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# Law Without the State: The Theory Of High Engagement and the Emergence of Spontaneous Legal Order within Commercial Systems 



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Law Without the State: The Theory of High Engagement and the Emergence of Spontaneous Legal Order Within Commercial Systems

Bryan Druzin



## ARTICLES

## LAW WITHOUT THE STATE: THE THEORY OF HIGH ENGAGEMENT AND THE EMERGENCE OF SPONTANEOUS LEGAL ORDER WITHIN COMMERCIAL SYSTEMS

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## I. Introduction

Commercial law ${ }^{1}$ is a fundamentally unique area of law. Unique because it reacts to, and is a reflection of, commercial forces: a vast body of regulation that is a response to a pre-existing and deeply entrenched human activity-commerce. ${ }^{2}$ As such, it is a mistake to simply compartmentalize it as one mere subsection of law, such as family law, criminal law, or environmental law. To do so is to fundamentally misunderstand its basic nature. ${ }^{3}$ Commercial law is grounded upon an entirely different paradigm of human interaction, one inextricably linked to commercial principles such as exchange, competition and profit. ${ }^{4}$ As such, the manner in which parties relate to one another is wholly unique.

The upshot of all this is that while law of a non-commercial nature by and large requires the backing of a state to give it efficacy, a great deal of commercial law as it exists today has, in fact, evolved largely through

[^1]its own energy, shaped by market forces. ${ }^{5}$ Indeed, the underpinnings of the most basic principles of contract such as formation, content, misrepresentation, mistake, and duress, originally arose not through the complex mechanics of legislation, but from the customary rules of merchants, only to be later co-opted by nation-states and codified. ${ }^{6}$ The market requires law because it serves the needs of the market; it has always been so. Just as a common medium of exchange aids the market, common norms (i.e. laws) facilitate exchange. Private ordering reduces transaction costs and protects the property rights exchanged through trade. ${ }^{7}$ Today, the practices of merchants continue to drive the development of commercial law as evidenced in international commercial arbitration, and indirectly articulated in documents such as the UNIDROIT Principles of International Commercial Contracts and the Uniform Commercial Code, which point to the reality that business practices in fact serve as the primary source of substantive business law. In our present age, the unremitting force of the market continues to shepherd a regulatory framework within which it can function. Codification efforts such as UNCITRAL, UNIDROIT, CISG, and the Lando-Principles are but formal reflections of this phenomenon. ${ }^{8}$ Indeed, modern international trade displays a strong tendency towards autonomous regulation, with individual contract drafting and international commercial arbitration, both of which are firmly rooted in the principle of party autonomy, fostering this evolution. ${ }^{9}$

It is the central contention of this paper that commercial law stands apart from other forms of law in that it is uniquely equipped to evolve spontaneously. ${ }^{10}$ The core reason for this, I will argue, is that com-

[^2]merce implies a very specific manner of interaction, which I refer to here as high engagement. This notion of high engagement forms the subject of this discussion. The basic question I will attempt to answer is: In what way is high engagement instrumental in allowing commercial law to evolve in a decentralized, spontaneous fashion, without the need to resort to a central legislative authority? The remainder of this paper attempts to answer this key question. Game theorists have long recognized the importance of repeated interaction in inducing cooperation. ${ }^{11}$ However, the distinct manner of interaction implied by commercial dealings has been left largely unexamined. How repetition induces cooperation has been well studied, and thus does not represent the principal focus of this discussion; rather, how commercial interaction induces repetition in the first place is what I will examine.

Many have contributed to the idea of "spontaneous law," in its most recent incarnations, most notably the work of Hayek, and to some degree Fuller. ${ }^{12}$ Game theorists, libertarians, anarchists, and law and economic scholars alike all postulate that law may evolve and function in the absence of the state. ${ }^{13}$ Indeed, "while law can be imposed from above by some powerful authority, like a king, a legislature, or a

Benson, The Enterprise of Law 30 (1990) for a theoretical and historical discussion of this phenomenon.
11. Indeed much of the game theory literature addresses the principle of repeated interaction in the context of iterated games. See generally John Maynard Smith, Evolution and The Theory of Games (Cambridge Univ. Press 1982); Robert Axelrod \& William D. Hamilton, The Evolution of Cooperation, Science, Mar. 27, 1981, at 1390; Robert Axelrod, The Emergence of Cooperation among Egoists, 75 Am. Pol. Sci. Rev. 306 (1981); Robert Axelrod, The Evolution of Cooperation (1984).
12. See Fuller, supra note 3; F.A. Hayek, Rules And Order (1973); see also F.A. Hayek, The Road to Serfdom 3-37 (1944) (arguing against centrally planned economies). See generally R.C. Ellickson, Order Without Law (1991) (arguing that order can arise spontaneously within close-knit groups who repeatedly interact); Robert Nozick, Anarchy, State, and Utopia (1974) (showing how the minimalist state arises naturally from anarchy); Charles Lindblom, The Intelligence of Democracy 3-6 (1965) (exploring the idea of coordination without hierarchy); Robert Sugden, The Economics of Rights, Co-operation and Welfare (1986) (demonstrating how conventions of property, mutual aid, and the voluntary supply of public goods can evolve spontaneously out of the interactions of self-interested individuals); Michael Taylor, Anarchy and Cooperation (1976) (arguing that there are conditions under which rational actors will cooperate to produce public goods); Michael Taylor, Community, Anarchy and Liberty (1982) (arguing that stateless social order is possible if "relations between people are those characteristic of community").
13. See Hayek, Rules And Order (1973); see also Cooter, supra note 6; Benson, supra note 4, at 644; Bruce L. Benson, Customary Law with Private Means of Resolving Disputes and Dispensing Justice: A Description of a Modern System of Law and Order Without State Coercion, 9 J. Libertarian Stud. 25 (1990); Bruce L. Benson, Enforcement of Private Property Rights in Primitive Societies: Law Without Government, 9 J. Libertarian Stud. 1, 1-22 (1989). See generally David Friedman, The Machinery of
supreme court, law can also develop 'from the ground,' as a result of a recognition of mutual benefits." ${ }^{14}$ As Cooter phrases it, "Rather than proceeding from the top to bottom, lawmaking can proceed from bottom to top." ${ }^{15}$ Hayek suggests that this spontaneous legal order evolves slowly over time just as markets do, as a by-product of participants' active engagement in it. ${ }^{16}$ In this sense, while most forms of law are creations of the state, commercial law is, in many respects, the creation of commerce itself, stateless and implicitly trans-regional. ${ }^{17}$ Indeed, in an inter-regional context, the growth of commercial rules has advanced at a swifter speed than its non-commercial counterpart. This is exemplified in the law merchant, both old and new. ${ }^{18}$ There are obvious reasons for this: for instance, commerce's potential to produce mutual benefit, a commonality of interests, the importance of interregional trade, and so forth. However, the specific manner of interaction involved in commercial activity is key in truly understanding this phenomenon.

It has been well recognized that the reciprocal gains from the recognition of rules of property and contract (and the potential loss of them) often serve as self-enforcing mechanisms, encouraging compliance. ${ }^{19}$ As such, private ordering within the realm of commerce may emerge without the necessity to resort to state-enforced rules. And this, in fact, is precisely what we find when we turn and examine the modern complexion of much of the lex mercatoria as it exists today, where indeed a central legislative authority is notably absent. Custom and an aggregation of trans-national treaties have emerged as the principal sources of

Freedom (2d ed. 1971); Murray N. Rothbard, Man, Economy, and the State: A Treatise on Economic Principles (1962); Cooter, supra note 6.
14. Bruce L. Benson, Reciprocal Exchange as the Basis for Recognition of Law: Examples from American History, 10 J. Libertarian Stud. 53, 53 (1991).
15. Cooter, supra note 6 , at 215.
16. Hayek distinguishes between the "order of actions" and the "order of rules" and suggests that, for given rules, the order of actions is what emerges from the spontaneous process governed by the order of rules. Hayek, supra note 13. He also argues that the order of rules can emerge spontaneously, just as the order of actions does. B.L. Benson, Economic Freedom and the Evolution of Law, 18 Cato J. 209, 209 (1998).
17. Trakman writes, "The self-sufficiency of the Law Merchant therefore retains its basic ingredients today as it did yesterday: it remains transregional in character, commercial in orientation, and expeditious in intent." Leon E. Trakman, The Law Merchant: The Evolution of Commercial Law 3 (1983).
18. See generally Benson, supra note 4.
19. See id. at 646 ("reciprocal gains from the recognition of rules of property and contract provided sufficient incentives for merchants to establish their own stateless enterprise of law [referring to the medieval Law Merchant]").
law. ${ }^{20}$ Despite its many deficiencies, commercial law has evolved frequently in the absence of a single coercive power. This was possible partly because, unlike other areas of law, the element of reciprocity underlying the activity of commerce allowed it to do so. The spontaneous law literature is grounded upon this dynamic of reciprocity. It is central because, as B. L. Benson concludes, it is the primary means of inducing compliance in the absence of enforcement. ${ }^{21}$ In place of enforcement, Fuller opines, it falls upon sheer self-interest to foster a recognition and protection of rights. ${ }^{22}$

While this is certainly true, the literature largely overlooks a second, yet vitally important, element-namely, the high level of general engagement that exists in commerce, and how it operates in supporting the element of reciprocity. Indeed, commercial activity stands apart from non-commercial forms of interaction in that participants simply tend to be more regularly engaged in the undertaking. This is important. This high level of engagement, which is the mark of commercial trade, reinforces the effects of reciprocity on systems of spontaneous order, accelerating the formation of legal norms by pulling relevant actors into repeated and more involved contact with one another. High engagement enhances the impact of reciprocity because it increases the overall rate and scope of interaction, and this helps forge customary norms and promote compliance. The higher the level of overall engagement, the more likely it is that behavioral norms will emerge spontaneously (and be adhered to). Below I argue that this phenomenon of high engagement has two important components. The first is sheer repetition and repeated exposure. The second is a tendency to assign positive obligations to participants, creating clear cycles of interaction, inducing cooperation. ${ }^{23}$ As we shall see, these two aspects of commercial interaction (along with reciprocity) play a pivotal role in allowing commercial law to evolve spontaneously.

Without the key ingredient of high engagement, it is difficult for social-legal ordering to develop as a result of reciprocity alone. To use an imperfect analogy: if reciprocity is understood as the serrated teeth of a saw, high engagement is like the hewing of that saw. With each quick

[^3]pass of the blade, a deeper groove of expected behavior is cut, in due course producing a recognized behavioral convention-a legal norm. Repeated cycles of purposive engagement stimulate the emergence of customary norms and induce compliance. Thus, the manner in which the players engage in the activity is decisive, and commercial activity possesses a uniquely accelerated pace of purposive interaction. Although the underlying elements of high engagement and reciprocity predominate in commerce, this is simply not the case of behavior regulated by law of a non-commercial nature, where these features are considerably less pronounced or entirely absent.

The following discussion will be divided into two parts. Part I presents a brief overview of the idea of reciprocity and spontaneous law theory. In Part II, a more detailed explanation of the notion of engagement is offered. Here I set out exactly how high engagement facilitates the development of and compliance with legal norms, mapping out how high engagement induces the evolution of normative systems. Although the topic is deserving of a far more in-depth, intricate, and empirical discussion, the goal here is more modest. It is to merely set out some core observations regarding the nature of commercial interaction in the broadest of strokes-to provide a skeletal framework upon which, hopefully, further examination may be pursued. Finally, the conclusion the paper reaches is that this element of high engagement plays a decisive role in commercial law's ability to evolve and function in a decentralized, spontaneous manner. ${ }^{24}$ This is an important insight in terms of the future development of the modern law merchant, as it emerges in the absence of a central legislative authority. Indeed, degrees of order can arise from anarchy. ${ }^{25}$

[^4]
## II. Commercial Law as a Self-Regulating System

Legal positivists espouse a distinctly hardened view of law. A legal positivist conception of law-commercial and non-commercial alikecontends that law must be enforced by an overarching authority lest it forfeit all claim to legal validity. In a sense, a legal positivist would argue that if there is no one to enforce the rules, there can be no real rules. This belief is eminently clear in the conclusions of early proponents of legal positivism such as Austin. ${ }^{26}$ And indeed, historically, this has been the underlying assumption of the vast majority of economists who have turned their sights on law. ${ }^{27}$ However, this is no more than an assumption. It is just one competing theory. Hayek, for one, issues a sharp rebuke of this view of law, condemning it as "the fiction that all law is the product of somebody's will." ${ }^{28}$ Similarly, Fuller rejects the notion that all law must be enforceable by a threat of force through state

[^5]HAYEK, supra note 13, at 28.
power, as through a court, asserting that to adopt such a view would be essentially to "define 'law' by an imperfection." ${ }^{29}$ To do so, Fuller points, would imply that our definition of law could not then include any system of regulation that "works so smoothly that there is never any occasion to resort to force or the threat of force to effectuate its norms." ${ }^{30}$ Clearly, the failure of a system cannot serve as its defining characteristic.

Fuller states the issue quite succinctly when he states that, "[t]he question that gives trouble is, How can a person, a family, a tribe, or a nation impose law on itself that will control its relations with other persons, families, tribes, or nations? Unlike morality, law cannot be a thing self-imposed; it must proceed from some higher authority." ${ }^{31}$ Fuller concludes this question arises from "the notion that the concept of law involves at the very minimum three elements: a lawgiver and at least two subjects whose relations are put in order by rules imposed on them by the law-making authority." 32 Essentially, the legal positivist position precludes the possibility that, having removed the law-making authority from the equation, law might still arise from merely the two subjects. ${ }^{33}$

Indeed, systems of commercial regulation are perfectly capable of establishing and enforcing their own laws without the need to resort to state coercion. As Ellickson concludes in his analysis of property rights, "[c]ontrary to Hobbes and Locke, a property system can get going without an initial conclave." ${ }^{34}$ Elsewhere, Ellickson notes that, "in some contexts initial rights might arise from norms generated through decentralized social processes, rather than from law." ${ }^{35}$ Such law is "recognized not because it is backed by the power of some strong individual or institution, but because each individual recognizes the benefits of behaving in accordance with other individuals' expectations, given that others also behave as he expects." ${ }^{36}$ Unlike law of a non-commercial nature, the underpinning feature of reciprocitywhich characterizes commercial activity, and from which commercial law is constructed and operates-provides a set of mechanics not at all envisioned in the legal positivist's view of law. This dynamic, most

[^6]prominent in commercial activity, allows commercial regulation to arise in an all-together different fashion.

## A. The Element of Reciprocity

As I have mentioned, reciprocal gains from the recognition of rules of property and contract provide sufficient incentives for law. ${ }^{37}$ In a system of spontaneous legal creation and compliance, where there is no external coercion, this element of reciprocity is essential. ${ }^{38}$ Benson explains that "[t]he authority which can most effectively back law is individual realization of reciprocal benefits arising from recognition of that law." ${ }^{39}$ Attempting to define reciprocity, Taylor writes, "reciprocity is made up of a series of acts each of which is short-run altruistic (benefiting others at a cost to the altruist) but which together typically make every participant better off." ${ }^{40}$ David Hume defined it nicely: "[h]ence, I learn to do a service to another, without bearing him any real kindness; because I forsee, that he will return my service, in expectation of another of the same kind...."41 In the language of game theory, reciprocity can be understood as a basic tit-for-tat strategy. ${ }^{42}$ Indeed, in his famous article, The Evolution of Cooperation, Axelrod defines the element of reciprocity precisely in these terms. ${ }^{43}$ Reciprocity "involves returning like behavior with like." ${ }^{44}$ It is a coordination of action governed by a succession of action and response.

## 1. The Importance of Reciprocity in the Absence of External Coercion

In theories of spontaneous law, such as those of Fuller and Hayek, reciprocity plays a critical role. ${ }^{45}$ In systems where there is no external enforcement, "coercion" must exist in the form of mutual self-

[^7]interest. ${ }^{46}$ While this reciprocity need not be immediately realized, it underpins all systems of law where exogenous coercion is not present. Benson explains that, "reciprocity has implications for the evolution of moral behavior because it means that an individual can face an immediate choice of bearing costs by recognizing another's property rights but perhaps without an immediate gain, in expectation of future reciprocal behavior by someone else. ${ }^{47}$ It is the force of reciprocal gain that renders such systems effectual, infusing the notion of legal duty with a sense of personal consequence. ${ }^{48}$ Thus, as Fuller points out "duties generally can be traced to the principle of reciprocity." ${ }^{49}$ Indeed, Fuller argues that the legitimacy of customary law in general sprung from "the principle of consensual reciprocity of expectations." ${ }^{50}$ In a system that requires voluntary compliance, reciprocity must be present in one form or another in order to induce this willingness to comply.

Parisi and Ghei look at the role of reciprocity in international law in a game theoretic framework, concluding that reciprocity is an essential component in its functioning-an element that should be considered a "meta-rule" in the system of international law. ${ }^{51}$ Although they do not look specifically at commercial law, their findings apply perhaps even more readily to the emergence of transnational commercial law:
the concept of reciprocity assumes peculiar importance in a world where there is no [clear] external authority to enforce agreements, that is in a world that exists in a Hobbesian state of nature . . . Such a strategy permits cooperation in a state of nature, when no authority for enforcement of agreements exists. ${ }^{52}$

Parisi and Ghei point out that international law, in fact, exists in such a state of nature, with no authority always possessing jurisdiction to enforce agreements. ${ }^{5.3}$

Reciprocity, in this sense, is of paramount importance. Self-interest

[^8]corrals the actions of individuals into efficient coordination-it is in this way a basic principle of such social order. The starker the manifestation of this element of reciprocity is in a given social arrangement, the easier cooperation can emerge without resort to external coercion. ${ }^{54}$ This is because actors are clearly conscious of what benefit they derive from the arrangement. ${ }^{55}$ The nature of the relationship issues an implicit appeal to their self-interest; thus, the lure of reciprocal benefit encourages compliance. If the reciprocal quality to the relationship is clearly laid out, participants are less likely to be confused as to why they should comply in the absence of coercion. ${ }^{56}$ In a sense, the coercion is internal.

