ESSAY

THE INVISIBLE HAND IN LEGAL AND POLITICAL THEORY

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INTRODUCTION

WHAT do the separation of powers, free speech, the adversary system of litigation, criminal procedure, the common law, and property rights have in common? In all of these cases and others, theorists have offered invisible-hand justifications for legal and political institutions, comparing them to explicit economic markets. Invariably, other theorists sharply criticize the invocation of the invisible hand. Yet the debates are largely localized, with few comparisons across contexts and no general and accepted account of how invisible-hand justifications might work. In general, although there is a literature that defines the structure of invisible-hand explanations, the normative use of invisible-hand arguments as a justification for legal and political institutions is much less explored.

This essay has two aims. The first is to identify general conditions under which an invisible-hand justification of legal and political institutions will succeed, in the modest sense that it is internally coherent and plausible (whether or not true in fact). The second aim is to identify several theoretical puzzles about invisible-hand justifications that cut across the local contexts in which such justifications are offered. I believe these puzzles are, in fact, genuine and irreducible dilemmas, which arise from the very structure and nature of invisible-hand reasoning. Moreover, they can arise in the context of explicit economic markets as well. Although in some cases invisible-hand justifications fail because the analogy to mar-

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kets fails, these dilemmas arise when the analogy works only too well.

Part I defines invisible-hand justifications, illustrates their use in various contexts in legal and political theory, and specifies necessary conditions for such justifications to be cogent, whether or not they are true or useful.

Part II discusses the dilemma of norms. Norms of truth-seeking, public-regarding action or altruism can both promote and undermine the workings of the invisible hand in the relevant institutions. Although it is abstractly possible to identify the conditions under which one effect or the other will predominate, the relevant norms are lumpy and cannot be fine-tuned sufficiently well to capture all, but only, those conditions under which norms are beneficial.

Part III discusses the dilemma of second best. In a range of interesting cases, partial compliance with the conditions for an invisible-hand justification produces the worst of all possible worlds. The result is that such justifications have a knife-edged quality: either a move to full compliance or a move to full rejection will prove superior to the intermediate case of partial compliance. Where this is so, institutional designers face an all-or-nothing choice.

Part IV discusses the dilemma of verification. In many cases, theorists claim that an invisible-hand process functions as a Hayekian discovery procedure, producing information that a centralized decisionmaker could not obtain. The question whether that claim holds is empirical, but it begs the question to judge the success of the invisible-hand process by comparing it to the body of information held by any single mind (such as the analyst’s) or by some centralized institution. It follows that invisible-hand justifications resting on informational benefits will have a speculative quality, but by the same token it is difficult to assemble decisive evidence against them.

I. INVISIBLE-HAND JUSTIFICATIONS

The most famous invisible-hand justification was pioneered by Adam Smith1 and later elaborated in neoclassical economics: under

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1 There is a large body of literature on what exactly Smith meant by his evocative, but unsystematic, references to the “invisible hand,” and how exactly his metaphor
conditions of perfect competition, markets will produce allocative and productive efficiency, and hence Pareto efficiency. In Friedrich Hayek’s variant of the argument for markets, the market orders the decentralized information and tacit knowledge distributed throughout society, coordinating individual plans better than could any central planner. Legal and political theorists have adapted these arguments and their relatives to offer invisible-hand justifications for a range of institutions. Here are some of the most prominent, although the list is by no means comprehensive:

- Influenced by Adam Smith and other figures of the Scottish Enlightenment, James Madison argued that the separation of powers would protect liberty as the unintended byproduct of a system in which “ambition [is] made to counteract ambition.”
- Following Madison, modern theorists have argued that the separation of powers system produces a “spontaneous order” through Coasean bargaining among lawmaking institutions.
- Madison and other Framers of the Constitution were suspicious of political parties, on the traditional civic-republican ground that parties are harmful “factions.” Following Hume, however, Madison recognized that the cure for the evils of party might be competition among multiple parties. Under pluralism in a large federal republic, each party serves as a check upon the others; the


4 See The Federalist No. 51 (James Madison), supra note 3, at 322 (“In the extended republic of the United States, and among the great variety of interests, parties and sects which it embraces, a coalition of a majority of the whole society could seldom take place on any other principles than those of justice and the general good . . . .”). For Madison’s debt to Hume, see Nancy L. Rosenblum, On the Side of the Angels: An Appreciation of Parties and Partisanship 70–71 (2008).
unintended byproduct of their interaction is freedom from majoritarian oppression and promotion of the “general good.”

- Justice Oliver Wendell Holmes, Jr., adapting an idea developed by John Stuart Mill, argued for free speech on the ground that “the best test of truth is the power of the thought to get itself accepted in the competition of the market.” Truth arises as an unintended byproduct of the marketplace of ideas.

- A close relative of Holmes’s approach is Alexander Bickel’s analysis of the struggle between government and journalists over the disclosure of classified government information. Bickel argued for a regime in which government may prosecute officials who leak government information, but would be barred by free speech principles from prosecuting reporters for publishing such information (absent a narrow category of very serious harms, such as threats to ongoing military operations). That regime, he suggested, would result in an “unruly contest” between a government biased toward secrecy and journalists biased toward disclosure; the contest would produce an “optimal” level of social disclosure overall.

- The American system of criminal procedure has been compared to a market in which legislatures set background entitlements, and the “price” of crime is set by decentralized bargaining over sentences among prosecutors, defense lawyers, and judges.

- James Fitzjames Stephen argued that although “the inquisitorial theory of criminal procedure is beyond all question the true one,” and a trial “ought to be a public inquiry into the truth,” nonetheless

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(Jack N. Rakove ed., 1999). Madison’s pluralism was sharply qualified: he distinguished “natural” from “artificial” parties, and argued that “the expediency, in politics, of making natural parties, mutual checks on each other” did not support creating artificial parties “in order to form them into mutual checks.” James Madison, Parties, supra, at 505. Because the checking solution is a second-best remedy adopted only because natural parties are “unavoidable,” id. at 504, that solution is not to be affirmatively chosen where necessity does not require it.

1 See The Federalist No. 51 (James Madison), supra note 3, at 321–22.
it may be, and probably is, the case, that in our own time and country, the best manner of conducting such an inquiry is to consider the trial mainly as a litigation, and to allow each party to say all that can be said in support of their own view; just as the best means of arriving at the truth in respect of any controverted matter of opinion might be, to allow those who maintained opposite views to discuss the matter freely and in public.\footnote{James Fitzjames Stephen, A General View of the Criminal Law of England 166 (1863).}

- In a generalization of Stephen’s claim, one main argument for the adversary system of litigation is that decentralized production of information by competing parties will produce a closer approximation to truth than an inquisitorial system. As a corollary, some legal ethicists have argued that the adversary system excuses advocates from moral obligations that would otherwise attach,\footnote{See, e.g., Monroe H. Freedman & Abbe Smith, Understanding Lawyers’ Ethics 119–22 (3d ed. 2004).} although others hotly disagree.\footnote{See infra notes 51, 96.}

