# AN ECONOMIC ANALYSIS OF LEGAL REASONING

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ABSTRACT

Legislatures have positive legitimacy to make law because of the power of the people who elected them. Throughout the world, however, unelected judges also make law. What, if anything, gives such judges positive legitimacy to make law? This paper demonstrates, through two superficially simple game theoretic models, that judges' positive legitimacy is based on the power of people. Courts' legitimacy has the same basis as legislatures'. Since the French revolution, the ultimate arbiter in the social fight is the strongest faction, the majority. A group of people communicates its type to society at the ballot box. On the basis of the ballot count, society makes concessions to the terms dictated by the majority. Under what circumstances would an individual ever be able to dictate terms to society? This paper demonstrates that the court system allows a single individual to act collectively with other similarly situated individuals spread out through time. This paper argues that this group is able to communicate its type to society through legal reasoning. Courts are insulated from the political process because unelected judges are supposed to be beholden to a temporally disconnected group, rather than to contemporaneous constituencies.

# 1. INTRODUCTION

Public choice theory has a gaping hole. According to the assumptions of democratic doctrine, lawmaking supremacy belongs in elected parliaments or legislatures, rather than in unelected courts. Yet in practice, throughout the world—in the common law system as well as in the civil law tradition—an undeniable amount of lawmaking power is actually wielded by unelected courts. Why is so much lawmaking power put in the hands of democratically unaccountable judges? Perhaps the majority's power, which legitimizes statutory law, also legitimizes case law.

We must bring much-needed conceptual clarity to the subject if we are to avoid illegitimate acts of legislative or judicial overreaching, and ensure democratic accountability under the rule of law.[1] A system of checks and balances vests in the unelected courts the authority to stand up for individual rights against the elected legislature, and vests in the elected legislature the authority to decide policy matters against the unelected courts.

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[1] If supranational institutions are needed to organize the new social reality, may legal scholars in this new century continue to pretend that legislative governance is legitimate while judicial governance isn't?

In this paper, we demonstrate, through two superficially simple game theoretic models, that the majority's power legitimizes both statutory law and case law. It turns out "the law" is nothing more than politics over time.[2] In sum, "the rule of law" is nothing other than synchronic processes of ballot-counting rectified by diachronic processes of analogical reasoning.

Close to 60 years ago Edward Hirsch Levi (1949), who later served as Dean of the University of Chicago Law School, published his highly influential booklet on legal reasoning. Yet no Chicago professor, other than Cass Sunstein (1993, 1996) about 10 years ago, has picked up the intellectual gauntlet thrown down. Let's get one thing straight—every lawyer knows that judges make law. Of course, the truism that judges make law begs the question: how do they make law? It is unbelievable that the community of legal scholars has entered the 21st century without a model to explain the positive legitimacy of judge-made law. Such a significant part of the whole sweep of the legal order is judge-made law. As an argument, this is unassailable, despite a plethora of legislation in the 20th century, despite codification since the 19th century and

[2] In a might-makes-right social order, this paper asks the question where is ultimate might to be found, considering that coalitions of people are notoriously unstable.

judges hiding their powerful and creative role in developing the law, somewhere behind the smoke and mirrors of the interstices of legislation, or in the shadowings, or penumbras, emanating from constitutional provisions. As an argument, this is unassailable, no matter how much Charles-Louis de Secondat Montesquieu (1748) denied it, when he asserted famously that judges are merely "mouthpieces of the letter of the law; passive beings, incapable of moderating either its force or rigor." How can we go on without a model to explain the legitimacy of case law, when case law is ubiquitous throughout legal history and continues to be a source of legal creativity in the common law system as well as in the civil law tradition? This poverty of thought, which distorts legal doctrine, despite an orgy of ostensible scholarship on both sides of the Atlantic, is unwise at best and potentially dangerous at worst.

The normative account of what legitimizes the lawmaking powers of majority rule seems a clear and well-settled doctrine. However, that appearance can be deceptive. Its greatest exponent, Jean-Jacques Rousseau (1762), bravely stated, "the law is the expression of the general will." Today's scholars use more up-to-date terms like "collective preferences"; yet to speak about "the will of the people" (popular will)—or for that matter about "the preferences of the majority" (majoritarian preferences)—is incoherent and pointless because

collective preferences do not even exist at all.[3] At least since the 1950s, after Kenneth Arrow (1951) published his impossibility theorem, scholars have known that it's impossible to devise a transitive and nondictatorial mechanism that would effectively aggregate the divergent preferences of individuals into an ordinal ranking of social preferences. This result irreparably dooms any hope that a collective or discursive rationality could lend a normative sense of legitimacy to law.[4]

What is left is the positive account: what James Madison (1810) called the "superior force of an interested and overbearing majority." Surely this cannot be the case. It seems odd and contradictory that the legitimacy of the law—the obligation to obey the law—could be anything but normative. Even purely positive law doctrines give the impression of reintroducing natural law by the back door, when they explain the legitimacy of law through a rule of recognition (H.L.A. Hart 1961) or *Grundnorm* (Hans Kelsen 1934) in order to

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[3] Coalitions of people are actually made up of many different—and sometimes even contradictory groups—which temporarily come together to engage in collective action (See Dahl 1956).

[4] The institution building that will follow in the 21st-century can no longer continue to rely primarily on the republican blueprints that were laid back at the end of the 18th-century.

escape from the trap of circularity? Are we ever, then, to eliminate natural law from legal discourse? What is entailed in a purely positive account of the legitimacy of statutory law, of case law?

Positive law and economics and positive political theory converge in a forward-looking book by Robert Cooter (2000). He employs economic methodology to address the strategic problems that institutional, especially constitutional, design must solve. Yet he ignores the constitutional dimension of individual rights. Rather, he treats individual rights as matters of public policy. In response, Eric A. Posner (2001) explains about public choice theories of constitutional rights: “There are no such theories, not in Cooter's book and not elsewhere in the literature. . . It may be that public choice, and rational choice in general, have nothing distinctive to say about constitutional rights.”

Over the last 40 years, a veritable cottage industry of public choice scholarship has sprouted up. From an interest-group perspective, this literature seems to delegitimize society's chief lawmaking institutions. The focus of much of this scholarship is on the agency problems endemic in core legislative institutions comprised of elected representatives (see Daniel A. Farber and Philip P. Frickey [1991], for a valuable though somewhat outdated survey,) and in core

judicial institutions comprised of unelected judges (see Maxwell L. Stearns 1995). Rather than repeat this literature, we skirt agency problems. Society's chief lawmaking institutions can be modeled without elected representatives or unelected judges.[5] By removing the agents of power, we reveal that substratum of power relations that lies beneath society.

This paper attempts to model the majority's power to legitimize both statutory law and case law. The legitimacy of case law, it turns out, is related (but not identical) to the legitimacy of statutory law. Accordingly, in section 2 of this paper, we first develop a game theoretic model of the purely positive legitimacy of statutory law. This part of the paper will only make explicit the suppositions that underlie much well-settled positive political theory regarding democracy. We acknowledge the obvious. There is nothing new in this part of the paper—no philosophy, theory, insight, perception, or pronouncement—that hasn't been, in some shape or form, expressed by someone before, and, for that matter, just as surely will be again. Only after this model is made explicit as the Che Guevara signaling game and graphically represented in the extensive form, do we attempt, in section 3 of this paper, to model the purely

[5] Recall a Swiss popular assembly or an Athenian popular court.

positive legitimacy of case law, which we advance as the Saint Thomas More signaling game.

This paper makes clear at the outset that while judge-made law is ubiquitous throughout the world, it is also minimalist and casuistic. Case law proceeds in small, incremental steps; it construes rights narrowly, through case-by-case decisions, unlike statutory law which defines policy matters broadly.[6] Moreover, case law is fact-specific. When judges decide cases, their decision cannot be abstracted from the facts of a case. Nor can a reason or principle necessarily be induced.[7] Case law is not about extracting any coherent ratio decidendi from a case. Nor do judges solemnly set out the ratio decidendi of cases. Rather, the holding of a case is inseparable from its report of the facts, with a decision.

