcement efforts of others, which results in an inefficient equilibrium with too much appropriation.

Models of social norms, however, must consider behavior that is not narrowly self-interested. Internalization of a norm may cause players to punish appropriators as a matter of principle, not self-interest. So the internalization of social norms is crucial to their effectiveness. (While noting the importance of internalization, I leave its analysis to psychologists, who have studied it for generations.[7])

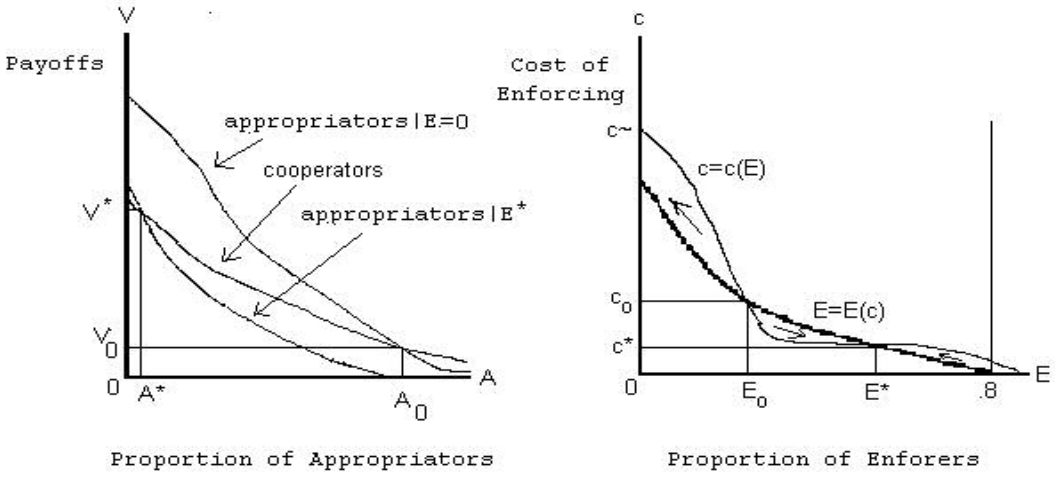
UNSTABLE EQUILIBRIA

The preceding figures depict stable equilibria. With social norms, however, instability can occur. A person who spontaneously punishes someone often risks confrontation or revenge. This risk tends to fall as the proportion of people willing to punish increases. In other words, the enforcer's cost of punishing decreases as the proportion of enforcers increases. Instability occurs when the cost of punishing wrongdoers decreases rapidly as the number of players willing to punish increases.

These facts are depicted in Figure 5. As in Figure 4, the function E=E(c) in Figure 5 depicts the proportion of enforcers E willing to pay c to enforce the

norm. In other words, E(c) is the willingness to pay for enforcement (demand curve). Unlike Figure 4, however, Figure 5 also depicts the actual cost of enforcement as a function of the number of people to pay it. The curve denoted c=c(E) in the right side of Figure 5 depicts the relationship between the expected cost of punishing someone who breaks a social norm, denoted c, and the proportion of people willing to pay that cost, denoted E. In other words, c(E) is the cost of enforcement (supply curve).

Figure 5 Decreasing Cost of Punishment



Notice that the cost c(E) paid by someone to enforcement the norm decreases as the number of enforcers E increases. This fact reflects the declining risk of confrontation or retaliation as more people support the enforcement effort. To illustrate, the risk of confrontation is less when someone complains to a smoker in a public building as the number of people increases who support the complaint. Whereas Figure 4 treats the cost of punishment as exogenous, Figure 5 treats the cost of punishment as endogenous.

If the actual number of enforcers equals the number required to sustain the current cost of enforcement, the cost of enforcement remains constant. In other words, an intersection of the curves E(c) and c(E) indicates an equilibrium in the number of enforcers and the cost of enforcement.[8] If the actual number of enforcers falls short of the number required to sustain the current cost of enforcement, the cost of enforcement will rise. Conversely, If the actual number of enforcers exceeds the number required to sustain the current cost of enforcement, the cost of enforcement will fall.

The directional arrows in Figure 5 indicate the dynamics of the system. The actual number of enforcers falls short of the number required to sustain the current cost of enforcement at points to the left of (E_o,c_0). So any disturbance that causes c and E to deviate to the left of the equilibrium (E_o,c_0) will cause the system to move to the corner equilibrium at (0,c~), where E=0.