- Law and economics theorists have suggested that under certain conditions the common law will evolve towards efficiency, in the sense that the rules maximize aggregate wealth. In the classic models, efficiency arises because inefficient precedents impose deadweight losses and are thus more likely to be challenged.\footnote{Paul H. Rubin, Why is the Common Law Efficient?, 6 J. Legal Stud. 51, 53–55 (1977); see also George L. Priest, The Common Law Process and the Selection of Efficient Rules, 6 J. Legal Stud. 65, 66–69 (1977). For an overview of the literature, see Paul H. Rubin, Why Was the Common Law Efficient? 2–9 (Emory Law & Econ. Research Paper Series, Working Paper No. 04-06, 2004), available at http://ssrn.com/abstract=498645.} A more recent variant considers conditions under which the common law evolves towards a type of informational efficiency, in the sense that all material distinctions are incorporated into the legal rules.\footnote{Nicola Gennaioli & Andrei Shleifer, The Evolution of Common Law, 115 J. Pol. Econ. 43, 60–61 (2007).} In both classes of models, efficiency arises through an invisible-hand process, as the unintended byproduct of action by litigants and judges.
The economist Harold Demsetz suggested\(^7\) that “property rights emerge when the social benefits of establishing such rights exceed their social costs.”\(^8\) Although Demsetz’s original argument took no clear position on whether this development required a “conscious endeavor,”\(^9\) later reconstructions posit an invisible-hand process in which efficient property rights evolve as the unintended consequence of decentralized action.\(^10\)

Put side by side, these arguments are highly heterogeneous, yet they also display important common features. The common ground is that in every case some good arises as an unintended byproduct of decentralized action. There are also notable differences among them, the major one being that the various justifications point to different goods, such as liberty, welfare, and truth. To sort all of this out, I will begin by attempting to elicit the conceptual structure of invisible-hand justifications—as briefly as possible, for it is true of both invisible-hand explanations and invisible-hand justifications that “[t]he definitional details of what counts as ‘invisible hand’ are less interesting than the particular theories.”\(^11\)

I suggest that an invisible-hand justification combines (1) an explanation that identifies an invisible-hand process with (2) a value theory that identifies some social benefit arising from the invisible-hand process and (3) a mechanism that explains how the invisible-hand process produces that benefit. As to condition (1), I will follow Ullmann-Margalit in supposing that an interesting invisible-hand explanation is one that takes as an input the preferences (or desires or goals) and beliefs of agents,\(^12\) and that yields as an output

\(^7\) Harold Demsetz, Toward a Theory of Property Rights, 57 Am. Econ. Rev. 347, 350 (1967).
\(^9\) Demsetz, supra note 17, at 350.
\(^12\) The agents might be individuals or institutional actors, such as states in international relations theory, or lawmaking institutions in the Madisonian invisible-hand account of the separation of powers. Methodological individualists will add that the behavior of the institutions is in principle reducible to statements about individuals, but for my purposes the validity of this claim is irrelevant.
2010] The Invisible Hand 1423

a structured pattern of behavior. The invisible-hand explanation substitutes for an explanation from design, based upon the intentional action of some designer(s). A hallmark of invisible-hand explanations is that none of the participants within the system need intend to bring about the structured pattern that arises from their actions.

This does not entail, however, that the invisible-hand system must itself emerge through an invisible-hand process, although it may do so. The emergence and the operation of invisible-hand systems are different questions. Some explicit markets, for example, grow up through the decentralized action of many participants, whereas others arise as the result of intentional action, as when regulators design and impose a system of emissions trading. Thus top-level managers at Hewlett-Packard set up an internal prediction market in which mid-level managers would place bets on the firm’s sales in future periods—bets that, when aggregated by the prediction market, in effect collected and transmitted to their superiors valuable information that was previously dispersed throughout the firm.

The list of invisible-hand justifications in legal and political theory is heterogeneous on this dimension. Some arguments, such as the claims that the common law and property rights evolve towards efficiency, are diachronic and focus on the genesis of institutions or rules. Others are synchronic and focus on the operation of institutions or rules at a given time, regardless of how those institutions

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25 This excludes mechanisms such as the Condorcet Jury Theorem, which shows that under certain conditions, the competence of a group of sincere voters using majority rule will exceed the average competence of its members. When the Theorem’s conditions hold, the Law of Large Numbers amplifies individual competence, but in the usual interpretation, the individuals are assumed to be attempting to figure out the right answer for the group; thus the right answer does not arise as an unintended byproduct of their actions. For a full statement of this theory, see Adrian Vermeule, Many-Minds Arguments in Legal Theory, 1 J. Legal Analysis 1, 4–9 (2009).
26 Ullmann-Margalit, supra note 23, at 275.
or rules originated. The Madisonian argument for the separation of powers attempts to justify an invisible-hand arrangement that results from an intentional act of constitutional design, rather than arising through an invisible-hand process. Yet the same argument could be used to justify a separation of powers regime that evolved organically, as in legal systems that have no written constitution.

An explanation that satisfies condition (1) posits an equilibrium or spontaneous order; it thus excludes random or chaotic behavior. Merely satisfying condition (1), however, need not at all imply that the spontaneous order is in any way desirable or beneficial. The “tragedy of the commons,” for example, is a spontaneously arising structured equilibrium of waste and inefficiency. Accordingly, condition (2) requires the theorist to posit some normative good that the spontaneous order produces, turning the explanation into a justification.

On this dimension as well, invisible-hand justifications are highly heterogeneous. In the neoclassical argument for markets, the relevant good is welfare, which markets are said to maximize. In a more recent version, the argument is that the market mechanism conduces to freedom, understood as the realization of individual opportunities and autonomy. In the Madisonian arguments for the separation of powers and for a plurality of parties, the main good is political liberty, although Madison also assumed that freedom from factional oppression would conduce to “justice and the general good.” In the Holmesian argument for the marketplace of ideas, the relevant good is truth or, less grandly, information; the same goods are relevant under Stephen’s argument for the adversary system of litigation.

Moreover, these goods may be combined in complex ways. The Hayekian variant of the argument for explicit markets has a hybrid character: welfare is still the ultimate good that markets produce, but instead of being produced directly by the consummation of all desired trades as in the neoclassical argument, welfare is produced indirectly by the market’s ability to exploit dispersed information

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30 The Federalist No. 51 (James Madison), supra note 3, at 322.
31 See supra notes 9, 12.
and even generate information that would not otherwise exist.\footnote{32} This contrast, between a welfarist and an informational argument for markets, is analogous to the contrasting arguments for the efficiency of the common law: the standard argument focuses exclusively on wealth maximization through the weeding out of inefficient rules, while a more recent hybrid argument suggests that the common law evolves towards informational efficiency.

Given all this heterogeneity, it is reasonable to question whether there is even a coherent category of invisible-hand justifications in the first place. I believe that the common structure of these arguments, in which the relevant goods are produced as the unintended byproduct of decentralized action, gives rise to important common problems, but the proof of this must emerge from the subsequent discussion. Most of the points I will make in Parts II through IV are addressed to the common structure of the arguments and thus do not depend upon whether the argument has a diachronic or synchronic character, or upon the nature of the good to which the argument appeals. That said, the dilemma discussed in Part IV—that the justification of competition as a discovery procedure creates empirical questions that by definition cannot be tested, at least in interesting cases—applies by its terms only where truth or information is the relevant good.

Condition (3) requires the analyst to supply a mechanism that aligns the structured pattern or spontaneous order of condition (1) with the social benefit identified to satisfy condition (2). For concreteness, and to set a benchmark case, consider the economic argument for free markets in ordinary goods. In the standard welfare-economic interpretation of Smith’s cursory references to the “invisible hand,” the operation of the price system in perfectly competitive markets will produce long-run allocative and productive efficiency in which net social benefits are maximized.\footnote{33} By definition, the conditions of allocative and productive efficiency also entail Pareto efficiency. In this argument, the price system is the relevant mechanism (condition 3) that ensures that the behav-

\footnote{32} However, because market participants have incentives to free-ride on the information generated by others, full informational efficiency in markets is impossible. See Sanford J. Grossman & Joseph E. Stiglitz, On the Impossibility of Informationally Efficient Markets, 70 Am. Econ. Rev. 393 (1980).

\footnote{33} See Grampp, supra note 1, at 445–46.
ior of actors under perfect competition produces an equilibrium (condition 1) that maximizes social welfare (condition 2).