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[6] Legislatures can make durable statutory law because the courts enforce those statutory standards (see Richard A. Posner and William M. Landes 1975; William F. Shughart II and Robert D. Tollison 1998). Here courts are asked to apply a legislatively-created right to facts clearly contemplated by the legislature.

[7] This paper breaks free of the distinctively rationalist vocabulary of process that has beguiled generations of civil trained lawyers and even prominent common law judges such as Benjamin N. Cardozo (1922). For an excellent general discussion, see Lloyd L. Weinreb (2005).

Also at the outset, we make clear what our methodology is. Rational choice assumptions do not present a problem in this paper when modeling rational, calculating, optimizing behavior across a temporal dimension.[8] In both game theoretic models, the players are assumed to be rational decision-makers maximizing their utility payoffs, and endowed with cognitive capacity to understand the rules of the games as well as the other players.[9] Legal

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[8] Criticisms in terms of its underlying assumptions about human knowledge and cognitive capacity are at least as old as the model of rational choice itself. In the 5th century, Augustine (1929, bk. 22), who articulated the doctrine of free choice and autonomy as the self who is a law unto himself, also articulated the doctrine of heteronomy, as the self's need for systems of external authority (law and religion) to impose direction upon life. Edmund Burke (1790) would turn the same doctrine in the 18th century into an argument on the necessity to respect the continuity of traditions, institutions and cultural practices of a people—the inheritance of dead generations, due to generations as yet unborn. In essence, Burke's contribution is an argument from a perspective of bounded rationality against the abstract programs of the French revolution to uproot traditional values and institutions.

[9] This paper assumes that Homo sapiens are intelligent, resilient, adaptable, organized animals which exhibit both allelomimetic and agonistic behavior. Even though incommensurate alternatives cannot be sorted out by reason, and disputes over rivalrous goods break out, this paper argues that communication is still possible even as the outbreak of violence seems inevitable. Homo sapiens communicate without resorting to hooting, strutting, ground-thumping, or chest-beating. Law is an outward manifestation of the signaling system of credible threats of violence in human populations.

reasoning by analogy is not an exercise in divination, but the extension of an empirical judgment about a non-abstract (concrete, ripe) injury across the temporal dimension. Our point is if oracles were possible, legislatures and not judges should consult them. In this sense, this paper departs radically from the nonsense literature attempting to take account of the preferences of future generations (see Anthony D'Amato 1990; R. George Wright 1990; G.F. Maggio 1997; Lisa Heinzerling 1999; Aaron-Andrew P. Bruhl 2002; John Edward Davidson 2003; at least Richard A. Epstein [1989] injects some common sense into this debate.)

Judges look to the facts of a present situation, and make a probabilistic inference by analogy that an empirical judgment may apply from past similar-fact cases, and also may have a bearing in future similar-fact cases. The perspective is present-centered because judges use only information available in current-state knowledge, and their decisions are primarily controlled by the immediate situation before them. Nonetheless, judges are radically past- and future- as well as present-oriented. They do not ignore or deny things in the immediate situation. However, they also combine their present-centered perspective with a kind of long-term, future-oriented approach to legal reasoning, as well as making a veritable dogma of the past. Judges rule in the present, revere the past and, at the same time, think about the future. They are

not seers because their vision of the future reflects past or present experience rather than developing a vision of life different from the past or present.[10]

Reasoning by analogy is an innate human ability. Well, yes. In both game theoretic models in this paper, the players are assumed to have the cognitive capacity to recognize in probabilistic, not deterministic, terms the considerable potential for similar, or worse, situations—that are presently before them, and which may have occurred in the past—to recur in the future.

The point of the debate over the legitimacy of both statutory law and case law as a positive matter is to distinguish those signals that are credible threats of violence from instances of strategic deception. Society must decide whether to heed the signal or to ignore it and attack. The point of signaling is to get information across that will avoid unnecessary violence.

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[10] Judges' own experience in handling multiple cases with similar facts gives them a sense of the recurrence, or continuity, of human experiences. In the judicial mind, the cyclical view of time prevails. However, in the actual labyrinth of life, judges also learn that recurrence cannot be trusted, as every case may be different.

In this paper we argue that politics and law are attempts, from within liberal theory, to make a place for difference and incommensurable ways of life. How does a liberal regime allow its citizens to pursue their diverse and incommensurate aims? How can we find freedom in an intrusive, dominating, relentlessly coercive society? We show how incommensurate pluralism in society is possible despite the legitimate overbearing coercive order under the rule of law.