In systems of commercial relations this principle is especially salient. Commerce is wholly predicated upon reciprocity. This principle in effect underpins the entire enterprise. In voluntary commerce, reciprocity is the purpose of the interaction-it is the basic nature of exchange. Further, in commercial interactions, parties are far more likely to be calculating their actions according to parameters of self-interest, and are therefore less likely to be guided by emotional considerations unrelated to profit and loss. Within such a milieu, concepts of rational choice theory in fact more readily apply. Commercial arrangements are often more clearly premeditated, being constructed around a less nuanced agenda. In commercial interaction, where the primary motivation for participation is unambiguously to glean individual profit, this

[^9]weighing of expected costs and benefits is far more clear-cut. The clarity of interests that arises from a relationship defined by reciprocity helps induce compliance. ${ }^{57}$ This principle of gain-a vitalizing force compelling the actions of rational actors-is commercial law's distinguishing mark. ${ }^{58}$

## 2. Reciprocal Gain and Self-interest as the Root of All Law

To some extent, individual benefit lies at the heart of all forms of law, whether commercial in nature or not. As Fuller expresses, "[e] xchange is, after all, only a particular expression of this more general, and often more subtle, relationship [of reciprocity]."59 Elsewhere he writes that "the reciprocity out of which a given duty arises can be visible, as it were, in varying degrees. At times it is obvious to those affected by it; at others it traces a more subtle and obscure course through the institutions and practices of society." ${ }^{60}$ Individual benefit is the primary engine of all norm emergence-the chief carrot. Take criminal law as an example, something that on its surface seems well removed from this element of profit Arguably compliance with criminal codes is similarly motivated by self-interest and the pursuit of personal advantage. This is compliance with rules so as to ultimately advance one's own personal safety (although admittedly this is a somewhat Hobbesian view of human nature). At its most basic level, it is an exchange of sorts: I will not harm you if you do not harm me. All law in this way can be said to be in a sense contractual. And, indeed, like commerce, it too is predicated on the control and protection of property. Property here being property in truly its most basic sense: the integrity of the physical person.

Hayek indeed has a more general conception of property, seeing it as the basis of law in the sense of universal rules of conduct. For him notions of property "determine boundaries of the domains of freedom by laying down rules that enable each to ascertain where he is free to act." ${ }^{\text {" }}$ In this sense, the reciprocal recognition of property, property in even the most abstract sense, is the basis of all forms of law. In the words of Hayek, "Law, liberty, and property are an inseparable trinity." ${ }^{62}$

[^10]Thus, individual benefit gleaned from a basic acknowledgment of ownership (i.e. property of any kind) underlies the formulation of all law. Hayek further notes that " $[p]$ roperty, in the wide sense in which it is used to include not only material things . . . is the only solution men have yet discovered to the problem of reconciling individual freedom with the absence of conflict." ${ }^{\text {".3 }}$ He goes on to assert that "the recognition of property preceded the rise of even the most primitive cultures, and . . . certainly has grown up on the basis of that spontaneous order of actions which is made possible by the delimitation of protected domains of individual or groups. ${ }^{, 64}$ In one sense then, all law addresses issues of property, from criminal law to family law, to constitutional law. All law may be said to be contractual in nature, concerning questions of property. ${ }^{65}$

Such a broad understanding of the term 'property' is consistent with much of the economic analysis of law literature. ${ }^{66}$ After all, what is law but a vast consensus to abide by certain rules, much in the same way a contract entails the consent of two or more parties to align their behavior in accordance to the stipulations of an agreement? Indeed, the "social contract" can be said to be a contract in a very real sense of

[^11][Common law] doctrines ...form a coherent system for inducing people to behave efficiently, not only in explicit markets but across the whole range of social interactions. In settings in which the cost of voluntary transactions is low, common law doctrines create incentives for people to channel their transactions through the market.... In settings in which the cost of allocating resources by voluntary transactions is prohibitively high, making the market an infeasible method of allocating resources, the common law prices behaviour in such a way as to mimic the market.

Richard Posner, Economic Analysis of Law 249-51 (7th ed., Aspen Publishers 2007). In this view, all law deals in aspects of property in some form or another; it is at its heart concerned with the adjudication of property. In so far as Posner sees the adjudication of the common law as predicated upon matters that are ultimately economic, law can be reduced to a system for coordinating forms of property, from the tangible to the extremely abstract.
66. "The connection between markets and property has induced stipulatively wide definitions of the term 'property' among some members of the school [the modern economic analysis of law]: any right which a person may agree not to insist on (whether personal, familial or political) should be styled a 'property' right, because the right-holder has control over the effects of the exercise of the right on others (its 'externalities')." Harris, supra note 26, at 46.
the word. We might think of it as a standard form contract, incrementally drawn up by the social order as a monolithic whole, to which members of the public, through their participation in society, give their implied consent. In the case of a formal contract, what we have is essentially a more limited instance of this same process-but the same paradigm is evident: rules are drawn up and parties agree to adhere to those rules because it provides a certain measure of reciprocal benefit.

## 3. The Unique Nature of Commercial Law

However, as I have discussed, commercial activity is unique as this principle of benefit is commerce's chief characteristic and defining feature. In the realm of commerce, it thus emerges as a far more quantifiable phenomenon. Gain is the sole reason for the activity. With the emergence of law such as criminal law, there are arguably other factors that come into play, such as the human impulse towards moral conduct and so forth. Similarly, in family law and constitutional law, there are influences of social custom and fundamental political conceptions at work. However, with commerce, what we have is a distilled version, an almost pure version of human self-interest. And as such what emerges through the prism of commercial intercourse is a system of interaction based more or less exclusively on the principle of individual gain. In commerce this principle of gain is the sole measure of efficiency. The effect of this is that while to some extent this principle of self-interest may be found within all forms of law, in commercial law it is profoundly more manifest, and thus commercial law offers itself up as the definitive illustration of this phenomenon. It is one extreme end of a spectrum, a far more tangible display of this dynamic, and thus may be clearly distinguished from all other forms of law. This aspect of reciprocity is the core constituent of a self-regulating system of legal relationships. Thus, commercial law is ideally calibrated to evolve and function without the necessity of resorting to the potency of state-backed coercion.

## 4. Contractual Ordering, Customary Law, and Reciprocity

If commercial law stands at one extreme end of a spectrum in terms of the principle of reciprocity, customary law in the pure sense of the word lies at its absolute tip. It can be said that customary law is wholly
grounded upon and constructed around the principle of reciprocity. ${ }^{67}$ In this respect, contractual ordering comes nearest to customary law in the pure sense of the term. Indeed, Fuller described customary law as the inarticulate brother of contract. ${ }^{68}$ Being so close on this continuum, the same forces that induce the 'spontaneous' emergence of norms in systems of customary law are also present in contractbased law. Contract-based law shares many of the basic characteristics of customary law, specifically its reliance upon the element of reciprocity. ${ }^{69}$

Depending upon the definition one chooses to adopt, it can be said commercial law is in fact a certain incarnation of customary law. ${ }^{70}$ Contract law is a more explicitly articulated form of customary law, with terms precisely spelled out. I would argue that its preciseness, in fact, allows the underlying force of reciprocity to work with even greater effect. Contract law's clarity of expression gives greater force to the element of reciprocity in the commercial relationships it creates. In this sense then, contract-based law could be said to be even more responsive to this principle of reciprocity than customary law, which at times might present a relatively muddied expression of reciprocity, creating instead merely a vague sense that the norm seems socially appropriate. With customary law, the element of reciprocity may at times get lost in the mix.

This is not so with contract law. As we have said, the unambiguous structure of a contractual relationship is one that is entirely oriented towards achieving some degree of mutual benefit. Reciprocal benefit is its life's blood, the sole reason for its formation. This unequivocal nature, one predicated exclusively on the self-interest of the contracting parties, brings the element of reciprocity to the fore, establishing it

[^12]as the basic governing principle under which parties coordinate their actions. In agreeing on terms and arranging the rules that will oversee their interaction, the goal of achieving some kind of reciprocal benefit is the principle to which parties will turn. Thus, reciprocity can be said to play an even greater role in contract-based relationships than any other kind of association.

The parallels between contract and customary law were of great interest to Fuller. ${ }^{71}$ Fuller wrote extensively on customary law, theorizing on its similarity with systems of contractual ordering. In doing so, Fuller was concerned with certain forms of contract. Fuller focused on longer term contractual arrangements that allowed for the emergence of continuous cooperation between the contracting parties, such as partnership agreements, franchises, labor contracts, contracts for the long term supply of goods, and so forth. He also included in this bank accounts, bonds, insurance policies, and other long-term contractual claims. ${ }^{72}$ For Fuller, these contractual arrangements possessed similar features with that of customary law in terms of their dependence upon reciprocity.

These forms of contract and customary law are similar "in that neither is imposed by a third party, or from above, as it were. Both develop, rather, when a situation arises in which the parties involved have or come to have needs that can be met through mutual reciprocation. ${ }^{73}$ This represents an important feature, as it is through an incremental process of interaction predicated upon reciprocity that norms in both forms of law emerge, essentially sidestepping the need for law to be created by a third party authority. In place of a legislature, the participants themselves formulate the pertinent rules. In place of statute, the terms of their agreement dominate; parties essentially create their own "statute" through the provisions they agree upon. In contract as in customary law, norms evolve gradually from tacit understandings gleaned from repeated interaction. ${ }^{74}$

In terms of enforcement, reciprocal benefit also plays a key role. Customary law theory asserts that "individual actors gradually come to embrace norms that they view as requisite to their collective wellbeing." ${ }^{75}$ In this way, the very reciprocal quality that ushers the arrangement into existence simultaneously serves as an enforcement mecha-

[^13]nism, promoting compliance. For the most part, the vast majority of contracts are fulfilled without having to go to court largely because "they are mutually advantageous, not because of any threats of force."76 Arguably, many social norms stand apart from contract in that they are not legally enforceable. However, this distinction falters when we consider that some forms of contract law also cannot be enforced. For example, this would be the case where parties stipulate against judicial enforceability, or a term is too unclear to warrant such enforcement. Nonetheless, such a contract may still be considered "lawful." 77

There is in contract and customary law an element of reciprocity underlying both forms of law. If our specific customary law dictates that I should not play with live electrical wires in my yard while my neighbor is swimming in his pool, I would do so with the expectation that such a behavioral norm would be reciprocated when it is I who is swimming. If I should turn off my cell phone in the theatre, I expect others to do the same. Likewise, if our contract states I will deliver 1000 sticks of chewed gum to you on Tuesday with the expectation of payment, I would expect you to pay me if I manage to get 1000 sticks of chewed gum into your hands on Tuesday. In all three instances, reciprocity undergirds the arrangement. The rule evolves because it confers a degree of mutual benefit, and, equally, it is usually complied with because of this quality of reciprocal benefit. ${ }^{78}$

To be sure, the element of reciprocity is more pronounced in systems of commercial law (as it is usually in customary law ${ }^{79}$ ). This is because reciprocity emerges in commercial situations with such vivid clarity-it is their primary characteristic. Commercial law is unique in the degree to which the element of reciprocity is active in it. Reciprocity is an

[^14]intrinsic feature of trade. Let us now go on to examine how commercial regulation itself may in fact be conceptualized as an instrument of the market, shaped to a large extent by the very market forces that it seeks to administer.

## B. Commercial Law as an Instrument Of The Market

Seen through a certain lens, commercial law is arguably not the product of laws at all, but rather the product of market forcesinevitable corollaries that arise in conjunction with commercial activity. Indeed, Benson argues that commercial law should be understood in precisely this way. ${ }^{80}$ A commercial system is in its essence "an evolving process of interaction and reciprocity which is simultaneously facilitated by and leads to an evolving system of commercial law." ${ }^{11}$ This view of commercial law holds that "evolving trade practices [provide] the primary rules of evolving commercial law." ${ }^{82}$ Commercial law "develops directly from the market exchange process as business practice and custom evolves." ${ }^{89}$ That is to say, commerce is not merely subject to law; law (at least commercial law) is, to a great extent, subject to commerce. It is, in a manner of speaking, an instrument of the market.

## 1. Fuller's Horizontal Law and Hayek's Order of Actions

In The Morality of Law, Fuller emphasizes law not only as an enterprise, but one that in fact mirrors the market order. ${ }^{84}$ In doing so, he cites the significance of customary $\mathrm{law}^{85}$ as a framework of spontaneously evolving rules arising from a dynamic process of dispute arbitration and adjudication. ${ }^{86}$ Like Bruno Leoni, Fuller recognizes a certain advantage in the self-coordinating properties of customary law. ${ }^{87}$ This Fuller calls an example of "horizontal forms of order" contrasted with

[^15]"vertical" systems of order imposed by the state. ${ }^{88}$ Unlike "vertical" law, horizontal forms of order are not predicated upon coercion. Thus, "just as a society may have rules imposed on it from above, so it may also reach out for rules by a kind of inarticulate collective preference. ${ }^{39}$ In Fuller's view then, there is a sense that law is in fact most compatible with the market order. Indeed, many scholars have noted the similarity in the spontaneous manner in which the body of law that regulates the market and the market itself evolve. ${ }^{90}$

In his 1973 seminal work, Law, Legislation, and Liberty, Hayek puts forward a similar notion regarding law. Discussing the emergence of order, Hayek contends there are two ways in which order can originate: "made" and "grown" order. ${ }^{91}$ The latter demonstrates a degree of similarity to the concept that underpins Fuller's notion of horizontal forms of order. For these two forms of order, Hayek uses the Greek terms taxis to denote made order, and kosmos for a grown order. ${ }^{92}$ Hayek explains that a made order may "be described as a construction, an artificial order or, especially where we have to deal with a directed social order, as an organisation. ${ }^{93}$ Legislated law would fall under this category. He describes this as an exogenous order. Hayek continues, "The grown order, on the other hand, which we have referred to as a self-generating or endogenous order, is in English most conveniently described as a spontaneous order."94 Hayek distinguishes between the "order of actions" and the "order of rules," suggesting that in the same fashion that a particular order of action may arise from a pre-existing pattern of social behavior, the order of rules may also emerge spontaneously and without the requirement for deliberate design. ${ }^{95}$ Hayek argues that although the rules upon which a spontaneous order rests may be deliberately made, these rules may similarly be of spontaneous origin. ${ }^{96}$

[^16]
## 2. Early Traces of Spontaneous Law Theory

The idea that law can arise from the spontaneous ordering of market activities is a significant contribution of Hayek. Constituents of the idea, however, can be traced back much earlier. Indeed the concept that law should evolve largely spontaneously in a decentralized fashion is a core principle within the common law. In fact, it is arguably its defining characteristic. Within a loose framework of statute, the common law grows through judicial precedent in an almost organic fashion, the product of countless individual contributions to its overall progression. ${ }^{97}$ The belief that, because of this, the law displays an "inner wisdom" and greater rationality as it emerges slowly from an array of specific cases, and thus is better able to accommodate a vast multiplicity of facts and circumstances, is a central tenet of English common law. ${ }^{98}$ In this sense, it is superior because it is the product of many minds. Describing this distinctive feature of the common law, Sir Matthew Hale, the renowned $17^{\text {th }}$ century English jurist explained, "it is a reason for me to preferre a Lawe by which a Kingdome hath been happily governed four or five hundred yeares than to adventure the happiness and Peace of a Kingdome upon Some new Theory of my owne." ${ }^{99}$ This assertion has a striking parallel with more modern economic theories regarding the development and equilibrium of market systems.

