

THE EXPRESSIVE POWER OF ADJUDICATION

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This article provides a causal explanation of adjudicative compliance that is distinct from both the court's threat of sanctions and its institutional legitimacy. The new mechanism for compliance is the power of adjudicative expression. The theory of "expressive adjudication" arises from a previously neglected synergy among three expressive concepts in game theory—correlated equilibria, focal points, and signals. The article identifies the circumstances in which adjudicative expression can, by itself, influence the behavior of existing disputants and of future potential disputants. In each case, ambiguity in the relevant facts or the concepts underlying intentional and spontaneous order can cause a conflict that clarifying expression resolves. This expressive power explains otherwise puzzling instances of compliance with tribunals that lack the power of sanctions, and unifies theories of third-party norm enforcement with a theory of legal sanctions. Finally, the article examines certain normative implications of the expressive theory, including a novel function of adjudicative impartiality, a new justification for the system of public adjudication, and a trade-off between dispute resolution and dispute avoidance.

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I. INTRODUCTION

A major issue for legal theory and social science is why people obey law. An important subset of that question is why people obey courts.¹ For both the general and the specific question, there are two primary theories. One dominant answer—nearly the only answer in economic theory—is that the threat of sanctions motivate legal compliance. Rational and selfish individuals obey law because they otherwise risk governmentally imposed liability or punishment.² In other words, law coerces. By contrast, sociology and psychology tend to view obedience to law as the result of the individual's deference to the authority or legitimacy of law. Using a richer account of human motivation, these approaches predict greater compliance when the public views legal rules as being just—either because law produces morally correct outcomes or because the law is created through a fair process (or both).³ Here, we might say, law persuades.⁴

Despite the sharp differences in these two approaches, they seem to share a common assumption: for individuals who are motivated by selfishness, or for contexts in which selfish motives control, the only reason to obey law is to avoid sanctions. Critics of economics think that economists err by overestimating the role of selfish motivations, and therefore underestimating the role of the law's perceived legitimacy in generating compli-

1. More precisely, the question is why people comply as much as they do. Compliance with courts—and the phenomenon of courts—are pervasive, as Martin Shapiro explains:

Cutting quite across cultural lines, it appears that whenever two persons come into a conflict that they cannot themselves solve, one solution appealing to common sense is to call upon a third for assistance in achieving a resolution. So universal across both time and space is this simple social invention of triads that we can discover almost no society that fails to employ it. . . . In short, the triad for purpose of conflict resolution is the basic social logic of courts, a logic so compelling that courts have become a universal political phenomenon.

MARTIN SHAPIRO, COURTS: A COMPARATIVE AND POLITICAL ANALYSIS 1 (1981).

2. See STEVEN SHAVELL, FOUNDATIONS OF THE ECONOMICS OF LAW 568 (2004) for a comprehensive statement of the existing economics of public law enforcement, almost all of which concerns deterrence. Shavell and other economists also discuss the incapacitating effect of certain criminal punishments such as prison, *id.* at 531–35; Steven D. Levitt, *Why Do Increased Arrest Rates Appear to Reduce Crime: Deterrence, Incapacitation, or Measurement Error?*, 36 ECON. INQUIRY 353 (1998), but that too is an effect of the legal sanction. Even Shavell's discussion of rehabilitation, *supra* at 535–37, assumes the imposition of sanctions.

3. See, e.g., E. ALLAN LIND & TOM R. TYLER, THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE (1988); TOM TYLER, WHY PEOPLE OBEY THE LAW (1990); Paul Robinson & John Darley, *The Utility of Desert*, 91 NW. U. L. REV. 453, 468–70 (1997); Mark C. Suchman, *On Beyond Interest: Rational, Normative and Cognitive Perspectives in the Social Scientific Study of Law*, 1997 WIS. L. REV. 475, 486–90. There are various causal stories. One possibility is that people defer to specific legal rules they do not agree with because they think it fair, given that a fair process was used to create the rules, or given that law more commonly does represent their moral views. Another possibility is that law persuades individuals as to what the correct moral view is, though this may also depend upon a general correspondence between the individuals' moral views and the law.

4. Yet a third, less established explanation of legal compliance views law as “constitutive”—that it provides or at least influences the mental frames, categories, or schema by which individuals understand and construct the social world. See, e.g., Jack Balkin, *The Proliferation of Legal Truths*, 26 HARV. J.L. & PUB. POL'Y 5, 5–10 (2003); Suchman, *supra* note 3, at 490–92; Cass R. Sunstein, *How Law Constructs Preferences*, 86 GEORGETOWN L.J. 2637 (1998). On framing generally, see Robert D. Benford & David A. Snow, *Framing Processes and Social Movements: An Overview and Assessment*, 26 ANN. REV. SOC. 611 (2000). Here too, law persuades but in a more covert and indirect manner.

ance. But these critics seem to accept, along with Holmes,⁵ that the “bad man” who acts out of his own self-interest would have no reason to obey law other than sanctions.

By contrast, Lon Fuller once suggested that sanctions and morality do *not* exhaust the mechanisms of compliance.⁶ There are selfish reasons to obey law other than the fear of governmentally imposed sanctions. In other articles, I have developed this idea by focusing on the public’s compliance with a legislature’s or executive’s prospective rules.⁷ In this article, I instead focus on disputants’ compliance with an adjudicator’s declared resolution of their dispute.⁸ My effort here is to supplement existing approaches by providing a new account of why people obey courts, a new causal story for the effect of adjudication. When I say the effort supplements existing approaches, I mean it does *not* seek to displace the theories of sanctions or legitimacy. There may come a time when empirical work will make it possible to choose decisively between different accounts, but for now I seek only to add to the existing toolbox for understanding what law does.⁹

My account of adjudication is noncoercive and “expressive” in that it focuses on what law says rather than the sanctions that law threatens. Despite this difference from the usual economic approach, this expressive theory of adjudication relies on the methods of economics. To isolate my causal claim from various legitimacy theories, I assume that individuals are

5. See OLIVER WENDELL HOLMES, *THE PATH OF THE LAW* (1897).

6. Much that is written today seems to assume that our larger society is enabled to function by a combination of the individual’s moral sense and social control through the threatened sanctions of state-made law. We need to remind ourselves that we constantly orient our actions toward one another by signposts that are set neither by ‘morals,’ in any ordinary sense, nor by words in law-books.

Lon L. Fuller, *Human Interaction and the Law*, 14 AM. J. JURIS. 1, 36 (1969). As I show *infra* text accompanying notes 63–64, the “signpost” metaphor is quite appropriate; traffic situations provide useful examples of how law works expressively.

7. See Dhammika Dharmapala & Richard H. McAdams, *The Condorcet Jury Theorem and the Expressive Function of Law: A Theory of Informative Law*, 5 AM. L. & ECON. REV. 1 (2003); Richard H. McAdams & Janice Nadler, *Testing the Focal Point Theory of Legal Compliance: Expressive Influence in an Experimental Hawk/Dove Game*, 2 J. EMPIRICAL LEGAL STUD. 87 (2005); Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339, 369 (2000); Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649, 1684 (2000) [hereinafter McAdams, *Focal Point*].

8. I pursue the same general issue in Tom Ginsburg & Richard H. McAdams, *Adjudicating in Anarchy: An Expressive Theory of International Dispute Resolution*, 45 WM. & MARY L. REV. 1229 (2004), where we presented a preliminary version of the theory developed below.

9. Though the existing toolbox is large, even nonstandard theories of compliance rely on the existence of legal sanctions or legitimacy. For example, some literature claims that law influences behavior by changing its “social meaning.” See Dan M. Kahan, *Social Meaning and the Economic Analysis of Crime*, 27 J. LEGAL STUD. 609 (1998); Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. CHI. L. REV. 943 (1995). Others suggest that law changes behavior by shaping preferences. See Kenneth G. Dau-Schmidt, *An Economic Analysis of the Criminal Law as a Preference-Shaping Policy*, 1990 DUKE L.J. 1; Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996). Yet both theories appear to require sanctions. Law changes social meaning because unregulated behavior that once “meant” (or signaled) one set of attitudes or preferences may, after becoming legally obligatory, “mean” (or signal) only that one seeks to avoid legal sanctions. Certain consequences follow that will be missed if one ignores the dimension of social meaning, but the first step in the causal chain remains the threat of sanctions. Similarly, I understand Sunstein and Dau-Schmidt to view the imposition of criminal sanctions as a necessary first step to changing preferences.

more or less selfish and rational, or at least that they are motivated by selfishness in the particular context under discussion. The selfish motive to comply may indeed be most important not when dealing with hypothetical individuals who are entirely self-regarding, but instead when dealing with individuals whose dispute arises because of conflicting moral principles. In other words, when moral principles lead individuals into conflict, self-interest may be the only motive that can lead them out. More generally, the importance of a full understanding of legal compliance recommends exhausting the implications of these simple assumptions in addition to considering the implications of richer accounts of human motivation. Finally, understanding when selfish incentives for compliance do not otherwise exist will provide a better understanding of when sanctions and legitimacy are strictly required and what their unique contribution is.

The expressive theory of adjudication explored here synergistically combines three ways that economics has of understanding communicative influences: (1) as a device for creating a “correlated equilibrium;” (2) as a “cheap talk” means of constructing a “focal point” around which individuals coordinate; and (3) as a signal of private information. Economic writings on a variety of topics try to use one of these three elements individually to explain compliance with mediation or adjudication lacking the force of sanctions (as in international law). Unfortunately, the individual contributions seem not to be aware of the existence of the others, much less the common enterprise they share. One goal of this article is to bring together these disparate writings for the first time and to recognize them as discussing the same broad topic—the expressive services a third party can provide in resolving and avoiding disputes, services that do not require the power of sanctions or legitimacy.

Existing theoretical work also suffers from a tendency to conflate the different contributions of constructed focal points, signaling, and correlated equilibrium. Another goal of this article is to resolve this confusion. Once one is clear about the different elements of expressive adjudication, it is easier to move to the final step, which is to identify the synergies of their interaction. This article’s primary contribution will be to explain how focal points, signaling, and the correlated equilibrium concept work together and reinforce each other. I first identify decisive objections to expressive theories based on any *one* of these mechanisms, but then show how, in combination, each mechanism solves the objections to the others.

To explain how courts influence behavior independent of their perceived legitimacy and the sanctions they wield, one must engage in a peculiar thought experiment imagining a court without two characteristics that are important—some would say essential—to what courts are. As a result, my method is to begin with what Martin Shapiro calls the “logic of the triad in conflict resolution.”¹⁰ I devote much of this article to describing an ex-

10. SHAPIRO, *supra* note 1, at 1.

pressive influence a third party—*any* third party—might have over two parties in a dispute. To identify the expressive power of a court judgment, I focus only on the expressive power a third party wields when he declares to disputants how they should resolve their dispute. This part of the article is explicitly more about nonbinding arbitration and “evaluative” or “directive” mediation¹¹—thus, about “expressive ADR”—than it is about actual adjudication. But despite the current emphasis on ADR, I agree with Shapiro that the distinctions drawn between contemporary courts and these contemporary alternatives obscures some basic similarities between them.¹² Thus, to build a theory of expressive adjudication, one must explore the basic logic of the triad and discover the general power of third-party expression.