The actual number of enforcers exceeds the number required to sustain the current cost of enforcement at points just to the right of (E_o,c_0) in Figure 5, so the cost of enforcement will fall. Any disturbance that causes c and E to deviate to the right of the equilibrium (E_o,c_0) will cause the system to move to the stable equilibrium at (E*,c*). The point (E*,c*) is a stable equilibrium because any small deviation from it causes the system to return to this point. Stability depends upon whether E(c) cuts c(E) from below or above.[9] Theory provides no reason to expect normative systems in general to be stable or unstable.

Having depicted unstable punishment in the right side of Figure 5, I turn to its consequences for the level of cooperation, as depicted in the left side of

Figure 6. First consider the stable corner equilibrium at (E,c)=(0,c~). When E=0, the absence of enforcement causes the appropriator's expected payoff to correspond to the curve labeled "appropriators|E=0" in Figure 5, which results in the equilibrium (A_0,V_0). Low enforcement thus results in a high proportion of appropriating agents and a low expected payoff to everyone.

Now consider the stable internal equilibrium (E,c)=(E*,c*). When E=E* in Figure 5, the high level of enforcement causes the payoff to appropriation to correspond to the curve labeled "appropriators|E*" in Figure 5, which results in the equilibrium (A*,V*). High enforcement thus results in a low proportion of appropriating agents and a high expected payoff to everyone.

In Figure 5, either many people enforce the norm or no one enforces it,[10] with the tipping point at (E_o,c_0). If the system begins at a level of enforcement above the tipping point, it "tips in" to a high level of enforcement of the norm. A high level of enforcement causes almost all agents to cooperate, thus approaching the most efficient situation in which no agents appropriate. Conversely, if the system begins at a level of enforcement below the tipping point, it "tips out" and low levels of enforcement result in low levels of cooperation. Later I discuss how law can cause such a system to tip into a high level of enforcement.

DISTRIBUTION AND CRITICAL MORALITY: AGENCY BARGAINING GAME

As explained, every agent in the game depicted in Figure 1 has an incentive to signal "cooperation." I want to modify the game to illustrate a situation with mixed signaling, not uniform signaling. As depicted in Figure 1,

cooperation produces 1 unit of output which the principal and agent split. Instead, modify the game by assuming that the parties bargain over how to split the production from cooperation. Let α denote the split. Before forming a partnership, the parties in the agency bargaining game depicted in Figure 6 must bargain to an agreement that the agent receives α% of the product and the principal receives (1-α)%.

Figure 6: Agency Bargaining Game

		Agent: cooperate	Agent: appropriate
Principal	invest	α 1-α	1.0 -1.0
	don't invest	0 0	0 0

The best bargaining strategy for each player depend upon details of the model that I leave unspecified, such as the cost of searching for a new partner when bargaining fails. Under reasonable assumptions, however, bargaining will settle into an internal equilibrium with some players signaling that they bargain hard and other players signaling that they bargain soft. Hard bargainers spend more time searching for partners and receive a large share of the cooperative surplus less often, whereas soft bargainers spend less time searching for partners and receive a smaller share of the cooperative surplus more often.

The incentives for signaling by agents differs between cooperating and bargaining. As explained, all agents have an incentive to signal cooperation, regardless of whether their real strategy is cooperation or appropriation. This fact explains why societies generate a consensus of opinion condemning

deception and fraud in business. In contrast, all agents do not have an incentive to signal that they will adopt the same bargaining strategy. This fact explains why societies do not generate a consensus over how to distribute the gains from cooperation.

Soft bargaining promotes cooperation and avoids bargaining breakdowns, so a social norm requiring parties to bargain softly could increase production. A consensus favoring soft bargaining, however, is unlikely to arise because people have incentives to transmit mixed signals. In the absence of a consensus, few people will internalize the obligation and enforcement will be low.

In the absence of consensus obligations, people will disagree about what they ought to do. In particular, people will disagree about whether or not they have an obligation to bargain softly. Soft bargainers will appeal to a higher standard of morality than the one acknowledged by hard bargainers. Such a higher moral standard is "critical" in the sense of criticizing ordinary morality. The existence of critical morality is characteristic of problems of distribution, where conflicting interests preclude consensus.

THIRD PARTY EFFECTS

In the game described above, the activities of a partnership effect its members and no one else. In reality, many business transactions effect third parties. In Figure 7, I modify the agency game to allow for external effects. To keep the numbers simple, I assume that investment by the principle has external effects in 10% of cases (e.g. injury, discharge of pollution, congestion of resource) and no external effects in 90% of the cases. When externalities occur,

investment imposes an external cost of 1 and cooperation by the agent also imposes an external cost of 1.