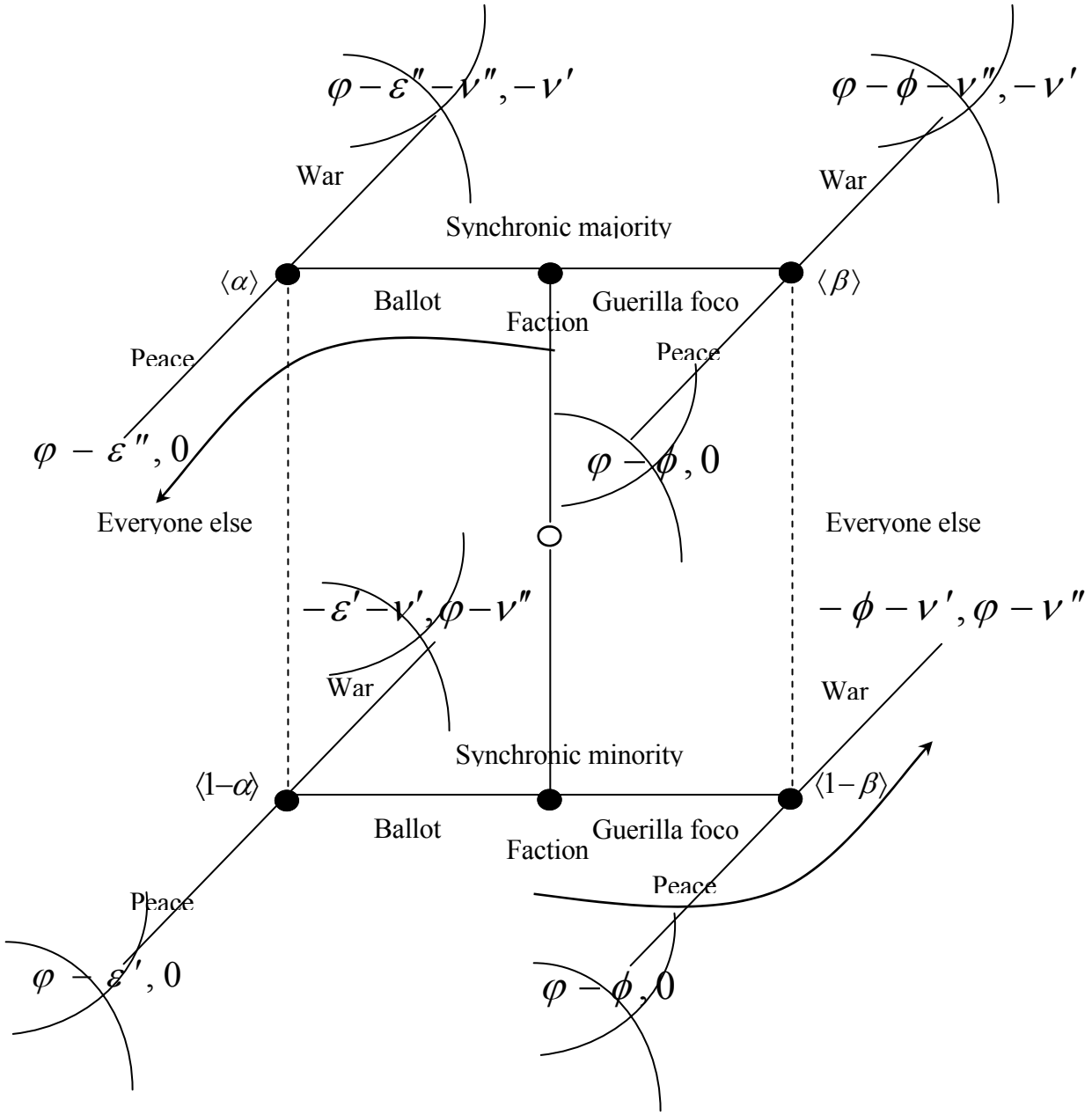
## 2. CHE GUEVARA SIGNALING GAME

To model the legitimacy of statutory law, we attempt a game theoretic approach. Consider the following extensive form game, which we'll refer to as the Che Guevara signaling game, involving nature, as well as faction and everyone else—two collectives of players or collective players, that is, N={0, faction, everyone else}. Nature moves first and determines whether faction is one of two types: a synchronic majority, or a synchronic minority, that is, $T_f$={synchronic majority, synchronic minority}. Faction is able to observe nature. As a result, the faction knows its own fighting ability, and that of its opponent, everyone else. Everyone else is unable to observe nature. As a result, everyone else remains ignorant of its own fighting ability, or that of its opponent, faction. Faction must choose without delay to communicate its type to everyone else either through a performance signal, or a strategic signal. In the Che Guevara signaling game, the performance signal is a ballot count, and the strategic signal is a guerrilla foco, that is, $C_f$={ballot count, guerrilla foco}. After receiving the signal, everyone else must choose between whether to wage war or declare peace, that is, $C_e$={war, peace}.

Since the path of play depends on the variable costs of signals and of impending violence to the players as well as the value of the rivalrous good, we define the following variables: In this model, $\varepsilon'$ is the cost of an election campaign to the minority, $\varepsilon''$ is the cost of an election campaign to the majority, and $\phi$ is the cost of leading a guerrilla foco. $\nu'$ is the costs of social conflict to the minority. $\nu''$ is the cost of social conflict to the majority. In this model, $\varphi$ is the present value of the rivalrous resource that is sought after, from the universe of what is politically attainable, $\left\langle \varphi \in \Gamma \middle| \varphi \rangle\rangle \phi \oplus \varepsilon' \oplus \varepsilon'' \right\rangle$. $\alpha, \beta$ are the beliefs that nature has made faction a synchronic majority. $1-\alpha, 1-\beta$ are the beliefs that nature has made faction a synchronic minority. The set of all possible strategy profiles is S∈{ballot count, guerrilla foco}×{war, peace} ≡{(ballot count, war), (guerrilla foco, war), (ballot count, peace), (guerrilla foco, peace)}. The payoff vectors for each strategy profile are displayed next to the corresponding terminal nodes in the extensive form of the game below.

We are interested in a certain subclass of the decisional space of the Che Guevara signaling game where the following conditions hold: The cost of an election campaign to the minority is much greater than the costs of leading a guerrilla foco, $\varepsilon' \rangle\rangle \phi$. The cost of leading a guerrilla foco is much greater than

the cost of an election campaign to the majority, $\phi \rangle\rangle \varepsilon''$. The cost of social violence in human life and destruction is immense, $\nu', \nu'' \rangle\rangle 0$. The cost of social conflict to the minority is much greater than the cost of social conflict to the majority, $\nu' \rangle\rangle \nu''$. The present value of the rivalrous resource is greater than the cost of social conflict to the majority, $\varphi \rangle\rangle \nu''$. Where these conditions are given, we find that the Che Guevara signaling game yields a perfect Bayesian separating equilibrium.


$\varphi-\varepsilon''-\nu'',-\nu'$
$\varphi-\phi-\nu'',-\nu'$
War
War
Synchronic majority
$\langle\alpha\rangle$
$\langle\beta\rangle$
Ballot
Faction
Guerilla foco
Peace
Peace
$\varphi-\varepsilon'',0$
$\varphi-\phi,0$
Everyone else
Everyone else
$-\varepsilon'-\nu',\varphi-\nu''$
$-\phi-\nu',\varphi-\nu''$
War
War
Synchronic minority
$\langle 1-\alpha\rangle$
$\langle 1-\beta\rangle$
Ballot
Faction
Guerilla foco
Peace
Peace
$\varphi-\varepsilon',0$
$\varphi-\phi,0$

*Lemma 1:* In social conflict over a rivalrous good, where $\varepsilon' \rangle\rangle \phi \rangle\rangle \varepsilon''$, $\nu' \rangle\rangle \nu''$ and $\varphi \rangle\rangle \nu''$, communication still happens between the parties, through a ballot count, despite a strong "incommensurability thesis." Hence, legislatively-enacted statutory law is given purely positive legitimacy.

Yet, we could change these conditions in any number of ways. Another subclass of the decisional space of this game, which we find interesting, reveals where a "rational" Che Guevara would be willing to take his comrades into the jungles and mountains.[11]

*Lemma 2:* In social conflict over a rivalrous good, in the subgame where $\varepsilon'' \rangle\rangle \phi \rangle\rangle \varepsilon'$ and $\nu'' \rangle\rangle \nu'$, communication still happens between the parties, through a guerilla foco, despite a strong "incommensurability thesis." Hence,

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[11] Let us not forget that the "real life" Che Guevara ached for the Cuban Missile Crisis to escalate into a nuclear holocaust that would destroy the United States. Jon Lee Anderson (1997) goes into some detail about the relish with which, upon gaining power in Cuba in the first months of 1959, the "real life" Che Guevara oversaw an estimated 550 executions of those considered enemies of the revolution. Several books about the foco ascribe its failure in large part to the complete absence of popular support, see Matt D. Childs (1995).

under these conditions, a rational Che Guevara champions a revolutionary foco.

A strong "incommensurability thesis," embodies the idea that there is a sharp, unbridgeable gap between different discourses about, and views of, the world. When we say that conceptual schemes and values are incommensurable, we mean that they are incomparable by any rational measure.[12] There exists no purely rational framework for making social choices about which ways of life are preferable.[13] Society is pluralistic.

A ballot count is something objective and unambiguous, unlike a nucleus of determined fighters who take to the mountains and jungles and claim to speak on behalf of a majority of the people. Performance signaling occurs when

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[12] A strong "incommensurability thesis" abandons our comfortable illusions that the various monisms that imprison the varieties of human experience and human thought in a single ideology or creed, may make social coherence possible.

[13] The existence of incommensurable concepts of the good and the consequent need to make choices between them undermines the Enlightenment faith in a rational morality. Values are in conflict. A divided, pluralistic society is tumultuous scene of competing and incommensurable views of order, of vastly different if not outright contradictory modes of comprehension, of different moral and religious traditions, of differing standpoints or conceptual schemes, of overlapping and contradictory objectives.

signalers send out signals that others are unable to mimic, much in the same way that not everyone is able to perform piano works of Tchaikovsky, Liszt and Shostakovich; or violin pieces by Chausson, Saint-Saens and Prokofiev. Performance signals are so costly to produce for some signalers that they cannot profit from their use. Performance signals may be both self-enforcing, in which the non-mimicry constraints arise from within a signal itself, and reinforced by non-mimicry constraints imposed from the outside.[14] Strategic signals, on the other hand, are signals that all signalers may be able to transmit because the choice of the signal stems from a less marked difference in rates of return between signalers and receivers. Ultimately, all signals are stabilized by costs, but strategic signaling may be unreliable and particularly vulnerable to cheating.