In a number of invisible-hand justifications, this third condition either is not clearly satisfied or is clearly not satisfied. As an example of the former problem, the argument that decentralized bargaining in the American system of criminal procedure creates a “market price” for crime does not clearly posit any mechanism that aligns individual behavior with the relevant good, here social welfare.\textsuperscript{34} The sentences themselves, whether set in terms of jail time or in monetary fines, are numerical, continuously graded, and plausibly commensurable, so that the analogy to the price system is at least somewhat plausible. It is hardly clear, however, that this suffices to align private and social costs. Genuinely irrational actors, insensitive to price changes, might be selected out of markets through bankruptcy but selected into the criminal system by their inability to respond to the law’s deterrent signals. Although changes in the “price” of crime through increased sentences will affect rational criminals and thus change behavior at the margin,\textsuperscript{35} if the fraction of rational criminals is very small, those changes will also be marginal in the colloquial sense. Furthermore, punishment through incarceration, as opposed to fines, builds in a systematic misalignment between private and social costs, because the punishment itself requires social expenditures for prisons and guards.\textsuperscript{36} That extra social cost cannot be entirely folded into the private cost of crime by increasing the expected sentence, because the social cost would then increase as well—unless the costs of running the prison system are all fixed, rather than marginal, costs, which is implausible.

More generally, the system of criminal procedure might be better described not as a genuine market but as a system of sequential decisionmaking by autonomous monopolies, in which the prosecutor has near-unchecked discretion over whether to charge a crime, the jury has near-unchecked discretion over whether to acquit, and the judicial system has near-unchecked discretion over final review of convictions. Although the prosecutor bargains with the defen-

\textsuperscript{34} See Easterbrook, supra note 11, at 289.
\textsuperscript{35} Id. at 291.
The relevant “prices” are set by the parties’ anticipation of what the judge and jury might eventually do, and there is no bargaining between the prosecutor and the jury, the prosecutor and the judges, or the jury and the judges. In competitive markets, by contrast, the price at which A will buy from B is defined by the terms A and B could agree to with another buyer and seller, not by the terms some third party would impose upon them. Even if there were simultaneous bargaining among prosecutor, jury, judge, and defendant, the theory of bargaining under multilateral monopoly is notoriously indeterminate, so it would be hard to say whether a system of this sort conduces to efficiency, however defined. The market analogy here is thus noticeably attenuated.

An example of clear failure to satisfy the third condition is Demsetz’s original argument for the evolution of efficient property rights, which posited conditions under which such rights would be socially efficient but offered no mechanism to explain why the relevant groups would move toward the efficient regime. Later analysts have attempted to supply such a mechanism by positing various invisible-hand processes conducing to efficiency, yet there are equally plausible interest-group accounts suggesting that property rights need not be efficient at all. The latter accounts parallel a standard argument that the common law need not evolve to efficiency. Repeat players, such as organized interest groups, have superior access to courts or differential stakes in judicial precedent and will bias the selection of cases for litigation, thereby skewing the precedents that result.

More controversially, I believe that Madison’s invisible-hand argument for a system of separated powers clearly fails to satisfy the third condition. Although stemming rather directly from Adam Smith, Madison’s argument is dissimilar in a critical respect: it does not specify any mechanism that aligns the “private” costs and

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37 See Merrill, supra note 18, at S336–37. For the point that property rights may not evolve towards efficiency because of interest-group pressures, see Saul Levmore, Two Stories About the Evolution of Property Rights, 31 J. Legal Stud. S421, S429–43 (2002).

38 For references and a discussion of some of the problems, see Adrian Vermeule, Law and the Limits of Reason 106–07 (2009).

39 See Fleischacker, supra note 3, at 897–98, 905–15; Prindle, supra note 3, at 223.
benefits to institutions with social costs and benefits. The decentralized bargaining among institutions that characterizes the separation of powers contains nothing remotely resembling a well-defined system of explicit or implicit prices, not even in the broad sense in which criminal sentences are prices. There is no systematic reason to think that this sort of bargaining will produce efficient outcomes, somehow defined, or other benefits such as the protection of liberty.

The Coase theorem holds that where transaction costs are zero, actors will bargain to efficient outcomes, whatever the initial allocation of entitlements. In the limiting case, the Coase theorem implies that any institutional structure is irrelevant, because actors will simply bargain around it. By contrast, the separation of powers presupposes that standing institutional forms matter and cannot be costlessly dissolved and reformed on an ad hoc basis. The consequence, however, is that a system of separated powers creates externalities that cannot always be internalized through bargaining; separated institutions may inflict externalities upon one another that represent real social losses, not merely transfers.

In any event, of course, the transaction costs of bargaining within a system of separated powers are much greater than zero; they include all manner of posturing, pandering, bluffing, brinkmanship, and holdouts. What are the properties of such a system? The legislature, President, and judiciary do bargain repeatedly over similar issues, and this produces something that vaguely resembles a marketplace for policies. Yet there are two major stumbling blocks to believing that this marketplace is efficient in any sense. First, the institutions are themselves aggregates of individual officials with competing agendas, and with a great deal of agency slack between

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41 For this reason, models in which the separation of powers produces welfare benefits must assume constraints on bargaining or collusion by institutions. See, e.g., Torsten Persson, Gérard Roland & Guido Tabellini, Separation of Powers and Political Accountability, 112 Q.J. Econ. 1163, 1165–66 (1997).

42 Thus another plausible model of the separation of powers shows that (1) absent bargaining, the separation of powers produces externalities between institutions and thus harms welfare, and (2) even with bargaining, the separation of powers can never do better than simple unitary government. See Geoffrey Brennan & Alan Hamlin, A Revisionist View of the Separation of Powers, 6 J. Theoretical Pol. 345, 346 (1994).
their own interests and that of the institution as such, and, especially in Congress, there exist severe costs of coordination and collective action.\textsuperscript{43} It thus requires an elaborate analysis of particular cases to decide whether bargains among the institutions efficiently serve even the interests of their members, let alone the interests of the ultimate principals—the citizens or voters.

Second, even if institutions were internally unified, severe commitment problems cripple the marketplace for policies. There is no institution external to government that can enforce agreements reached through institutional bargaining;\textsuperscript{44} this absence of enforceable contracting remits the parties to self-help and tit-for-tat mechanisms in which cooperation is merely one equilibrium. These two problems reinforce one another, because the turnover of personnel within institutions undermines the reputational mechanisms that can sometimes produce long-term cooperation even where agreements are unenforceable. Under these conditions there is no reason to think that institutional bargaining over policies produces efficient results, and there can be no political Coase theorem.\textsuperscript{45}

All this suggests that there is no general welfarist argument for the separation of powers, but as we have seen, the relevant good may be political liberty, not welfare. Perhaps Madison’s argument should be understood to claim that the separation of powers will protect liberty in some rough-and-ready way, by raising the costs of enacting new legislation. On this argument, the transaction costs of the system are a virtue, not a vice.

The separation of powers at the national level, however, only makes it difficult to enact federal legislation, remitting individuals to whatever rights they may or may not enjoy under other sources of law, including potentially oppressive state and local laws; the federal government’s internal separation of powers protects federalism,\textsuperscript{46} not liberty per se. When the multiple veto points of the fed-

\textsuperscript{43} On the divergence between institutional and individual interests, see Daryl J. Levinson, Empire-Building Government in Constitutional Law, 118 Harv. L. Rev. 915, 923–37, 951–53 (2005).