Figure 7 summarizes the resulting payoffs. The principal and agent decide whether or not to invest and cooperate. The numbers in the lower left corner of each cell indicate the sum of the payoffs to the principal and agent. The numbers in the upper right corner of each cell indicate the external effects upon the third party. If the principal does not invest and the agent does not cooperate, then they receive 0 and no external effects occur, so the 3rd party also receives 0. If the principal invests and the agent cooperates, then the principal and agent receive a total payoff of 1, and ttheir activities have external costs with known probability. Specifically, the 3rd party loses 0 with probability .9, and the third party loses 2 with probability .1.

Figure 7: Principal/Agent and 3rd Party

		payoff to 3rd party and its probability	
		no externality probability=.9	externality probability =.1
total payoff to principal and agent	invest & cooperate	0 1	-2 1
	don't invest	0 0	0 0

Assume that the principal and agent can foresee whether or not their activities fall into the 10% of cases with external effects. Given foresight, efficiency requires the partners to forego their activities in the 10% of cases with external effects, and efficiency requires the partners to invest and cooperate in the 90% of cases without external effects.

I assume that partners and third parties cannot bargain with each other to produce the efficient result. In other words, a contract cannot internalize the spillover. Consequently, self-interest prompts the partners to invest in order to earn 1 even when the external effects impose costs of 2 on others. Will a social norm evolve to solve the problem? The answer depends upon the level of coherence in the community.

In the simple agency game, self-interest prompts the parties to transmit a uniform signal, which provides the consensus about obligations as needed for the evolution of a social norm. In the agency game with externalities, however, self-interest does not necessarily produce uniform signaling. Instead, a consensus requires individuals to recognize their common interest in the group's efficiency and fairness. I use the phrase "coherent community" to mean a society whose members recognize this common interest and act upon it.

If the affected people belong to a community, they will discuss and debate the question of whether or not a partnership should proceed under circumstances where its activities yield 1 for partners and cost 2 for 3rd parties. Some people will probably say that everyone in the community should give the same weight to the harms they cause to others as to the benefits that the receive for themselves. One cause of coherence is symmetry among the members of the community. By symmetry towards external costs, I mean that everyone has the same probability of being a future injurer, and everyone has the same probability of being a future victim.

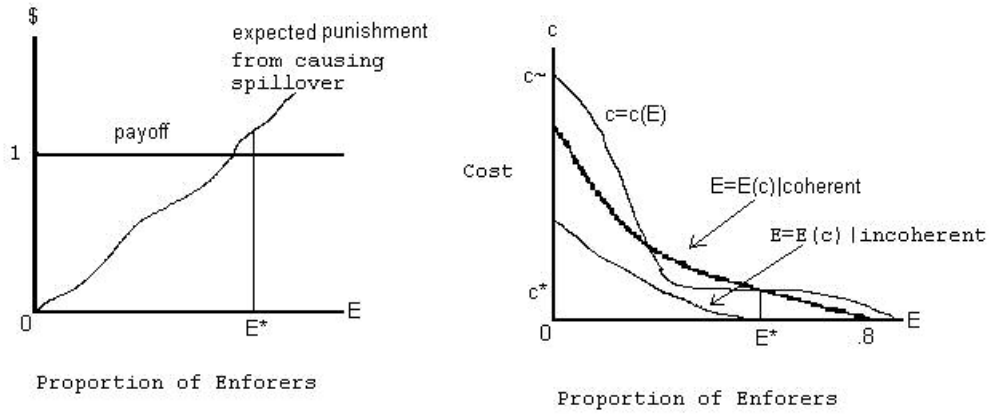
For example, everyone in a certain group might have the same probability of being the injurer or victim of an automobile accident, or the polluter or pollutee from exhaust fumes. Symmetry enhances agreement among people about the best rule for governing future harms. Everyone may prefer the same future rule ("ex ante Pareto efficient"), even though people disagree about the rule for allocating past harms.[11] A consensus concerning the best rule for future harms may cause a norm to evolve that constrains spillovers. (I postpone a detailed analysis of coherence until another ocasion.)

I will say no more about whether or not a norm will evolve to control spillovers. Instead, I consider the consequences of having or not having such a norm. Community coherence will cause its members to internalize the norm and punish violators. A high level of enforcement will provide an incentive for players to conform to the norm. Conversely, community incoherence will prevent the internalization of the norm and the punishment of violators.