While in the latter half of the 20th century this notion of jurisprudence was greatly expanded upon and tied to economic principles by Hayek, it is in fact grounded upon the earlier theories of Adam Smith, David Hume, Adam Ferguson, and Edmund Burke. ${ }^{100}$ It is in the work of these thinkers that we first discern the nascent concept of spontaneous social order. Of these, perhaps Adam Smith is best known for advancing this position. In the Wealth of Nations, Smith posits a theory of economic society that possesses a self-regulating system of spontaneous order. ${ }^{101}$ And this order, in his view, arises naturally in an unpremeditated fashion from a confluence of disparate forces unintention-

[^17]ally working in coordination with one another. ${ }^{102}$ This blind interdependence brings about a spontaneous order-an "invisible hand" that guides the market place. Smith explains that as each individual member pursues his own limited interests "he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention." ${ }^{103}$ Describing the same phenomenon, Adam Ferguson defines this process as one that stems largely from a phrase later adopted and made famous by Hayek: "the result of human action, but not the execution of any human design."104

## 3. Menger, Hayek, and the Austrian School of Economics

The economist Carl Menger has a similar notion regarding jurisprudence. Menger conceptualizes law as an example of what he calls "organic" phenomenon, the aggregate result of natural processes. ${ }^{105}$ Menger opines that "law, even the state itself . . . and numerous other social structures are already met with in epochs of history where we cannot properly speak of purposeful activity of the community as such directed at establishing them." ${ }^{106}$ Hayek is more adversarial in his appraisal. Hayek condemns what he views as the argument of "constructivist rationalism, ${ }^{107}$ which he sees as underpinning the legal positivist position, stating that the argument is grounded upon "the fiction that all the relevant facts are known to some mind, and that it is possible to construct from this knowledge of the particulars a desirable social order." ${ }^{108}$ Hayek argues that within the field of economics, the price mechanism works to synchronize the diverse and limited knowledge of each individual member, allowing a spontaneous self-organization to emerge. Hayek coined the awkward term "catallaxy" to describe this self-organizing system of voluntary co-operation. ${ }^{109}$ For an economist

[^18]like Hayek observing the emergence of order within the subtle and highly interconnected flux of market systems, the possibility of law arising more or less spontaneously from the mechanics of economic forces was not only feasible, it was the most likely outcome. This idea of spontaneous order in fact became central to the Austrian school of economics reformulation of economic theory (in which Menger and Hayek are key figures). ${ }^{110}$ At the core of classical liberalism lies the belief that from an unfettered market system, a spontaneous order of cooperation in exchanging goods and services can develop. ${ }^{111}$ Indeed, the notion that order can emerge as the product of the voluntary actions of a multitude of individuals operating in blind coordination, and not through the legislative maneuvering of the state, is a key idea in the classical liberal and free market tradition. It is a basic premise of libertarianism, and continues to be to this day. ${ }^{112}$

## 4. Understanding Commercial Law as an Invisible Hand

This represents a significant shift away from the more traditional conceptions of law espoused by legal positivism. Benson argues that the development of commercial law can be likened to the natural evolution

[^19]Judit Kapás, The Coordination Problems, the Market and the Firm, 2 New Perspectives on Political Economy 13, 20 (2006) (citation omitted).
110. Norman, supra note 97, at 12-14.
111. Sally Razeen, Classical Liberalism and International Economic Order: Studies in Theory and Intellectual History 17 (1998).
112. This idea finds full expression in the intriguing theories of Anarcho-capitalism (a unique variant on Anarchist theory), of which Murray N. Rothbard is perhaps the best-known proponent (also an Austrian School economist). Anarcho-capitalism is an anti-state political philosophy that argues for an economic system based upon the voluntary trade of private property and services without the existence of state government. The theory calls for the complete elimination of the state, seeing free-market capitalism, unrestrained by the coercive and subverting interference of a state, as the true basis of a free society. See Rothbard, supra note 13, at 84-85; see also Friedman, supra note 13, at 116-17; Susan Love Brown, The Free Market as Salvation from Government: The Anarcho-Capitalist View, in Meanings of the Market: The Free Market in Western Culture 99, 113 (James G. Carrier ed., 1997).
of commercial systems. In The Spontaneous Evolution of Commercial Law, Benson contends that similar to "the invisible hand" explanation for the emergence of market systems, commercial law evolves because it facilitates commercial activity, making it more efficient. ${ }^{119}$ Benson writes, "Commercial law itself is analogous to the price system in that it facilitates interaction and makes exchange more efficient. The underlying mechanics are also analogous. Commercial law develops directly from the market exchange process as business practice and custom evolves." ${ }^{114}$

Benson contends that commercial regulation is as Hayek maintains, "the result of human action but not of human design." ${ }^{115}$ Thus, commercial law is, in a very real sense, an instrument of the market, emerging in reaction to the same forces that shape commerce. Commercial law is not so much imposed by an external authority, but rather evolves spontaneously subject to the internal mechanisms that underlie commercial systems. It is, to a degree, a voluntarily produced body of law. Bentham famously wrote that "before the [state's] law there was no property, take away the law, all property ceases." ${ }^{116}$ However, within the realm of commercial law, there is more to the story than this. Certainly, some law is necessary to regulate the exchange of property and the enforcement of property rights, but this may not be such a one-way relationship. In a sense, commerce, in turn, produces and shapes the law that evolves to regulate it.

## 5. Spontaneous Legal Evolution and the Law Merchant, Old and New

In advocating for the plausibility of the spontaneous evolution of commercial law, Benson takes particular notice of the development of the medieval Law Merchant. ${ }^{117}$ In many respects, the Law Merchant exemplifies the ability of commerce to generate law in response to

[^20]commercial needs. The Law Merchant evolved from common usage rather than from official edict. The Law Merchant was a creation of the market, facilitating the machinery of trade. Commerce was, in this sense, not just subject to the edicts of the Law Merchant; the Law Merchant was also subject to commerce. The Law Merchant is a clear example of a system of "spontaneous" law arising from the maelstrom of repeated and sustained commercial interaction rather than the artifact of a central authority predicated upon coercion but existing as a living creation of the market itself.

In the tenth, eleventh, and twelfth centuries, merchants across vast swaths of Europe broke the bonds of political constraints and created an international system of law to facilitate the burgeoning system of trade developing in their midst. ${ }^{118}$ By the eleventh century, every aspect of commercial trade in Europe, and even beyond the borders of the continent, was governed by the principles of the Law Merchant. This system of law was "voluntarily produced, voluntarily adjudicated and voluntarily enforced." ${ }^{119}$ Scholars trace its absorption by the common law during the rise of the modern state, and the eventual reemergence of the Law Merchant as a primary force in current international commercial trade, where it still continues to evolve. ${ }^{120}$ Benson concludes that "evolving trade practices provided the primary rules of evolving commercial law." ${ }^{121}$ The body of law that emerged was a response to the requirements of the market. Its overarching orientation was to facilitate commerce, which was done incrementally and in a decentralized fashion. It was as Benson argues, a process that "evolved without the design of any absolute authority" because it "facilitate[d] interaction and ma[de] exchange more efficient." 122 "The law," Trackman informs us, "did little more than echo the existing sentiments of the merchant community." ${ }^{123}$ The rules of the Law Merchant were an expression of the commercial practices merchants themselves instituted in order to facilitate exchange between them. Indeed, at its core, market forces created and sustained the Law Merchant.

[^21]The Law Merchant, however, did not die with the emergence of the modern state. It was merely co-opted by national laws, and transformed. ${ }^{124}$ It was also subsumed by national commercial law codes. The Law Merchant remained the principal source of commercial law in both the common law and civil law systems, ${ }^{125}$ and has now reemerged in our present age. To some extent national law has fragmented the Law Merchant in its current incarnation, but it nevertheless continues to exist. ${ }^{126}$ We are now witnessing the growth of a "new" Law Merchant, suggestive of its medieval counterpart ${ }^{127}$ : "Like the medieval Law Merchant, a twenty-first century Law Merchant is evolving that is cosmopolitan in nature and transcends the parochial interests of nation states." ${ }^{128}$

As in medieval Europe, the existence of diverse regional legal jurisdictions represents a considerable obstruction to those engaging in trade across borders. ${ }^{129}$ Business recognizes this. Thus, the "general trend of commercial law [has been] to move away from the restrictions of national law to a universal, international conception of law of international trade. ${ }^{130}$ As with its forefather, the core philosophy of the modern Law Merchant is pragmatism: "Commercial law is grounded in commercial practice directed at market efficiency and privacy... free from inefficient government intrusion. In line with this, mercantile disputes [are] resolved functionally and privately in light of commercial practice, not [through] state impositions on that practice." ${ }^{131}$ The ability of merchants to regulate their dealings through "their own business practices, their contracts, their customs and their usages" ${ }^{132}$ is increasingly valued. In many respects, modern international commerce is governed by regulation largely the creation of the commercial sector itself. ${ }^{133}$

The widespread use of dispute resolution as an alternative to local courts is testament to this. By the middle part of the last century, approximately seventy-five percent of commercial disputes were settled

[^22]through arbitration. ${ }^{134}$ Today, it is standard practice for parties to write arbitration clauses into their contracts. Approximately " 90 percent of international trade contracts written in the early 1990s contained arbitration clauses." ${ }^{1.35}$ Parties select arbitrators to apply the parties' choice of law. These arbitrators are chosen for their commercial expertise and tasked with conducting arbitral hearings "in light of merchant practice and trade usage." ${ }^{136}$ Many international trade associations offer internal conflict resolution procedures. ${ }^{137}$ The International Chamber of Commerce (ICC) has created "a substantial arbitration institution." ${ }^{198}$ Such arbitration is strikingly pragmatic, exhibiting an underlying recognition of the accepted business practices of those immersed in the enterprise of international trade. ${ }^{139}$

Indeed, the basic components of the Law Merchant-contract, trade usage, and commercial arbitration-are alive and well. In many ways, the basic principles of international commercial law are a current reflection of the medieval Law Merchant: choice of arbitration institutions, procedures, arbitrators and applicable law, and an overarching deference to recognized business customs and usages. These principles exist in response to the requirements of merchants engaging in trade. The Law Merchant, past and present, informs us that commercial law is, in many respects, an instrument of the market. Indeed, it is forged in part by the very commercial interaction it seeks to regulate. Law related to commercial interaction emerges centered around the principle of reciprocity, not as the parent, but as the child of the market.

To be sure, the principle of reciprocity emerges very clearly in commercial interaction, encouraging the formation of and compliance with the rules people formulate to govern their relations. However, a high level of overall engagement is a key component in this as it accentuates the effects of reciprocity on traders' dealings with one another. Fuller writes, "the bond of reciprocity unites men." ${ }^{140}$ True enough, but the bond of reciprocity becomes that much more powerful as people are thrust into engaged, repeated interaction with each other. Reciprocity is crucial in systems of law lacking external coercion. Its importance is well appreciated among spontaneous law theorists.

[^23]The significance in the manner of engagement, and how it enhances the effects of reciprocity, however, is less understood. This allimportant manner of engagement is what I will turn to next, and serves as the central focus of the remainder of this paper.

## III. The Element of High Engagement

## A. The Concept of High Engagement Mapped Out

Let us now look at this element of high engagement-the theoretical focus of the paper. Actors in commercial activity demonstrate a generally higher level of engagement compared with other forms of regulated activities. The importance of this fact cannot be overstated, as this characteristic of commercial dealings amplifies the effect of reciprocity on the emergence of legal norms. Without it, the effects of reciprocity would not manifest as powerfully. ${ }^{141}$ Thus, in seeking to explain norm evolution in commercial law, we must examine what relationship exactly the degree of engagement has with the ability of commercial systems to evolve and self-enforce.

What then exactly do I mean when we speak of engagement, and how is this unique to situations of trade and commerce? I am using the term engagement here to signify the extent to which players engage with one another and establish patterns of repeated and involved interaction. As will be shown, a higher level of overall engagement translates into a greater willingness to adhere to the rules of the game. This high level of engagement comprises two interrelated aspects of commercial law: basic repetition and the creation of clear cycles of interaction. Moreover, these two aspects are inextricably linked as the second in effect paves the way for the emergence of the first. The characteristic of repeated interaction is able to manifest as it does in commercial dealings because of the nature of the interaction itself.

## 1. Repetition

Through their association, actors expand the general scope of their relations and repeat them, more and more frequently brushing up against situations that necessitate the involvement of rules to mediate their cooperative ventures. Arguably, this is true of every form of law in the sense that the primary function of law is to provide guidelines to
141. Indeed, this is Axelrod's central finding: that repeated interactions increase the magnitude of reciprocal benefit, and therefore its impact upon the emergence of cooperative norms. See Axelrod, supra note 11, at 129-32; Axelrod \& Hamilton, supra note 11.
which the behavior of individuals must to some degree conform. However, with commercial interaction it is different. Commercial law is distinct in the sense that the players tend to be more frequently and consistently engaged in the activity (i.e. commercial trade) where it is often their very livelihood. Participants voluntarily enter into specialized situations that demand the attention of specific rules, and they do so on an exceedingly frequent basis. This stands in clear contrast to other areas of law such as criminal law or tort, in which most individuals will infrequently, if at all, find themselves in direct contact with those systems. Further, while situations involving non-commercial law are more or less static, trade has the ability to both expand in scope and accelerate. This high level of engagement intensifies the cohesive effects of reciprocity on the relationship, encouraging rule compliance simply because there are more cycles of interaction. ${ }^{142}$ To use once more the analogy of a saw, deeper grooves of cooperative norms are cut because the players run through the process more frequently-the blade is passed repeatedly over the spot. Looking at commerce, we see that the sheer frequency of interaction is profoundly greater than in non-commercial situations.

There are several important points regarding this characteristic of repetition that I will point out in this section: (i) the interaction is often repeated with the same players; (ii) the frequency of repetition can increase; (iii) new partners and new interactions are sought out; and (iv) repetition has the effect of making players far more exposed to the law.

## i. Repeat with Same Players

The nature of commerce welcomes repetition. Successful cooperation will usually lead to repeated dealings, further expanding relations, all the while deepening the contact and familiarity the players have with the relevant rules governing their ventures. The tendency to target specific parties and engage in repeated dealings with them is a significant feature of commercial interaction as it plays a crucial role in inducing the emergence of cooperation. Ellickson contends that groups of " $[\mathrm{p}]$ eople who repeatedly interact can generate [legal] institutions through communication, monitoring, and sanctioning." ${ }^{143}$ For Fuller, one of the general conditions under which customary law can evolve and persist is that the occasions for interaction "must be sufficiently

[^24]recurrent." ${ }^{144}$ Fuller calls this "the tacit commitments that develop out of interaction." ${ }^{145}$ Indeed, "Such interactional practices are often open-ended and oblique at the outset, and become refined and fixed only by a gradual process of adjustment and accommodation. They commonly 'glide into being imperceptibly' . . . The stabilized practices that ultimately emerge are typically tacit, yet recurrent." ${ }^{146}$ The fact that parties often repeat their interactions allows for the possibility of more sophisticated forms of cooperation between them. ${ }^{147}$ This characteristic of repeated interaction with the same participants has important implications-elaborated on below-for situations that display a Prisoner's Dilemma problem. In the realm of commerce, it is an almost universal objective to construct cooperative relationships that can be repeated, and often the more frequent the interaction the better. This is not true for non-commercial law where there is no overarching effort to accelerate, expand, and repeat interactions.

## ii. Frequency Can Increase

A further important point to be made is that with commercial law the frequency that the players interact with one another can continue to increase, constrained only by relevant market situations. There is, in theory, almost no ceiling to the extent of cooperation. While patterns of non-commercial interaction are typically fixed and have no reason to increase, commercial interactions are often accelerated and repeated. To do so is usually a primary objective.

## iii. Seek Out New Partners

Participants in commerce actively seek out new opportunities to construct new sets of relations with different parties. Commerce is an exercise in ceaseless expansion and repetition. ${ }^{148}$ Not only does the same interaction have the potential to be repeated again and again, but successful interactions will often lead to new ventures, again involving recognition of certain rules. Benson expounds on this, noting that "as the benefits from one bilateral relationship evolve, incentives to develop similar benefits with others arise and a loose knit group with

[^25]intermeshing reciprocities begins to develop." ${ }^{149}$ New interactions create new opportunities for cooperation, not only with the original parties, but also with new participants. ${ }^{150}$ Likewise, opportunities for wholly new forms of interaction also emerge. One enterprise will frequently open a window to a new business venture, often with a new set of responsibilities and commitments. ${ }^{151}$ Thus, new contracts are formed to govern new forms of interaction.

## iv. More Exposed to Law

The end result of all this is significant. The participants in commercial interaction are considerably more exposed to the relevant law. In each interaction-dealings that often demand cooperation with parties they have little other relationship with beyond trade-they rely steadfastly on the collectively recognized rules. These rules serve as the chief constitution of their actions. Participants, in this way, find themselves constantly engaged in situations where these conventions are of primary importance. Participants are repeatedly exposing themselves to these rules, and operating within an explicit legal context. This is simply not the case for interaction governed by other areas of law. To use the example of criminal law, how frequently does the average person really find herself in contact with it? Perhaps once in her lifetime, if at all. ${ }^{152}$ The particular rules of family law or tort do not directly affect individuals on a regular basis. ${ }^{153}$ Certainly, shadows of the law exist minimally in the background of their lives to the extent of maintaining order within the societies they live. However, law, for the most part, demands little or none of their explicit attention. It is not something with which they are highly engaged.

In contrast, communities of traders and merchants are in contact with commercial law on a daily basis where it is often their very

[^26]livelihood. As a result, the law is of primary importance to them. They deal repeatedly with situations that explicitly demand adherence to certain rules, often tirelessly seeking to expand and increase these very situations. This is the primary aim to which they orient themselves, day in and day out. The rules they establish and adhere to in these interactions form a fundamental and familiar substratum to their lives. They are constantly engaged with these sets of rules, frequently finding themselves in situations where they must resort to them to overcome obstacles that threaten the success of the relationships they construct. Thus, these rules are of the utmost importance to them, permeating their daily lives.

With each new cycle of cooperation, their mutual recognition and adherence to the set of rules they have chosen to govern their relationship is further established and deepened. In this way, behavioral conventions evolve and become further entrenched. ${ }^{154}$ In a sense, they are constructing legal norms with each relationship they foster. In this respect, commercial interaction is markedly different from all other forms of interaction. There is in commercial intercourse a perpetual genesis of shifting responsibilities and duties to other individuals. It is this unique characteristic of commercial interaction that defines commercial situations as possessing a high level of overall engagement. And it is because players are more engaged in the specific activity that fixed behavioral norms can emerge. ${ }^{155}$

## 2. Creating Cycles of Interaction

There is, though, another important distinction between commercial and non-commercial law that should be pointed out here. This is a second aspect of high engagement found in the basic nature of commercial interaction. We must also consider the basic nature of the kind of action that commercial dealings produce. Ultimately, frequency and repetition are very much related to the particular form the interaction takes. The nature of commercial interaction in effect allows for extreme repetition.