After discussing dispute resolution, I turn more clearly to a discussion of adjudication—to the ability of courts or quasi-judicial bodies to influence the behavior of those *not* a party to the dispute that prompts its decision. This third-party influence comes from articulating rules. Even without the power of sanctions or legitimacy, I claim that courts have some ability to set precedent by clarifying the formal or informal rules governing the parties’ interactions in a particular context. Indeed, this is a power that seems to justify some centralization of adjudication into a branch of government, and which may be lost by dispute resolution outside of courts. After extending the analysis to explain the expressive power of rule articulation—adjudication proper—I also extend the analysis from two-party to multi-party disputes.

A word about terminology: this article is about *compliance*, specifically, compliance with the declarations of arbiters and courts. The mechanism I explore is expression—that in certain circumstances adjudicative expression has a power independent of legitimacy or sanctions. As a result, I describe a theory of “expressive dispute resolution” and “expressive adjudication.” I am not alone in using the term “expressive” to refer to the law’s ability to generate compliance by what it says independent of sanctions.¹³ I note, however, that legal “expression” and related terms like “expressivism” play an important role in other domains of legal theory. Cer-

11. Here, I use the distinction drawn in the ADR literature between “evaluative” and “facilitative” mediation or, more recently, between “directive” and “elicitive” mediation. See, e.g., RUSSELL KOROBKIN, *NEGOTIATION THEORY AND STRATEGY* 357–65, 370 (2002); *MEDIATION: THEORY, POLICY AND PRACTICE* 152, 155, 165, 180–01 (Carrie Menkel-Meadow ed., 2001); Leonard L. Riskin, *Decisionmaking in Mediation: The New Old Grid and the New New Grid System*, 79 NOTRE DAME L. REV. 1, 4–5 nn.5–6 (2003). I suspect that all types of mediation involve expressive influences, but I focus on the influence that arises from the third party declaring before both disputants how the dispute should be resolved. Because courts make declarations, explaining the expressive power of third party declarations will help to explain the expressive power of courts.

12. SHAPIRO, *supra* note 1, at 8–17; see *id.* at 15 (“[J]udges tend to share the same means of conflict resolution with other triadic figures, and most of those we would label judges engage in a great deal of mediation”).

13. See, e.g., Robert Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585 (1998); Alex Geisinger, *A Belief Change Theory of Expressive Law*, 88 IOWA L. REV. 35 (2002); Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021 (1996).

tain social science scholars make the positive claim that lawmakers select the rules they do because of what they express, such as a status hierarchy or a challenge to that hierarchy.¹⁴ Certain legal philosophers make the normative claim that law can be morally evaluated, in part, by what it expresses, independent of its consequences.¹⁵ This article does not significantly engage either such claim, but instead advances a causal theory of legal compliance.¹⁶

Having introduced in Part I the broad subject matter of this article, Part II reviews and critiques the existing economic literature about what I call expressive adjudication. There are three key ideas—that adjudication “correlates” strategies, constructs “focal points,” and signals information—but in isolation none succeeds in explaining expressive power. Part III presents a new, integrated theory of expressive adjudication, explaining how the three elements interact, each overcoming an objection to the other. I explain how expressive adjudication works not only in cases of contested facts, but also to resolve ambiguities in the concepts underlying formal or informal order, creating precedent that influences future behavior as well as resolving the immediate dispute. I also examine the necessary conditions for the theory, which circumscribe the domain of disputes to which it applies. Part IV discusses some positive and normative implications of the theory, including an explanation for otherwise puzzling compliance with sanctionless adjudication, a unified theory of formal and informal third-party sanctioning, and a trade-off between dispute resolution and dispute avoidance. Part V concludes.

14. See, e.g., JOSEPH R. GUSFIELD, *SYMBOLIC CRUSADE: STATUS POLITICS AND THE AMERICAN TEMPERANCE MOVEMENT* 177 n.83 (2d ed. 1986); Dan M. Kahan & Donald Braman, *More Statistics, Less Persuasion: A Cultural Theory of Gun-Risk Perceptions*, 151 U. PA. L. REV. 1291, 1318 n.25 (2003); Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 HARV. L. REV. 413, 416 n.18 (1999).

15. Some theorists claim that an appropriate normative theory forbids law that expresses an inappropriate inegalitarian meaning, such as racial inequality. See, e.g., C. Edwin Baker, *Injustice and the Normative Nature of Meaning*, 60 MD. L. REV. 578, 600 (2001); Deborah Hellman, *The Expressive Dimension of Equal Protection*, 85 MINN. L. REV. 1, 18 n.13 (2000); Richard H. Pildes, *Why Rights Are Not Trumps: Social Meanings, Expressive Harms, and Constitutionalism*, 27 J. LEGAL STUD. 725, 723 (1998). Other theorists claim that the social meaning of crime is essential to understanding its wrongfulness and that an appropriate normative theory compels punishment that expresses the appropriate condemnation of criminal acts. See, e.g., Jean Hampton, *An Expressive Theory of Retribution*, in *RETRIBUTIVISM AND ITS CRITICS* (Wesley Cragg ed., 1992). For a critique of such theories and an exchange, see Matthew D. Adler, *Expressive Theories of Law: A Skeptical Overview*, 148 U. PA. L. REV. 1363 (2000); Matthew D. Adler, *Linguistic Meaning, Nonlinguistic ‘Expression’ and the Multiple Variants of Expressivism: A Reply to Professors Anderson and Pildes*, 148 U. PA. L. REV. 1577 (2000); Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503 (2000).

16. Although I do not here engage these other expressivist theories, there are some possible interactions. Most obviously, if I am right that adjudicative expression influences behavior, it becomes even more likely that individuals and interest groups will struggle against each other through adjudication.

II. DIVERGENT ECONOMIC THEORIES OF ADJUDICATIVE EXPRESSION: A REVIEW AND CRITIQUE

Within law and economics, there is such a strong emphasis on sanctions as the reason for legal compliance that one can fairly say that the discipline does not distinguish between the two questions “What is the effect of the legal rule?” and “What is the effect of the legal sanctions?” In the absence of sanctions, psychology and sociology still predict that individuals may comply with legal rules out of deference to the perceived legitimacy or authority of the law. Economics, however, would seem to predict no compliance without sanctions.

There are, however, a few recent exceptions. A small rational-choice literature has sought to explain how law influences behavior expressively by what it says, independent of what it threatens.¹⁷ To date, this literature has mostly addressed the expressive effects of statutory law and administrative or executive decisions. This article asks, however, whether adjudication—specifically, the judicial declaration resolving a dispute—can work expressively. Does economics offer any selfish reason for the parties to a dispute to obey a judicial declaration other than the threat of legal sanctions? The scant literature giving an affirmative answers suggests three different theories: that adjudication is a device for (1) achieving a “correlated equilibrium,” (2) constructing a focal point, and (3) signaling information. In this Part, I describe the existing literature and elaborate on each theory. I also provide a critique, finding each of the three expressive theories subject to serious objection.

A. Adjudication as a “Correlated Equilibrium” Device

I begin with the most non-intuitive possibility—a game-theory idea that is sufficiently esoteric to avoid much discussion in law and economics texts.¹⁸ The idea of a “correlated equilibrium” is that, in some strategic situations (“games”), it is a stable outcome for two individuals to condition

17. I discuss and cite particular works below. A general list of such scholarship includes the sources cited *supra* notes 7 and 8; Jennifer Gerarda Brown & Ian Ayres, *Economic Rationales for Mediation*, 80 VA. L. REV. 323 (1994); Geoffrey Garrett & Barry R. Weingast, *Ideas, Interests, and Institutions: Constructing the European Community's Internal Market*, in IDEAS AND FOREIGN POLICY: BELIEFS, INSTITUTIONS, AND POLITICAL CHANGE (J. Goldstein & R.O. Keohane, eds. 1993); Matthew C. Stephenson, “When the Devil Turns . . .”: *The Political Foundations of Independent Judicial Review*, 32 J. LEGAL STUD. 59 (2003); Iris Bohnet & Robert D. Cooter, *Expressive Law: Framing or Equilibrium Selection?* (2001) (unpublished manuscript, on file with the author); J. Robert Tyran & Lars P. Feld, *Why People Obey the Law: Experimental Evidence from the Provisions of Public Goods* (Jan. 2002) (unpublished manuscript, on file with author).

18. There is no entry for “correlated equilibria,” “correlated strategies,” or their originator “Robert Aumann” in most leading law and economics texts. See DOUGLAS BAIRD ET AL., *GAME THEORY AND THE LAW* (1994); ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* (3d ed. 2000); THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW (1998); RICHARD POSNER, *ECONOMIC ANALYSIS OF LAW* (5th ed. 1998); SHAVELL, *supra* note 2.

their behavior (technically, “actions” or “strategies”¹⁹) on some observable, random feature of the world. I explain the relevance correlated equilibria may have to adjudication, extend the existing theory, and then describe some critical objections to it.

1. Existing Literature

Game theory predicts behavior based on the idea of an equilibrium. An outcome is a “Nash equilibrium” when, from that outcome, no individual has any incentive to switch strategies unilaterally; each is playing his best response to what the others have done.²⁰ In any game, there may be one or multiple outcomes that satisfy this condition. Against this background, however, Nobel Laureate Robert Aumann noted that if the parties have rich opportunities to communicate, they can sometimes create the possibility of an additional *correlated* equilibrium.²¹ Under some conditions, if the individuals (technically, those in the game are “players,” though I will also use the term “parties” given my focus on disputes) mutually agree to observe some random event, they will benefit by basing their actions on the outcome of the event. For example, one player might flip a coin in the other’s presence and each could then play a strategy that takes one action when the coin comes up heads and another action when the coin comes up tails. Or the parties might correlate their strategy on the randomized expression of a third party. As a result, the parties now have strategic options that they did not have in the absence of communication. Sometimes these new strategies will make possible new correlated equilibria.

Jennifer Brown and Ian Ayres use this idea to explain one function of mediation.²² They observe how a mediator could, by *randomly* choosing between alternative resolutions of a dispute, produce a mediate solution that enhances value for both disputants. They therefore claim to explain both why the disputants would hire a mediator and why they would tend to obey him. Brown and Ayres illustrate the point formally with the Battle of the Sexes Game in Figure 1. (As is standard, each cell lists the payoffs for, respectively, Player 1 and Player 2.) The players each choose between Strategy O and Strategy B where matching the strategies (OO or BB) produces a higher payoff for both players than failing to match (OB or BO).

19. See ERIC RASMUSEN, *GAMES AND INFORMATION* 13 (3d ed. 2001) (“An action . . . is a choice [a player] can make.”); *id.* at 16 (a “strategy . . . is a rule that tells [a player] which action to choose at each instance of the game, given his information set.”).