Figure 8 illustrates these facts. The right side of Figure 8, like the right side of Figure 5, depicts the cost of enforcing social norms. In a coherent community, people are willing to pay for enforcement, as indicated by the function labeled "E=E(c)|coherent," which results in the high equilibrium level of enforcement E*. The payoff to partners from investing and cooperating equals 1, as depicted in the left side of Figure 8. The high level of enforcement E* deters partners from violating the norm, as indicated in the left side of Figure 8 by the fact that enforcement E* causes the expected punishment to exceed the immediate payoff from the partnership.

In contrast, people in an incoherent community are less willing to pay for enforcement, so the curve in the right side of Figure 8 shifts down to "E=*E*(c)|incoherent", which results in the low equilibrium level of enforcement E=0. The low level of enforcement E=0 does not deter partners from violating the norm, as indicated in the left side of Figure 8 by the fact that the immediate payoff 1 to partners exceeds the expected punishment 0 caused by enforcement E=0.

Figue 8: Equilibrium With Spillovers



JURISPRUDENCE OF SOCIAL NORMS

So far I have discussed social order. Now I turn to legal order built on social order.

Law Reinforces a Norm

The preceding figures depict the informal enforcement of social norms by private persons, not state enforcement. According to Locke, the state can provide more certain and secure enforcement (Locke 1961 (1690)). State enforcement is more certain because a written law provides a canonical formulation of the underlying obligation and, in an ideal situation, courts apply the rule with impartiality. State enforcement is more secure because of the state's monopoly on official use of force.

Private enforcement and state enforcement typically complement each other. The cooperation of citizens with officials increases the effectiveness of state enforcement and lowers its costs. Conversely, the effectiveness of private enforcement increases, and its risks to private enforcers decreases, when state officials back-up and supplement private enforcers. Thus the enactment of a social norm into law and its enforcement by the state shifts the private cost curve c(E) down in the preceding figures. In the stable equilibrium (E*,c*) depicted in Figure 5, a downward shift in the cost curve c(E) shifts the equilibrium to a higher level of private enforcement above E*. In other words, public enforcement "pulls in" more private enforcement, rather than "crowding out" private enforcement. The increase in total punishment causes the equilibrium proportion of appropriators to fall below A* in Figure 5.

State enforcement has another potentially powerful effect. If most citizens in Figure 5 believe that most citizens will enforce the social norm, then the system will move to the stable, internal equilibrium (E*,c*) with a high level of

enforcement A*. Conversely, if most citizens believe that few citizens will enforce the social norm, then the system will move to the unstable, corner equilibrium with a low level of enforcement. Thus Figure 5 depicts a self-fulfilling prophecy. In such a social system, state enactment can sometimes tip society into conformity with the law merely by causing citizens to *believe* that most of them will enforce it.

For example, society may begin at the corner (E,c)=(0,c~) Figure 5, where everyone correctly anticipates low private enforcement and high appropriation A_0. Now the state announces that it will punish violators of the norm. Consequently, the citizens correctly anticipate that many private citizens will also enforce the norm, which will result in the new equilibrium (E,c)=(E*,c*), with low appropriation A*. Thus the state induces high private enforcement merely by announcing public enforcement.

To illustrate, the City of Berkeley recently enacted an ordinance requiring owners to clean up after their dogs (“pooper-scooper” law). Enactment of the law clarified vague social norms concerning courtesy. After the law's passage, people became more aggressive toward discourteous owners of dogs. Apparently it is easier to say “Obey the law” than to say “Don’t be so rude.” Most owners now clean up after their dogs, so the sidewalks are much cleaner.

In another example, many local jurisdictions in America have recently enacted ordinances prohibiting smoking in public buildings such as airports. Before these ordinances were enacted, people smoked at will and nonsmokers seldom complained to smokers. After the ordinances were enacted, officials

posted signs prohibiting smoking in public buildings. Officials almost never enforce the prohibitions. Perhaps the signs made nonsmokers believe, correctly, that other nonsmokers would support complaints against smokers. Enacting the ordinance apparently tipped the balance in favor of private enforcement of the social norm.

Law Undermines A Norm

I have shown how state enforcement of social norms can reduce violations of the underlying obligation. Now consider what happens when the state imposes laws that undermine social norms. To undermine a social norm, the state creates obstacles to its private enforcement. For example, morality may require the fulfillment of promises to perform acts forbidden by the state, such as paying interest on a loan that exceeds the ceiling set by usury laws. Obstacles to private enforcement raise its costs, as indicated by an upward shift in the cost curve c(E) in the preceding figures. In the stable equilibrium depicted in Figure 4 an upward shift in the cost curve c(E) shifts the equilibrium to a lower level of private enforcement In the unstable equilibrium depicted in Figure 5, an upward shift in the cost curve c(E) increases the probability that random shocks will cause the system to reach the corner solution characterized by a low level of enforcement. After shifting c(E) upward, a small shock to the stable equilibrium (E*,c*) can move the system to a point beyond (E_0,c_o), which causes the system to settle in the corner (0,c~).