\textsuperscript{44} Jon Elster, Ulysses Unbound: Studies in Rationality, Precommitment, and Constraints 58, 94–95 (2000).


eral lawmaking process block legislation that would immunize individual liberty from state and local infringements, liberty interests are harmed, not protected. Even in a unitary, rather than federal, lawmaking system, private action might itself impair liberty, and the separation of powers would then block lawmaking that would protect liberty from private infringements. At best, then, the separation of powers produces a liberty-liberty tradeoff, and there is no general mechanism ensuring that the tradeoff will be struck so as to maximize liberty overall. The upshot is that bargaining within a system of separated powers, even if it produces short-run mutual advantage for the institutions involved, will have no systematic tendency either to protect liberty or to produce efficient outcomes for society generally.\textsuperscript{47}

A separate and equally serious problem is that Madison’s argument does not clearly specify a mechanism by which the separation of powers generates spontaneous order in the first place. Not only is the system not necessarily socially beneficial, either in terms of welfare or liberty, as I have just argued, it may not even amount to a well-structured system at all. If this is so, the system’s outcomes will represent a random walk depending upon a succession of political contingencies and the accidents of history. The argument may thus fail condition (1) as well as condition (3).

So far I have suggested three necessary conditions for invisible-hand justifications and offered examples of arguments that fail one or more of the conditions. Even if all three conditions are met, however, all that results is a “cogent” invisible-hand justification (borrowing the term that Ullmann-Margalit applies to invisible-hand explanations).\textsuperscript{48} The cogent explanation might or might not be true, and might or might not be justified in the sense that it is warranted by a rational assessment of the evidence. However, a major complication in assessing the truth or evidentiary warrant for invisible-hand justifications is that their proponents often argue that they are useful precisely because they disclose information to which there are no other means of access. I shall return to these issues in Part IV.

\textsuperscript{47} McGinnis acknowledges that the “spontaneous order” arising from the separation of powers is unlikely to promote either liberty or social welfare as a general matter. McGinnis, supra note 4, at 303.

\textsuperscript{48} Ullmann-Margalit, supra note 23, at 274.
Moreover, even if an invisible-hand justification is both cogent and true, or at least justified, it need not be dispositive. There is always a further comparative institutional question: even given that an invisible-hand process can be shown to produce some social benefit, would an alternative institutional arrangement produce the same benefit at lower cost, produce more of the benefit at the same cost, or produce greater net benefits at higher cost? These questions become relevant in cases where institutional designers face the choice whether to set up invisible-hand processes to achieve their ends or instead to use other approaches. Although Hewlett-Packard’s internal prediction market worked well, it is possible that alternative arrangements lacking the invisible-hand character of the prediction market would have worked equally well or even better. Consider, for example, a survey of mid-level managers about whether they expect to meet production and sales targets, combined with a credible promise that the survey will be conducted on an anonymous basis, perhaps by an independent firm. In such cases, the choice between an invisible-hand arrangement and some other arrangement is a matter for ordinary cost-benefit analysis.

It is obviously somewhat arbitrary to separate out the three conditions specified above, for the cogency of invisible-hand justifications, from the further questions whether such justifications are true and dispositive. Although nothing of substance turns on this, I believe that the cogency conditions demarcate conditions under which an invisible-hand justification is in some sense entitled to compete in the marketplace of ideas with other institutional arrangements, justified by other types of arguments. If the invisible-hand justification fails because the evidence does not support it, or because there are superior alternatives, these are venial sins, whereas a failure to satisfy the cogency conditions means that the invisible-hand justification is in some sense spurious, and perhaps ideological.

II. THE DILEMMA OF NORMS

I turn now to the first of three dilemmas that bedevil invisible-hand justifications and that cut across local debates and institutions.

49 See Wolfers & Zitzewitz, supra note 27, at 113.
in which such justifications are offered. To be clear, I do not suggest that each of these dilemmas applies to every invisible-hand justification, or that these dilemmas apply only to invisible-hand justifications, as some of them apply in other contexts as well. I merely suggest that (1) each of these dilemmas applies to more than one invisible-hand justification, and thus transcends particular questions or debates within legal and political theory, and (2) every invisible-hand justification (of which I am aware) runs into one or more of these dilemmas, and for systematic reasons.

I begin with a set of problems arising from the role of norms in invisible-hand arguments. “Norms” are notoriously hard to define, but a rough cut suffices for my purposes: by norms, I mean rules of conduct that oblige agents to act in a way inconsistent with their short-run interests. As we shall see, one of the issues about norms is whether and when they actually serve the agents’ long-run interests. I also mean to be agnostic on the question whether norms are (ever) genuinely internalized or are observed only because agents anticipate that violations of the norms will cause others to sanction them.50

Norms can be social, moral, legal, or political; professional norms, such as rules of conduct for lawyers and doctors, have a hybrid character composed of social, moral, legal, and political elements simultaneously. An important twist is that professional norms will sometimes require the professional to give effect to the self-interest of the client, as when lawyers argue that their professional role requires zealous advocacy of the client’s interests. In cases of this sort, the contrast between norm-governed behavior and self-interested behavior can be recast as a tension between generally applicable norms of ethics or altruism, on the one hand, and the professional norms of specialized agents such as lawyers, on the other. The points I will offer are the same under either description of the problem.

Do norms promote or frustrate the working of the invisible hand? Both answers have champions. Academic moralists typically, and economists occasionally, suggest that moral norms of

good faith and fair dealing are indispensable to the operation of markets: “[G]ood consequences in equilibrium will depend on at least some voluntary compliance with nonlegal prescriptions.”  In the standard rendition of this claim, norms are indispensable to producing social benefits in situations of market failure. In explicit economic markets, for example, the costs of contracting and enforcing contracts make it impossible to exclude all forms of literalism, circumvention of promises, and chicanery; norms of good faith are thus necessary to facilitate efficient exchange. Likewise, in a “market for lemons” characterized by asymmetric information and experience goods or credence goods, norms of truthfulness or honesty are necessary to prevent exploitation and unraveling. In the market for commercial blood donations, as of 1972, the “detection [of hepatitis in the donated blood] depend[ed] essentially on the willingness of the donor to state correctly whether or not he is suffering from that disease.”

Similar arguments have been applied to invisible-hand justifications for legal and political institutions. On one account of pluralist competition among political parties, partisanship is positively beneficial, but only so long as it occurs within a framework of “regulated rivalry” in which “[p]arty conflict entails political self-discipline—institutionalized, eventually legalized, internalized, and made moral habit.” This “Ethic of Partisanship” is necessary to keep partisan competition within bounds. Similarly, it has been argued that the market for ideas functions well only because, and to the extent that, participants observe norms of truth-seeking. On this view, truth does not arise as an unintended byproduct of self-interested behavior:

[H]istorians, for example, might arrive at a better and deeper understanding of historical events through an open and unfet-

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55 Rosenblum, supra note 5, at 125.
56 Id. at 10.
tered discussion of historical evidence and alternative hypotheses. But the process works because the participants are committed to some conception of the truth and observe various standards in their presentation and assessment of evidence and theories.57

Finally, a standard critique of the adversary system of litigation holds that the trial cannot serve as a truth-finding device if lawyers aim solely for victory and do not observe any norms of respect for truth.58

The contrary view, according to which norms hamper markets, tends to be held by economists and political scientists, rather than professional moralists, and can take either of two forms. In the first version, the concern is that partial compliance with norms can be worse than either full compliance or no compliance at all. This is the dilemma of second best, which I will take up in Part III. In a second and stronger version, the concern is that even when they are widely observed, norms create friction, rather than lubrication, and thus represent a drag on the processes of competition that generate a socially beneficial equilibrium in markets or other institutions. As to explicit markets, an example is the “feudal-shackles thesis,” which holds that the persistence of traditional norm-governed behavior into the bourgeois era hampers the full attainment of the social benefits of capitalism.59

Norms can create friction in several ways. For one thing, there is severe tension between norms of reciprocity, on the one hand, and norms of altruism, on the other. Reciprocity can support the generation of efficient conventions or the production of public goods by inducing sanctions against violators or free-riders, but altruism can undermine those incentives by causing putative sanctioners to empathize with the pain of those who stand to be sanctioned.60 Fur-

thermore, norms can create friction not only by dampening self-interested motivation, but by producing ill-informed action. “[E]thically motivated behavior may even have a negative value to others if the agent acts without sufficient knowledge of the situation.”