20. See BAIRD ET AL., *supra* note 18, at 310 (“A pair of strategies will form a Nash equilibrium if each strategy is one that cannot be improved upon given the other strategy.”).

21. See generally Robert J. Aumann, *Correlated Equilibrium as an Expression of Bayesian Rationality*, 55 *ECONOMETRICA* 1 (1987); Robert J. Aumann, *Subjectivity and Correlation in Randomized Strategies*, 1 *J. MATH. ECON.* 67 (1974). See also DREW FUDENBERG & JEAN TIROLE, *GAME THEORY* 53–60 (1991); ROGER B. MYERSON, *GAME THEORY: ANALYSIS OF CONFLICT* 244–58 (1991); RASMUSEN, *supra* note 19, at 74–75; BRIAN SKYRMS, *EVOLUTION OF THE SOCIAL CONTRACT* 63–79 (1996).

22. Jennifer Gerarda Brown & Ian Ayres, *Economic Rationales for Mediation*, 80 *VA. L. REV.* 323 (1994).

The two matching outcomes are equilibria (with payoffs of 1 or 5).²³ The two players each prefer reaching either equilibrium to either of the two non-equilibrium outcomes (with payoffs of 0). But the players also have conflicting preferences because each prefers a different equilibrium. Indeed, if each player selects the strategy necessary to produce his desired outcome (Player 1 picks O and Player 2 picks B), the result OB is one of the non-equilibrium outcomes that is worse for both.

FIGURE 1
A BATTLE OF THE SEXES GAME

		Player 2	
		O	B
Player 1	O	5,1	0,0
	B	0,0	1,5

Figure 1 offers a good model for bargaining impasse, where each threatens to walk away from negotiations and where there is some barrier to a simple 50/50 split. One might imagine two divorcing spouses disputing the allocation of two jointly owned properties (or two siblings disputing jointly inherited property) where both prefer one to the other, but where the second best property is better than failing to agree because non-agreement forces a sale and loss of sentimental value. Or the game could represent two businesses contemplating a merger where the two owners have not yet agreed which of them will be the new CEO or what the new firm's name will be; the failure to agree blocks the merger. All of these individuals lose by failing to agree, but each may purposely risk impasse to get his preferred outcome.

Brown and Ayres claim that, in this situation, the parties would agree to have a mediator announce a recommendation before they simultaneously select their strategies. The key assumption here, explored further below, is that each player has a sufficiently large probability of "winning" from the mediator a message to play his preferred equilibrium. Brown and Ayres illustrate the point by assuming that the mediator randomly chooses between the two messages "Play O" and "Play B," so that each party has a fifty percent chance of receiving the message he prefers. If so, then following the mediator's recommendation improves the players' expected outcome by giving each a fifty percent chance of his best outcome, a fifty percent chance of getting his second best outcome, and a zero percent chance of the noncoordinated outcome both wish to avoid.

The point can be made more precisely by comparing this result to the "mixed strategy" equilibrium. In addition to choosing O or B, a party may play a "mixed strategy" of choosing O with probability p and B with prob-

23. At OO, either player would be worse off being the only one to switch strategies because the results OB and BO are worse for each (payoff of 0 instead of 1 or 5). The same is true of BB.

ability $(1 - p)$.²⁴ There can be an equilibrium of mixed strategies. In Figure 1, the equilibrium occurs where Player 1 plays O eighty-three percent of the time and B seventeen percent of the time, while Player 2 plays B eighty-three percent of the time and O seventeen percent of the time. As a result, they fail to coordinate seventy-two percent of the time and the expected payoff for each is approximately .83.²⁵ Now consider: if the parties know the mediator will flip a coin and, depending on the results, announce “Play O” or “Play B,” then mutually following the mediator will eliminate the noncoordinated outcome and produce an expected payoff of 3 for each, a “more than a three-fold improvement over the unmediated mixed-strategy equilibrium.”²⁶ Thus, to solve a dispute that takes the form of a Battle of the Sexes game, “a mediator . . . only needs randomly to select one of two signals and transmit this signal to both parties.”²⁷

As a terminological matter, I would not use “signal” to describe what the mediator is doing here. What really matters to the Brown and Ayres analysis is that if each party perceives *ex ante* that the mediator will recommend the equilibrium he prefers with a fifty percent probability (or something close to it), and if each will then follow the mediator’s advice, then each will prefer mediating the dispute to not mediating. But it does not matter how the mediator generates this perception, by promising to randomize in some formal way or just by being unpredictable.²⁸ So the media-

24. See RASMUSEN, *supra* note 19, at 66 (“A pure strategy maps each of a player’s possible information sets to one action,” while “a mixed strategy maps each of a player’s possible information sets to a probability distribution over actions.”). Thus, given an information set, a “pure” strategy involves the selection of a particular action with certainty, but a “mixed” strategy involves a player selecting at least two actions with probabilities that sum to one.

25. At a mixed strategy equilibrium, each party is indifferent between the possible strategies one can play because any will produce the same payoffs given the mixed strategy of the other player(s). One can determine the mixed strategy equilibrium for these payoffs by defining p as the probability that Player 2 plays strategy O, and determining what value p would have to take for Player 1 to receive the same payoffs from playing O or B. Player 1’s payoffs for O would then be $[p(5) + (1-p)(0) = 5p]$. Player 1’s payoffs for B would then be $[p(0) + (1-p)(1) = 1-p]$. These two payoffs ($5p$ and $1-p$) are equal when $p = 1/6$ (about 17%). So Player 1 is indifferent to the choice between O and B when Player 2 plays O with probability 1/6 and B with probability 5/6 (about 83%). Because the payoffs in Figure 1 are symmetrical, Player 2 is indifferent to the choice between O and B when Player 1 plays O with probability 5/6 and B with probability 1/6.

Expected payoffs for the mixed strategy equilibrium are calculated by adding the products obtained when one multiplies the probability of each outcome by the player’s payoff for that outcome. The probability of OO is 5/36 and Player 1 will then receive a payoff of 5, so the expected gain from OO is .7. The probability of BB is 5/36 and Player 1 will then receive a payoff of 1, so the expected payoff from BB is .14. The probability of either OB or BO is 26/36 and Player 1 receives a payoff of 0 so the expected payoff from either form of noncoordination is 0. Player 1’s total expected gain is approximately .83. Because the payoffs are symmetric, the same result holds for Player 2.

26. Brown & Ayres, *supra* note 22, at 375. Each has a fifty-percent chance of receiving a payoff of 5 and a fifty percent chance of receiving a payoff of 1, for a total expectation of 3.

27. *Id.* at 375–76.

28. For example, a mediator might create the impression of giving each side an equal chance to prevail, at least in the short run, by following a bizarre but nonrandom rule that no one can decipher, such as: “alternate each mediation between ruling for and against the party with the most vowels in his or her full name.” Thus, the mediator is not signaling any private information (or even if one thinks of the bizarre rule as private information, the effect on behavior is not that the parties update their beliefs about anything that matters to their behavior).

tor's message is not a signal of his private knowledge of anything such as how a coin landed.²⁹ It is, in game theory parlance, "cheap talk."³⁰

2. *Extending Correlated Equilibrium Analysis*

The BOS game models unequal equilibria, where the players disagree on which outcome is best but agree on which outcome is worst.³¹ Unlike a Prisoners' Dilemma, where "solving" the game means somehow moving the players from the all-defect equilibrium to a cooperative outcome that benefits both players,³² BOS involves a choice between inequalities.

Other games have these characteristics.³³ Now I want to extend the correlated equilibrium analysis to a similar game—called *Hawk/Dove* or *Chicken*—that I believe is better for modeling certain disputes.³⁴ Here, each player chooses between an aggressive strategy—"Hawk"—where one insists on getting one's way—and a passive strategy—"Dove"—where one defers to others. In a two-person version, the game is *Hawk/Dove* when both players rank the four possible outcomes as follows, starting with the best: (1) playing Hawk against Dove; (2) playing Dove against Dove; (3) playing Dove against Hawk; and (4) playing Hawk against Hawk. The pure strategy equilibria are *Hawk/Dove* and *Dove/Hawk*; an example is Figure 2 below.³⁵ The *Dove/Dove* outcome is attractive because it seems "fair," but

29. An interesting implication of this analysis concerns the need for some (but only some) impartiality. For the theory to apply, the mediator cannot diverge too much from the perfect midpoint where each party has a fifty-percent chance of winning. Otherwise, a party expecting the mediator to favor the other party too much will prefer to play the game without mediation. However, the same analysis reveals why the parties may comply even if they expect *some* divergence from perfect impartiality and precisely how much "partiality" will be tolerated. See *infra* Part IV.B.1.

30. "Formally, cheap talk is defined as a message that does not directly affect the payoff of either the message's sender or receiver." Jason Scott Johnston, *Communication and Courtship: Cheap Talk Economics and the Law of Contract Formation*, 85 VA. L. REV. 385, 412 (1999); see Joseph Farrell & Matthew Rabin, *Cheap Talk*, 10 J. ECON. PERSP. 103 (1996). Below I argue that adjudication can work expressively as a signal. See *infra* Part II.C.1.

31. See THOMAS C. SCHELLING, *THE STRATEGY OF CONFLICT* 89 (1960). Schelling, calls these situations "mixed motive" games because the players have both common and conflicting interests. The common interest is in avoiding the outcome(s) they mutually regard as worst (in the BOS Game, OB or BO; in the next game discussed in the text, Hawk/Hawk). The conflicting interest is over what outcome is best (in the BOS Game, BB or OO; in the next game, Hawk/Dove or Dove/Hawk).

32. See RASMUSEN, *supra* note 19, at 20.

33. For example, see the discussion in ROBERT SUGDEN, *THE ECONOMICS OF RIGHTS, CO-OPERATION AND WELFARE* 30, 62–66 (1986), concerning the "attrition" game and the "Nash bargaining" game.

34. See *infra* Figure 2.

35. At the outcome (Hawk, Dove), Player 1 does not want to switch strategies unilaterally because he currently has a payoff of 4, while (Dove, Dove) would give him a payoff of 2. Similarly, at this point, Player 2 does not want to switch strategies unilaterally because he currently has a payoff of 0, while (Hawk, Hawk) would give him a payoff of -1. The same analysis applies to the outcome (Dove, Hawk); thus, both are equilibria. By contrast, at (Dove, Dove), each receives 2 and either benefits by unilaterally switching to Hawk, which against Dove produces 4. At (Hawk, Hawk), each receives -1 and either benefits by unilateral switching to Dove, which against Hawk produces 0.

it is not an equilibrium because each party would benefit by switching to the more aggressive strategy when the other plays Dove.³⁶

FIGURE 2
A HAWK/DOVE GAME

		Player 2	
		Dove	Hawk
Player 1	Dove	2,2	0,4
	Hawk	4,0	-1,-1

Note the formal difference in the games: in BOS, the two players each rank both non-equilibrium outcomes as worse than either of the two equilibrium outcomes, while in the Hawk/Dove (HD) Game the players rank only one of the non-equilibrium outcomes—Hawk/Hawk—as worse than either equilibrium. Each regards Hawk/Hawk as being worse even than giving in to the other's demand (to play Dove against Hawk). Each ranks Dove/Dove as being second best—better than one equilibrium (one's playing Dove against Hawk) and worse than the other (one's playing Hawk against Dove).