To deny that a faction may cheat in an election is naïve. A faction strongly desiring to perpetuate an election fraud has many workable options, depending on the polling method in use. For example, the faction may cast votes in the names of dead persons not yet purged from a register, forage voting registers,

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[14] Self-enforcing signals are sometimes referred to in the literature as "spence signals" (see Michael Spence 1973.)

list ineligible persons as eligible, use substitutes with forged identity documents to vote in place of registered voters. In some systems, a voter may vote more than once—either by going more than once to a polling place or by depositing more than one voting record during a single visit to a polling place. Additionally, a faction might print or distribute unofficial ballot slips already marked with choices and, somehow, smuggle these slips into the pile of votes already cast. The faction may be able to manipulate the counting process, or influence members of the electorate, for example, harassing, threatening, bribing, or intimidating, voters. Voters may be prevented from voting by violence or disorder near polling places.

Yet perpetuating a wholesale electoral fraud may be an expensive undertaking for a faction. Moreover, the irregularities and cheating during voting may destroy public acceptance of the announced results; here the cost for the signaler arises, not from the cost of perpetrating the fraud, but from the receivers' reactions. All the related costs involved in an attempt to pervert the course of an election make a ballot count a performance signal.

It is not entirely socially unrealistic to assume that numbers matter in the urban and rural setting of factional strife. Even professional troops and trained militias may be unwilling to open fire on groups of civilians. We assume that

the costs of social conflict are invariable with respect to the absolute sizes of the majority and of the minority. Only their relative sizes count. To expect that forming a coalition involves a lengthy process of dialogue and consultation that makes such groups self-aware is not entirely socially unrealistic. However, as in the case of the formation of a coalition, the costs involved in maintaining an existing unstable, internally-divided coalition may be prohibitive. Accordingly, the faction may only remain self-aware for a limited amount of time.

That a majority faction of the people is willing to stand up and fight on an issue worth $\varphi$ conveys information to everyone else about the relative costs of social warfare, and makes the threat of violence credible. Safe and secure in its victory, a self-aware majority is not only ready and willing but seems almost eager to engage in violence against the now powerless minority on the issue. The threat is credible and imminent because the outcome of the struggle is predictable. Otherwise, social violence is generally a non-credible threat. The destructive nature of any violent activity means that it is costly for anyone to resort to social warfare. The sensitivity of people to a threat of social violence decreases once their affairs are thrown into turmoil. After the violence breaks out, people become desensitized.

Since the sacrifice involved in committing to a guerrilla foco, or undertaking any other terrorist activity, is quite high, even suicidal, a legal enactment passed by the overwhelming majority of the people has more threat value than a dozen bombs set off by a terrorist organization. All in all, we claim, a clear and unambiguous ballot count is a performance signal of the synchronic majority backing for the legislative initiative that is voted into law. Statutory law is legitimate in so far as the barely submerged threat of the majority to compel the minority through the force of arms is brought credibly to bear in the arena of social conflict. Society surrenders to the inevitable ascendancy of the majority, rather than accept bodybags as the necessary concomitant of a social engagement. We strip the political process down to its bare agonistic essentials, and find that in social conflict over a rivalrous good, under the stated conditions, communication still happens between the parties.

Legal legitimacy is a concept that can be given purely positive content.[15] An attentive observer may have noticed that the Che Guevara signaling game, which strips political confrontation down to its agonistic essentials, does not remove nature. It's not that we deny the role of nature; far from it. In a Bayesian game with incomplete information, nature must move before the players have learned their types, however interpretively awkward that may be (John C. Harsanyi 1967-1968). The role of nature in the Che Guevara signaling game is undeniable. Nature must determine the type of faction. However, retaining nature should not be confused with retaining natural law. Natural law assumes that nature has in itself powers of reason. We make no such assumption. Moreover, the path dependent processes (see Stearns 1994)

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[15] The majority's power—whether of a synchronic majority or of a diachronic majority—legitimizes positive law. Questions about coercion, and free will, arise about what people can avoid. To make an analogy with natural law, we reconcile ourselves to something undesirable but unavoidable and subordinate or yield our will or reason to a higher power, such as God. Moreover, this submission and surrender of our will to the higher authority of the all-powerful majority is more like a stoic posture towards fate than a variation of the Hostage Identification Syndrome (see Georges Gachnochi and Norbert Skurnik 1992) whereby people accept the domination of their erstwhile oppressors, though the armchair nihilist might deny the significance of the distinction (see, for example, Roger Berkowitz 2003).

through which coalitions are formed, represented in our model by nature, do not depend on any collective or discursive rationality.

The legitimacy of law does not involve, nor does it require, a normative justification. Nor does it require a normative, communicative, rational discourse to form part of the democratic decision-making process.[16] The perfect Bayesian separating equilibrium which we demonstrate if the conditions mentioned are given, although it is dictatorial, is not tyrannical—as we will also demonstrate in the Saint Thomas More signaling game, in the next section. The rule of tyranny is the opposite of the rule of law; it is rule by illegitimate dictatorial commands. In the next section, we complete our examination of performance signaling of legitimate, dictatorial legal regimes in human populations. The legitimacy of statutory law, it turns out, is related (but not identical) to the legitimacy of case law.

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[16] Jürgen Habermas (1973, 1981, 1992) spent much of his life arguing the opposite. Furthermore, history does not have in itself powers of reason, despite the importuning of Georg Wilhelm Friedrich Hegel (1807). Rather than stay committed to the centrality of dialogue and debate in democracy and the rule of law, let us recognize politics and law for what they are: attempts to reconcile our discordant, incommensurable values and interests.

Again and again, in everyday parlance, we thrust forward the phrase "the rule of law" as a kind of rhetorical flourish, even fetish. Yet was Grant Gilmore (1977, pp. 105-06) right to hold 30 years ago that rule-of-law ideals are more rhetorical than real? The economic analysis of legal reasoning brings an unexpected benefit: an entirely new approach to that fundamental and highly visible phrase "the rule of law," a concept that is notoriously hard to define. The rule of law captures for us the legitimacy of "the law," as opposed to nonlaw. We are able to define this concept in positive, not normative, terms using economic methodology, with greater precision than ever before. Otherwise, the rule of law rings hollow as a thin and well-worn platitude.

Unless we achieve sharp conceptual clarity in these matters, we might find thrust upon us a process not dissimilar to the 1930s Nazification of Germany or the 1940s and early 1950s Peronization of Argentina. In the treacherous, volatile and brutal world that we inhabit, is natural law necessary to avoid another ethnic cleansing, or another period of New Deal-type social democracy? Almost 70 years ago, Lon Fuller (1940, p. 116) led the call for a

revival of natural law.[17] The problem with natural law is: whose reason is reasonable? How can a legitimate, legal regime be conceived, in normative terms, when reasonable people differ about what is self-evident?

[17] Fuller may have been more concerned about the economic interventionism of the New Deal than the Nazi juggernaut. It has now been 50 years since Fuller's (1958) famous debate with Hart (1958).

## 3. SAINT THOMAS MORE SIGNALING GAME

Despite the rapid expansion of statutory law in the 20th century (see Guido Calabresi 1982), legislatures did not create most of the rules of private law; judges did—Roman law, as well as English common law. A great deal of public law is also judge-made—the federal and constitutional doctrine of the United States of America in the 19th and 20th centuries, and the large body of public law developed by courts in the administrative system of the crown of Castile in the Americas and the Philippines in the 16th and 17th centuries (see del Granado 2008). For that matter, much of the public law being created in the European Union in the last 60 years is also judge-made law. We must model the legitimacy of law and lawmaking in a way that accurately reflects what everyone knows about the legal system: Both legislators and judges do make law and always have. Case law carries the same force of law as statutory law; it is "the law" for us, not non-law. Moreover, to function well, core legislative institutions comprised of elected representatives must be supplemented by other, non-elected bodies, like courts. Again, we remove the

agents of power altogether,[18] and attempt a pure agonistic, ludic distillation of human struggles.