Legal theorists make similar points in various invisible-hand settings, sometimes unwittingly. A leading criticism of Bickel’s contest theory, under which a struggle between government and press over disclosure of secret information will produce a socially beneficial equilibrium, holds that

the adversarial model on which the [contest] theory relies is both odd and inaccurate. It requires an assumption that the government and private speakers are locked in combat, with each trying constantly to undermine the other. It would be disturbing if such a picture mirrored reality. The normal expectations are that the press will at least sometimes respect legitimate interests in secrecy, and that the government will often promote disclosure on its own. If the incentives diverge dramatically from what the equilibrium model assumes, the model will break down.

This passage combines an implicit normative claim—it would be bad if the premises of the contest theory held true—with a causal claim—norms of mutual restraint, observed by both government and press, are precisely what prevent the contest from working at full power. This is an uneasy combination of arguments, for it illustrates a larger aspect of the role of norms: if they are friction, rather than lubricant, then invisible-hand justifications have the
radical implication that norms are obstructions to be removed. The critic quoted above is implicitly attempting to discredit that theory by showing that fully implementing the logic of the contest theory would require a “disturbing” violation of norms of political morality. Yet the opposite conclusion might also be drawn: if necessary to attain a social optimum, the norms, rather than the theory, should give way.

So far I have tried to lay out two conceptions of the relationship between norms and the operation of the invisible hand, involving norms as lubrication and as friction, respectively. Can these conceptions be reconciled? Perhaps each is correct, just under different circumstances. On this view, where there are serious background imperfections in the relevant market, norms are necessary lubricants, but where markets otherwise operate smoothly, norms hamper the attainment of equilibrium through universally self-interested action. Kenneth Arrow thus states: “I think it best on the whole that the requirement of ethical behavior be confined to those circumstances where the price system breaks down [because of asymmetric information and other market failures].” Norms should be turned off where markets function well and turned on where they do not.

While this reconciliation is attractive in theory, it overlooks that norms cannot be perfectly fine-tuned; they cannot be tailored to any arbitrarily desired degree of nuance and suspended or activated at will. For one thing, it is implausible that the same actors who behave in a fully self-interested fashion in the absence of market failure will be able to adhere fully to a constraining code of norms in the presence of market failure. Either self-interested behavior will spill over from the domain where it is socially beneficial into the domain where it is not, or the constraints that are desirable in the latter domain will also shape behavior in the former, where they are undesirable. Smith famously quipped that “[p]eople of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.” Economic agents who

63 Arrow, supra note 54, at 354–55.
64 See Arrow, supra note 52, 304–09.
ruthlessly seek profits in competitive markets will also tend to collude in order to make markets noncompetitive. The standard remedy is to police those agents through antitrust and competition law, but this requires a separate and costly institutional apparatus, extrinsic to Arrow’s norm-based framework.

For another thing, the processes of reputational sanctioning and moral education, by which institutions and individuals force others to observe or even to internalize norms, depend for their effectiveness, in part, on the dogmatic and general character of the norms themselves. While some norms take the form of a presumption that can be overcome, or a rule-with-exceptions, the principle that actors should act on the basis of general norms only under conditions of “market imperfection” has a different structure, in which the norm is rendered wholly operative or inoperative by background conditions. Not only is it psychologically costly to switch norms on and off in this fashion, but the switching condition is itself ill-defined.

There is also a separate problem as to how the requisite norms can be generated. In the usual case, norms are not chosen by anyone in particular, and instead emerge as the unintended byproduct of decentralized interactions between and among individuals and institutions. Arrow uses a passive verb (“[I]t [is] best . . . that the requirement of ethical behavior be confined . . . .”66) because it is mysterious who in society has the capacity to confine norms of ethical behavior to all and only those circumstances identified by the economic theory of market failures.67 The supply side of norms is their Achilles’ heel.68 Although there are occasional attempts to put forth an explicitly evolutionary theory to the effect that norms develop so as to patch up failures of markets, there is no general

66 Arrow, supra note 54, at 354.
67 See also Arrow, supra note 52, at 316 (“Ethical codes, if they are to be viable, should be limited in their scope [to situations of market failure].”). Which institutions or individuals will have both the capacity and the incentive to do the limiting is unclear.
68 Gordon S. Bergsten, On the Role of Social Norms in a Market Economy, 45 Pub. Choice 113, 113 (1985) (arguing that the normative economic theory of social norms “is flawed because it is not grounded in an understanding of the processes by which social norms are created, maintained and enforced”). More recent work, in one sense, has corrected this problem by elaborating models of the supply side of norms and, in another sense, has exacerbated it by showing that norms need not be efficient. See generally Posner, supra note 50; Sugden, supra note 28, at 85–87, 97.
mechanism sufficiently robust to support such a theory. Inefficient conventions can harden into inefficient norms, and even where norms would be efficient, their existence will depend upon the private costs and benefits to individuals of supporting those norms by sanctioning violators or by praising and conferring benefits upon entrepreneurs who pioneer efficient norms. The private calculus of norm generation and norm enforcement may well diverge from the social calculus of norms’ efficiency. Norms are most plausibly efficient within close-knit groups of repeat interactors who collectively bear both the costs and benefits of the norms they create, so that the group’s internal norms do not impose significant externalities. Yet such groups are the exception rather than the rule in large-scale modern economies.

The proposed reconciliation, then, appears highly contingent and imperfect; there is no general reason to think it is feasible. If this is right, the lumpiness of norms is, as it were, a kind of imperfection in the available technology for coping with market imperfections, including imperfections in the implicit markets addressed in legal theory. Where norms are lumpy, they are condemned either to overshoot the mark or to undershoot it: either norms will be absent in some cases of genuine market imperfections, or norms will be present in cases where they hamper the operation of markets. In this respect, the role of norms poses, I believe, a genuine and unavoidable dilemma for invisible-hand justifications.

III. THE DILEMMA OF SECOND BEST

The last Part explored problems that arise within explicit or implicit markets because of the operation of widely shared norms. This Part explores a conceptually distinct possibility: even if norms might be beneficial when widely shared, partial compliance with or internalization of norms within an explicit or implicit market might make things worse, not better. This problem is a special case of the

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69 Sugden, supra note 28, at 93.
70 See Posner, supra note 50, at 169–79.
general theory of second best, which holds that if not all of the conditions necessary for a system-wide optimum can be fulfilled, it is not necessarily or even generally better to fulfill as many as possible of those conditions. A state of affairs in which only some of the relevant variables take on their optimal values may well be inferior to a state in which no variables do so. An implication is that piecemeal “improvements,” in the sense that one or a few variables are nudged towards their optimal values while others remain suboptimal, may make things worse.

The general theory of second best connects to invisible-hand justifications in a systematic way, because the theory implies that the interaction among several non-ideal elements can produce an overall system that is as close as possible to the ideal. Invisible-hand justifications, which describe how some collective good arises from the interaction of agents whose behavior, taken in isolation, is non-ideal, apply this insight in particular settings. By the same logic, however, the general theory of second best also implies that partial compliance with the conditions for an invisible-hand justification can be the worst of all possible worlds.