The HD Game does a better job than BOS of mapping onto real world situations whenever the different ways of failing to coordinate produce these different sorts of rankings. For example, imagine two drivers approaching an intersection on different roads, where each wants to proceed at his current speed while the other stops. Perhaps there is a line of cars behind each driver so that stopping means a long delay waiting for all the cars on the other road to proceed through the intersection. In this case, Hawk is the strategy of driving on and Dove is the strategy of stopping. There are two sorts of non-equilibrium outcomes—Dove/Dove means that both cars stop, while the Hawk/Hawk outcome is a collision.³⁷ Or, suppose

36. In Figure 2, the combination of payoffs at Dove/Dove (2 + 2) outcome is equal to the combination of payoffs at Dove/Hawk or Hawk/Dove (4 + 0). This is not necessary. The game could still have the HD structure if the combined Dove/Dove payoffs were greater or lesser than the payoffs at the two equilibria. When the Dove/Dove payoffs are greater, because there is some joint gain from compromise, this outcome is efficient (and therefore doubly attractive as being efficient and fair). Though not explicitly referring to a Hawk/Dove game, Brown & Ayres demonstrate in such a situation case that a mediator can, by making certain recommendations to each party, *separately and privately*, create a correlated equilibrium in which the parties sometimes reach the efficient Dove/Dove outcome. Brown & Ayres, *supra* note 22, at 377–78. This result gives a nice explanation of facilitative mediation or shuttle diplomacy.

By contrast, there are often economies of scale involved that make compromise—Dove/Dove—inefficient, so it jointly pays less than the Hawk/Dove or Dove/Hawk outcomes. For example, as explained below, a dispute may concern property that is more valuable when used intact by one person than when divided evenly between two. In this case, there is no particular advantage to a third party giving recommendations separately and privately, as in facilitative mediation. However, there remains the expressive power described in this article for publicly declared recommendations, as that of evaluative mediators, arbitrators, and courts.

37. Obviously, if both cars stop, at this point, the drivers' decision about how to proceed *also* has the structure of a Hawk/Dove game, because each prefers to go first but risks an accident if both try to proceed first. (Dove/Dove is still better than playing Dove against Hawk because one at least preserves the possibility of proceeding first.) One could combine the two (or more) stages—who stops and who

two individuals are sitting near each other in a public place when one pulls out a cigarette and the other requests that the first not smoke it. At this point, Hawk is the strategy of insisting on getting one's way and Dove is the strategy of giving in to the other's preference. Here, Dove/Dove may represent each party moving slightly away from their current location,³⁸ while the Hawk/Hawk outcome might be an embarrassing shouting match.

As the most general possibility, whenever the parties have a dispute Dove/Dove may represent some compromise while Hawk/Hawk represents violence.³⁹ If two neighbors disagree about the precise location of their shared property boundary, for example, we can think of Hawk as the strategy of treating the disputed land as one's own and Dove as the strategy of deferring to the other's claim. Imagine that the Dove/Dove outcome is to split the disputed land equally, while Hawk/Hawk represents a physical fight. In this case, although the outcome of Hawk/Hawk for each player is uncertain—one might win or lose the fight—the *expected* value is the worst possible outcome for both players because the cost of fighting is high relative to the value of the disputed resource. Both parties, of course, are subject to criminal punishment for assault, but deterrence of violence is obviously highly imperfect, which is one reason that a significant amount of violent crime is a “self-help” remedy to a perceived loss of honor or property.⁴⁰ The risk of costly but nondeterring criminal sanctions is merely another reason that the violent outcome is the worst for everyone.⁴¹

Again, the players in this context will benefit if they correlate their strategies with a mediator's randomly selected recommendation of one of the two equilibria. Without anything to make either equilibrium focal, the players may use a mixed strategy and reach equilibrium (given these payoffs and assuming risk neutrality) only when each plays Dove with probability 1/3 and Hawk with probability 2/3.⁴² For each player, the expected

proceeds first when both stop—into a single game. This game would no longer be Hawk/Dove but it would still have multiple equilibria and still be subject to all the points made in the text.

38. Or Dove/Dove here might be a compromise of the smoker smoking just half a cigarette.

39. I use this game as a general model of disputes in articles discussing the expressive effects of law outside the context of adjudication. See Ginsburg & McAdams, *supra* note 8, at 1235–36; McAdams & Nadler, *supra* note 7, at 8; McAdams, *Focal Point Theory*, *supra* note 7, at 1674.

40. See SALLY ENGLE MERRY, *URBAN DANGER: LIFE IN A NEIGHBORHOOD OF STRANGERS* 175–86 (1981); RICHARD E. NISBETT & DOV COHEN, *CULTURE OF HONOR: THE PSYCHOLOGY OF VIOLENCE IN THE SOUTH* 4 (1996); Donald Black, *Crime as Social Control*, 48 *AMER. SOC. REV.* 34, 39 (1983).

41. BOS and HD are two of the simplest mixed motive games. More complex games capture additional nuance. For example, a dispute may involve numerous stages of escalating conflict leading to a final BOS or HD game. Or a dispute may be a “war of attrition” where each round is costly for each player and the winner is the one willing to stay in the game the longest. See FUDENBERG & TIROLE, *supra* note 21, at 119–26; SUGDEN, *supra* note 33, at 62–66. Or disputes may recur among players who recognize each other, so that each seeks each round to establish a reputation for playing aggressively. The key is that most such games have multiple equilibria in which players mutually prefer to avoid outcomes of the most costly conflict. Thus, in any such game, there remains an element of coordination. Because the players' strategy choice then depends on expectations not entirely determined by the payoffs, there is room for expressive influence.

42. As explained above, one can determine the mixed strategy equilibrium by defining p as the probability that Player 2 plays strategy Dove and determining what value p would have to take for Player 1 to receive the same payoffs from playing Dove or Hawk. Player 1's payoffs for Dove would then be

value of the game at this equilibrium is .67.⁴³ This payoff includes a 4/9 chance of the costly Hawk/Hawk outcome. By contrast, if the two players designate a third party to randomly select one of the two equilibria, and each player follows this recommendation, then the expected outcome for each is now 2.⁴⁴ Because the third party mediator never recommends that both players select Hawk, the mediator eliminates the possibility of a costly Hawk/Hawk clash. The third party thereby creates a substantial expected gain for each player.

In sum, the Brown and Ayres analysis appears to apply in a wide array of circumstances, where adjudicative expression can influence the behavior of disputants by creating a correlated equilibrium.

3. *Two Problems for the Correlated Equilibrium Theory*

One reaction to this analysis is to dismiss out of hand the idea that one could resolve disputes by randomization. There may appear to be something amiss in equating dispute resolution with an essentially reasonless process.⁴⁵ Yet randomization is not so strange if one sees it as merely one way of “splitting the difference.” Ordinarily, compromising disputes involves an intermediate solution where each side gets about half of what it wants. Randomization is just a compromise where each side gets a fifty-percent chance of getting what it wants.

Nonetheless, there are two important objections to the correlated equilibrium theory: (1) the theory is not actually sufficient to show why disputants would comply with the mediator; and (2) the theory implies that the disputants would resolve their dispute without a third party. Moreover, there is a third problem alluded to here that I describe further in a subsequent section.

The first problem is a gap in the application of correlated equilibrium theory to mediation or adjudication. The theory demonstrates only the existence of a new equilibrium—one in which the two players correlate their

[$p(2) + (1-p)(0) = 2p$]. Player 1's payoffs for Hawk would then be [$p(4) + (1-p)(-1) = 5p - 1$]. These two payoffs ($2p$ and $5p - 1$) are equal when $p = 1/3$. So Player 1 is indifferent between Dove and Hawk when Player 2 plays Dove with probability 1/3 and Hawk with probability 2/3. Because the payoffs in Figure 1 are symmetrical, Player 2 is similarly indifferent when Player 1 plays Dove with probability 1/3 and Hawk with probability 2/3.

43. Expected payoffs are calculated by adding the products obtained when one multiplies the probability of each outcome by the player's payoff for that outcome. Given the equilibrium probabilities, the probability of Dove/Dove is 1/9 and Player 1 then receives a payoff of 2, so his expected gain from this outcome is 2/9. The probability of Hawk/Hawk is 4/9 and Player 1 then receives a payoff of -1, so his expected payoff is -4/9. The probability of Dove/Hawk is 2/9 and Player 1 then receives a payoff of 0, so the expected payoff is 0. The probability of Hawk/Dove is 2/9 and Player 1 then receives a payoff of 4, so the expected is 8/9. The sum of these four products is $6/9 = 2/3$. Because the payoffs are symmetric, the same result holds for Player 2.

44. Each has a fifty-percent chance of receiving a payoff of 4 and a fifty percent chance of receiving a payoff of 0, for a total expectation of 2.

45. Indeed, nothing in the theory of a correlated equilibrium would require that the adjudicator understand or engage the reasons that the parties disagree, though we ordinarily think of that engagement as central to adjudication.

strategy with an observable event. By itself, the theory does not demonstrate that the players will wind up at that equilibrium. To the contrary, whenever there are multiple equilibria, the theory tells us only that these are the possible outcomes, not which outcome will occur.

Brown and Ayres appear to avoid this problem by showing that it is in the interest of the players to follow the correlated equilibrium created by the mediator. But it is an error to think that the reason for compliance flows simply from the calculations of expected payoffs. Given their assumptions, Brown and Ayres only show that, prior to the mediator's announcement, each party would expect to improve his payoffs by hiring and following the mediator's message, *assuming that the other player would follow it as well*.⁴⁶ But is there any reason for one player to assume that the *other player* will follow the announcement? Because the mediator's message does not change the payoffs, even after the mediator endorses a particular outcome, the *unendorsed* equilibria stubbornly remain.

Perhaps the answer is that, when there are multiple equilibria, the players tend to play the one that is mutually best, if there is one (and subject to other qualifications not relevant here). Thus, demonstrating that both players expect to gain the most by obeying the mediator's recommendation is arguably sufficient to show that they will obey him. But this does not follow. The expected payoff analysis says that each player will be better off obeying the mediator's recommendation given that the other player does so. *But we could also say the opposite*: each player will be better off doing the opposite of what the mediator recommended, given that the other player does so.⁴⁷ The equilibrium of both players doing the opposite of what the mediator says has the same expected payoffs as both players following the mediator. Yet this equilibrium represents perfect noncompliance, which now makes it an odd representation of the power of mediation.