CONCLUSION: ECONOMIC DEVELOPMENT

State laws are visible obligations protruding above a larger, invisible mass of social obligations. This paper begins to develop a theory of the relationship between them. My theory of norms has some practical implications for economic development. In a developing economy with relatively free trade, business will tend to develop efficient norms to regulate private interactions. In these circumstances, the role of state law can be limited to correcting failures in the market for norms. Failures tend to occur because private, informal punishment insufficiently deters wrongdoing. In these circumstances, state enforcement of social norms can increase private cooperation and production. However, successful state enforcement typically requires a close alignment of law with morality, so state officials enjoy informal support from private persons.

Business law and morality get out of alignment in states suffering from legal centrism, such as over-regulation or central planning. In these circumstances, the re-alignment of business law with morality is needed to reduce corruption and create the private basis for effective public laws. To re-align business law with morality, business law should be remade to reflect the best business practices.

The problem of aligning law with morality is especially acute when business activities create external costs. In these circumstances, incentives for mixed signaling impede the emergence of consensus norms to reduce externalities. In the presence of externalities, the emerge of social norms requires develop of critical morality. Coherent groups of people criticize

members who harm the group. Such morality can restrain spillovers, provided that enough people internalize the obligation and punish violators.

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Citations

[1]The process of assimilating bills of exchange and negotiable instruments into the common law, which occurred in the eighteenth century, is well documented. The traditional theory is developed in (Holden 1955). Holden is criticized in (Baker 1979). A revised view, which stresses that Mansfield immersed himself in the minutiae of business practice in order to extract the best principles from it, is found in (Rogers forthcoming). I benefited from discussions on this point with Dan Coquillette, James Gordley, and Jim
Rogers.

[2]Social scientists sometimes use "social norm" to refer to average behavior. For example, sociologists sometimes use "norm" to mean what people normally do, as opposed to what deviants do, and statisticians talk about the "normal distribution." In contrast, philosophers usually use "norm" to refer to what people ought to do, where the obligation comes from a rule. See (Wright 1963).

[3] The exceptions to this generalization, which need not concern us here, are analyzed in (Harrison and Hirshleifer 1989) (Hirshleifer and Coll 1988).

[4] As the proportion of appropriating agents increases, more partnerships dissolve more often. Some of the principals released from these relationships look for new partners. Consequently, the *release* of principals from existing partnerships tends to *lower* the expected cost of a successful search by an agent for a partner. Another force, however, works in the opposite direction. As the number of appropriators increases, investment becomes less profitable and some principals withdraw from the industry. *Withdrawal* of principals from the industry *increases* the expected cost of a successful search by an agent for a partner. On balance, more appropriators cause search costs to increase when the *withdrawal effect* dominates the *release effect*. Thus a stable equilibrium usually exists when the "withdrawal effect" dominates the "release effect." For a similar, formal model, see (Schussler 1993,).

[5] Natural expressions for emotion make character translucent, which conveys an evolutionary advantage on people by facilitating forms of commitment (Frank 1988).

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

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

[7] For example, see (Freud 1962) (Piaget 1948) (Kohlberg 1969)Freud, Piaget, Kohlberg, (Chaldini, Kallgren, and Reno 1991; Sherif 1936).

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

[9] If E(c) cuts c(E) from below, the curves intersect at a stable punishment equilibrium. If E(c) cuts c(E) from above, the curves intersect at a stable punishment equilibrium. Instability is more likely under two conditions. First, a small increase in the number of enforcers causes a large decrease in the cost of enforcement, which makes c(E) steeply sloped. For example, c(E) slopes steeply when large numbers of enforcers enjoy much security, whereas isolated enforcers bear much risk. Second, a small decrease in the price of enforcement causes a large increase in the number of enforcers, which makes E(c) flat. For example, E(c) is flat when many people who internalize the norm will pay a small amount to enforce it, but no one will enforce it at substantial personal cost.

[10] This possibility is discussed by (Taylor 1987) p. 145) and Casson (1991, p. 83.

[11] Such a rule is "ex ante Pareto efficient." For a discussion, see (Cooter and Ulen 1987).