There are several important components to this point that I will address in this section: (i) the manner of interaction itself allows for repetition; (ii) commercial interaction generates positive duties to act; (iii) commercial interaction serves as an arena to create law; (iv) com-

[^27]mercial interaction is a delineated, clearly defined game that can be played out; (v) cooperation strategies and iterated games as applied to commercial interactions.

## i. Manner of Interaction Allows for Repetition

What is meant here by engagement is more than mere repetition. It is important to understand what exactly is being repeated, and how it is being repeated-that is to say, the kind of action that is repeated. High engagement thus also refers to the nature of the interaction, not just its frequency. This is because the nature of the interaction itself allows for greater repetition-it lends itself to the possibility of more frequent repetition by providing a delineated cycle of interaction that may be run through again and again. Thus, the substantive nature of interaction regulated by commercial law merits further investigation.

## ii. Creation of Positive Duties to Act

In a way, the types of action required by commercial and noncommercial law are polar opposites. In commercial law, participants are actively doing something, that is, they are engaging in an activity as opposed to merely refraining from doing something. While noncommercial law, for the most part, regulates what people should not do, commercial law regulates what people are obliged to do (as well as what they should not do). The distinction perhaps seems simple, even obvious, but its simplicity should not be confused for unimportance; it has profound implications.

In The Principles of Social Order, Fuller touches briefly on the idea that particular forms of law can be distinguished in that they involve a certain call to action (though he is speaking of customary law in general): "what is involved is not simply a negation, a prohibition of certain disapproved actions, but also the obverse side of this negation, the meaning it confers on foreseeable and approved actions, which then furnish a point of orientation for ongoing interactive responses." ${ }^{156}$ This applies perfectly to the laws that regulate commercial interaction-specifically contract law. Like Fuller, I am here referring not to contract law in the traditional sense as in the law of contract, but to the "law" that a contract itself brings into being. ${ }^{157}$ Patterns of

[^28]commercial interaction are distinct from all other forms of law where legal injunctions are couched in purely negative terms, incurring penalty if violated. For example, the criminal law's universal prohibition against murder, or tort law's against nuisance and trespass. ${ }^{158}$ Commercial law, in addition to the threat of sanctions, creates positive obligations between parties. It is mostly unique in this sense. ${ }^{159}$ It not only regulates how parties are to interact, essentially "criminalizing" certain behavior, it actively promotes the formation of completely new duties between agents, promoting new forms of association. ${ }^{160}$ To put it colloquially, with commercial law, actors are actually actively doing something, while in other forms of law, they are not doing anything. Instead, they are refraining from doing something-an important distinction. Flipping through the criminal code of any nation state one will find scant few, if any, actual positive legal obligations towards other individuals. Non-commercial law is what one must not do to other individuals. It is not what one must do. That is, it is the maintenance of a certain social order as opposed to the proactive generation of wholly new cooperative structures. The basic distinction here is that law that arises from some sort of contractual union between parties builds new relationships, while virtually all other forms of law, for the most part, merely regulate existing relationships. ${ }^{161}$ This is a fundamental distinction, and for our purposes, an important one, as this structure to commercial law pulls participants into a higher level of engagement with the law in that it greatly expands the points of contact between individuals that require specific forms of regulation. And, in so doing, induces the emergence of stable legal norms, conventions on which to model one's behavior-all without the need of a central legislative body to enact law.

In commercial law, we have a specific well-defined kind of interaction that definite rules explicitly regulate. This is not so much the case in human relationships outside of commerce, where the manner in which parties are to interact is not as clearly mapped out; only injunc-

[^29]tions are offered. ${ }^{162}$ What we have with commerce is essentially the wholesale creation of new networks of relationships, one that targets a specific end and is exceedingly specialized. ${ }^{163}$ In this way, it is the generation of new forms of interaction, positive duties to act, and not simply the regulation of existing relationships that are largely framed in the negativeinjunctions against certain acts. That is, non-commercial law, for the most part, is the regulation of human interaction that already exists, while commercial regulation is in fact the further formation of kinds of interaction. It is the active construction of a system of cooperation over and above mere prohibitions against harming other individuals. It instead seeks to aid in individuals' efforts at new forms of cooperation. This is an important distinction. In a sense, commercial society is something we create through the enterprise of trade, and is something that stands almost separate to the standard set of interactions that can be observed in society. It is an appendage, something that through our actions we are continually creating.

In so doing, we are essentially fashioning new avenues of human interaction, which in turn give rise to new systems of regulation to govern those relationships, assigning duties and responsibilities where previously there were none. These arrangements, with their myriad of obligations between parties, pull individuals, or sometimes-vast collections of individuals, into complex compositions of cooperation. These legal relationships are constantly being generated, with new forms of association arising continuously with each new commercial interaction. This constant flow of collaboration ensures the high engagement of the participants because they are called to act, rather than simply asked to refrain from acting. Within such networks of association, it is not enough to simply go about one's business so long as one does not interfere with others. Rather, one's business is, in a sense, the business of others. In commercial arrangements, one essentially commits oneself to an array of responsibilities towards other individuals. Within this sphere of interaction, one's duties to others extend beyond simply not harming others through theft or physical injury. In no other areas of law do we witness such a wholesale construction of responsibilities and duties to other parties.

## iii. Arena to Create Law

This more active and engaged nature of commercial law puts participants in a better position to "create" legal norms. Owing to the engaged

[^30]nature of trade, players have more opportunities to develop systems of cooperation characterized by a pattern of responses and counterresponses. ${ }^{164}$ They are actively engaging with one another, creating a venue where law, in the sense of legal norms that relate to their specific interactions, can be constructed through their actions. Through their individual participation, actors contribute to an incremental evolution of the law. Parties' ability to form contracts tailored to the specific manner of association in which they find themselves allows players to essentially construct law.

There are of course countless examples of this. Consider the drafting of non-performance clauses in international crude oil contracts. These force majeure clauses are expressed in detailed terms, and each clause is formulated in light of the unique requirements of the crude oil industry itself. ${ }^{165}$ These provisions are specifically crafted by traders with an intimate knowledge of the industry, in order to establish contractual consequences that will ensue as a consequence of such things as political unrest, insurrection, or nationalization. ${ }^{166}$ These clauses often include other considerations highly peculiar to the oil industry, such as oil spills, pipeline blockages, the arrest or restraint of prices, and the unavailability of crude oil as the result of the election of a government that seizes royalty crude oil. ${ }^{167}$ These clauses are adopted in response to the demands of international transactions. They "comply with prior practices, involving past occurrences in world trade; and they embody new practices, reflecting current events in the energy market." ${ }^{168}$ Such clauses have evolved into standard provisions in modern international crude oil contracts, an example of how commercial actors through structuring contracts tailored to their particular circumstances may influence the creation of general legal norms. In fact, distinct sets of transnational commercial law have emerged for "specialized areas of international business and trade such as a 'lex petrolia' for the international oil-industry, a 'lex numerica' or 'lex informatica' for international data interchange, a 'lex constructionis' for the international construction industry and a 'lex maritima' for international maritime practice. ${ }^{169}$ All of these are examples of how,

[^31]through the drafting of their contracts, private parties are persistently engaged in the active generation of highly specialized normative standards.

## iv. Commercial Trade as a Delineated Game: Game Creation

Unlike non-commercial activities, in commerce new systems of cooperation are constantly being formed. In other aspects of life, relationships between individuals are for the most part static and fixed. In commerce we have instead continually evolving subsystems of cooperation: new patterns of interaction. The most important point to take away from this, however, is that it will affect the system's ability to generate cooperation between individual actors. It does this by opening the door to a certain clarity regarding repetition. That is, there is something being actively done that can be repeated. The act of actively doing something, as opposed to refraining from doing something, has specific consequences regarding stimulating cooperation between parties. Repetition of interaction induces the emergence of norms and compliance with them. ${ }^{170}$ This generation of norms and compliance arises from repeatedly running through cycles of interaction. In the sense that commercial law generates clearly delineated cycles of interaction, cycles that are typically repeated again and again, it reinforces this process of norm creation through repetition. Thus, when we speak of repetition, we are speaking of the repetition of cycles of interaction, and commercial law, specifically contract, constructs clear cycles of interaction.

Trakman concludes that time plays a formative role in the emergence of trade custom and, ultimately, into its solidification into legal norms: "time fosters the growth of inter-party practices. Time permits practices to crystallize into business usage and ultimately into trade custom. ${ }^{171}$ This is correct. Over time, trade practices will emerge and gain an increasingly widespread acceptance. ${ }^{172}$ However, while Trakman sees the decisive mechanism here as time, I would submit that it is not time per se, but rather the act of repeating cycles of engagement in which parties rely on these norms that actually induces this occurrence.

[^32]Time is merely an approximate metric with which to get a sense of how many cycles of interaction have occurred. Thus, it is more accurate to speak of cycles of engagement, or repetition, than merely time. And commercial law, by its nature, allows for heightened cycles of defined interactions.

The process of contract is essentially the creation of a delineated, clearly defined cycle of interaction. Because parties are actively engaged in these interactions, these cycles of interaction allow for intricate systems of cooperation to develop and evolve. ${ }^{173}$ It provides a demarcated set of actions that, in effect, facilitates the emergence of norms and subsequent compliance with them. The process of actively doing something within the scope of a delineated sequence of interaction creates an arena in which cooperation can evolve. ${ }^{174}$ In the language of game theory, it is a clearly defined game, or period of a game. ${ }^{175}$ There is a clear cycle of interaction to be completed by the players. Thus, it is clear when actors have gone through a finished cycle. Commerce is game creation. That through the constraints of a game situation players can develop cooperation strategies has been well studied by notable names such as Maynard Smith ${ }^{176}$ (in the field of biology) as well as Axelrod and Hamilton. ${ }^{177}$ Significant contributions to the analysis of the evolution of social conventions have been made by philosophers such as Lewis and UllmanMargalit. ${ }^{178}$ More recent attempts at applying game theory to the evolution of legal norms have been made by Ellickson, ${ }^{179}$ Parisi, ${ }^{180}$

[^33]Posner, ${ }^{181}$ McAdams, ${ }^{182}$ and Cooter, ${ }^{183}$ to name only a few. In that a contract-based relationship is a delineated game, the principles of game theory apply quite readily. Contract is essentially defining, in explicit terms, a "game" to be played by the participants. Each stage and sequence of the game is laid out before hand, contingencies are anticipated, and possible outcomes of the game are addressed. A very specific sequence of response and counter-response is stipulated. Put plainly, the rules of contract are the rules of a precise game to be played by the participants. In playing these games, parties repeatedly run through rounds of interaction, and this assists in the generation of norms. Put still another way, by defining a complete cycle of interaction, the game allows for repetition as it provides something that can be easily repeated. With other forms of law, the activity at issue is not a clearly defined purposive interaction that parties can complete. ${ }^{184}$ Rather, the activity is one of inaction, of refraining from doing something. It is therefore not as clear when a cycle has completed itself. More often than not, it is a situation without any clear end. Instead, it is an ongoing process of refraining from some action or another.

Consider a simple analogy involving two situations, scenario A and scenario B. Scenario A represents commercial interaction, and scenario B non-commercial interaction. In scenario A, I ask you to call me everyday at exactly 9:00 pm , let the phone ring once and hang up, after which I will promptly call you back and give you a time to call again the following day. In scenario B, I simply ask you to never call me. In scenario A there will emerge definite cycles of interaction that will lead to further cycles of dealings, and therefore a system of cooperation. With scenario $B$, it is not as clear when we have run through a pattern of interaction. The interaction as it were is not a clearly delineated and sequenced game, but rather is one game that is ongoing.

It should be acknowledged that contracts often stipulate that parties must refrain from certain actions. In this example, one could argue that not calling everyday conveys compliance. However, it still would not be as clear a signal as actively calling me (perhaps you just forgot all about me). Contracts will, however, typically tether inaction to a

[^34]specific time or event, which nevertheless still allows the game to be sequenced. In doing so, a sequence of cooperation can still arise, as it will be clear when compliance (inaction in this case) has been observed and the game (or a stage of it) has concluded. That is, even if a contract demands inaction, the terms of the contract will still create a clear delineated game to be played. With scenario $B$, we are forever stuck on this one phase of interaction; there is no active construction of a system of repeated cooperation. The game is not an iterated game, as they say in game theory parlance. ${ }^{185}$ Alas, this is the case with commercial and non-commercial interaction. There is a profound difference between them. The difference is one of engagement, that is, in actively doing something, and doing so in clear stages.

In fact, to modify scenario B so that it is a more accurate reflection of the kind of interaction typically regulated by non-commercial law, I would not even designate a particular person to refrain from calling me, but rather simply declare to society as a whole that no one should ever call me. Group size will inevitably come into play. ${ }^{186}$ While in a very small group this might not be an issue, as an individual will have a pretty good idea of whom potential collaborators are, in large groups it will not even be clear who the participants in the game are. In a large group, commercial partnership essentially carves out a small group of collaborators from this larger pool, clearly designating the players. This is illustrated by scenario A. The situation in our modified scenario B is open-ended and imprecise, players are unclear, and there is no delineated game created as a result. This is, in fact, the nature of noncommercial law. Thus, in these forms of law, a cycle is not as clearly defined as it is in commercial interactions, where a game is explicitly delineated. As famously established by Axelrod, the ability to run through repeated "games" helps create cooperative norms and a willingness to comply with these norms as players place a greater value on the benefits of continued cooperation. This is a very important point. In contrast, non-commercial law does not involve the creation of

[^35]small chunks of interaction, that is, intact games that can be played out.
v. Cooperation Strategies and Iterated Games

The idea that commercial law can be thought of as the creation of repeated games is an intriguing and complex notion. It is one that probably deserves a far more detailed discussion regarding game theory than can be presented here. However, an attempt is made to outline the bare fundamentals of the idea below. Commercial cooperation (for the most part) represents a non-zero sum game. ${ }^{187}$ That is, one party's benefit does not have to come at the expense of the other party. Both parties may glean some mutual advantage from their arrangement, as there is a collective creation of wealth. In most situations this reciprocal gain will ensure norm compliance. However, the problem arises in situations where this dynamic breaks down and a Prisoner's Dilemma ${ }^{188}$ scenario emerges, where there is a "conflict between self-interest and the common good." ${ }^{189}$ In a Prisoner's Dilemma cooperation will provide mutual benefit, but the opportunity is
187. There are many real-world examples of non-zero sum games of pure coordination, where
the payoffs are structured such that the players have strong individual incentives to choose strategies that will conjoin to produce cooperative results. Every motorist, for example, recognizes that there will be gains from a convention that requires all to drive on the right (or left) side of the highway; every user of a language gains if there is a consensus about the meaning of given words. It is unremarkable that players reach cooperative outcomes in these sorts of games.

ElLickson, supra note 12, at 159.
188. McAdams provides a concise description of the Prisoner's Dilemma:

In the famous example, two prisoners, $A$ and $B$, are suspected of committing a crime together. If neither confesses, each knows they will each be convicted of a lesser offense and serve (say) three years in prison. The prosecutor then offers each the following deal, and each knows it is offered to the other: If you confess and the other does not, we will let you off with only one year in prison; if the other confesses and you do not, we will punish you with ten years in prison; if you both confess, you both will serve five years in prison. Confessing is the dominant strategy because it is the best strategy no matter what the other prisoner does. From $A$ 's perspective, if $B$ confesses, $A$ is better off confessing and getting five years instead of ten; if $B$ does not confess, $A$ is better off confessing and getting one year instead of three. The reasoning is the same for $B$.