To model the legitimacy of case law, we shall again take a game theoretic approach. Consider the following extensive form game, which we'll refer to as the Saint Thomas More signaling game, involving nature, as well as faction and everyone else, two collectives of players or collective players, that is, N={0, faction, everyone else}. Nature moves first and determines whether the faction is one of two types: a diachronic majority, or a discreet and insular minority, that is, $T_f$={diachronic majority, discreet and insular minority}. Faction is able to observe nature. As a result, faction knows its own fighting ability, and that of its opponent, everyone else. Everyone else is unable to observe nature. As a result, everyone else remains ignorant of its own fighting ability, or that of its opponent, faction. Faction must choose without delay—especially if it is presently as small as a single individual—to communicate its type to everyone else either through a performance signal, or a strategic signal. In the Saint Thomas More signaling game, the performance signal is a legal argument made by analogy from a particularized, concrete injury, and the

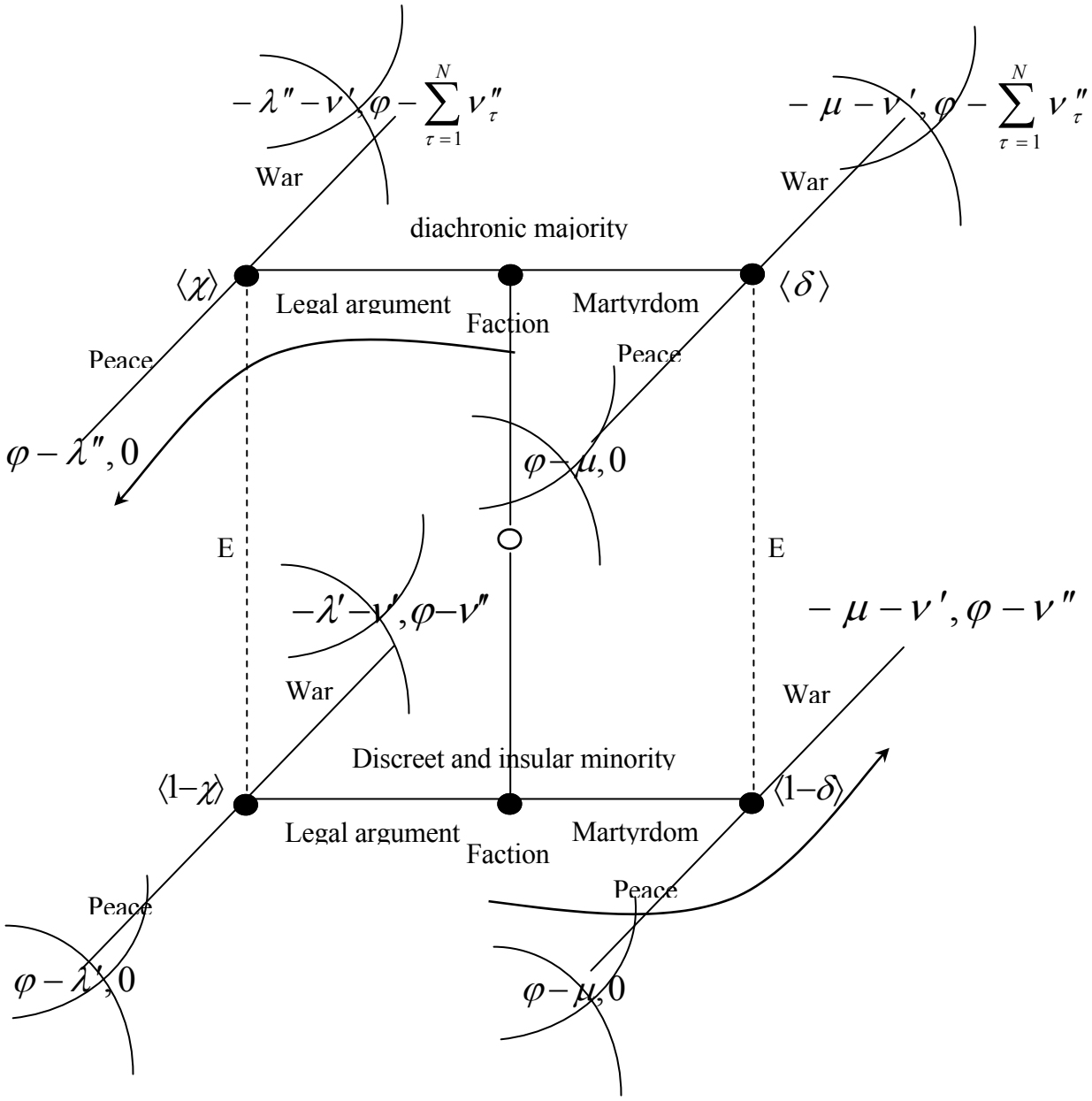
[18] Our analysis does not require Kings or Queens, ministers, magistrates, or judges of any kind.

strategic signal is a stance of martyrdom, that is, $C_f$={legal argument, martyrdom}. After receiving the signal, everyone else must choose between whether to wage war or declare peace, that is, $C_e$={war, peace}.

Since the path of play depends on the variable costs of signals and of impending violence to the players as well as the value of the rivalrous good, we define the following variables: In this model, $\lambda'$ is the cost to a discreet and insular minority of mounting a convincing legal argument, $\lambda''$ is the cost to a diachronic majority of mounting a convincing legal argument, and $\mu$ is the cost of martyrdom. $\nu'$ is the cost of social conflict to the discreet and insular minority. $\nu''$ is the cost of social conflict to the diachronic majority. In this model, $\varphi$ is the present value of the rivalrous resource that is sought after, from the universe of what is legally attainable, $\left\langle \varphi \in \Gamma \middle| \varphi \right\rangle \rangle\, \mu \oplus \lambda' \oplus \lambda'' \Big\rangle$. $\chi, \delta$ are the beliefs that nature has made faction a diachronic majority. $1-\chi, 1-\delta$ are the beliefs that nature has made faction a discreet and insular minority. The set of all possible strategy profiles is S∈{legal argument, martyrdom}×{war, peace}≡{(legal argument, war), (martyrdom, war), (legal argument, peace), (martyrdom, peace)}. The payoff vectors for each strategy profile are displayed next to the corresponding terminal nodes in the extensive form of the game below.

Inasmuch as game theory is the introduction of time into mathematics, the extensive form allows the sequence of actions and responses to be graphically depicted. There are only two types and four actions—two signals and two possible responses.

We are interested in a certain subclass of the decisional space of the Thomas More signaling game where the following conditions hold: The cost of mounting a convincing legal argument to a discreet and insular minority is much greater than the cost of martyrdom, $\lambda' \rangle\rangle \mu$. The cost of martyrdom is much greater than the cost of mounting a convincing legal argument to a diachronic majority, $\mu \rangle\rangle \lambda''$. The cost of social violence in human life and destruction is immense, $\nu', \nu'' \rangle\rangle 0$. The costs of recurrent violence over time is greater than the present value of the rivalrous resource, $\sum_{\tau=1}^{N} \nu''_{\tau} \rangle\rangle \varphi$. Where these conditions are given, we find that Thomas More signaling game yields a perfect Bayesian separating equilibrium.


$-\lambda''-\nu', \varphi-\sum_{\tau=1}^{N}\nu''_{\tau}$
War
$-\mu-\nu', \varphi-\sum_{\tau=1}^{N}\nu''_{\tau}$
War
diachronic majority
$\langle\chi\rangle$
Legal argument
Faction
Martyrdom
$\langle\delta\rangle$
Peace
Peace
$\varphi-\lambda'', 0$
$\varphi-\mu, 0$
E
E
$-\lambda'-\nu', \varphi-\nu''$
$-\mu-\nu', \varphi-\nu''$
War
War
Discreet and insular minority
$\langle 1-\chi\rangle$
Legal argument
Faction
Martyrdom
$\langle 1-\delta\rangle$
Peace
Peace
$\varphi-\lambda', 0$
$\varphi-\mu, 0$

*Lemma 1:* In social conflict over a rivalrous good, where $\lambda' \rangle\rangle \mu \rangle\rangle \lambda''$, $\nu' \rangle\rangle \nu''$ and $\sum_{\tau=1}^{N} \nu''_{\tau} \rangle\rangle \varphi$, communication still happens between the parties, through a legal argument made by analogy from a particularized, concrete injury, despite a strong "incommensurability thesis." Hence, judicially made case law is given purely positive legitimacy.