Another way to state this objection is to imagine what would happen if there were *another* third party besides the mediator—an “interloper”—who also communicates a randomly selected message favoring either Player 1 or Player 2⁴⁸ in the presence of both. Interlopers are common to disputes because various bystanders may enjoy offering their opinion on how the dispute should be resolved. Suppose that the mediator's and interloper's

46. The question of compliance arises *ex post*, after the message is given. But one can extend the Brown & Ayres analysis (at least for a BOS game) by noting that *ex post*, after the adjudication, both parties are still better off complying if the other complies. In their example, even the “loser” of the mediation is better off complying because his less preferred equilibrium, with an expected payoff of 1, beats his mixed strategy equilibrium, with an expected payoff of .83.

47. Another problem here is that, in games other than BOS, it may no longer be the case that following the mediator is Pareto-dominant. That is, in contrast to the analysis in the last footnote, in some games the player who loses the mediation will prefer going back to the mixed strategy equilibrium, which is a reason to resist the mediator's message *ex post*. In the Hawk/Dove game of Figure 2, for example, the expected outcome of the mixed strategy equilibrium (.67) is higher than the outcome of the “losing” party—who expects zero playing Dove against Hawk in conformity with the mediator's message.

48. In this context, by a message “favoring Player 1,” I mean one endorsing OO, which is Player 1's preferred equilibrium. Conversely, a message “favoring Player 2” would endorse BB, which is Player 2's preferred equilibrium.

messages conflict because one favors Player 1 and the other favors Player 2. Compared to the mixed strategy equilibrium, both parties now gain from *either* both following the mediator or both following the interloper (though each prefers following one to following the other). The parties have merely exchanged the coordination problem of choosing O or B with a coordination problem of following one third party (mediator) or another (interloper). My point is not that Brown and Ayres are wrong about mediation, but that there is a gap in the theory. They do not explain what it is about the mediator's expression that will cause each player to expect the other to follow *it*, rather than its opposite and rather than some other third-party expression. It is not difficult to see what the missing element is,⁴⁹ but I defer discussion of it until the next section.

The second problem with using correlated equilibria theory to explain adjudication is that it does not justify the need for a third party. If disputants merely need to correlate their strategies with dichotomous events they perceive as being (approximately) equally likely, then why can't the parties simply flip a coin? Obviously, it is more costly and time consuming for the parties to ask a mediator to randomly select between the equilibria than for the parties to do so themselves. So this explanation raises the question of why the parties would ever resort to a third party mediator or adjudicator to provide this service.⁵⁰

Third, given that the parties usually have private information, there is a serious strategic problem for those who agree to resolve their disputes this way. However, this problem also infects another theory of expressive adjudication—concerning “focal points”—and it will be better to defer discussion of it until after I describe that theory.

B. Adjudication as Focal Point Construction

A second expressive theory is that an adjudicator uses cheap talk to construct a “focal point” in a coordination game. Here I provide some basic background, describe the literature proposing that courts can construct focal points, and then provide a critique.

49. Indeed, Brown & Ayres point to the precise answer I will give when they say: “[T]he parties’ agreement to bring the dispute before a mediator might allow the parties to look to the mediator’s action as a *focal point* to coordinate their behavior.” Brown & Ayres, *supra* note 22, at 376 (emphasis added). But they do not identify the problem for which focality is the necessary solution—the gap in the theory just described in the text.

50. Brown & Ayres identify other circumstances where a third party is strictly necessary. As discussed *supra* note 36, when the efficient outcome to a game is not an equilibrium, a third party can get the two players to reach the efficient outcome on occasion by sending different signals to each *in private*. But I am trying to demonstrate the power of mediation or adjudication to produce compliance with the judgment *declared* to both parties, and therefore the need for a third party to make such a public announcement.

1. *Background on Focal Points*

Talk is said to be “cheap” when it is “costless, nonbinding and non-verifiable.”⁵¹ *A*’s threat of harming anyone who fails to keep his promise to *A* is cheap talk if *A* bears no cost from uttering the statement, nothing binds *A* to follow through on the threat, and there is nothing to verify whether *A* has harmed past promise-breakers.⁵² That “cheap” talk could ever influence behavior may seem puzzling within a rational-choice framework.

There is no puzzle, however, if the game has multiple equilibria. When a game has only one equilibrium, then by definition the payoffs determine the outcome. If the game has more than one equilibrium, however, then by definition something *other than the payoffs* may determine the particular equilibrium that results. A simple example is the pure coordination game, such as the choice of whether to drive on the left or right side of the road. Assume Players 1 and 2 choose between strategies *L* and *R*, where each receives a higher equal positive payoff if both coordinate at *LL* or *RR* than if they wind up at *LR* or *RL*. Merely from the payoffs, Player 1 cannot rationally determine whether to “aim for” the *LL* equilibrium or the *RR* equilibrium; neither can Player 2. But if the players can communicate freely, they might “agree” to each play *L*. Though the agreement is non-binding cheap talk (it is not enforced by a third party and, let us assume, the players feel no moral obligation to keep their promise), it is likely the players will follow it. Even if the players cannot both communicate, if one can send a message to the other naming a particular equilibrium, it is likely the message will determine the behavior. Experimental data confirms the value of cheap talk to coordinating behavior.⁵³

If players cannot communicate or fail to agree,⁵⁴ Nobel Laureate Thomas Schelling identified an alternative mechanism for coordination—“focal points.”⁵⁵ An equilibrium is focal if it has some feature that, for rea-

51. BAIRD ET AL., *supra* note 18, at 303; see discussion *infra* Part III.B.

52. Similarly, *A*’s statement that he has harmed promise-violators in the past is cheap talk if it is costless to make and its truth is not verifiable.

53. See generally Vincent Crawford, *A Survey of Experiments on Communication via Cheap Talk*, 78 J. ECON. THEORY 286 (1998).

54. Cheap talk may fail because there is no opportunity to send or receive messages, because the exchange of messages among all players is too expensive to be worth it, or because players have conflicting preferences over how to coordinate and reach a bargaining impasse.

55. SCHELLING, *supra* note 31. Schelling wrote more than four decades ago, but David Kreps explains his lasting relevance:

The point is that in some games with multiple equilibria, players still ‘know’ what to do. This knowledge comes from both directly relevant past experience and a sense of how individuals act generally. And formal mathematic game theory has said little or nothing about where these expectations come from, how and why they persist, or when and why we might expect them to arise. The best discussion of these sorts of things (at least in the literature of game theory) remains the original treatment due to Thomas Schelling (1960); little or no progress has been made in exploring Schelling’s insights.

DAVID M. KREPS, *GAME THEORY AND ECONOMIC MODELING* 101 (1990). Thus, it bears emphasis that the term “focal point” is more of a conclusion rather than an explanation. Some feature of an outcome causes the players to focus their attention on it. Economics has no theory for what features have that ef-

sons of psychology, history, or culture, draws attention to itself, making it “stand out” among all equilibria. If the players are aware that one equilibrium draws special mental attention from all the players—is “salient” to all—that fact alone can cause everyone to play their strategy associated with that equilibrium. For example, when Schelling asked individuals where they would go to meet someone on a map if they had been separated accidentally, most individuals identified topographically unique places on the map (such as the only bridge or only 5-way intersection).⁵⁶ In this context, expectations are self-fulfilling: once a player believes the other players are “aiming for” a particular equilibrium, the player’s best response is to play the strategy associated with that equilibrium.⁵⁷ Experiments confirm that, in games of multiple equilibria, salient nonpayoff features—i.e., focal points—significantly facilitate coordination.⁵⁸

For purposes of law, Schelling’s most interesting insight combines cheap talk and focal points. He discusses the ability of a *third party*—someone who is not a player in the underlying coordination game—to influence the players in the game merely by communicating in favor of a particular outcome.⁵⁹ By publicly endorsing a particular outcome in view of the players, the third party makes that equilibrium “stand out” from the rest, which may then create self-fulfilling expectations that others will play the strategy associated with that equilibrium. In contrast to “natural” focal points, third-party cheap talk *constructs* a focal point.⁶⁰

One of Schelling’s illustrations is useful. Suppose that two drivers approach a busy intersection on different roads when the traffic light is broken. Each prefers to maintain his or her speed and have the other driver slow down or stop, but each realizes that the drivers will collide in the intersection if neither slows down. In this Hawk/Dove context, Schelling observes the likely effect of “a bystander who jumps into an intersection and begins to direct traffic.”⁶¹ The bystander’s suggestions do not change the payoffs because the bystander cannot sanction drivers for failing to comply. Nor does the bystander seem to enjoy authority or legitimacy of the sort

fect, though other disciplines may. Psychology, for example, may be able to say what features of a situation are likely to be most salient.

56. SCHELLING, *supra* note 31, at 54–55, 58.

57. The point is not that every player is *certain* that others will play the focal strategy, but that as any one player believes it more probable the others will play the strategy associated with the focal outcome, it becomes more and more in the interest of that player to play his best response to that strategy.

58. See Michael Bacharach & Michele Bernasconi, *The Variable Frame Theory of Focal Points: An Experimental Study*, 19 GAMES & ECON. BEHAV. 1, 37–39 (1997); Judith Mehta et al., *Focal Points in Pure Coordination Games: An Experimental Investigation*, 36 THEORY AND DECISION 163 (1994); Judith Mehta et al., *The Nature of Salience: An Experimental Investigation of Pure Coordination Games*, 84 AM. ECON. REV. 658, 672 (1994); Judith Mehta et al., *An Experimental Investigation of Focal Points in Coordination and Bargaining: Some Preliminary Results*, in DECISION MAKING UNDER RISK AND UNCERTAINTY: NEW MODELS AND EMPIRICAL FINDINGS 211, 216 (John Geweke ed., 1992).

59. Of course the third party is “in” some larger game. One should ask about his incentives for giving a particular message. I address this issue below.

60. See Garrett & Weingast, *supra* note 17.

61. SCHELLING, *supra* note 31, at 144.

that sociologists and psychologists attribute to law. Nonetheless, because “coordination requires the common acceptance of *some* source of suggestion,”⁶² one suspects that the bystander’s directions will influence the drivers’ behavior. By calling attention to one outcome, the relevant hand signals make that outcome focal. Experimental studies confirm Schelling’s intuition.⁶³

2. *Using Adjudication to Construct a Focal Point: Existing Literature and the Connection to Correlated Equilibria*

Several economic theorists and philosophers have suggested cheap-talk construction of focal points to explain the expressive effect of law.⁶⁴ Most of the prior work on legal expression as means of constructing focal points, including most of my own, has focused on legal rules of general application stated in advance of a particular dispute. In this article, however, my concern is whether this expressive effect can work retrospectively for adjudication, providing a tribunal with power to influence disputants after their dispute occurs.

Schelling himself first suggested that mediation and fact-finding might work to resolve disputes by making focal a particular outcome.⁶⁵ The first theorists to apply Schelling’s idea to adjudication were apparently the political scientists Geoffrey Garrett and Barry Weingast, who offer a focal point explanation of the role of the European Court of Justice.⁶⁶ Garrett and Weingast claim that nations have a mix of common and conflicting interests that frequently create situations of multiple equilibria. Specifically, they imagine that nations seeking to cooperate in an iterated Prisoners’ Dilemma (PD) game may enter into a potentially self-enforcing agreement that specifies what form their cooperation will take. Two nations, for ex-

62. *Id.*

63. For empirical evidence specific to the context of the Hawk-Dove game, see McAdams & Nadler, *supra* note 7. For other games, see Bohnet & Cooter, *supra* note 17; Tyran & Feld, *supra* note 17; Rick K. Wilson & Carl M. Rhodes, *Leadership and Credibility in N-Person Coordination Games*, 41 J. CONFLICT RESOL. 767, 785 (1997).