Partial compliance can take the form either of asymmetric compliance by some and not others, or else a moderate level of compliance by all. In the former case, asymmetric compliance with or internalization of norms by some parties and not others can cripple processes of bargaining or exchange, as Jon Elster shows:

Once upon a time two boys found a cake. One of them said, “Splendid! I will eat the cake.” The other one said, “No, that is not fair! We found the cake together, and we should share and share alike, half for you and half for me.” The first boy said, “No, I should have the whole cake!” . . . Along came an adult who

73 The belief that any movement towards the systemic optimum, short of full attainment, is nonetheless desirable has been called the “approximation assumption”: the fallacious view that the best course of action is the one that approximates an unobtainable ideal as closely as possible. See Avishai Margalit, Ideals and Second Bests, in Philosophy for Education 77, 77 (Seymour Fox ed., 1983).
said, “Gentlemen, you shouldn’t fight about this: you should compromise. Give him three quarters of the cake.”

What creates the difficulty here is that the first boy’s preferences are allowed to count twice in the social choice mechanism suggested by the adult: once in his expression of them and then again in the other boy’s internalized ethic of sharing. And one can argue that the outcome is socially inferior to that which would have emerged had they both stuck to their selfish preferences.75

As for the latter case, Serge-Christophe Kolm has argued, as to explicit markets, that although an economy in which all agents are fully altruistic could function better than an economy in which all agents are fully self-interested, under plausible conditions the worst state of affairs would be an economy in which agents are partly altruistic.76 To apply a point made above about the production of public goods, for example, fully altruistic agents might take into account that failure to sanction non-contributors will hurt all concerned, but partly altruistic agents might care about the suffering of the non-contributor alone, resulting in inadequate sanctions and hence inadequate contributions. A slight extension of Kolm’s and Elster’s arguments suggests that, while universal compliance with or internalization of norms that override self-interested behavior may be best of all, partial compliance—either in the sense of compliance by some and not others or in the sense of a moderate level of compliance by all—may be socially inferior to universal norm-free self-interest.

Problems of partial compliance arise in many invisible-hand settings in legal and political theory. Suppose that a system of pluralist competition among political parties requires an internalized “ethic of partisanship,” according to which partisans accept an institutionalization of conflict that will result in the parties’ rotation in office.77 Suppose also, however, that not all parties internalize this ethic: most parties are restrained by norms of democratic behavior,

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75 Id. at 115–16 (quoting Raymond M. Smullyan, This Book Needs No Title: A Budget of Living Paradoxes 56 (1980)).
77 See Rosenblum, supra note 5, at 7–10.
while a few parties seek election only as a stepping-stone to permanent domination, intending to exploit democracy in order to abolish democracy. The result may be that “the best lack all conviction, while the worst are full of passionate intensity,” giving an enduring advantage to the parties who unilaterally reject democratic norms (although on tactical grounds they may pretend to accept them for the time being). This is a familiar paradox of democracy; most democracies address it by placing legal limitations on individual freedom to associate with parties that aim to subvert democracy itself.\footnote{William Butler Yeats, “The Second Coming” (1920).}

Less worrisome configurations are also possible, however. If there is a group of self-restrained parties who respect the basic framework of democracy, and another group of parties who do not, the framework may nonetheless be stable if the latter group is internally divided between parties of the extreme left and extreme right. In that case, the extremes may simply thwart each other’s efforts. Alternatively, although each of the extreme parties may hope for total victory, the second preference of each may be to support the democratic framework, rather than risk total victory for parties at the other extreme. These possibilities emphasize that everything depends on the precise distribution of noncompliance across parties. The general theory of second best does not imply that partial compliance will always produce the worst of all possible worlds, only that it can do so.

Analogous problems arise in the setting of free speech. Suppose that the marketplace of ideas would function best if media institutions observe norms of truth-seeking and responsible balancing of all affected interests. Yet if only some media institutions adhere to these norms, the resulting state of affairs might be worse than if no media observed the norms at all. Political partisans are often heard to complain that media institutions are composed of (1) neutral gatekeepers and (2) propagandists of the opposite party; this composition creates a skew in (what the partisans take to be) the wrong direction. When they are logically consequent, these partisans go on to argue that the neutral gatekeepers should be replaced by par-

\footnote{For examples of these limitations, see John E. Finn, Electoral Regimes and the Proscription of Anti-Democratic Parties, in The Democratic Experience and Political Violence 51, 70–71 (David C. Rapoport & Leonard Weinberg eds., 2001).}
tisans of their own view, producing a “fair and balanced” array of viewpoints at the level of the overall system rather than within individual media firms.

In this sort of case, partial compliance with the norms of objective journalism is not a sufficient condition for a distortion to arise. One possible configuration, parallel to the happy scenario in which extremist parties of left and right cancel each other out, is that some media institutions are objective, while others are partisan, yet in opposite directions. Here again, partial compliance does not entail the worst of all possible worlds, but it does make the worst-case scenario possible.

In the setting of the separation of powers, similar problems arise when some institutions, but only some, pursue Madisonian “ambition,” while others attempt to promote the public good. Theorists of separation of powers frequently argue that a system of universal institutional ambition is inferior to a system in which all institutions observe norms of mutual self-restraint. On this view, the separation of powers “works only if every branch is committed to effective governance and is willing to forbear from the deployment of its powers to their extreme theoretical limits.” The theorists, however, usually do not consider the consequences of partial self-restraint by some institutions and not others. Where this occurs, universal institutional ambition may be the best of the attainable regimes, even if universal self-restraint would be best of all.

Suppose, for example, that the President systematically promotes the long-run growth of presidential power, while Congress and the Supreme Court act in good faith on the basis of case-by-case assessments of the public interest—assessments that are intrinsically random with respect to presidential power and thus sometimes favor its expansion. The long-run consequence will be that even though a majority of institutions act in a public-spirited way, the system as a whole trends towards greater and greater

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80 I will bracket here all questions about the internal aggregation of preferences within institutions and assume that the institutions can be understood as having something like composite utility functions. On the problems of internal aggregation, see generally Levinson, supra note 43.

presidential power, albeit not as quickly as the President taken alone would favor. Depending upon what the optimal level of presidential power is at any given time, this long-term trend might be salutary or harmful. In the latter case, even if the first-best would be to have all institutions attempt to promote the public interest as they see it, the attainable second-best might be to have all institutions attend strictly to their institutional ambitions, because Congress and the Court would then provide a more robust check on presidential aggrandizement.

It might, in other words, be best for the nation if institutions universally ignore the national interest, or invariably believe that their own interests and the national interest are aligned. To be sure, there is also a happier scenario: perhaps the President and (say) Congress relentlessly promote their respective institutional interests, while a public-regarding Court balances their claims and thus promotes the national interest overall. Needless to say, nothing guarantees that this optimistic possibility will actually materialize. Depending upon the specific distribution of behavior, partial compliance might mimic the results of full compliance, but might also yield the worst possible outcomes.

A final example involves the role of the prosecutor in an adversarial system of criminal procedure. In the standard view, the criminal defense lawyer’s obligation is to act as a zealous advocate for the accused, a role frequently justified by the equilibrium theory that vigorous competition between self-interested parties will produce more information overall. At the same time, however, the standard view holds that the prosecutor’s duty is to “seek[] truth and not victims”—to act in the interests of public justice, rather than as a partisan advocate for conviction.

These two ideas are patently in some tension with one another. One cannot simply say that the prosecutor and the defense lawyer have different roles, because the invisible-hand justification for adversarial litigation involves the systemic relationship between the two. If the premise is that the defense lawyer may be a zealous advocate because a system of competitive production of evidence by

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parties best promotes truth overall, it is not obvious how one can go on to deny that the other party, namely the prosecutor, should be equally entitled to produce evidence in a competitive and partisan fashion. A system in which prosecutors but not defense lawyers have an obligation to present evidence impartially to the tribunal might be the worst of all possible worlds. One can affirm, by brute force, that an asymmetric role-morality is most likely to produce truth overall, but that position must rest on a different theory than the invisible-hand justification for competitive production of evidence, and it is unclear what theory might fill the gap.