Yet, we could change these conditions in any number of ways. Another subclass of the decisional space of this game, which we find interesting, reveals where a "rational" Saint Thomas More would be willing to lay down his life in a stance of martyrdom.[19]

*Lemma 2:* In social conflict over a rivalrous good, in the subgame where $\lambda' \rangle\rangle \mu \rangle\rangle \lambda''$ and $\nu'' \rangle\rangle \nu'$, communication still happens between the parties, through a stance of martyrdom, despite a strong "incommensurability thesis."

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[19] It is instructive to remember five centuries ago Sir Thomas More, lord chancellor in one of England's most dangerous periods, amid the initial split between Catholics and Anglicans, or English Protestants, and the onset of the religious wars, embraced martyrdom rather than swear a false oath to King Henry VIII's Act of Succession. To those assembled at the scaffold, he said that he died "the King's good servant, but God's servant first" (see David Halpin, 2001.)

Hence, in these conditions, a rational Saint Thomas More embraces martyrdom.

Unlike an ideologue bent on martyrdom, in order to bring a legal action, a litigant must show a concrete injury-in-fact.[20] This requirement enables legal reasoning to draw analogies from a concrete injury liable to be repeated over time. An ideological litigant—a discreet and insular minority—is unable to point to this type of particularized injury. At most, an ideological litigant may press home policy arguments.[21]

Legal argument is a performance signal because the litigant is able to demonstrate an actual or imminent injury-in-fact, and through reasoning by analogy unfolds a parable of horribles, alluding to other particularized instances of harm which preceded it or are likely to follow it. It should be

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[20] The justiciability doctrines—standing, ripeness, mootness, and the political question—must be strictly applied for case law to be legitimate.

[21] The doctrines of justiciability of standing (common law system) or *actio* (civil law tradition) must not conflate injury-in-fact with an injury to a zone of interests protected by statutory law. An injury can be both to a zone of interests defined as a matter of public policy and an actual injury sufficiently personal and concrete that a litigant could analogize from it. Courts make case law, which may shape new rights, or may extend legislatively-created rights to facts not previously considered by the legislature.

noted that what makes a legal argument by analogy from long-standing precedents or particularized showings of future harm unduly expensive for ideological litigants is that their harm is more conjectural and speculative. Ideological litigants' legal arguments seem hardly real and not credible when made in the abstract, with unsubstantiated and potentially misleading allegations of fact, precisely because of the difficulty of looking around the temporal corner. Again, the non-mimicry constraints are both internal, and imposed from the outside by the receivers' reactions.

Actually, the role of courts in the legal process is not to extend a mantle of protection over discreet and insular minorities, however much John Hart Ely (1980) insists that this function lies at the core of judicial responsibilities. As a positive matter, it is socially realistic to suppose that quite the opposite happens. Courts dispense with discreet and insular minorities—the term used by Justice Harlan Fiske Stone in "the Footnote" in *United States v. Carolene Products Co.* (304 U.S. 144, 152 n.4 [1938]). Judicial review is not "a counter-majoritarian force"; much less is it a "deviant institution" in democracy. There would be no positive justification for a counter-majoritarian institution in the political process. Would such an institution not instigate a revolution against it? Why have the Anglo American people not plunged into an incarnate revolution against the Supreme Court, and against all courts and lawyers?

Wasn't the French revolution provoked by the actions of the Parliament of Paris? Alexander M. Bickel's (1962) approach has led several generations of common law scholars astray, and misses the very point of legal reasoning across time, which works by analogy.

While the vigilant and courageous nonelected courts are required as an occasional counterpoise to the elected legislature, it is to promote durable statutory law (Judge Posner's [1973] thesis) and to define and protect, by accretion of case law, the interests of a diachronic majority (the proposal we make). In game-theoretical terms, the signal given by a diachronic majority is similar (but not identical) to the signal sent out by a synchronic majority. The legitimacy of statutory law, it turns out, is related (but not identical) to the legitimacy of case law. An enactment passed by the overwhelming majority of the people becomes a legitimate legal command because the outcome of the social struggle on that issue is predictable. Society simply submits to the inevitable domination of the majority in order to avert pointless bloodshed. In contrast, the sentence handed down after a court proceeding becomes an unqualifiedly legitimate legal command not on account of the result of the social struggle, but because the diachronic majority will put up a struggle even in the face of a possible crushing defeat or complete annihilation.

Let us explain why. If a discreet and insular minority were to attempt to dictate its preferences on the rest of society, the majority would simply crush it, that is, wipe it out of existence. The majority might decimate the faction, or even obliterate it and its lineage, that is, completely annihilate it from time.

Yet a diachronic majority is different. A diachronic majority is composed of people, who while sharing concrete interests, exist at different times in the past, present, and in the future (though future identities remain indeterminate.) Due to the transaction costs of existing communications (upstream) as well as time paradoxes (see Derek Parfit's [1984] thought experiments), this group is unable to meet or assemble into coalitions. However, if each person puts up a present struggle (however unequal this struggle may be,) and in turn is annihilated, society is unavoidably faced with recurrent crises of violence over time. Unrelated injured parties reappear, willing to engage society to assert analogous interests. Strategically speaking, it is not individually unrealistic to expect that the injured parties find it rational to put up a fight where defeat would be otherwise absolutely certain, secure in the knowledge that a numerous group of people spread out through time, in turn, fight on a same issue. The diachronic majority dares to face off against everyone else because it is self-aware through the very same process of legal reasoning. This struggle takes place within reconstituted, present and imaginary time. One moment a

diachronic faction seems to have self-immolated. The next it is reborn, like the Phoenix bird, literally rising up out of its ashes. Accordingly, through legal reasoning by analogy, diachronic majorities are able to signal threats that are credible because of the recurrent violence that is expected over time. Through the jurisdictional activity of courts, society makes the necessary concessions to these analogous interests, in order to pre-empt these recurrent, violent disruptions and outbursts from breaking out.

It is precisely empty cores, the relentless pattern of cycling in the world of politics, which prevent a discreet and insular minority—or a majority or even super majority for that matter—from maintaining itself over time. The byzantine politics of fluid allegiances between people, a Sisyphean hell of endless negotiation and re-negotiation, has a logic all its own. Today, ideological interest groups are part of the faction. Tomorrow, they ask themselves if a new faction will be unified enough to hold the political line.[22]

That a diachronic majority of the people is willing to put up a fight on an issue worth $\varphi$ despite near-defeat and annihilation conveys information to everyone

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[22] As much as Gerry Mackie (2003) would like to deny it.

else about the relative costs of social warfare, and makes the threat of violence credible. Self-aware of the nature of its recurrent struggle, the diachronic majority faces off against society.

We do not discount the costs of the recurrent violence expected from a diachronic majority over time. The value of the threat shortly decreases after society is swept over by violence. Yet to assume that recurrent violence regenerates this threat is not entirely socially unrealistic. Accordingly, we assume that the costs of recurrent violence to everyone else add up over time, $\sum_{\tau=1}^{N} \nu''_{\tau}$. We observe that recurrent violence only brings poverty and deprivation for everyone else.