64. For extended discussions, see Robert B. Ahdieh, *Law’s Signal: A Cueing Theory of Law in Market Transition*, 77 S. CAL. L. REV. 215 (2004) (financial laws supply a focal point); Garrett & Weingast, *supra* note 17 (international law constructs a focal point); Russell Hardin, *Why a Constitution?*, in THE FEDERALIST PAPERS AND THE NEW INSTITUTIONALISM (Grofman & Wittman eds., 1989) (constitution supplies a focal point); McAdams, *supra* note 7 (law generally supplies focal point); David Strauss, *Common Law Constitutional Interpretation*, 63 U. CHI. L. REV. 877, 910–19 (1996) (constitution). Others have noted the point. Rational choice theorists include Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms*, 86 VA. L. REV. 1577, 1593–94 (2000); J.R. Hay & A. Shleifer, *Private Enforcement of Public Laws: A Theory of Legal Reform*, 88 AM. ECON. REV. 398, 400–01 (1998); Eric A. Posner, *Law, Economics, and Inefficient Norms*, 144 U. PA. L. REV. 1697, 1719 (1996). Philosophers frequently note that law works in part by facilitating coordination. See the discussion by and sources cited in HEIDI HURD, MORAL COMBAT 169–76 (1999). Early examples include Gerald J. Postema, *Coordination and Convention at the Foundation of Law*, 11 J. LEGAL STUD. 165 (1982), and Conrad D. Johnson, *On Deciding and Setting Precedent for the Reasonable Man*, 62 Archiv fur Rechts-Und Sozialphilosophie 161, 163 (1976) (F.R.G.).

65. SCHELLING, *supra* note 31, at 62, 68.

66. Garrett & Weingast, *supra* note 17.

ample, may agree to limit their tariffs and sustain cooperation by threatening to breach if the other breaches. To the conventional point that iteration allows (but does not ensure) the parties to sustain cooperation,⁶⁷ Garrett and Weingast add the point that there is often more than one way for parties to cooperate to achieve their best outcome. The parties therefore require an agreement to define what behavior constitutes “cooperation” for purposes of their conditionally cooperative strategies (which effectively “enforce” the agreement).

The problem is that contracts are inevitably incomplete.⁶⁸ There are always ambiguities and unforeseen contingencies that create situations where the parties disagree on what behavior is required to cooperate. The parties may be drawn to preexisting focal solutions but, in the absence of natural focal points, “an institution can *construct* one by devising the required set of specifications (as to the nature of the agreement, and hence as to what constitutes cooperation and defection) and by making them known to the community.”⁶⁹ Similarly, I recently coauthored an article arguing that the International Court of Justice generates high compliance with its decisions in part by its ability to make focal the outcomes it endorses.⁷⁰

None of this prior work, however, notes the vital connection of focal point construction to the idea of a correlated equilibrium.⁷¹ Focal points provide what I described in the previous section as the element missing from Brown and Ayres’s discussion of correlated equilibria. A mediator’s message tends to make salient the outcome he endorses, rather than the opposite outcome, and thus tends to generate self-fulfilling expectations that the endorsed outcome will occur, rather than the opposite one.

Moreover, we can now see why the players would tend to follow the mediator’s message *instead* of an interloper’s message. That is, we can identify what is special about the message the two players select as the one on which they will correlate their strategies. What makes an outcome focal is not merely that it stands out to each individual, but a kind of common knowledge: that each individual believes that it stands out to others, that each individual believes that each individual believes that it stands out to others, and so forth.⁷² Two obstacles may impede the creation of this com-

67. On the standard game theory view, cooperation can occur because, if each party values the future sufficiently, they may be willing to forgo the immediate benefits of defection in order to preserve the benefits of future cooperation. But it is also possible that individuals reciprocate strategies because they feel it is fair to do so and gain satisfaction from punishing defection and rewarding cooperation. See Dan M. Kahan, *The Logic of Reciprocity: Trust, Collective Action, and the Law*, 102 MICH. L. REV. 71 (2003). Either iteration or a preference for reciprocity creates multiple equilibria, where mutual cooperation becomes a possible outcome but mutual defection remains possible as well.

68. For this standard proposition, see SHAVELL, *supra* note 2, at 299–301.

69. Garrett & Weingast, *supra* note 17, at 183.

70. Ginsburg & McAdams, *supra* note 8.

71. In this respect, and in certain others, this article revises the theory of Ginsburg & McAdams, *supra* note 8.

72. BAIRD ET AL., *supra* note 18, at 304, provide a general definition: “Something is common knowledge if it is known to each player, and, in addition, each player knows that the other player has this knowledge; knows that the other person knows the player knows it; and so forth.”

mon knowledge: (1) uncertainty about whether the other players in the game received the third party's message; and (2) common knowledge that the other players received conflicting messages from *additional* third parties. Either fact creates doubt about what outcome is most salient to others.

The *ritual* of adjudication, however, provides a solution to both obstacles.⁷³ If the parties agree to designate an individual as their arbiter, their agreement creates a common belief that everyone will pay attention to what *this individual* says. The same is true of the ritual itself—the disputants' joint attendance at the proceeding works toward creating common knowledge of the resolution that the third party declares. Moreover, even if everyone pays equal attention to other speakers who send inconsistent messages (and there is common knowledge of this fact), the special designation of one individual as the arbiter tends to make his message unique. In the face of competing messages, that there is only one individual whom the disputants agreed to consult tends to make his message salient. Thus, two parties can give a third party a particular power of influencing their behavior by cheap talk by their agreeing (via cheap talk) to designate that individual as their dispute resolver.

Thus, the missing element in the story of adjudication as correlated equilibrium is this ability of the designated coordinator's speech to make a particular outcome salient and the tendency of salience to produce self-fulfilling expectations that the salient outcome will result. Henceforth, I will combine the ideas of focal points and correlated equilibrium by saying that parties correlate their strategies on an equilibrium the arbiter makes focal. Note the synergy: while the focal point explains the special power of the arbiter's message, the ability of a correlated equilibrium to increase expected payoffs explains why the parties will seek out the message in the first place.

3. *Two Problems for the Focal Point Theory*

The idea of constructed focal points solves one of the objections I raised above to the idea of adjudication as correlated equilibria—that it did not actually explain compliance. Now we can see why the players are likely to succeed in correlating their strategies with a mediator's randomly selected message, if they agree in advance to treat his message as their coordinating device.

But we are still left with the second problem—that disputants seeking a randomized solution do not need to hire a third party because they could randomize by themselves. If two parties need to correlate strategies on a

73. See MICHAEL S. CHWE, *RATIONAL RITUAL* (2001). Chwe explains the form social rituals take by their ability to generate the common knowledge needed to solve a coordination game. He gives many examples but unfortunately omits the ritual of law, including adjudication, which I believe perfectly illustrates his general theory. Cf. Andrew J. Cappel, *Bringing Cultural Practice into Law: Ritual and Social Norms Jurisprudence*, 43 SANTA CLARA L. REV. 389 (2003).

constructed focal point, selected at random, they can create one without third-party assistance. The parties need only to select a future event with equal dichotomous outcomes (e.g., a coin flip) and to agree on how they will correlate their strategies on the two possible outcomes. Once the event occurs, the agreed-to solution will tend to be focal. Thus, the focal-point theory does not explain why two parties seek a third-party arbiter to resolve their dispute.

Garrett and Weingast don't discuss this problem, but it appears to infect their theory. Although they do not identify randomization as the method the adjudicator uses to choose which equilibria to endorse, neither do they identify any other basis for the adjudicator's decision. Nothing in their theory says how a court should choose which of the possible equilibrium outcomes to make focal.⁷⁴ Moreover, recall that the problem focality solves, in their account, is ambiguity. But when the third party states a particular clarifying resolution of an ambiguity (in an agreement defining cooperative behavior), that expression makes that resolution salient without regard to the reasons the adjudicator had for selecting it. If so, then it is not clear why the players need a third party; they could themselves use a random device to make one equilibrium salient.

There is now a second objection I want to raise with the idea of adjudication as a constructed focal point, briefly alluded to above. The problem with randomly generated focal points is the strategic ability of one party to exploit randomization by the other. This point requires identifying an implicit assumption of the above analysis. The Brown and Ayres and the Garrett and Weingast analyses are static; they assume that the existence of a dispute is exogenous to and unaffected by the manner of dispute resolution, that the players can therefore resolve a dispute without affecting the likelihood of finding themselves in such a dispute again in the future. Put differently, existing models proceed as if all disputes are genuine—that is, based on actual differences in how the parties perceive the situation.⁷⁵ But when one allows for the dynamic possibility of *strategic* disputes—that is, the manufacturing of apparent disagreement about the nature of the situation to exploit the opportunities the dispute creates—then disputes will be endogenous to the method of dispute resolution. The number of times one must play a game may be determined by how one plays it. Of particular relevance, if an individual always randomizes to resolve his disputes, then he will have more of them.

This strategic problem is obscured if one focuses solely on the payoffs of the canonical Battle of the Sexes Game. That game is normally described as having only positive payoffs in equilibrium, zero payoffs for the non-equilibrium outcomes, and no negative payoffs. Under these circum-

74. I argue below that they implicitly assume another mechanism at work in dispute resolution and it is this other mechanism (signaling) that explains why a third party is necessary.

75. Brown & Ayres, *supra* note 22, explicitly assume, for this part of their analysis, that the parties have no private information, which means that the dispute is genuine.

stances, where one cannot lose, one *wants* to play this Battle of the Sexes game as often as possible (at least as long as one does not thereby forgo playing other games with even higher expected payoffs). Therefore, there is no strategic danger in taking action that encourages others to create this BOS situation again in the future. Many disputes, however, involve negative payoffs for at least one party. Here, randomization may encourage disputes one wishes to avoid.

An example of the strategic problem is a property dispute modeled by the Hawk/Dove game. A person does not want to be in the situation in which others assert a claim to property he currently possesses and uses as his own. Losing property one has been enjoying causes a loss of utility.⁷⁶ Yet if an individual is known to have used randomization in the past whenever others claimed property he was using, he will encourage such claims. Knowing that *A* will flip a coin to resolve ownership of what he currently regards as his house would prompt a long line of individuals to appear claiming to own the same property, in order to get a fifty-percent chance of acquiring it. Eventually, *A* will lose his house and all of his property. To avoid this predicament, *A* may want to avoid randomization, or at least to cabin it in some way. My point is not that this strategic barrier is insurmountable; only that it remains to be shown how it can be solved.