There are three logically consequent approaches to resolving this tension. First, one might redefine the defense lawyer’s role to require disinterested truth-seeking; second, one might redefine the prosecutor’s role as that of a zealous advocate for conviction; third, one might admit that the combination of zealous defense with impartial prosecution compromises the invisible-hand logic of the adversary system, but go on to argue that the compromise is justified as a means of introducing a bias in favor of the accused, which is desirable on extrinsic grounds. The first solution has its advocates.\(^3\) As for the second, although I have not found this view endorsed as such by any legal commentator, a near relative is the view that the prosecutor’s office in effect combines two functions—advocacy and impartial judgment—that should be separated, institutionally, by having different executive personnel perform the two functions.\(^4\) The implication is that when litigating, as opposed to performing other functions, the prosecutor should be a zealous advocate for conviction.

The third solution probably captures the implicit assumptions of many criminal law theorists. On this view, a hybrid adversary system for criminal cases, one in which the prosecutor but not the defense has a duty of impartiality, is all of a piece with the requirement of a unanimous jury vote to convict, the rule that guilt must be proven beyond a reasonable doubt, and other built-in protections for the accused. This skew might in turn be justified by point-


ing to a background imbalance of resources between the state and the accused, by a belief that the costs of erroneous conviction are much greater than the costs of erroneous acquittal, or both.

A view of this sort would need much more work, however. Two of the more obvious problems are as follows. First, some theory is needed to determine how much skew in favor of the defendant is socially desirable. Even if one believes that it is better for ten guilty defendants to go free than for one innocent defendant to be convicted, it is unlikely to be better that a thousand guilty defendants should go free. If the background institutions of the jury system and of proof beyond a reasonable doubt already build in the right amount of skew, then an additional requirement that the prosecutor litigate with one hand tied behind her back in effect double-counts the defendant’s interests. Second, even if the background institutions do not create enough bias in the defendant’s favor, it is not obvious why compromising the adversary system of litigation—stipulating that such a system is otherwise desirable on truth-production grounds—is the right means for introducing additional protections. Given some desirable amount of pro-defendant bias, the institutional designer should intervene on the margin that will produce the desired bias at the lowest social cost. Expanding juries from twelve to fifteen, for example, with a unanimous vote still required to convict, might be less costly than weakening the invisible hand of the adversary system.

These examples, I believe, underscore a central dilemma of invisible-hand justifications. Where partial compliance would pro-

85 For the many different versions of this ratio in various times and places, see Alexander Volokh, Guilty Men, 146 U. Pa. L. Rev. 173, 174–77 (1997).

86 This assumes informative voting, in which jurors vote in accordance with their individual evidentiary signals. With strategic voting, in which jurors draw information from the votes of other jurors, increasing the size of the jury may actually increase the chances of a unanimous verdict for an erroneous conviction. Jurors will reason that if they are pivotal under a unanimity rule, every other juror is voting to convict; and the larger the number of jurors, the more powerful this inference becomes. See Timothy Feddersen & Wolfgang Pesendorfer, Convicting the Innocent: The Inferiority of Unanimous Jury Verdicts Under Strategic Voting, 92 Am. Pol. Sci. Rev. 23, 23 (1998). Experiments do not bear out this counterintuitive thesis, however, and indeed the “gap between the theoretical predictions and the experimental observations [widens] as jury size grows.” Arthur Lupia et al., When Should Political Scientists Use the Self-Confirming Equilibrium Concept? Benefits, Costs and an Application to Jury Theorems, 18 Pol. Analysis 103, 120 n.10 (2010).
duce the worst possible state of affairs, such justifications are balanced on a razor’s edge: whether full compliance with the invisible-hand conditions or full rejection of those conditions is best of all, a move towards either extreme will represent an improvement. Moreover, starting from the state of either full or no compliance, a move by small steps towards the other extreme can be blocked by the high costs of transition through the worst-case scenario of partial compliance.

Here, as in other settings, the general theory of second best forces legal and political theory to confront the discrepancy between aspirations and opportunities. Where it is clear that the first-best is unattainable, this dilemma has no consequences for action; there is no pragmatic point in dwelling on what is out of reach, although it may or may not be a socially useful project to engage in what David Estlund calls “hopeless aspirational theory.” The dilemma has a sharper edge, however, when it is uncertain whether the first-best state is or is not attainable. If actors attempt to reach it and fail, the very attempt to reach the first-best state will, at least in hindsight, represent a costly and fruitless endeavor.

To make these problems concrete, suppose that in a system of separated powers the first-best state is a system in which all branches of government behave with a measure of self-restraint, yet none are currently doing so. Should any one branch opt for restraint, hoping that others will follow its lead? Even if all branches have “assurance game” preferences, and would thus prefer to cooperate if others do so, each may believe that the others have “prisoners’ dilemma” preferences, and would thus prefer to defect if others cooperate, in which case the cooperators will receive only the “sucker’s payoff.” Believing this, no branch will show restraint, the beliefs of all branches about the other branches will be confirmed in a self-fulfilling fashion,

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88 For an overview of assurance games in which players have incomplete information about others’ preferences, see Andrew H. Kydd, Trust and Mistrust in International Relations ch. 2 (2005).
89 In this sort of self-confirming equilibrium, players’ conjectures about other players’ strategies are confirmed so long as the conjectures match the other players’ actual behavior under the actual circumstances, as opposed to their counterfactual behavior under different circumstances. See Lupia et al., supra note 86, at 104–05.
indefinitely in a second-best state. Alternatively, one branch might decide to show restraint regardless of what others do; as we have seen, under identifiable conditions this unilateral forbearance will produce the worst possible results.

IV. THE DILEMMA OF VERIFICATION

Do invisible-hand justifications actually work, in a given domain? Across all domains, theorists recognize that the question is at least partly empirical. The preferred mode of argument is then to implicitly shift the burden of proof to the other side. One criticism of Bickel’s contest theory of free speech, for example, is that “[t]he equilibrium theory remains impressionistic and relies on premises that are both unsupported and unlikely.”90 As for the broader claim that the marketplace of ideas produces truth, its “most prominent weakness” is “[t]he absence of . . . a demonstration, in the face of numerous counter-examples,” that truth tends to prevail over falsehood.91 Likewise, a standard criticism of the argument that the adversary system produces truth is that it is merely “a hopeful supposition derived from advocacy ideology. There is no empirical evidence indicating that the contests of advocates deliver truth in this manner.”92 Such arguments rarely explain why the invisible-hand justification should be rejected if there is no evidence for it; the situation is equally compatible with there being no evidence against it, and the lack of evidence favoring the invisible-hand justification is not the same as positive evidence that the justification fails. The critics, that is, confuse or exploit the distinction between absence of evidence and evidence of absence.

This implicit burden-shifting is the usual stuff of legal argument, but I believe that the empirical problems surrounding invisible-hand justifications go deeper than in many other domains. The key problem is that invisible-hand justifications typically include an express or implied claim that competition serves as a discovery procedure.93 The action of participants in express or implied markets

91 Frederick Schauer, Free Speech: A Philosophical Enquiry 26 (1982).
92 Goodpaster, supra note 58, at 124.
93 F.A. Hayek, Competition as a Discovery Procedure, Institut für Weltwirtschaft Lecture at the University of Kiel (1968), in 5 Q.J. Austrian Econ. 9, 9–10 (Marcellus
itself generates information, to which the analyst may have no other means of access.