The legal scholar may feel uncomfortable with the reductive assumptions of the model. We lump together the decision to bring a legal action and adjudication of the dispute inter partes. We make short shrift of the adverserial/inquisitorial distinction in legal process. We put aside the tripartite structure of dispute resolution. Our focus is rather on private/public law litigation erga omnes. In case lawmaking, the party structure is not bipolar, but rather multipolar, with plaintiff classes defined by a common individuated injury-in-fact standing against everyone else, or against a public defendant

replacing private defendants. In case lawmaking, everyone has a stake in the case or controversy. Accordingly, a decision will have an effect beyond the parties directly involved. A legal norm created by a court is valid erga omnes (with prospective general effects.) In addition to the immediate effect inter partes; a given decision has a prospective effect as a result of the case's effect on other cases. We assume deference to precedent—though not necessarily excessive adherence to precedent or the doctrine of stare decisis (to stand by decisions and not disturb settled matters)—as part of the legal system. Without precedent, past/present pronouncements do not bind the present/future. We strip the legal process down to its bare agonsitic essentials, and demonstrate that in social conflict over a rivalrous good, communication still happens between the parties. Moreover, legal argument, stripped down to its superficially simple agonsitic essentials, is a legitimate dictatorial, nonrational command in that the receiver, who responds to the variable signal, consents to the terms the signaler dictates in exchange for peace.

Since the sacrifice involved in martyrdom, or engaging in any other strategic brinkmanship, such as a hunger strike, is quite high, even suicidal, a legal resolution handed down after a court proceeding has more threat value than dozens of hunger strikes. All in all, a clear and unambiguous legal argument is a performance signal of the diachronic majority backing for the judicial

decision that is held to be law. Case law is legitimate in so far as the barely submerged threat of unavoidable recurrent violence is brought credibly to bear in the arena of social conflict. Society surrenders to the inevitable ascendancy of the diachronic majority, rather than live with recurrent violent disruptions and outbursts.

The primary requirement for a litigant to gain access to the courts, an injury-in-fact, is the rule of representation in the legal process, in the same manner that the ballot count obtained in an election is the rule of representation in the political process. The counter-majoritarian fallacy may lead some scholars into the sophomoric blunder of believing that society suffers from a democratic deficit, when actually the rule of law is the basic foundation of democracy. However, scholars who see through the counter-majoritarian fallacy should resist the siren calls of legal process jurisprudence (see, for example, Ilya Somin 2004). We can have no illusion that the ruthless exercise of power can be trammeled by the highest principles and procedural safeguards. Nor that

reason and procedure are the essence of law. The only possible constraint on power is power. Where there is countervailing power, there is constraint.[23]

We should not confuse democracy with elections or constitutions (second-order laws enacted by super majorities.[24]) The latter may be necessary

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[23] Nor should we think that limited government depends entirely on a constitution's delegation of limited powers to it. Power remains with the people as a matter of social fact. Constitutions ought to clarify the limited role of government and the expansive scope of individual action, but it's not that legal process or constitutional principles define the role of legislatures or of courts. Constitutions are also very open-ended. It's the power itself that is self defining. One person's power ends where another person's power begins. Coalitions of people in time are highly unstable. Today's majority is not the same coalition as tomorrow's. Certain temporally disconnected individuals who share actual, concrete, discrete, particularized interests wield power. Rather than parliamentary or judicial supremacy, there is a delicate balance of powers under the rule of law.

[24] Time is a problem for contractual analyses of constitutional law. Jeb Rubenfeld's (2001) response is that "peoples" exist over time. His view is undermined by the contractual incompleteness of constitutions, the limited lifespan of any ratifying generation, and the inherent instability of even super majoritarian coalitions. Malla Pollack's (2005) elaboration of constitutions as intergenerational promises is a realist attempt to apply private legal doctrines to the public law realm. Pollack asserts, however, that these promises (which give rise to quasi contractual rights) bind only the state; citizens are free to withdraw their allegiance at any time. In practice, furthermore, citizens' quiescence may be not more than fear of power. To want to resist the conclusion is perhaps understandable given Pollack's

conditions for a democracy, but they are insufficient in themselves. Raising up a democracy requires politically independent institutions. Unelected courts correct a collective action problem—that people disconnected through time are unable to act together. Core judicial institutions comprised of unelected judges, unlike core legislative institutions comprised of elected representatives, are insulated from the political process because unelected judges are supposed to be beholden to a diachronic majority, rather than to synchronic constituencies. In sum, a line of judicial decisions in concrete cases, not any constitutional convention, is the source of our individual rights as people. Why, therefore, shall we continue to be treated in public law to the ludicrous, yet disturbing sight, of constitutional conventions, which give ideological discontents of every stripe a perfect forum to haggle over abstract rights as matters of policy?

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stated purpose, yet her argument makes the case for rather than against originalism in constitutional interpretation.

Moreover, as is evident from our model, judges may create new case law as well as prospectively overrule earlier case law.[25] There appears to be no conceptual difficulty for the legal positivist here. The declaratory theory of adjudication —steeped in the natural law tradition— implies that judges retroactively overrule earlier case law. With a change in current-state knowledge, a synchronic majority may legislatively reconsider statutory law. With a change in current-state knowledge, a diachronic majority may reconsider case law. Legal reasoning is forgotten and resurrected, assessed and reassessed, interpreted and reinterpreted, in the hands of the living generation.

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[25] Stare decisis (a policy of observing precedent if the facts of the cases are similar) is not an inexorable command even in the common law system. If a court believes a past ruling is unworkable, it will be overturned. In the civil law tradition, a line of decisions establishes case law; yet judges are freer to depart from prior holdings.

## 3. A NEW, BETTER DEFINED, FORMALISM

Our entirely novel approach to statutory law and case law keeps within the parameters of legal positivism. There will always be public disagreement about what constitutes basic individual rights and liberties and shared community values. That is why we have politics and law in a democracy under the rule of law.

However, as long as agency problems are kept out of consideration, there is no need for political or legal morality. Law and morality should not be confused. Legal obligation and moral duty are two different things. "The law" is a law unto itself. Its (purely positive) legitimacy lies outside the realm of morality. Though all of us are adept moralizers—law is a very different matter. Robert Cooter (1997) has successfully modeled morality as a punishment-induced equilibrium—answering more than 200 years later the forlorn, aching cry of encylopedist Denis Diderot—dependent on a signaling equilibrium, which he calls "consensus." The problem with a "consensus" is that Cooter is right, a consensus is non-majoritarian. As long as a consensus is non-majoritarian, it must be kept within the bounds of informal enforcement.

The only justification for coercive law must be grounded in the majority's power to legitimize. By achieving sharp conceptual clarity in these matters, we may be able to avoid the triumphant ascent of a moral dictatorship in the future, and the slipping away of democracy itself.[26] Without a purely positive legitimate rule of law, the coercive order is built on positively illegitimate divisive decrees, without valuable exercises in democratic accountability—parliamentary and judicial checks on arbitrary government measures.[27]

Cooter has unlocked the economic logic behind morality, through an economic analysis of the private enforcement of social norms. Law and morality seem to be coterminous, and law seems to be a normative order. Respect for law itself may be a social norm, but that is entirely a different matter. Cooter's focus is on efficient social norms. However, we must be careful, and bear in mind that social norms can also be inefficient, or even

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[26] Cuba is an example of the moral dictatorship of an ideological minority enjoying complete control. A moral dictatorship is tyrannical by itself (see Ricardo Manuel Rojas 2005).

[27] The Coase theorem predicts that, if bargaining in coalitions were costless with side payments permitted, majority rule would yield a stable equilibrium of efficient government policies.

pathological (see Posner 1998). The legitimacy of law, as we have shown, remains purely positive.