The problem is general. It also applies in the BOS game if one considers what happens after the players initially “solve” the game. Reconsider Figure 1. What happens if the “losing” party—who prefers the equilibrium other than the one selected by randomization—demands renegotiation? To show the payoffs at this juncture, we need to transform Figure 1.⁷⁷ Suppose the original adjudication-by-randomization produced Player 1’s preferred outcome of OO. Players 1 and 2 will now experience preservation of OO as the status quo baseline of zero, while switching to BB produces a

76. Thus, if we were going to model this situation, we would have to modify the payoffs in Figure 2 to reflect the fact that the party currently enjoying the good will perceive his retention of it as the baseline of zero. The result is Figure 2a. Player 1 merely preserves the status quo by playing Hawk against Dove, so that outcome gives him a utility of 0. His playing Dove against Hawk means that he loses the good he was enjoying, which represents an outcome of -4. His playing Dove against Dove means he loses half the value of the good, for an outcome of -2. And his playing Hawk against Hawk means he incurs the costs of fighting and some probability (assumed to be one-half) of losing the good, for an outcome of -5. Player 2’s payoffs remain the same because, as before, his baseline involves not enjoying the good. The structure is still HD, but this is a game that Player 1 wants to avoid playing.

FIGURE 2A
A MODIFIED HAWK/DOVE GAME

		Player 2	
		Dove	Hawk
Player 1	Dove	-2,2	-4,4
	Hawk	0,0	-5,-1

77. To be more precise, we would transform the simultaneous game of Figure 1 into a sequential game where the possibility of renegotiation arises after the initial dispute is settled, thus combining Figures 1 and 3 into a single game. But the textual example is simpler and the strategic point would remain in the sequential version.

loss for Player 1 and a gain for Player 2. The result is figure 3,⁷⁸ which remains a BOS game.⁷⁹

FIGURE 3
BOS RENEGOTIATION

		Player 2	
		Stay At O	Change To B
Player 1	Stay At O	0,0	-5,-1
	Change To B	-5,-1	-4,+4

First consider this game without the possibility of randomization. In the mixed strategy equilibrium, Player 1 selects Stay at O with probability 5/6 and Change to B with probability 1/6; Player 2 selects Stay at O with probability 1/6 and Change to B with probability 5/6. Player 1's expected outcome is then -4.17; Player 2's is -.17.⁸⁰ Because both expectations are negative, this is a game both parties would prefer to avoid; even Player 2 would rather stick to the status quo than to demand redeciding the original dispute.

What if the parties can resolve their renegotiation dispute by randomization? As before, randomization benefits both parties: given a fifty percent chance of preserving the status quo and a fifty percent chance of switching, Player 1's expectation is now improved to -2 while Player 2's expectation rises to +2. The crucial difference is that, while Player 1 still expects to lose value, randomization transforms Player 2's expectation to a positive one. Thus, the prospect of randomization induces Player 2 to demand reconsideration, a result that harms Player 1. Anticipating that problem, Player 1 wants to avoid using randomization.⁸¹ Therefore, it appears

78. The payoffs are derived from Figure 1 as follows. Once the players arrive at the OO equilibrium, they experience Stay at O/Stay at O as the baseline of 0,0. Put differently, there is no difference in the initial (5,1) payoff and the final (5,1) payoff. If they both were to play Change To B, then the move from (5,1) to (1,5) is experienced by Player 1 as a loss of 4 (-4) and experienced by Player 2 as a gain of 4. If Player 1 selects Stay At O and Player 2 selects Change To B then the move from (5,1) to (0,0) is experienced by Player 1 as a loss of 5 (-5) and by Player 2 as a loss of 1 (-1). If Player 1 selects Change To B and Player 2 selects Stay At O then the move from (5,1) to (0,0) is experienced by Player 1 as a loss of 5 (-5) and by Player 2 as a loss of 1 (-1).

79. There remain two equilibria—Stay/Stay and Change/Change—and the two players rank these two equilibria differently but both prefer either equilibria to either non-equilibria outcome.

80. These numbers are derived in the manner explained at *supra* note 25.

81. One might want to say that the parties can rule out "re-negotiation" when they first agree to randomize, thus treating the first mediator's first coin flip as irrevocable. The problem is that I am trying to determine how mediation or adjudication could work without the threat of sanctions, so we are asking whether the cheap talk agreement not to renegotiate would work in that context. Thus, we should assume that no court will use sanctions to enforce a "no renegotiation" pledge. Still, it is possible that this agreement to randomize only *once* will create self-fulfilling expectations not only to follow the initial random message but also to ignore subsequent ones. But there is a serious danger that Player 1 will not be able to resist the pull of randomizing a second time. The precedent of a prior solution often makes the same solution focal for the next situation, so there may be self-fulfilling expectations of using randomization for future disputes. Moreover, even if Player 1 refuses to "agree" to randomize again, Player 2 might simply announce to Player 1: "I am going to flip this coin [or hire a new mediator to flip this coin]. If it lands heads I will play 'Stick at O,' but if it lands tails I will play 'Change to B.'" This statement may then create

that disputants will not generally wish to correlate their strategies with randomly selected focal points.

C. *Adjudication as Signaling*

The strategic problem just discussed implies that there is a flaw in Garrett and Weingast's analysis of the European Court of Justice (ECJ). They find significant compliance with the decisions of the ECJ, yet I have claimed that disputants would not wish to resolve their conflict by following randomly constructed focal points. Why would a group of nations create an institution for resolving disputes that would only encourage more disputes? Upon closer examination, Garrett and Weingast are implicitly relying on some feature of adjudication other than focal-point construction. Rather than describing the ECJ as endorsing outcomes arbitrarily or randomly, they have in mind that the institution mitigates the problem of ambiguity by "making declarations or judgments about what occurred in the past."⁸² At one point, they give an example where the Danish government backed down prior to an ECJ ruling because the government "fear[ed] an adverse judgment" had it proceeded with a case "it probably would have lost."⁸³ In other words, because the adjudicator engages the facts underlying the dispute, its decisions are made on some constrained, predictable basis. Despite the authors' claim, this is not (or not merely) focal point construction (nor is it a correlated equilibrium analysis). Garrett and Weingast are describing signaling.

In contrast to cheap talk, an individual's costly words or action can reveal or signal otherwise private information if the costs or benefits the individual incurs from the words or action depend upon the private information.⁸⁴ That *A* spends a lot on burglar alarms may signal his level of risk aversion or his having many expensive items in his home.⁸⁵ Observing *A*'s expenditures may therefore cause individuals to change their beliefs about facts they cannot directly observe: *A*'s level of risk aversion or the value of objects stored in his home.

There has been surprisingly little writing on the possibility of signaling as an explanation of adjudicative compliance,⁸⁶ or indeed of any legal com-

self-fulfilling expectations. Specifically, if the coin comes up tails, it may then cause Player 1 to expect Player 2 to play "Change to B," which makes Player 2 prefer to play "Change to B."

82. Garrett & Weingast, *supra* note 17, at 204.

83. *Id.* at 195.

84. The first such model is Michael A. Spence, *Job Market Signalling*, 87 Q. J. ECON. 355 (1973). See RASMUSEN, *supra* note 19; FUDENBERG & TIROLE, *supra* note 21, at 446-60; see also *infra* Part II.A.1.

85. Similarly, *A*'s willingness to offer a warranty when he sells a widget may signal his belief in the reliability of his product or his ability to provide low cost service.

86. I don't count Shavell's signaling analysis of nonbinding arbitration because it works merely by signaling the likely outcome of a full-fledged trial, that is, the likely direction of state coercion should the parties fail to settle. See Steven Shavell, *Alternative Dispute Resolution: An Economic Analysis*, 24 J. LEGAL STUD. 1 (1995). After arbitration, disputants update their beliefs about the probable trial outcome, which usually narrows their perceived differences, making settlement more likely. On this account, nonbinding arbitration would still not influence behavior if the state did not stand ready to enforce the

pliance.⁸⁷ I contend that the signals adjudicators typically send will commonly influence the disputants' behavior. One reason is obvious. Adjudicative signals will matter if one assumes that the disputants are, in the context of their dispute, substantially motivated by a common sense of fairness or morality. By changing the individuals' view of the facts, signals might change the individual's view of what morality or fairness requires, and thereby change behavior.⁸⁸

As discussed in the introduction, however, I want to demonstrate the robustness of expressive power by showing that it operates even under the narrower assumptions of rational self-interest, either for individuals who are so motivated or for contexts in which such motives prevail. The motive of self-interest can become especially important when the conflict arises because the individuals have different views of their moral entitlements.⁸⁹ In this section, I describe a theory of adjudicative signaling⁹⁰ and then raise some objections.

1. *A Signaling Model of Dispute Resolution*

The third expressive possibility, within the assumptions of economics, is that adjudication provides disputants with an informational signal about some feature of the world.⁹¹ According to this idea, those receiving the signal will change (update) their belief about the feature of the world being

outcome of a trial. The question I am pursuing is whether adjudicative expression can influence behavior *on its own*, without even indirect reliance on state sanctions.

87. For a signaling theory of legal compliance that is not specifically about adjudication, see McAdams, *Attitudinal Theory*, *supra* note 7, where I argue that the enactment of new legal rules may signal the attitudes of individuals toward the regulated behavior (which affects behavior if people care about gaining approval and/or avoiding disapproval). In addition, Dharmapala & McAdams, *supra* note 7, claim that legislative enactments may signal information about the costs and benefits of the regulated behavior. Ginsburg & McAdams, *supra* note 8, address adjudication, but the theory there omits several features explored here, including the correlated equilibrium concept. Other writing is suggestive of a signaling theory. See TOM GINSBURG, *JUDICIAL REVIEW IN NEW DEMOCRACIES: CONSTITUTIONAL COURTS IN ASIAN CASES* 21–33 (2003); Eric A. Posner & John C. Yoo, *Judicial Independence in International Tribunals*, 93 CAL. L. REV. 1 (2005); Stephenson, *supra* note 17.

88. For example, if *A* finds an envelope containing cash, he might be willing to give it to *B* only if he believes *B* is the one who lost the envelope. Similarly, *B* might be willing to use force to obtain that cash from *A* only if he believes it is the same cash that he lost. An adjudicator can then influence *A* and *B*'s behavior by influencing their view of these facts, which he does either by verifying the parties' exchange of relevant information, signaling his own belief about the facts, or both.

89. For example, if *A* believes in (and has internalized) a "finders, keepers" rule, then he will not be influenced on moral grounds by the signal that *B* once owned the property. Conversely, *B* might be insensitive to the signal because he believes that he is entitled to the cash on grounds of distributive justice even if it is not the cash he lost because he suffered the misfortune of having lost that sum, while *A* is wealthy and suffered no such misfortune. But both individuals could still comply with the signal for the selfish incentives I identify below.