Richard McAdams, Signaling Discount Rates: Law, Norms, and Economic Methodology, 110 Yale L.J. 625, 628, n. 13 (2000).
189. Matt Ridley, The Origins of Virtue 53 (1996).
present for one party to grab a little more at the direct expense of the other party. Aggravating this problem is the fact that one cannot be guaranteed that the other party is not considering a decision to try to grab a little more. The dilemma is that the "two individuals can each either cooperate or defect. . . No matter what the other does, the selfish choice of defection yields a higher payoff than cooperation."190 This sabotages the emergence of cooperation. In such situations, defection will invariably become the dominant strategy over cooperation, forming a Nash Equilibrium of non-cooperation. ${ }^{191}$ This "dilemma" represents a distinct obstacle in situations where there is no third-party enforcement. ${ }^{192}$ As Axelrod and Hamilton note, "with two individuals destined never to meet again, the only strategy that can be called a solution to the game is to defect always despite the seemingly paradoxical outcome that both do worse than they could have had they cooperated." ${ }^{199}$ In the case of Prisoner Dilemma games "played only once, no strategy can invade the strategy of pure defection. . . . in the single-shot Prisoner's Dilemma, to defect always is an evolutionarily stable strategy." ${ }^{194}$ In an isolated interaction there is no escape from this. ${ }^{195}$

The well-known solution to this dilemma, of course, is to make the situation an iterated game. ${ }^{196}$ Indeed, "[r] epeated interactions give rise to incentives that differ fundamentally from those of isolated interactions." ${ }^{197}$ Knowing that a greater benefit may be derived from future cycles of cooperation with the other party, agents have an incentive to forgo a short-term gain that may be achieved through defection. This in fact was the finding of Axelrod and Hamilton: cooperative strategies (of which tit-for-tat is perhaps the best known) can emerge if the game comprises many periods of play, and parties expect their current interaction will be but one incident in a series of future interactions. ${ }^{198}$

[^36]After all, who would you be more inclined to trust: a mechanic fixing your car in a distant town you encountered while traveling, or the mechanic on the corner of your street, whom you see and do business with every day? This principle of permanence and duration has evolved to the point of an axiom among game theorists: "One-shot encounters encourage defection; frequent repetition encourages cooperation." ${ }^{199}$

In the language of game theorists, as discount factors (the value placed on subsequent periods) increase and time horizons (the time of potential repeated interaction) broaden, a greater premium is placed upon maintaining a relationship of cooperation. The discount factor plays a pivotal role. The discount factor is a function of a player's time preference and the probability of future interactions. ${ }^{200}$ Situations "promoting a high probability of future interaction and low time preference are therefore more likely to induce optimizing equilibria. In the case of a one-shot game, on the other hand, the probability of future interaction is zero. So that the expected value of future cooperation is also zero." ${ }^{201}$

This is precisely the dynamic we witness in commerce. Long-term contractual business relationships are grounded upon the prospect of continued future cooperation. Commercial interaction, in this sense, is an iterated game situation. The tendency to expand and increase the scope of these relationships with the same partners prevents a defection strategy from becoming dominant. As commercial relationships are essentially repeated games, parties with "selfish objectives might nevertheless behave cooperatively and efficiently . . ." ${ }^{202}$ Certainly the trust that develops between two commercial parties is typically not trust in the generic sense, but rather, it is that both parties "trust" that the other party has determined that long-term future cooperation is in their own interest. As Axelrod points out, in commercial exchanges "business ethics are maintained by the knowledge that future interactions are likely to be affected by the outcome of the current exchange." ${ }^{203}$

The inherent nature of commercial interaction is oriented towards repetition, and as such, is a process of iterated-game creation. Even in

[^37]so-called one-shot game scenarios, there is often at least the potential for repetition underlying the interaction. For instance, a vendor may take responsibility for faulty merchandise if only to preserve the faint possibility of keeping a future customer. The dynamic of repeated dealings, or the potential for repeated interaction, will tend to produce cooperation strategies between parties. These may take many forms, and game theorists have exhibited no lack of creativity in conceiving of various strategies. Among them, the aforementioned tit-for-tat strategy (hereafter called TFT) is perhaps the most well known. ${ }^{204}$ TFT is predicated upon repeated interaction. ${ }^{205}$ As Ridley observes, "The principal condition required for tit-for-tat to work is a stable repetitive relationship. The more casual and opportunistic the encounters between a pair of individuals, the less likely it is that tit-for-tat will succeed in building cooperation." ${ }^{206}$ Axelrod and Hamilton concluded that so long as players have a "sufficiently large probability" of meeting again, TFT can succeed. ${ }^{207}$ A broader conception of the dynamic that underpins TFT is to term such strategies (including those that may not technically be TFT) as "conditionally cooperative." ${ }^{208}$

The often-touted advantage of TFT is that it allows parties to penalize their partners while still leaving the door open to continued cooperation. ${ }^{209}$ Certain elements of contracts are designed to achieve this very objective. For example, penalties stipulated in liquidated-damages clauses may be written into long-term contracts so as to provide a mechanism to compensate injured parties for specific breaches, and redirect non-complying parties back into compliance, while still preserv-
204. AxELROD, supra note 11, at 13-14.
205. A fascinating example of TFT that Ridley cites is that of soldiers on the Western Front in WWI. Truces were a common "problem" between Allied and German units that had been facing one another for long periods of time and fought repeated battles over the same piece of territory.

Elaborate systems of communication developed to agree terms, apologize for accidental infractions and ensure relative peace-all without the knowledge of the high commands on each side... Raids and artillery barrages were used to punish the other side for defection . . . In order to eliminate these truces, commanders would frequently shuffle units about so no regiment was opposite any other for long enough to build up a relationship of mutual cooperation. They would, in this way, stymie the cooperativeinducing effects of repeated interaction-a simple but effective "solution."

Ridley, supra note 189, at 65 (internal quotations omitted).
206. RIDLEY, supra note 189 , at 63.
207. Axelrod \& Hamilton, supra note 11, at 1393.
208. Maskin, supra note 202, at 2.
209. Ellickson, supra note 12, at 164-65; Ridley, supra note 189 , at 60.
ing the agreement. ${ }^{210}$ The right to affirm a contract in the face of a repudiatory breach otherwise allowing for discharge from the contract is another such mechanism. ${ }^{211}$ Among other advantages to this, a party can avoid the transaction costs involved in finding a new commercial partner. This could be understood as a "tit-for-tat with forgiveness" strategy as it is termed in game theory. ${ }^{212}$

Still, there are other elements of commercial law that allow individuals to employ harsher retaliatory strategies, such as grimtrigger or permanent retaliation, where a party will immediately terminate all future cooperation with a party upon the first sign of trouble. ${ }^{219}$ Certainly this is the case with commercial interaction where parties do not engage in future commercial dealings with individuals who did not honor agreements giving rise to repudiatory breaches. Losing a client is precisely the commercial expression of a grimtrigger strategy. Grimtrigger is typically seen as an inferior strategy. ${ }^{214}$ However, the availability of competitors can make this strategy viable in a commercial
210. See Gerrit De Geest \& Filip Wuyts, Penalty Clauses and Liquidated Damages, in 5 Encyclopedia of Law and Economics 141 (Boudewijn Bouckaert \& Gerrit de Geest eds., 2000). Liquidateddamages clauses are a "contractual provision that determines in advance the measure of damages if a party breaches the agreement. Traditionally, courts have upheld such a clause unless the agreed-on sum is deemed a penalty . . . " Black's Law Dictionary 949 (8th ed. 2004). The fact that when such clauses prove overcompensatory they are deemed unenforceable "penalty clauses" is a reflection of the principle of proportional response undergirding a tit-for-tat strategy. The forbidding of penalty clauses in the common law has puzzled legal theorists who hew to a law and economic analysis, as it discourages efficient breach. See Paul H. Rubin, Unenforceable Contracts: Penalty Clauses and Specific Performance, 10 J. Legal Stud. 237 (1981); Charles J. Goetz \& Robert E. Scott, Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach, 77 Colum. L. Rev. 554, 558-77 (1977). Still other uses of penalty clauses have also been noted, such as their function as a signal of a party's confidence in their ability to perform as promised by offering such penalty clauses against themselves. See Richard Posner, Tort Law: Cases and Economic Analysis 93 (1977). However, it arguably makes some sense if we view this from a game strategy perspective.
211. In the case of anticipatory breach, the non-repudiating party has three options: "(1) treat the repudiation as an immediate breach and sue for damages; (2) ignore the repudiation, urge the repudiator to perform, wait for the specified time of performance, and sue if the repudiating party does not perform; and (3) cancel the contract." Black's Law Dictionary 1030 (8th ed. 2004).
212. See Axelrod, supra note 11, at 13-14.
213. Axelrod defines it thusly, "It starts by cooperating, and continues to cooperate until the other player's first defection; then it never cooperates again. The grim trigger strategy imposes the most severe punishment available for the smallest departure from cooperation, namely a response of eternal detection." Robert Axelrod, On Six Advances in Cooperation Theory, 22 Analyse \& Kritik 130, 135 (2000) (internal citation omitted).
214. Id. at 135-37 (internal citation omitted).
setting-we could rename grimtrigger the "I'll take my business elsewhere" strategy. ${ }^{215}$ Benson, indeed, contends that competition can be understood as a "low-cost option to retribution or tit-for-tat sanctions." ${ }^{16}$

The point to be understood here is that commercial interactions can be distinguished from non-commercial interactions in that they set out, and more clearly demarcate, a definite cycle of interaction. A contract can thus be understood as the creation of an iterated game. This sequence of games assists in the spontaneous development of voluntary cooperation strategies, thus getting around the need for third party enforcement. Non-commercial interactions, on the contrary, are typically one-shot games, if they can be defined as games at all.

In sum, when we speak here of high engagement we mean the extent to which individuals are involved with the relevant law-that they are engaged with it. This has two components, the first being integrally related to the second.

The first is the simple but profoundly important fact that in commercial interaction parties are engaged in the activity more. They actively seek out interactions, repeat them more frequently (often with the same partners), and, for the most part, labor to expand their scope. This can be understood as repetition.

The second point is intertwined with the fundamental nature of commerce, and one that greatly impacts on the first point. Commercial interaction creates clear cycles of engagement. It is the act of actively doing something. Unlike any other form of law, the interaction is one that involves the creation of positive duties towards other individuals that call for the active and purposive attempt to meet these duties. Because of this, people are drawn into situations where they are highly engaged in the interaction. A commercial interaction represents a clearly delineated cycle of engagement-a game. Much more so than other areas of law, commercial law is unique because people owe each other explicit duties, and the interactions it governs may be repeated

[^38]with profound repetition, constantly running through delineated cycles of interaction. Continuously repeating these games breeds coopera-tion-a certain compliance with the norms that emerge even when it is not in a party's immediate self-interest to do so. Repeated interaction offers a solution to social dilemma problems. ${ }^{217}$ This is made possible by the fact that in commercial intercourse there is a well-defined sequence of interaction that may be repeated, and it is one that is actively performed. It is essentially an iterated game.

From this whirling pool of association, legal norms can emerge, gain momentum with each act of observance, and strengthen over time. There is no need for coercion as high engagement and an underlying recognition of reciprocity can, on their own, foster compliance. Toward this end, high engagement is critically important.

## 3. High Engagement and Opinio Juris Sive Necessitatis

In the absence of enforcement, reciprocity and a high level of engagement are often enough to foster the emergence of what can be understood as legal norms. If not for the sheer frequency of interaction and thus exposure to these rules, behavioral conventions could not emerge without resort to the edicts of some central authority. ${ }^{218}$ Time is often cited as playing a key role in the emergence of international customary law (along with universality). ${ }^{219}$ For instance "French jurisprudence has traditionally required the passage of forty years for the emergence of an international custom, while German doctrine generally requires thirty years." ${ }^{220}$ However, as discussed earlier, it is in fact more accurate to speak of repeating cycles of engagement in which parties rely on these norms-time is but a yardstick with which to gauge how many cycles of interaction have occurred. ${ }^{221}$ In that high engage-

[^39]ment creates cycles of interaction, it plays a crucial function in allowing business practices to ripen into legal norms. Because networks of commercial trade are coursing with a ceaseless flow of countless interactions repetitively occurring, a well-defined parameter of conduct can evolve-decentralized order can arise. It is, as Cooter says, "a social network whose members develop relationships with each other through repeated interactions." ${ }^{229}$ From this stream of interactions the formative element in customary law identified by the phrase opinio juris sive necessitates emerges; that is, the widespread conviction that the practice represents a kind of binding norm. ${ }^{229}$

The perception of the norm's obligatory nature is crucial in nonenforcement systems (and perhaps in all systems of regulation ${ }^{224}$ ) because it is here that we find the basic foundations upon which a system of spontaneous compliance evolves. Through repeated exposure to a particular rule that confers a reciprocal advantage, participants begin to "internalize" the norm. ${ }^{295}$ Fon and Parisi note, "internalization of [a] norm is a source of spontaneous compliance... individuals internalize obligations when they disapprove and sanction other individuals' deviation from the rule, or when they directly lose utility when the norm is violated." ${ }^{226}$ The lack of coherent rules undermines the ability of a trading community to develop, with the direct consequence that the flow of commerce is impeded and partici-
n. 1 (R.Y. Jennings \& Ian Brownlie eds., Oxford Univ. Press 1974-1975); see also Mark Eugen Villiger, Customary International Law and Treaties: A Study of Their Interactions and Interrelations with Special Consideration of the 1969 Vienna Convention on the Law of Treaties 24-25 (1985) ("active and consistent practice of a comparatively large, 'representative' group of States may harden into customary rule [of international law] after a comparatively short period of time").
222. Cooter, supra note 6 , at 216.
223. Literally: "opinion of law but of necessity." Opinio juris sive necessitatis or opinio juris is the "widespread belief in the desirability of the norm and the general conviction that the practice represents an essential norm of social conduct." Parisi, supra note 180, at 6 . In international law it is the idea that a "practice be accepted as law or followed from a sense of obligation." Andrew T. Guzmán, How International Law Works: A Rational Choice Theory 185 (2008).
224. In fact, the functioning of all law is very much predicated upon the norm that legislated law should be respected. In this sense, that individuals obey the law in the first place is driven largely by internalized social norms.
225. A good example of internalization is a driver stopping at a red light in the dead of night at a deserted intersection even though the driver is certain that flouting the law would not lead to repercussions.
226. Vincy Fon \& Francesco Parisi, Role-Reversibility, Stochastic Ignorance, and the Social Cooperation, 37 J. Socio-Economics 1061, 1064 (2008).
pants do lose utility. ${ }^{297}$ In this way, the process of internalization is kick-started. Indeed, "once there is a general consensus that members of a group ought to conform to a given rule of conduct, a legal custom can be said to have emerged when some level of spontaneous compliance with the rule is obtained." ${ }^{228}$

Looking at some aspects of business usages, one might hesitate to call these rules law with a capital "L." Nevertheless, these rules are precisely that. They are the nascent emergence of norms not yet hardened into codified law but every bit as binding upon those who voluntarily participate in the affected system. They are examples of horizontal law, as Fuller would call it. ${ }^{299}$ It is only within a system that exhibits such a level of high engagement in terms of sheer repetition and discrete cycles of interaction that this form of customary law can evolve so vividly. Without the energizing effect of high engagement in the form of repeated exposure and involved participation in these norms, such conventions would not have the fertile soil in which to firmly take root. Thus, engagement is absolutely crucial. On a very frequent basis, communities of merchants and traders are involved in a highly specialized set of relationships as they aggressively pursue trade with one another. The simple fact that they are so involved fosters a clear recognition of rules as these parties must frequently employ specific sets of conventions to govern their business dealings. It is not necessary that any one authority formulate these rules. The community itself, through the generative process of repeated interaction, can produce clear legal norms. High engagement and reciprocity work in tandem to produce identifiable norms and the subsequent adherence to them.

Left yet to explore in a systematic fashion is how exactly high engagement induces the evolution of substantive norms. The remainder of this paper will discuss how exactly high engagement induces the evolution of norms in the absence of a legislative authority.

## B. High Engagement: Natural Selection, Norm Creation, and Diffusion

If a central legislating authority is removed from the equation, the question invariably arises: how can legal norms still evolve? To rephrase the question: without a "lawmaker" how is law made? As we will see, the element of high engagement here is key. According to the perspective

[^40]most associated with Thomas Hobbes, human society requires a coercive authority to enforce systems of cooperation. Without the machinery of the state, the argument goes, the perennial temptation to free-ride will undermine such a system. ${ }^{230}$ Indeed, the work of the new norms scholars of the "New Chicago School" reflects the same sentiment in their call for "governmental intervention to manipulate the norm-making process." ${ }^{231}$ However, the stance of Libertarian theorists such as Hayek and Benson offers up an alternative explanation of how norms may emerge.

They argue that rules of governance may evolve as the unintended outcome of individuals separately pursuing their interests-the same way as markets do. ${ }^{232}$ While there is no central authority to create law, the participants themselves, through their very participation, generate the relevant legal norms. Rules evolve spontaneously from the vast flow of voluntary interaction, as "individuals discover that the actions they are intended to coordinate are performed more effectively under one system or process than under another." ${ }^{233}$ Through a slow progression of trial and error, duplication and emulation, successful rules are modified and employed again in subsequent interactions. Over time, better rules tend to replace less effective ones. Thus, through a winnowing process, rules and institutions are "naturally selected for" and proliferate in use precisely because they prove themselves to be the most efficient. ${ }^{234}$ This process is in essence "a legal version of the Darwinian paradigm." ${ }^{235}$

In this way then, rules evolve slowly over time, emerging incrementally from countless repeated interactions. And it is here that the element of high engagement is so important. As has been discussed, commercial law demonstrates a markedly higher degree of repeated cycles of interaction. Without this constant flow of repeated dealings, norms could not emerge in this manner. To this end, game creation and repetition are crucial.

[^41]
## 1. Not of Human Design: Legal Norms as an Aggregate of Individuals Separately Pursuing Their Interests

Hayek contends that there exist orderly structures, which are "the product of the action of many men but are not the result of human design." ${ }^{236}$ This oft-referenced quote by Hayek sums up the crux of the position quite nicely. Efficient systems of order can evolve incrementally from a steady flow of countless small occurrences, each one not necessarily meant to achieve the final product. The process is "independent of any common purpose, which the individual need not even know." ${ }^{2.37}$ It is possible for commercial rules to evolve in such a manner. ${ }^{238}$

In each occurrence, the actors are driven merely by the pursuit of their own interests, that is, the acquisition of reciprocal benefit. The rules that are formulated are created only to meet the immediate ends of the specific interaction in which they are involved. From this a greater system of rules will evolve. Reciprocal benefit is, in this way, very much like the principle that drives the exchange process: "the order of the market rests not on a common purpose but on reciprocity; that is, on the reconciliation of different purposes for the mutual benefit of the participants." ${ }^{239}$ Here again it is clear how commercial law is analogous to "spontaneous market equilibria," 240 evolving in relation to commercial forces. Coordinated in this fashion by the guiding principle of reciprocal benefit, there emerges a tendency toward an overall equilibrium regarding the actions of individuals. ${ }^{241}$ However, the greater system of legal norms is not the product of any grand design as would be the case (at least in theory) with government codification. It is rather the outcome of countless tiny interactions-a slow tricklelike build-up of norms from the unintended outcome of individuals separately pursuing their interests.