Insofar as democracy and the rule of law are built on the economics of violence, our sole justifications for these institutions remains purely positive. Moreover, as Cooter fails to recognize, an adequate explanation of the mechanisms which generate legal rules narrowly defined: statute and common law, is crucial to the further development of an adequate understanding of the relationship between law and morality. Law and economics (or the economic analysis of law) has lacked, till now, an adequate purely positive model of law-making. In this sense, David D. Friedman's (2000, p. 318) candor is refreshing in a profession whose practitioners are loathe to admit ignorance.[28]

Let's be honest about tried-and-true economic methodology.[29] Intellectual honesty is the only way to further develop law and economics. Mathematical models are (sometimes) indeterminate. Mathematical analysis has limits—this

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[28] He makes no pretensions that he knows everything about everything; instead he is humble.

[29] Using the methods of scientific inquiry and mathematical analysis, we have been able to unravel many deep mysteries of the economy. For the classic statement of economic methodology, see Milton Friedman (1953).

much we have known since the late 19th century.[30] Some scholars either fear, or choose to ignore, these limits. Others acknowledge these limits, indeed, embrace these limits. Game theory has injected the notion of time into the atemporal realm of mathematics. Game theory lies, for example, at the edge of what can be modeled.[31]

Accordingly, many legal questions escape precise economic definition. As David D. Friedman (2000, p. 317) says, economics is not a set of questions and answers. Rather economic science is an approach to predicting human behavior. The results depend not only on economic theory but on the facts of the world to which economic analysis is applied. Economic analysts may

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[30] Henri Poincaré (1892) ascertained these limits when he confronted the three-body problem in celestial mechanics.

[31] The phenomena of multiple equilibria is why brute force in human affairs often involves co-ordination among networks for collective action, rather than individual attributes (the brute, primal cave-dweller still exists within us all). The greek historian Polybius (1882, bk. 6) understands this well (though the Florentine theorist of power politics, Niccolò Machiavelli, seems not to have caught on), when he suggests that justice (substitute: legal authority) permits a leader to retain his hold onto power even after he had grown feeble with age.

know a lot about the world. Yet as Friedman allows, there is a great deal more about the world that they do not know.

Let me put this argument in stark relief. Markets, under the right conditions, may aggregate private information. A market price may contain more information about the world than any economic analyst could possibly know. Prices make private information public. The purely positive result of market transactions may prove more deeply illuminating about the world than normative statements that reflect the values and judgments of any single economic analyst.

Now let me hazard a hypothesis. What if legislatures and courts aggregated private information as market do? Cooter (2000, p. 53) imagines how, under the right conditions, Coasian bargaining may occur in a legislature.[32] The bargaining yields efficient legal rules and efficient provision of public goods. This paper takes this analysis further. If rights have costs, and bargains are implicit in recognizing individual rights (see Stephen Holmes and Cass R. Sunstein 1999), how does bargaining occur in courts? In legislatures, the

[32] See, e.g., his distinction between the political and democratic Coase theorem.

mundane pragmatism of political transactions generate short-lived coalitions, which dictatorially impose legal rules.

The rule of law itself is, at the heart of our Constitution, a delicate balance of synchronic and diachronic powers. Martin Shapiro (1998) shows how courts avoid a head-on collision with the legislature or parliament through a preoccupation with concrete cases and a seamless web of incremental decision-making. Courts act where legislatures are inactive.[33] Certainly courts keep from engaging legislatures head-on by applying the political question doctrine, and the group of doctrines that lead courts to avoid constitutional issues whenever possible.

This paper focuses on the other justiciability doctrines—standing, ripeness and mootness. The astonishing result of this paper is that private individuals have the power to legislate. An oversimplified action-response game theoretic model shows us how this legislation is possible.[34] Not only is legislation by

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[33] According to Justice Ginsburg (1992), courts open a (rational?) dialogue with the legislature or parliament when they make deliberate, carefully measured movements and slow advances with adherence to procedures.

[34] We ask when an individual will face-off society, and win?

private individuals possible, it is ubiquitous. The best scientific models eschew complications, avoid complexities, in favour of simple elegance. So if individuals, under certain conditions, can dictate terms to the rest of society, what type of Coasian bargaining occurs in courts to guarantee efficiency? Does adjudication make possible interpersonal comparisons of utility? We think not! Legislation dictated by individuals is based on such individuals' private knowledge. Judge-made legal rules turn private knowledge into public knowledge.

Do judges calculate the trade-off, the bargain implicit in rights? Economic analysis may inform their decisions. Moreover, legal reasoning by analogy informs judges how a social struggle is likely to play out through the temporal dimension.[35] Synchronic coalitions are cobbled together for a moment, notoriously unstable, and short-lived. Diachronic persistence is based on a phoenix-like regeneration of individual litigants with similar concrete injuries. If faced with a diachronic majority, on one side, and a synchronic majority, on

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[35] With potentially inefficient trade-offs, the same party may make gains indefinitely, with different parties taking the losses. Yet, a same party can't bear losses indefinitely. Accordingly, inefficient trade-offs may multiply—a slippery slope best left untrekked.

the other, the choice may be clear.[36] If there are diachronic groups on both sides, legal reasoning may be far less clear.

Judges are not augurs, soothsayers, diviners, who make inquires of the dead or the unborn. Judges apply probabilistic reasoning to legal arguments in the light of present knowledge about the past and the future. Independent courts solve the collective action problem caused by the inability of parties spread across time to form coalitions to defend their efficient interests because of temporal paradoxes and high upstream transaction costs.

In the economic analysis of the law, we must strike a balance between a formalism of legal reasoning and democracy and our best understanding of the consequences of legal rules. This perspective enriches law and economics, it does not detract from the economic approach. It is intellectually honest, and ontologically modest. As Hayek (1972) knew and forcefully demonstrated, the economics of information explains why we have freedom.

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[36] Agency cost may be less, as litigants must bear the consequences of court decisions directly in a way that political representatives do not.

Law is about the dictatorial commands, within an open, competitive economy of violence, that structures freedom. Private individuals (through judge-made law) have legislated the substantive rules of our private law.[37] At least the written constitution with its fundamental rights is a mockery, where effective remedies prove elusive or improper because state action is absent. Accordingly, to increase our freedom, we must deconstitutionalize private law. Moreover, in public law, individual rights must set limits to the role of the government.

We offer a new modest formalism, which respects reasoning by analogy and democratic results (somewhat) as a branch of practical reasoning. True,

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[37] One of the most important tenets of the economic analysis of law is that the common law is efficient. See generally Richard A. Posner (2003, pp. 25-26, 573-75 & n. 1). Many different explanations have been proposed, from evolutionary models to Hayekian arguments (Paul H. Rubin 2005). One that has never been articulated by common law scholars is that what tends to efficiency, however, is that the system of private law tends to be more efficient, a rationale that can also be extended to Roman law. The private legal order aligns incentives, supports the pricing mechanism, redresses informational asymmetries, decentralizes decision making, supports credible commitments, reduces monitoring costs, decreases governance costs, avoids holdouts, ameliorates the problems of moral hazard and adverse selection, and facilitates financial intermediation between long term capital demand and short-term capital supply.

rational choice is an optimistic assumption when applied to individuals who act for their own interest. Yet, as Friedman (2000, p. 13) wisely points out, it becomes a pessimistic assumption when applied to people who must act in someone else's interest. We have taken agency relationships and agency costs out of the equation in this paper—through a slight of hand. With agency costs, public choice perspectives teach us to be cautious. Perhaps, understanding the logic of the problem widens the scope for the economic analyst, and concedes less to the rule-of-law formalist (believer in legal reasoning and democracy).[38]

Up to this point, public choice theory has lacked an adequate purely positive explanation of the mechanisms which generate legal rules narrowly defined: statute and common law. In this paper, we hope to have contributed to developing such a theory. The conclusion that we draw is interesting. By coming forward with an economic analysis of legal reasoning, we find that law may be an autonomous discipline (in some measure).

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[38] An efficient market hypothesis—that markets attempt to incorporate all currently known information—may be more problematic for legislatures and courts.

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