Hayek famously made this claim as to explicit economic markets, yet Hayek also suggested an analogy between markets and many other social and political institutions that harness competition, such as “sporting events, examinations, the awarding of government contracts, [and] the bestowal of prizes for poems, not to mention science.” Such institutions, Hayek suggested, are justified when and because we do not otherwise know the information that the competition is designed to reveal:

[I]t would be patently absurd to sponsor a contest if we knew in advance who the winner would be. . . . The only reason we use competition at all has as its necessary consequence the fact that the validity of the theory of competition can never be empirically verified for those cases in which it is of interest.

On the logic of this claim, we might have no independent access to the information by which to judge whether an invisible-hand justification does or does not work. As to explicit markets, the analyst who asks the question is a single mind and on Hayekian premises can never generate the information that socially distributed knowledge can produce through the price system. In the context of adversary criminal trials, “[w]e can’t learn directly whether the facts are really as the trier determined them because we don’t ever find out the facts.” This is slightly overstated, because in a tiny fraction of cases DNA evidence or other conclusive proof emerges after the fact, yet it seems a valid generalization. In the setting of free speech, it might be argued—although to my knowledge no one has done so—that it is pointless to ask whether the marketplace of


94 Hayek, supra note 93, at 9.

95 Id. at 10. Hayek may be wrong to put games into this category. Games, unlike examinations, may not be a means of uncovering independent information; if the game is played according to its rules, the outcome is necessarily correct. However, I am unsure of this point. It seems perfectly coherent to affirm both that the point of the annual Wimbledon tennis tournament is to determine who is the best tennis player at a given time, and also that in a particular year, the winner of the tournament was not the best player.

ideas really tends as a general matter to produce truths that cannot otherwise be discovered. Putting aside the possibility of divine revelation, it is not obvious what independent source of truth could be appealed to without begging the question.

The lack of independent access to the information supposed to be generated by competitive processes insulates Hayekian invisible-hand justifications from criticism, but the price is high. Where competition is said to function as a discovery procedure, the success of the invisible-hand justification will be empirical but pragmatically unverifiable. This makes it just as hard for proponents of the invisible-hand justification to prove their case as it is for critics to disprove.

Given this inherent difficulty of direct access to the necessary evidence, proponents and critics fall back upon indirect strategies of assessment. For their part, critics examine the inputs into the competitive discovery procedure in order to indirectly impeach its outputs. A typical response to the informational argument for the adversary system, for example, is that it would be astonishing if the partisan motivations and rhetorical tricks of advocates tended to cancel each other out, rather than simply deepening the jury’s confusion and thus tending to produce random outcomes.

The problem with such arguments is that all invisible-hand processes are astonishing, in the sense that their inputs always seem disreputable taken in isolation. A narrow focus on the self-interested motivations and self-serving actions of individuals in local contexts will always make it seem surprising that the aggregation of individual motives and behaviors could produce social goods overall. That is the very point of invisible-hand justifications, their central alchemy. It is a straightforward fallacy of composition to assume that because market participants are self-interested, the market as a whole cannot serve the public interest, however defined. It is equally fallacious to assume that because advocates in jury trials use rhetorical tricks, the interaction of their efforts must simply sow more confusion.

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97 See id.
98 Id. at 94.
Conversely, proponents of invisible-hand justifications attempt to offer indirect evidence for the epistemic success of competition by invoking mechanisms of evolution or social selection. On this sort of argument, the relevant institutions can be indirectly shown to produce better information by virtue of their competitive success in environments where more information is advantageous. Hayek, for example, fell back upon the following claim:

When . . . we do not know in advance the facts we wish to discover with the help of competition, we are also unable to determine how effectively competition leads to the discovery of all the relevant circumstances that could have been discovered. All that can be empirically verified is that societies making use of competition for this purpose realize this outcome to a greater extent than do others—a question which, it seems to me, the history of civilization answers emphatically in the affirmative. 100

Analogous arguments from competitive social selection are legion. Luther Gulick, an American official writing after the Second World War, suggested that the Allied democracies had emerged victorious over the Axis powers because the principle of free political speech had allowed democratic governments to learn from their mistakes and to correct their policies more quickly than could their enemies. 101 On a smaller institutional scale, Hayek also deployed social selection arguments for the common law, describing it as a spontaneous order that embodies more latent information than a centralized designer of rules could comprehend, and suggesting a competitive advantage for common law legal systems. 102

Finally, an interesting variant is the argument that the adversary system of litigation and the inquisitorial system must be about equally good at producing truth: “[I]t would be . . . astounding to discover a greater difference in veracity between the Anglo-American [adversarial] and Continental [inquisitorial] systems, for

100 Hayek, supra note 93, at 10.
surely such a difference would after so many centuries have become a commonplace in our folklore.”

All of these arguments but the last, however, commit the fallacy of assuming that what is true of the whole must be true of the parts, taken one by one (the fallacy of division). Even if there is selection pressure at the level of whole societies, such pressure need not entail that some subsystem within a given society—the free market, freedom of political speech, the adversary system, or the common law—is superior to an alternative subsystem in other societies. Even if social selection exists, it operates on the society as a whole, as an integrated total system, and no inference about the society’s subsystems follows. Indeed, it might be that the subsystem that the analyst praises actually drags down the performance of the whole, but not so much as to exceed advantages on other margins.

Is the lesson of 1989 that free markets are superior to command and control economies, or that democratic political systems are superior to authoritarian ones? All that can be observed is that the combination of markets plus democracy is superior to the combination of command and control plus authoritarianism; disentangling the causal contribution of each component requires further cases. Likewise, it might be that the common law or the adversary system is a net cost, compared to the civil law and inquisitorial alternatives, but that societies that have the common law or the adversary system also tend to have other institutions that give them decisive advantages over competitors. In natural selection of biological

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103 Luban, supra note 96, at 93.
105 Id. at 665. John E. Roemer, A Future for Socialism 3 (1994), observes that “[a]lthough the Communist economies had planning but no markets, they also had political dictatorship, a background condition that any experimental designer would like to be able to alter.”
organisms, the analogous phenomenon is pleiotropy, in which some genotype that produces both negative and positive traits can survive and even spread when its benefits outweigh its costs. That the package is optimal does not imply that all of its subparts are optimal or even beneficial, taken one by one.

The suggestion, then, is that the argument from competition as a discovery procedure yields questions that are in principle empirical yet indeterminate, and that indirect strategies of assessment—examining inputs or appealing to social or institutional selection—cannot close the gap. We are left with another genuine dilemma, applicable to the subset of invisible-hand justifications that posit truth or information as the good produced as the unintended by-product of individual interaction.

**CONCLUSION**

Invisible-hand justifications are ubiquitous in legal and political theory and cannot be judged as a class. Some are more plausible than others, and their plausibility varies with varying conditions, as I have attempted to show. Where there is a well-defined substitute or analogue to the price system of explicit markets, where norms of altruism or general morality are unnecessary or positively harmful to the operation and stability of the system, and where the relevant benefits are hard to produce in other ways, invisible-hand justifications are most likely to be cogent, whether or not true or dispositive. More fundamentally, invisible-hand justifications face a set of recurring dilemmas that arise from their very structure, involving the lumpiness of norms, the difficulties of empirical but intrinsically indeterminate claims, and problems of partial compliance. I believe, although this is a speculation, that the existence of these dilemmas accounts for the controversial and perennially polarizing character of invisible-hand justifications: theorists who appreciate only one horn or the other of the relevant dilemmas will vehemently defend or reject such justifications in particular cases. Comparing and contrasting a suite of similar justifications in various settings, as I have tried to do, may permit a more dispassionate evaluation of the invisible hand in legal and political theory.

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