This is particularly true in the case of commercial intercourse. Each isolated interaction, each exchange guided by the pursuit of individual

[^42]gain contributes to the blind articulation of an overall coherent body of rules. As is noted by Parisi, this formulation "proceeds through a purely inductive accounting of subjective preferences. Through his own action, each individual contributes to the creation of law. The emerging rule thus embodies the aggregate effects of independent choices by various individuals that participate in its formation."242

## 2. Making Law Through Contract: Norm Tweaking

Parisi is here referring to all forms of customary law. However, this process is especially salient in commerce. Why? Commercial interaction is so much more fertile soil for this process primarily because the parties themselves are in a position to tweak the law. The nature of contract is one that allows for the formulation of new terms and conditions that will, with repeated use, mature into legal norms. As Parisi notes, "[t]his . . process allows individuals to reveal their preferences through their own action, without the interface of third-party decision makers." ${ }^{249}$ From this succession of interactions, the law is incrementally adjusted through a process of "norm tweaking."

Nowhere is this more true than in the realm of contract, where parties can actually draw up the rules that will govern their interactions. Fuller actually defined contract law as a form of law fashioned through an explicit process of bargaining. ${ }^{244}$ Indeed, "[t] he parties who negotiate such law are a kind of miniature legislature, and their law a miniature statute." ${ }^{245}$ Through the synergetic process of contract, participants cast their vote on what they have concluded is the most efficient rule regarding their specific situation. A continual "referendum" on rules is taking place with each interaction. This is profoundly different from other forms of law derived solely from legislation or even stare decisis. In such cases, there is no means for participants to directly and plainly signal perceived shortcomings in the law; there is no opportunity to tweak and refine the law in such a direct fashion. ${ }^{246}$ Through contract, commercial law gives voice to the actual partici-
246. See Parisi, supra note 20, at 612 ; see also Benson, supra note 4 , at 658 ; Benson, supra note 16; Summers, supra note 50. Hayek argued that contract represented the ultimate vehicle for what he termed "abstract" rules, as it allows individuals to privately determine their own rules. See Richard A. Posner, Hayek, Law, and Cognition, 1 N.Y.U. J. L. \& Liberty 147, 150 (2005). See also Friedrich A. Hayek, The Constitution of Liberty 151-54 (1960).
pants. The merchants themselves "decide with whom they wish to contract and upon what terms; they determine the limits of their own requirements; and they establish the parameters of their obligations." ${ }^{247}$ Thus, a situation emerges in which the law may be continually refined. As Benson explains,

The commercial sector continues to develop an expanding base of customary law. Order clearly arises from contractual agreements, for instance. Thus, contracts negotiated and voluntarily entered into by private individuals provide one form of privately created law. . . [I]f a contract develops an effective new business practice in the face of a new situation, it is likely to add to customary law. Since commerce operates in a dynamic continually changing environment, new contractual arrangements are always being mediated-new law is being created. ${ }^{248}$

This body of law "grows, it does not change in the sense that an old law is suddenly overturned and replaced by a new law. That growth tends to be gradual but fairly continuous, through spontaneous collaboration." ${ }^{249}$ Because it allows its consumers to directly shape its constitution, commercial law is able to evolve in the unique fashion described by Benson.

## 3. Norms Are Reviewed in Situations of Success as Well as Failure

It is important to note how much this differs from other forms of law. In non-commercial forms of law, the efficacy of the law is examined only in cases where the law has essentially failed, and as a consequence, has given rise to litigation. ${ }^{250}$ Litigation and actual legislation provide the only occasions for possible amendments to the law. Rubin and Priest point out that legal rules will only be challenged in court if they prove to be inefficient. ${ }^{251}$ Leoni argues that "individuals make the law,

[^43]insofar as they make successful claims." ${ }^{252}$ Such is the case with most forms of law. Review is limited to situations of actual litigation, when official attention is drawn to the inadequacy of the law highlighted by its own failure.

This is not so with commercial law. Commercial law is subject to immediate review in each and every interaction regardless, precisely because the participants themselves are actively engaged in "tuning" the law. Thus, the efficiency of a rule is not only evaluated in cases where it has failed (this can be in the case of formal litigation or simply by the parties themselves if no litigation is initiated), but equally in cases where it has succeeded. Moreover, the efficiency of a commercial rule is scrutinized in situations where, in place of outright failure, the law merely portrays a slight degree of inefficiency. Insofar as noncommercial law goes, situations where the law does not fail to the point of giving rise to actual litigation, but nevertheless lacks the comparable efficiency of alternative rules, the law in question will not have the occasion to be modified. This is the inherent advantage of decentralized rule making: it can be continually tweaked because those who directly engage in the regulated activity are in a position to fine-tune the rules, either through direct modification or through the selection of alternative rules to govern their future dealings. ${ }^{253}$ Indeed, Fuller, among others, recognized this advantage in customary law, citing how spontaneously evolved rules emerge through "dispute arbitration and adjudication combined with the spread of superior ways of doing things through competition and imitation." 254

Contract law is unique in that it allows for a more active role in its actual formulation. The parties of the contract are their own "miniature legislature," judging the efficiency of their contractual arrangement through the very commercial interaction they undertake. The rules that govern their dealings are constantly being evaluated in terms of their ability to achieve varying levels of efficiency. In this way, traces of inefficiency can be addressed. In subsequent dealings, rules that prove even slightly impractical can be jettisoned and more efficient

[^44]rules may be adopted in their place. With each new interaction, players can engage in a process of "norm tweaking." This has the ultimate effect of making commercial law far more amenable to a kind of incremental evolution that incorporates a natural selection-like process.

## 4. Law Evolves Towards Efficiency

The commercial body of law continually evolves through a process of natural selection towards ever-greater efficiency. ${ }^{255}$ Through their participation, actors refine the rules that oversee their commercial arrangements. Pragmatism and meeting the requirements of the market form the guiding spirit of such reform. Hayek contends that such a process generally produces an optimal system of rules, which could not be achieved through any planned scheme. ${ }^{256} \mathrm{He}$ asserts that "a spontaneous system of rules will be more efficient . . . precisely because it has survived an evolutionary process: a process in which not reason but natural selection determines which rules and institutions are appropriate." ${ }^{257}$ This is a central argument of Hayek's: order that evolves spontaneously from a decentralized process can achieve a greater degree of efficiency. ${ }^{258}$ As discussed earlier, this notion lies embedded within the theoretical underpinnings of the common law. ${ }^{259}$ As Ellickson notes, social norms that evolve "through natural selection tend to

[^45]be wiser than the ratiocinated policies of the most brilliant policy makers." ${ }^{260}$

The decentralized process of norm formation in commercial systems is comparable to any other decentralized market process. ${ }^{261}$ Thus just as decentralized market processes have "a comparative advantage over centralized allocation mechanisms in the creation of efficient equilibria," ${ }^{262}$ so too does a decentralized process of norm formation arising in response to the same commercial forces that drive the market. Such a process is analogous to a decentralized decision making process, possessing a certain advantage over centralized processes in generating efficient rules. ${ }^{263}$ Thus, in this manner, a process of natural selection refines the rules of commerce towards greater and greater efficiency.

The basic nature of commerce is very receptive to an evolution of this sort. The market itself provides an exceptionally accurate mechanism with which to gauge the 'effectiveness' of these rules. ${ }^{264}$ Commercial efficiency is the sole measure of any rule. Thus, rules that do not prove to be the most effective are quickly discarded and replaced by more efficient ones. ${ }^{265}$ The element of competition, implicit in commercial enterprise, ensures this. In order to remain competitive, those engaged in commerce must adopt more efficient rules to oversee their interactions. To not do so would imperil their competitive position and ultimately their commercial survival. Thus, it is not even really a question of choice; driven by competition, actors are often forced to implement commercial laws that have proven most functionally efficient. As with natural selection in the biological world, those who do not remain competitive simply do not survive. Those who develop better rules and thus reinforce their capacity to successfully trade are able to flourish, and with them, the rules they choose to institute. In this sense, competition breeds efficiency. Non-commercial law is not predicated upon competition. As a result, there is no comparable imperative to improve upon less than optimally efficient norms. Evolu-
260. Ellickson, supra note 230, at 4 .
261. Benson, supra note 4 , at 645 .
262. Parisi, supra note 20, at 611.
263. Id.
264. Benson, supra note 4 , at 658.
265. Benson explains this concept of "natural selection": "Those customs and legal institutions that survive are relatively efficient because the evolutionary process is one of 'natural selection,' where laws or procedures that serve social interaction relatively poorly are ultimately replaced by improved laws and procedures." Bruce L. Benson, Enforcement of Private Property Rights in Primitive Societies: Law Without Government, 9 J. Libertarian Stud. 1, 13 (1989); see also Benson, supra note 14 , at 57 ; Benson, supra note 16 .
tionary traps may emerge. ${ }^{266}$ A coercive authority is thus needed to institute and enforce changes in law, and knock it back on a more collectively beneficial track. In contrast, commerce, with its unforgiving bottom line and its twin gods of profit and loss, confers survival only to the fittest.

What is true for individual actors within commerce is also true for entire systems of commercial law. New rules and institutions that prove more efficient will be adopted by groups of actors so long as transaction costs do not thwart this process. ${ }^{267}$ As a result, "more effective rules and institutional arrangements tend to replace less effective ones as individuals observe, learn, imitate, and secede in order to migrate when superior competitive alternatives are available." ${ }^{268}$ Indeed, as we have seen, the primary catalyst for the emergence of the Medieval Law Merchant was in fact that it was a more commercially efficient system of law. ${ }^{269}$ In a modern context, jurisdictional "shopping" embodies this phenomenon. Parties will tend to choose the jurisdiction that proves least disruptive to their commercial interests. ${ }^{270}$

## 5. Each Repeated Interaction Is a Test-Run

What is true for the theory of natural selection in the realm of biology is also true for this evolutionary process of "norm tweaking." For such a complex system to emerge in this incremental fashion, it is paramount that we are dealing with a vast multitude of interactions. Each successive interaction builds on the one before it. It is a process of repeated refinement and improvement. To this end, high engagement plays a decisive role. The higher the level of engagement, the more easily norms may evolve in this fashion.

Central to this evolutionary process is the ability for rules to be repeatedly evaluated and then modified. Commerce is precisely such a situation. Each commercial interaction represents a discrete test of the efficiency of a given rule. The interaction itself is an ideal platform from which to evaluate the worth of a particular rule. The relative

[^46]success or failure of the commercial interaction itself serves as a precise measurement of the rule's efficiency. ${ }^{271}$ Each commercial dealing is, in a sense, a test run of the rule's effectiveness performed by the parties in the best position to most accurately appraise the practical impact of the rule upon the interaction. Through subsequent contract formation, this evaluation can immediately translate into a change in the rules. ${ }^{279}$ Thus, the process of constant and repeated "norm tweaking" is instrumental in this evolution. And towards this end, repeating these appraisals in the form of frequent commercial dealings is essential. It stands to reason that the more it is repeated, the more powerful this process can be. ${ }^{273}$

Because commerce entails a higher level of engagement in which players repeat interactions, there is a constant flow of independent "test runs." These "test runs" serve an important function in the emergence of norms; a single interaction represents a complete test cycle through which a given rule can be evaluated. It is one small juncture in a long sequence of evolution comprising a succession of minute interactions. Completing these cycles is crucial to an evolutionary process. Cycles of interaction allow a rule to be tested, providing incremental feedback at discrete stages along the way. This is not so with other forms of law where the element of high engagement is absent. As non-commercial forms of law generally do not consist of a concrete series of actions, no definite cycle of interaction is formed. Furthermore, these interactions are not repeated with the same frequency.

As in evolutionary biology, where more efficient traits become more common in successive generations of a population as each organism reproduces, so too in the process of legal natural selection efficient rules thrive as subsequent interactions employ the rule. ${ }^{274}$ The repetition of a single cycle of interaction is comparable to an organism reproducing in the field of biology. Indeed, as we discussed, successful commercial ventures will often lead to a repetition of the same interaction. This is in fact often the overarching objective to the interactionreproducing it. More efficient rules help ensure the success of an interaction, which in turn may then be repeated. Thus high engagement produces cycle of interaction that serve as important feedback loops, contributing to this legal evolution.

[^47]
## 6. Norm Diffusion

High engagement also has the effect of spreading norms between groups. ${ }^{275}$ Successful players will often seek out new partners with which to forge new business relationships, in an effort to duplicate their prior successes and expand their pools of wealth. Thus, as within the realm of biology, efficient rules will spread by way of this mixingsomething akin to the spreading of an advantageous gene pool. ${ }^{276}$ In other forms of law, we do not find a comparable fluid mixing of specific, targeted partners. This is in large part due to the fact that commercial law is, as we have already mentioned, unique in that it requires the seeking out of explicit partners with whom to establish a definite relationship and engage in a clear delineated cycle of interaction: business. Other forms of law have not so much to do with the building of partnerships, as they are concerned with preventing injurious interactions between individuals in a large group. ${ }^{277}$ Again, here we have the idea that commercial law is the active formation of new relationships of cooperation between select parties, while noncommercial law involves the regulating of the behavior of individuals through injunctions-i.e., what not to do. ${ }^{278}$ Thus, the former will force a mixing of players by linking together individuals, producing a greater diffusion of norms.

While forms of association regulated by non-commercial law are generally static, commercial interactions, in contrast, are highly specialized, active, and marked by a tendency to build fresh relationships with new partners. Although I share a fleeting legal relationship with the man I pass on the street in that we both obey the law, mutually refraining from inflicting harm on one another (hopefully), we do not construct a specialized form of association, and, more importantly, I do not actively seek out new people to pass on the street. In this sense, these relationships can be understood as generally static. Commerce, in contrast, is a bridge between particular parties within a greater community. Perhaps it could be conceptualized in this manner: while

[^48]non-commercial law regulates interactions between individuals in "a large and at times somewhat unclearly defined community," ${ }^{279}$ commercial interaction is in effect the constructing of a miniature community within the larger community, one sometimes involving only two parties. This constructs a clear, dynamic relationship between the members of the community. Thus, this "bridge" created between one set of people can then be extended to another, and so forth. In each instance, a smaller "community" is carved out from the greater whole-the result being a greater diffusion of norms, as norms are carried from one "community" to the next.

This applies equally to entire regions. This mixing often reaches across the threshold of national and cultural borders, as the long arm of commerce extends to wherever it can seize hold of a business opportunity and flourish. Thus, the nature of commerce, in that it constructs new and specialized forms of association between definite parties, in the process facilitates a diffusion of proven, efficient rules that are instituted to oversee these interactions. To be sure, when it is pronounced within a system, the element of high engagement is instrumental in aiding the evolution of norms through a process of natural selection and its subsequent diffusion.

## IV. Conclusion

It is clear that markets can and do evolve in a spontaneous, decentralized fashion. Markets evolve as they do, guided by an invisible handthe aggregate of countless individuals separately pursuing their own interests. This can, however, hold equally true for the law that governs the market. As we examined in the first half of this paper, the same force that directs economic evolution-namely reciprocal benefit-may also help generate legal norms. Understood in this light, the unique nature of commercial law comes into clearer focus. It emerges from a highly specialized dynamic of human relations, with its own set of governing principles. Most crucial though is the manner of interaction implied by commercial association. At the outset of the discussion, I argued that the nature of commercial interaction is fundamentally different from other forms of human interaction, and that while the significance of this unique manner of interaction, which I termed high engagement, has gone largely unappreciated in theories of spontaneous law, its role in the ability of commercial law to follow paths of decentralized evolution is decisive.

The second half of the paper set out the idea of high engagement. I argued that it comprises two intertwined components: repetition and the creation of discrete cycles of interaction (game creation). I began by discussing repetition, discerning four points that induce the emergence of legal norms. The first was that actors tend to engage in repeated interaction with one another. The second was that the frequency of these interactions can greatly increase. The third point was that participants in commerce expand their associations, actively seeking out opportunities to construct new sets of relations with different parties. The fourth point was that business actors are repeatedly and constantly engaged in situations where these norms are of primary importance, thus forming the guiding constitution of their actions.

Although the repetition of commercial interactions induces the emergence of norms, the second aspect of high engagement facilitates this tendency by producing a clear cycle of interaction that then lends itself to repetition. Five points were explored here. The first was that the nature of the interaction itself allows for the possibility of more frequent repetition by providing a delineated cycle of interaction that may be run through over and over. The second point was that actors engage in performing something rather than refraining from doing something. That is, commercial relations create positive duties to act, producing something tangible that may then be repeated. The third point explored the idea that parties' ability to form contracts tailored to their specific situation allows players to construct law. The fourth point examined how commercial trade is in effect a delineated game, allowing parties to repeatedly run through rounds of interaction, which assists in the generation of norms. Finally, I looked at the idea that commercial interactions can be conceptualized as repeated games and the importance of repeated interaction in reference to social dilemmas.

These two aspects of high engagement are intimately connected. The nature of commerce creates small "chunks" of interaction, and at the same time, encourages parties to run through them again and again. This plays a decisive role in the spontaneous evolution of legal norms. Without the ability for commercial actors to run through repeated cycles of interaction, it would be difficult for clear normative rules to emerge without relying on some legislative authority.

In the final portion of the discussion I examined how high engagement allows legal norms to evolve through an evolutionary process reminiscent of natural selection. Six points were made regarding this. The first was that countless individual actors separately pursing their interests in
fact allow a greater system of norms to incrementally evolve through sheer repetition. The second point was that the nature of contract is one that permits the formulation of new terms that will, through repeated use, mature into recognized norms. In the third point, I explored the idea that in each cycle of interaction the efficiency of a commercial rule is subject to immediate review. This applies to situations of success as well as failure, or even slight inefficiency. The fourth point was that through repeated and engaged participation, the law evolves towards efficiency. The element of competition implicit in commercial enterprise virtually ensures parties will adopt the most efficient rules to oversee their interactions. Driven by competition, actors are forced to adopt norms that have proven most efficient. I then made the point that interactions are instrumental as "test runs." Each successive interaction builds on the one before it in a process of repeated refinement and improvement. Here, I emphasized the importance of these cycles of interaction as incremental feedback. The final point made was regarding the important role high engagement plays in facilitating the diffusion of norms. Commerce connects and facilitates communication between disparate parties, if not directly, then indirectly through the complex web of commercial associations it engenders.

Commercial society's capacity for self-organization is astonishing. To be sure, law regulating commercial interaction is, more so than any other form of law, uniquely positioned to evolve in a decentralized, spontaneous manner. Other forms of human interaction may generate law in this fashion but commercial interaction is intrinsically inclined to do so. This is not only due to the reciprocal nature of commercial relationships, as the engaged nature of commercial interaction also plays a vitally important role in this process. Indeed, high engagement engenders naturally generated mechanisms for legal recognition, adjudication, and change, thus lessening the need for a centralized legislative authority. In sum, commercial law is unique in that it possesses both reciprocity and high engagement. Ultimately, these twin elements serve as the two wings of spontaneous legal ordering. If both are present, decentralized legal development may indeed take flight.


[^0]:    * PhD candidate and visiting tutor at King's College London. © 2010, Bryan Druzin.

[^1]:    1. What is meant here is commercial law in its most basic sense: the formation of a contract between parties and the exchange of property-the purest form of this being trade in some sense or another. However, radiating outward from this core starting point, commercial law also should be read as including the contracts parties themselves draw up, the rules of international arbitration, and even, in its more general sense, the rules of multi-sovereign bodies such as the Organization for Economic Co-operation and Development (OECD) or the World Trade Organization (WTO). In this general sense, the term is inclusive of the most simple, and at the same time, the most complex definitions of what is commonly meant by the term commercial law. However, the discussion that follows is primarily concerned with law that is largely the product of choices and behavior of individual economic actors, which evolves in the absence of a definite authority.
    2. As one scholar puts it: "Society is substantially an economic social pattern stabilized by legal principles. Economics weaves its want into all facets of society, dragging along with it the relevant legal concepts." Ronald Charles Wolf, Trade, Aid and Arbitrate: The Globalization of Western Law, at vii (2004).
    3. It is telling that throughout The Morality of Law, Fuller's illustrations of the coordinating effects of law are entirely drawn from the commercial realm: the law of quasi-contract, the law of contract, and Tort law. See Lon L. Fuller, The Morality of Law, ch. 1 (1969).
    4. See, Bruce L. Benson, The Spontaneous Evolution of Commercial Law, 55 S. Econ. J. 644, 644 (1989) ("Commerce is an evolving process of interaction and reciprocity which is simultaneously facilitated by and leads to an evolving system of commercial law.").
[^2]:    5. See generally id.
    6. Robert D. Cooter, Structural Adjudication and the New Law Merchant: A Model of Decentralised Law, 14 Int’l Rev. L. \& Econ. 215, 216 (1994) (speaking about the absorption of merchant practices into the English common law, where "judges dictated conformity to merchant practices, not the practices to which merchants should conform. By this process, the law merchant was allegedly absorbed into English common law").
    7. Klaus Peter Berger, The New Law Merchant And The Global Market Place, in The Practice of Transnational Law 1, 14 (Berger ed., 2001).
    8. Id. at 9 ("The new lex mercatoria is created by the parties to international commercial transactions and their arbitral tribunals. Thus, the UNIDROIT and Lando-Principles are not 'Re-Statements' but 'Pre-Statements' of the new lex mercatoria") (footnotes omitted).
    9. Id. at 5 .
    10. See Benson, supra note 4. Benson looks at the emergence the Law Merchant in medieval Europe, concluding that "nation-states are not a prerequisite for law . . . the merchant community's 'enterprise' of accomplishing the subjection of commercial conduct to control naturally generated mechanisms for recognition, adjudication, and change." Id. at 646. See also Bruce L.
[^3]:    20. Francesco Parisi, Spontaneous Emergence of Law: Customary Law, in 5 Encyclopedia of Law \& Economics 603 (Boudewijn Bouckaert \& Gerrit de Geest eds., Edward Elgar 2000).
    21. Benson, supra note 16, at 211. See also Benson, supra note 4, at 646 ("it becomes clear that reciprocal arrangements are the basic source of the recognition of duty to obey law (and of law enforcement when state coercion does not exist)").
    22. See Fuller, supra note 3, at 23.
    23. The word 'game' is meant here in the sense of game theory.
[^4]:    24. A proviso: it is not my contention here that the growth of international commercial law is necessarily "fair." Arguably, many aspects of commercial globalization are not. While many of the ideas regarding law and property presented in this discussion may be seen as espousing a libertarian position, this is not so. Although I draw heavily from concepts such as spontaneous market order, the presupposition that such orders are implicitly fair is not assumed here as it is in Libertarianism. In many respects the systems that emerge are not equitable. Rather, the point at issue here is simply that commercial law, as opposed to law of a non-commercial nature, has a unique ability to evolve and function in the absence of a central authority. It is this aspect of commercial law that I will explore. Any value judgments-positive or negative-as to the effects of this phenomenon (because there are many) lie beyond the intended scope of this paper. In the following pages, there is no critique or defense of globalization offered; the sole purpose here is to present an academic exploration of commercial law's innate ability to spontaneously evolve, and no more.
    25. Anarchy is used here in its pure root sense: an absence of government. As Ellickson declares, anarchy does not imply disorder; only those unable to envision order without government equate the two. Ellickson, supra note 12, at 138.
[^5]:    26. Austin, a vociferous advocate for the legal positivist position, argues that rules must be backed by the threat of enforcement. Failing this, he contends, there can be no legal obligation:
    to say a person is under a legal obligation to act in a certain way becomes, for Austin, the claim that the person is "obnoxious to" or liable to a sanction (pain) in the event of noncompliance with the wish of the politically sovereign power. The obligatoriness of law, in other words, is an alternative description of the readiness of the sovereign to make its threat of a sanction effective...Austin's conception is a stark form of legal voluntariness: the exercise of superior force alone accounts for the creation of legal duties.

    Lon L. Fuller, The Principles of Social Order: Selected Essays of Lon L. Fuller 20 (1981). "On this basis [enforcement by a sovereign], so-called 'customary law' was to be excluded from the province of jurisprudence, unless it had been adopted as the content of a wish by some state organ. The same was true of public international law and of conventional constitutional law."
    J.W. Harris, Legal Philosophies 30 (2d ed. 1997).
    27. See Benson, supra note 4 , at 644 .
    28. Hayek writes,
    such confusions are at the root of the basic conceptions of highly influential schools of thought which have wholly succumbed to the belief that all rules or laws must have been invented or explicitly agreed upon by somebody . . [and] that all power of making laws must be arbitrary, or that there must always exist an ultimate "sovereign" source of power from which all law derives . . . This is especially true of that tradition in legal theory which more than any other is proud of having fully escaped from anthropomorphic conceptions, namely legal positivism; for it proves on examination to be entirely based on what we have called the constructivist fallacy... which, in taking literally the expression that man has "made" all his culture and institutions, has been driven to the fiction that all law is the product of somebody's will.

[^6]:    29. Fuller, supra note 26, at 221.
    30. Id .
    31. Fuller, supra note 3, at 233.
    32. Id
    33. Ellickson articulates a forceful indictment of this position. See "The Legal-Centrist Position" in Ellickson, supra note 12, at 139.
    34. Robert C. Ellickson, Property in Land, 102 Yale L. J. 1315, 1366 (1993).
    35. Ellickson, supra note 12, at 139.
    36. Benson, supra note 14 , at 54.
[^7]:    37. Benson, supra note 4, at 644.
    38. See Benson, supra note 14.
    39. Benson, supra note 4 , at 646.
    40. Taylor, supra note 12, at 29.
    41. David Hume, A Treatise Of Human Nature 521 (L.A. Selby-Bigge ed., Oxford Univ. Press 1896) (1739-1740).
    42. See Axelrod, supra note 11, at 118-20.
    43. "This strategy is simply one of cooperating on the first move and then doing whatever the other player did on the preceding move. Thus TIT FOR TAT is a strategy of cooperation based on reciprocity." Axelrod \& Hamilton, supra note 11, at 1393.
    44. Francesco Parisi \& Nita Ghei, The Role Of Reciprocity In International Law, 36 Cornell Int'l L.J., 93, 94 (2003).
    45. See generally Fuller, supra note 3, ch. 1 .
[^8]:    46. See Benson, supra note 16 , at 211 .
    47. Id.
    48. Id.
    49. FULLER, supra note 3, at 22.
    50. Robert S. Summers \& Lon L. Fuller: Jurists: Profiles in Legal Theory 79 (1984).
    51. Parisi \& Ghei, supra note 44 , at 105.
    52. Id. at 93.
    53. Id.
[^9]:    54. Reciprocity made even more pronounced by repeated interactions will induce cooperation as players come to value the reciprocal benefits gleaned from long-term cooperation. Axelrod \& Hamilton, supra note 11; see Axelrod, supra note 11, at 129-30. Indeed, situations predicated upon a clear dynamic of mutual reciprocal benefit need "not rely on external enforcement mechanisms, such as a legal system, or a threat of retaliatory behavior . . . " Vincy Fon \& Francesco Parisi, Reciprocity-Induced Cooperation, 4 (George Mason University School of Law, Law and Economics Working Paper Series No. 2-13, 2003). See, e.g., Benson, supra note 14, at 53 (contending that entire systems of law can evolve as "a result of a recognition of mutual benefits, through exchanged agreements . . . to obey and participate in the enforcement of such law"); see also Bruce L. Benson, The Enterprise of Law 12 (1990) (positing that law arising as a consequence of recognized reciprocity has functioned effectively throughout history).
    55. See Axelrod \& Hamilton, supra note 11; Axelrod, supra note 11, at 139-41.
    56. Parisi and Ghei note that situations undergirded by unambiguous reciprocity in game theory are represented as positive sum games with a single dominant strategy that leads to efficient outcomes "where the party's incentives are perfectly aligned, any implicit or explicit agreement between the parties becomes self-enforcing, in the sense that no party has an interest to unilaterally deviate." Parisi \& Ghei, supra note 44, at 95-96 (footnotes omitted). Thomas Schelling categorizes this same dynamic as a pure common interest game. See Thomas Schelling, The Strategy of Conflict 88 (1980). See also Axelrod \& Hamilton, supra note 11; Axelrod, supra note 11, at 54.
[^10]:    57. See Axelrod \& Hamilton, supra note 11; Axelrod, supra note 11, at 120-23.
    58. Fuller, supra note 3, at 20-21.
    59. Id. at 19.
    60. Id. at 22.
    61. Hayek, supra note 13, at 107.
    62. Id.
[^11]:    63. Id.
    64. Id. at 108.
    65. Posner in particular adopts a singular commercial approach to the adjudication of law in arguing that economic considerations form the underlying rationale to the workings of the entire common law. For Posner, judicial opinions, even when not explicitly couched in economic terms nor recognized as such, are in reality addressing issues that are purely economic in nature:
[^12]:    67. In situations involving customary norms where reciprocal benefit may not be immediately clear, there will be an underlying benefit to be gained from such custom in the form of collective benefit of the group as a whole, which presumably would benefit the party who is complying with the "law." In such situations, the norm will carry with it a flavor of opinio iuris ac necessitates, that it just seems like the right thing to do: that there is a general belief in the widespread desirability of the norm and a conviction that it is an essential norm of conduct. This might manifest simply in the form of a sense of social obligation to comply. As Parisi observes, "only those practices recognized as socially desirable or necessary will eventually ripen into enforceable customary law. Once there is a general consensus that members of a group ought to conform to a given rule of conduct, a legal custom can be said to have emerged when some level of spontaneous compliance with the rule is obtained." Parisi, supra note 20, at 606.
    68. Lon L. Fuller, Anatomy of the Law 108 (1968).
    69. See generally Parisi, supra note 20.
    70. See Summers, supra note 50 , at 81 .
[^13]:    71. See generally Fuller, supra note 3.
    72. Summers, supra note 50 , at 81.
    73. Id.
    74. See Fuller, supra note 26, at 218.
    75. Parisi, supra note 20, at 603.
[^14]:    76. Summers, supra note 50, at 81 .
    77. Id.
    78. Though it should be noted this is not true for all norms; at least the benefit it confers is not always imme diately clear. See Eric Posner, Law and Social Norms (2002) (on the discount-rate signalling model of norms). See generally Wayne Davis, Meaning, Expression, and Thought (2003); Andrei Marmor, On Convention, 107 Synthese 349 (1996); Peter Vanderschraaf, Knowledge, Equilibrium, and Convention, 49 Erkentnis, 337 (1998). For norms as serving a functional purpose, see Edna Ullmann-Margalit, The Emergence Of Norms (1977); David Lewis, Convention (1969) ; Paul D. Allison, The Cultural Evolution of Beneficial Norms, 71 Soc. Forces 279, 279-301 (1992) ; Muzafer Sherif, The Psychology of Social Norms, 143-53 (Benjamin Nelson ed., Harper Torchbooks 1966) (1936).
    79. Parisi states, " $[\mathrm{a}] \mathrm{n}$ enforceable custom emerges from two formative elements: (a) a quantitative element consisting of a general emerging practice; and (b) a qualitative element reflected in the belief that the norm generates a desired social outcome." PARISI, supra note 20, at 604-05 (emphasis added).
[^15]:    80. See generally Benson, supra note 4 .
    81. Id. at 644.
    82. Id. at 660 .
    83. Id. at 645 .
    84. See Barry Macleod-Cullinane, Lon L. Fuller and the Enterprise of Law, 22 Legal Notes 1, 1 (1995).
    85. In looking at customary law, Fuller drew in part on the work of Eugen Ehrlich, specifically in regards to Ehrlich's concept of "living law." See Summers, supra note 50, at 78. For a good summary of Eurlich's concept of Living Law, see Reza Bankar \& Max Travers, An Introduction to Law and Social Theory 42-49 (2002).
    86. See Macleod-Cullinane, supra note 84, at 1.
    87. See Bruno Leoni, Freedom and the Law (1991), especially Chapter Five, "Freedom and legislation."
[^16]:    88. Fuller, supra note 3 at 233.
    89. Fuller, supra note 26, at 216.
    90. See generally Carl Menger, Problems of Economics and Sociology (Louis Schneider, ed., Francis J. Nock, trans., 1883); Hayek, supra note 13; Michael Polanyi, The Logic of Liberty: Reflections and Rejoinders Michael (1951).
    91. Hayek, supra note 13 , at 35.
    92. Hayek, supra note 13, at 37. Hayek gives an explanation of these terms: "Classical Greek was more fortunate in possessing distinct single words for the two kinds of order, namely taxis for a made order, such as, for example, an order of battle, and kosmos for a grown order, meaning originally a 'right order in a state or a community.'"
    93. Hayek, supra note 13, at 37.
    94. Id.
    95. Id. at 98-99; see also Benson, supra note 16, at 209.
    96. Hayek, supra note 13 , at 45.
[^17]:    97. Id. at 82; Barry Norman, The Tradition of Spontaneous Order, 5 Literature of Liberty 7, 14-15 (1982); see also Allan C. Hutchinson, Evolution and the Common Law 1, 277, 288 (2005); Oona Hathaway, Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System, 86 Iowa L. Rev. 101, 150 (2001).
    98. Norman, supra note 97 , at 15 .
    99. 5 William Holdsworth, A History of English Law 504 (3d ed. 1924).
    100. Norman, supra note 97, at 15, 21.
    101. Id. at 25.
[^18]:    102. Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations 32 (Andrew Skinner ed., Penguin 2000).
    103. Id. at 456.
    104. Adam Ferguson, An Essay on the History of Civil Society 122 (Duncan Forbes ed., Edinburg Univ. Press 1966) (1767).
    105. Norman, supra note 97, at 31.
    106. Carl Menger, Investigations into the Method of the Social Sciences with Special Reference to Economics 146 (1985).
    107. HaYEK, supra note 13 , at $8-34$.
    108. Id. at 14.
    109. Hayek derived the word "catallaxy" from the Greek verb katallasso ( $\kappa \alpha \tau \alpha \lambda \lambda \alpha \sigma \sigma \omega)$ meaning "to exchange," "to admit in the community" and "to change from enemy into friend." F.A. Hayek, The Mirage of Social Justice 108-09 (1976).
[^19]:    To refer to the complex system that assures coordination of individuals' acts Hayek uses the term spontaneous order or catallaxy. According to him, spontaneous order consists of those institutions that are the result of human action but not the result of some specific human intention. In other words, spontaneous order or catallaxy is a network of firms and households and has no specific purpose of its own; rather it serves as a process by which individuals and organizations pursue their own purposes. Catallaxy is that which results naturally from the interaction of firms and households through the market exchange.

[^20]:    113. Benson, supra note 4 , at 660 .
    114. Id. at 645.
    115. F.A. Hayek, Studies in Philosophy, Politics and Economics 96 (1967) (quoting Adam Ferguson, An Essay on the History of Civil Society 187 (Georg Olms Verlag 2000) (1767)).
    116. 1 Jeremy Bentham, The Works of Jeremy Bentham 309 (Edinburgh, William Tait 1843).
    117. There have been several historical analyses of this kind examining other self-ordering arrangements. These include: the Maghribi Traders; medieval Iceland; Maine and mining camps in the American West. See Avner Greif, Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders 49 Journal Of Economic History 857 (1989); David Friedman, Private Creation and Enforcement of Law: A Historical Case, 8 J. Legal Stud. 399 (1979); John Umbeck, A Theory of Property Rights with Applications to the Californian Gold Rush (1989). See generally Terry L.
[^21]:    Anderson \& Peter J. Hill, An American Experiment in Anarcho-Capitalism: The Not So Wild, Wild West, 3 J. Liberation Stud. 9 (1979).
    118. See Harold J. Berman, Law and Revolution: The Formation of Western Legal Tradition 333 (1983).
    119. Benson, supra note 4 , at 647 .
    120. See generally id.
    121. Id. at 660.
    122. Id. at 644-45.
    123. Trakman, supra note 17 , at 9 .

[^22]:    124. Id. at 23.
    125. Id.
    126. Leon E. Trakman, From the Medieval Law Merchant to E-Merchant Law, 53 U. Toronto L.J. 265, 283 (2003).
    127. Trakman, supra note 17 , at 39.
    128. Trakman, supra note 126 , at 281.
    129. Trakman, supra note 17 , at 39.
    130. Id.
    131. Trakman, supra note 126 , at 283.
    132. TrAKMAN, supra note 17 , at 39.
    133. Benson, supra note 4 , at 658 .
[^23]:    134. Id. at 656.
    135. Klaus Peter Berger, International Economic Arbitration 12 (1993).
    136. Trakman, supra note 126, at 282.
    137. Benson, supra note 4, at 659.
    138. Id.
    139. Id. at 658-659.
    140. Id. at 646 (quoting Lon L. Fuller, The Morality of Law (1964)).
[^24]:    142. See Axelrod, supra note 11, at 129-32; Axelrod \& Hamilton, supra note 11.
    143. Ellickson, supra note 12 , at 34.
[^25]:    144. Summers \& Fuller, supra note 50 , at 80.
    145. Fuller, supra note 3, at 234.
    146. Summers \& Fuller, supra note 50 , at 78.
    147. See Axelrod, supra note 11, at 27-54 (showing that when the Prisoner's Dilemma game is repeated conditionally cooperative strategies may emerge).
    148. Benson, supra note 16 , at 225.
[^26]:    149. Id. at 213-14.
    150. See id. at 218.
    151. See id. at 216-17.
    152. Although while only a very crude yardstick at best, in 2002 the world's prison population stood at approximately 8.75 million, about $0.14 \%$ of the world's population. The United States, which has the highest prison rate of any country, stood at roughly $0.68 \%$. Roy Walmsley, Global Incarceration and Prison Trends, 3 Forum On Crime And Society 65, 66 (2003).
    153. While it is an imperfect indicator, it is interesting to note that in 2005, 26,950 tort, contract, and real property cases were disposed of in the United States. Linn Langston \& Thomas H. Cohen, Civil Bench and Jury Trials in the State Courts 1 (2005), available at http:// bjs.ojp.usdoj.gov/index.cfm?ty=qa\&iid=408. Assuming each case involves two individuals, this number still only amounts to a sliver (approximately $0.018 \%$ ) of the population.
[^27]:    154. See Axelrod, supra note 11, at 139-41; see also Ellickson, supra note 12, at 164-66.
    155. See Axelrod, supra note 11, at 124-41; see also Ellickson, supra note 12; Ellickson, supra note 34 .
[^28]:    156. Fuller, supra note 26, at 213-214.
    157. To quote Fuller: "we shall be concerned here with contract as a source of social order, as one means for establishing 'stable interactional expectancies.' . . [T]he term contract law, there-
[^29]:    fore, refers primarily, not to the law of or about contracts, but to the 'law' a contract itself brings into existence." FUlLER, supra note 26, at 224.
    158. See FULLER, supra note 26, at 213-14 (speaking of customary law).
    159. Cf. id.
    160. Cf. id.
    161. In "non-commercial" areas of law-such as negligence, real property, criminal law and family law-where positive duties to act arise, I would argue that the law, although often not explicitly recognized as such, is in fact predicated on some form of contractual-like relationship (e.g., fiduciary duties, etc.) .

[^30]:    162. See FUller, supra note 26, at 213-14.
    163. Cf. id.
[^31]:    164. This interplay of response and counter-response is an important point and we will return to it shortly when we discuss prisoner's dilemma games.
    165. Trakman, supra note 17 , at 48.
    166. Id.
    167. Id. at 48-49.
    168. Id. at 49.
    169. Klaus, supra note 7, at 14 (footnotes omitted).
[^32]:    170. See Axelrod, supra note 11, at 129-32; Axelrod \& Hamilton, supra note 11; see also ElLickson, supra note 12, at 139.
    171. Trakman, supra note 17 , at 2.
    172. Indeed, this has a certain legal recognition; for the formation of customary law, time is considered a key formative element. French jurisprudence traditionally recognizes forty years as the minimum for an international custom. The German legal system requires thirty. Parisi, supra note 20, at 605 .
[^33]:    173. See Axelrod, supra note 11, at 129-32; Axelrod \& Hamilton, supra note 11; see also Ellickson, supra note 12.
    174. See Axelrod, supra note 11, at 139-41; Axelrod \& Hamilton, supra note 11.
    175. Ellickson, supra note 12 , at 164.
    176. Maynard Smith, supra note 11 , ch. 13.
    177. See Axelrod \& Hamilton, supra note 11; Axelrod, supra note 11, at 306.
    178. See, e.g., Lewis, supra note 78; Ullmann-Margalit, supra note 78. Sociologists and psychologists have also stepped into the fray. See, e.g., Allison, supra note 78; Donald T. Campbell, On the Conflicts Between Biological and Social Evolution and Between Psychology and Moral Tradition, 30 Am. Psychologist 1103 (1975); SHERIF, supra note 78.
    179. Ellickson, supra note 12; Robert C. Ellickson, The Aim of Order Without Law, 150 J. Inst. Theo. Econ. 97 (1994).
    180. Francesco Parisi, Law as a Voluntary Enterprise in S. Ratnapala and G. Moens (eds.), The Jurisprudence of Liberty 111 (1996); Parisi \& Ghei, supra note 44; Parisi, supra note 20; Francesco Parisi, The Formation Of Customary Law (96th Annual Conference of the American Political Science Association, Washington, D.C.), Aug. 31-Sept. 3, 2000; Francesco Parisi, The Harmonization of Legal Warranties in European Law: An Economic Analysis (presented at 1st International Congress of the Society of European Contract Law, Rome (Italy), June 8-9, 2001); Francesco Parisi, Toward a Theory of Spontaneous Law, 6 Const. Pol. Econ. 211 (1995).
[^34]:    181. Posner, supra note 78; Eric A. Posner, Law, Economics, and Inefficient Norms, 144 U. PA. L. ReV. 1697, 1708-10 (1996).
    182. Richard H. McAdams, Beyond the Prisoners' Dilemma: Coordination, Game Theory, and Law, 82 S. Cal. L. Rev. 209 (2009).
    183. Cooter, supra note 6, at 215; Robert D. Cooter, Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms, 86 VA. L. REv. 1577 (2000).
    184. See Fuller, supra note 26, at 213-14.
[^35]:    185. Ellickson, supra note 12 , at 164.
    186. Group size has been an important feature of game theory research and one that has been much studied. Social dilemma research has shown that cooperation decreases in large groups, partly because players are less identifiable. See David De Cremer \& Geoffrey J. Leonardelli, Cooperation in Social Dilemmas and the Need to Belong: The Moderating Effect of Group Size, 7 Group Dynamics: Theory, Research, and Practice 168 (2003); N.L. Kerr, Illusions of Efficacy: The Effect of Group Size on Perceived Efficacy in Social Dilemmas, 25 J. Experimental Soc. Psychol. 287 (1989); W.B.G. Liebrand, The Effect of Social Motives, Communication and Group Size on Behaviour in a N-person Multi-stage Mixed-motive Game, 14 Eur. J. Soc. Psychol. 239 (1984).
[^36]:    190. Axelrod \& Hamilton, supra note 11, at 1391.
    191. See generally Axelrod \& Hamilton, supra note 11.
    192. While a breakdown in a commercial relationship does not always imply a perfect prisoner's dilemma situation (for example, in a one-shot game, defection may in fact yield a lower payoff than cooperation), here we employ the prisoner's dilemma as the archetypical example of a non-cooperation inducing game.
    193. Axelrod \& Hamilton, supra note 11, at 1391.
    194. Axelrod \& Hamilton, supra note 11, at 1392.
    195. George J. Mailath \& Larry Samuelson, Repeated Games and Reputations: Long-Run Relationships 3 (2006).
    196. See generally Axelrod \& Hamilton, supra note 11.
    197. Mailath, supra note 195, at 2.
    198. Axelrod \& Hamilton, supra note 11.
[^37]:    199. Ridley, supra note 189 , at 65.
    200. Parisi, supra note 20 , at 607.
    201. Id. See also Axelrod \& Hamilton, supra note 11.
    202. E. Maskin, Evolution, Cooperation, and Repeated Games 1 (Inst. for Advanced Study, Sch. of Soc. Sci., Economics Working Papers No. 80, 2007), available at http://www.sss.ias.edu/ publications/papers/econpaper80.pdf.
    203. Axelrod, supra note 11, at 307.
[^38]:    215. Another important point is the problem of the Folk Theorem in repeated games. The Folk Theorem of repeated games holds that "every intermediate possibility between full cooperation and full defection can occur in equilibrium as well." Maskin, supra note 202, at 3. The theory does not favor any one particular strategy over another; even some uncooperative strategies are equally as viable. Here the element of competition has an enormous impact. The Folk Theorem is applied to iterated games in which parties are locked into interaction. For the most part, this is not the case with commercial interaction, where parties can terminate a commercial relationship with a particular party if it is not proving beneficial. Drew Fudenberg \& Eric Maskin, The Folk Theorem in Repeated Games with Discounting or with Incomplete Information, 54 Econometrica 533 (May, 1986).
    216. Benson, supra note 16, at 214.
[^39]:    217. A social dilemma is a more broad term for situations that undermine cooperation. A social dilemma "exists when there is an incentive structure that leads individual actors to take a course of action that produces a collectively undesirable outcome." Toshio Yamagishi, Seriousness of Social Dilemmas and the Provision of a Sanctioning System, 51 Soc. Psychol. Q., at 32.
    218. See Jeremy Waldron, Cosmopolitan Norms, in Another Cosmopolitanism (Robert Post ed., 2006) ("The example of commerce . . . is a prototype of how the mundane growth of repeated contact between different humans and human groups can lay the foundation for the emergence of . . . norms, in a way that does not necessarily presuppose a formal juridical apparatus."); see generally Ellickson, supra note 12; see also Cooter, supra note 6, at 216 (1994); Benson, supra note 4.
    219. Francesco Parisi, Presentation at the 96 th Annual Conference of the American Political Science Association in Washington, D.C.: The Formation of Customary Law (Aug. 31-Sept. 3, 2000).
    220. Id.
    221. Similarly, Akehurst points out "time and repetition are often two sides of the same coin." Michael Akehurst, Custom as a Source of International Law, in 47 Brit. Y.B. Int'L L. 1, 12
[^40]:    227. Or as a "local public good" as Cooter would identify it as he does in fleshing out his alignment theorem. Cooter, supra note 6, at 224.
    228. Parisi, supra note 180 , at 6 .
    229. Fuller, supra note 3, at 233.
[^41]:    230. Robert C. Ellickson, The Market for Social Norms, 3 Am. L. \& EcON. Rev. 1, 3-4 (2001).
    231. Id. at 4.
    232. Benson, supra note 16 , at 209.
    233. Id. at 210.
    234. Id.
    235. Oona Hathaway, Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System, 86 IowA L. Rev. 601, 638 (2001).
[^42]:    236. HayEk, supra note 13, at 37. See also HAyEk, supra note 115 , at 96.
    237. HayEK, supra note 13 , at 50.
    238. Indeed, the evolution of the medieval Law Merchant, in many respects, exemplifies this process. Benson argues that the rules of the Law Merchant evolved in this manner. Benson, supra note 4 , at 659. See also Part I, section B above ("Spontaneous Legal Evolution and the Law Merchant, Old and New").
    239. HAyEk, supra note 13, at 109-10.
    240. Parisi, supra note 20, at 612.
    241. See F.A. Hayek, Competition as a Discovery Procedure, in New Studies in Philosophy, Politics, Economics and the History of Ideas 179 (1978).
[^43]:    247. Trakman, supra note 17 , at 1 .
    248. Benson, supra note 4 , at 658 .
    249. Id. at 660 .
    250. Georg von Wangenheim, Where Do We Stand? Where Should We Go? 2-3 (May 8, 2006) (unpublished manuscript, available athttp://www.cms.uva.nl/acle/seminars.cfm/8FA49328-9C4B-46FA-910E028392FDF3C6).
    251. Their purpose in making this point is to argue that this tendency will induce efficiency in the common law. However, for our purposes, the point to be noted is that the only occasion for inefficient laws to be modified is through actual litigation. See Paul H. Rubin, Why is the Common Law Efficient, 6 J. Legal Stud. 51 (1977) (examining Hayek and Posner's arguments for evolution-
[^44]:    ary efficiency in the law); George L. Priest, The Common Law Process and the Selection of Efficient Rules, 6 J. Legal Stud. 65 (1977) (arguing that inefficient laws will be litigated more frequently than efficient laws, thus evolving toward efficiency).
    252. Bruno Leoni, The Law as Individual Claim, developed from lectures given at the Freedom School Phrontistery in Colorado Springs, Colorado, (Dec. 2-6, 1963), reprinted in Bruno Leoni, Freedom And The Law 202 (1991).
    253. Benson, supra note 4 , at 658.
    254. Macleod-Cullinane, supra note 84, at 1.

[^45]:    255. Many scholars of a law and economics bent draw on the evolutionary model to argue that competition leads to the best (most efficient) legal rules in the common law through the mechanism of litigation. For a good summary of this literature, see Richard A. Posner, Economic Analysis Of Law 2 (4th ed. 1992). See generally William M. Landes \& Richard A. Posner, The Economic Structure of Tort Law (Harvard Univ. Press 1987) (analyzing the efficiency theory in relation to tort law); Paul H. Rubin, Why is the Common Law Efficient, 6 J. Legal Stud. 51 (1977) (examining Hayek and Posner's arguments for legal evolutionary efficiency); George L. Priest, The Common Law Process and the Selection of Efficient Rules 6 J. Legal Stud. 65 (1977) (arguing that inefficient laws will be litigated more frequently than efficient laws, inducing a general evolution towards efficiency). But see Robert Cooter \& Lewis Kornhauser, Can Litigation Improve the Law Without the Help of Judges?, 9 J. Legal Stud. 139 (1980) (arguing that blind evolution will not necessarily lead to efficiency) ; R. Peter Terrebonne, A Strictly Evolutionary Model of Common Law, 10 J. Legal Stud. 397 (1981) (examining the supposition that inefficient rules are litigated more commonly than efficient ones).
    256. Norman, supra note 97, at 44-45.
    257. Id.
    258. HAYEK, supra note 246 , at 58-61. Hayek's "claim is that greater regularity and predictability, and therefore complexity, will exist in orders where the bulk of the rules that govern interdependency have emerged spontaneously." Norman, supra note 97, at 29. From this Hayek goes on to conclude that a greater degree of efficiency may be achieved. Id.
    259. See supra Part I.B.2. ("Early Traces of Spontaneous Law Theory").
[^46]:    266. An evolutionary trap is a situation where the benefit pursued by each individual is not sufficient to compensate for the harm incurred by other member in the group, generating a suboptimal Nash equilibrium. In such cases, the system is not self-correcting, and as a consequence, will continue along this less than efficient path. Parisi, supra note 20, at 616-17.
    267. Benson, supra note 16 , at 210.
    268. Id.
    269. See supra Part I.B.5. ("Spontaneous Legal Evolution and the Law Merchant, Old and New").
    270. Note, Forum Shopping Reconsidered, 103 Harv. L. Rev. 1677, 1677 (1990).
[^47]:    271. Benson, supra note 4 , at 658 .
    272. Id.
    273. See Benson, supra note 265; Benson, supra note 4 , at 658 .
    274. See Benson, supra note 4, at 658; Benson, supra note 265.
[^48]:    275. See generally Bryan Druzin, Buying Commercial Law: Choice of law, Choice of Forum, and Network Effect, 18 Tul. J. InT'L \& Comp. L. 131 (2009).
    276. HAYEK, supra note 246, at 58-61; HAYEK, supra note 13. Hayek argues that the law enables the social coordination of individual expectations, and therefore will outperform competitors through a winnowing process of natural selection. See Todd J. Zywicki \& Anthony B. Sanders, Posner, Hayek, and the Economic Analysis of Law, 93 Iowa L. Rev. 559, 586 (2008); see also Ellickson, supra note 230, at 4; supra Part I.B.2. ("Early Traces of Spontaneous Law Theory").
    277. Cf. Fuller, supra note 26, at 213-14.
    278. See id.