90. The basic theory is first presented in Ginsburg & McAdams, *supra* note 8.

91. Another possibility, noted by Posner & Yoo, *supra* note 87, at 14–15, is that a third party facilitates the parties exchange of information by verifying that each has disclosed all the relevant information in its possession to the other and verifying the authenticity of all information disclosed. The third party thus solves or ameliorates certain strategic problems that otherwise limit the reliability of information exchange. Nonetheless, if this is *all* the third party did—if he does not also declare what the facts and applicable rule are—then this is a form of facilitative mediation, but not adjudication.

signaled, and this change in beliefs can cause a change in behavior. I will eventually explain why the change in belief influences the behavior of disputants, but first I address the general idea of signaling.

Economists usually use signaling to describe inferences made from an individual's conduct. In the typical model, an individual reveals his "type" ("good" or "bad") by the degree to which he will engage in behavior that has different costs for different types. For example, one who earns a graduate degree may signal his having abilities that make such education less costly for him.⁹² For my purposes, however, it is important to see how ordinary *talk* can also constitute a signal.⁹³ As an example, consider the expression of a critic or reviewer. A review (of theater, wine, stereo equipment, etc.) is cheap talk only if the reviewer doesn't value his reputation for providing reliable information for a consumer's purchasing decision. If the reviewer does value his reputation, deriving some monetary or other satisfaction from influencing these decisions, then his public statements are costly because they affect his reputation. For this reason, the expression of a reviewer (who values his reputation) can cause readers to change their beliefs about the reviewed item, which in turns changes their behavior.

Another analogy, closer to adjudication, is the informal sports referee, who lacks any power to sanction players for disobeying his rulings. Nonetheless, athletic competitors sometimes solicit individuals to serve as informal referees and often obey their rulings. Among other possible reasons is signaling. If the players believe the referee cares about preserving his reputation for accurate rulings, then they will view his rulings as signals of his beliefs and update their beliefs accordingly. If such an informal referee signals a goal in a soccer game, members of the team ostensibly scored against would assign greater probability to the fact that the ball crossed the goal line, and expect the team that apparently scored also to assign greater probability to that fact. As a result, the former team is more likely to concede the goal. Like the reviewer, the informal referee has persuasive, rather than coercive, influence.

Of course, to cause individuals to update their beliefs about the state of the world, a reviewer, referee, or arbiter must have a certain ability and motive. To be able to form a relevant belief, the third party must first have private information about the relevant state of the world. That could be based on some independent observation, but more usually it is simply that the individual reviews existing evidence (perhaps provided by the parties) and evaluates it with his own unique experience and judgment. Obviously, individuals vary greatly in their experience and judgment, which from the

92. See RASMUSEN, *supra* note 19; Spence, *supra* note 84, at 267–91. As another example, one who has a relatively low discount rate—valuing the future relatively highly—might reveal their type by their greater willingness to incur costs following social norms. See ERIC A. POSNER, *LAW AND SOCIAL NORMS* (2000).

93. See, e.g., Dhammika Dharmapala & Richard H. McAdams, *Words That Kill? An Economic Model of the Influence of Speech on Behavior (with Particular Reference to Hate Speech)*, 34 J. LEGAL STUD. 93 (2005).

disputants' perspective means they vary in signaling accuracy—the fit between the signal and the “true value” of the variable being signaled. They also differ in their partiality toward the parties. The degree to which the disputants change their beliefs in the face of a signal depends on this perception of accuracy and partiality. Other things equal, a disputant will give greater weight to (and change his beliefs more in response to) a signal against his interests (i) having greater accuracy and (ii) being less biased against him.⁹⁴

Accuracy and bias are only partly a function of ability; they also depend on motive. To be motivated to signal, the third party must have an incentive to reveal his actual beliefs about what he observes. That requires that he would incur some costs for failing to speak or for speaking something other than what he actually believes. A judiciary may (or may not) embody professional norms that motivate its members to signal their actual beliefs;⁹⁵ such a judiciary would then enjoy a reputation that would give it a particular power to resolve disputes.

But even without norms there is sometimes a selfish motive for providing accurate and unbiased signals—the prospect of future opportunities to serve as a mediator or arbitrator. Assume that a third party expects to receive some benefit for resolving a dispute, such as money, prestige, or influence. The greater the third party's reputation for accuracy, the greater his opportunity for being hired as an arbiter.⁹⁶ If so, then an arbiter will want to adopt a strategy that maximizes his chances that these, or other disputants, will ask him to serve as an arbiter again in the future, which means maximizing his apparent accuracy and impartiality. Players will measure accuracy and impartiality by the disparity between their beliefs and what an arbiter signals. Although different people will see things differently, an arbiter who actually believes that the observed state of the world is x can minimize the disparity in his signals and what others believe by signaling x . Even if he is not highly confident of x , his belief that x occurred means it is more likely that the mean belief among the players is x rather than some-

94. Being “less biased” can mean several things. If a signal is contrary to a disputant's interests, he will give it more weight if he perceives it as unbiased compared to one he perceives as being biased against him. He will also give greater weight to a signal against him if he believes the signaler is biased in his favor rather than unbiased, and greater weight to a signal in his favor if he believes the signaler is biased against him. Without knowing in advance which way an adjudicator will rule, impartiality preserves the greatest potential influence over both disputants. I discuss the normative implications of this need for impartiality. *See infra* Part IV.B.1.

95. *See, e.g.*, MODEL CODE OF JUDICIAL CONDUCT 3E (1990). *Cf.* Albert P. Melone, *The Senate's Confirmation Role in Supreme Court Nominations and the Politics of Ideology Versus Impartiality*, 75 JUDICATURE 68, 75 (1991) (noting routine refusal of Supreme Court nominees to answer certain questions on ground of “professional norms of impartiality”).

96. Accuracy creates opportunity in both a relative and absolute sense. First, third parties will compete against each other for the job of arbiter; disputants will hire those who are the most accurate relative to others. Second, the disputants will insist on a certain absolute level of accuracy because, on this theory, the costs of hiring an arbiter will be justified only if the signal is expected to cause enough belief change to resolve the dispute. In sum, disputants will pay more for a signal they believe is more accurate because it provides a greater chance at avoiding conflict. (Below, I present a theory in which signaling matters for reasons other than updating, but accuracy remains important for different reasons.)

thing else. He will therefore want to express what he actually believes. Given this motive, the third party's statement of the state of the world is a signal of his private information.⁹⁷

So we come to the basic signaling story of adjudication I want to defend.⁹⁸ Stated abstractly, the point is that even selfish players, or players motivated in a particular context by selfish interests, frequently choose strategies that depend, in part, on observed facts about the world. If so, then a third-party signal can change the players' beliefs and therefore their behavior.⁹⁹

For example, in an iterated Prisoners' Dilemma, one's best strategy may depend on whether one's counterpart "cooperated" or "defected" in the last round, and this may depend on narrower matters of observed fact.¹⁰⁰ We might imagine two business partners who each prefer to shirk while the other works or two neighbors who each prefer to free-ride on the public-good investment of the other. Sustaining cooperation is possible if each side implements a reciprocal strategy that in some respect rewards past cooperation with cooperation and punishes defection with defection. An example is the strategy Tit-for-Tat, where a player cooperates in round one and then reciprocates whatever the other player did in the prior round.¹⁰¹ Suppose, however, that the underlying facts are ambiguous; the situation is "noisy."¹⁰² Noise represents an impediment to cooperation be-

97. If one party is more likely than the other to require dispute-resolution services in the future, then this fact may skew the third party's incentives to be biased in the direction of the party more likely to provide repeat business. See, e.g., Lisa Bingham, *Focus on Arbitration after Gilmer: Employment Arbitration: The Repeat Player Effect*, 1 EMP. RTS. & EMPLOYER POL'Y J. 189, 212-15 (1997); Lisa Bingham, *Emerging Due Process Concerns in Employment Arbitration: A Look at Actual Cases*, 47 LAB. L.J. 108, 113-16 (1996).

98. I defer for now a more complex possibility: that community members will enforce norms against a party to the dispute who is believed to have violated the community's norms. Thus, if the arbiter signals that *B* lost the cash that *A* found, others may then sanction *A* if he fails to return the cash to *B*. In the face of an arbiter's signal that the money is *B*'s, *A* may then give the money to *B* not because *A* now believes that *B* lost it, but because he expects third parties to now believe as much, and *A* believes that they will sanction him if he does not comply. See *infra* Part III.C.

99. Although Posner & Yoo do not use the term "signal," this sort of information revelation appears to be the theory they use to explain observed compliance with international adjudication. See Posner & Yoo, *supra* note 87. There is, however, an ambiguity in their explanation. They say that "[t]he tribunal's function is to provide information," *id.* at 17, that "the judgment is, in effect, a disclosure of information," *id.* at 20, and that the tribunal works because it "has the right kind of expertise of information, or the ability to generate information." *Id.* at 22. But they do not explain exactly how new information affects behavior; they do not explicitly state that the information resolves the dispute by changing the disputants' beliefs.

100. Here, I am using the conditions Garrett and Weingast, *supra* note 17, set out to explain the focal power of a court's decision, though unlike them, I am using the same context to explain signaling. Later, I show why the arbiter's factual signaling may also matter in the context of a Hawk/Dove Game. See *infra* Part III.B.1.

101. See ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* (1984); Paul G. Mahoney & Chris W. Sanchirico, *Competing Norms and Social Evolution: Is the Fittest Norm Efficient?*, 149 U. PA. L. REV. 2027 (2001).

102. See, e.g., Jonathan Bendor et al., *When in Doubt... Cooperation in a Noisy Prisoner's Dilemma*, 35 J. CONFLICT RESOL. 691 (1991); Barbara Saintry, *Achieving Greater Cooperation in a Noisy Prisoner's Dilemma: An Experimental Investigation*, 39 J. ECON. BEHAV. & ORG. 421 (1999); Jianzhong

cause *A* may think it has cooperated in round *n* while *B* thinks *A* has defected.¹⁰³ *B* may then defect in round *n* + 1, producing a cascade of alternating defection.¹⁰⁴ In this context, a timely third party signal of the relevant facts of round *n* might cause *A* and *B* to update their beliefs in the same direction, such that they now agree as to what happened in the prior round.¹⁰⁵

The result is compliance. If the adjudicator rules in favor of *A* by saying “*A* cooperated in round *n* and therefore *B* should cooperate in round *n* + 1” (or some more contextually appropriate language), *B* may now update his factual belief sufficiently to believe that *A* did cooperate in round *n*. If so, then *B*'s strategy tells *B* to cooperate in round *n* + 1. In general, the losing player will then tend to comply with this expression, so long as the signal is strong enough to cause him to update his beliefs sufficiently. Thus, for very general reasons, adjudicative signaling about such facts can generally influence disputant's behavior, generating compliance independent of sanctions.

2. *Two Problems for the Signaling Theory*

There are two weaknesses in the signaling account of expressive adjudication. The first problem is merely a limitation, but an important one. In many cases, disputants are so confident in their position that the third party's signal will not change their beliefs sufficiently to change their behavior. For example, the parties would presumably always have some doubt about their estimates, but they might play strategies based on their level of confidence. So, Party *A* might treat Party *B*'s behavior as defection, and act accordingly to punish *B*, if *A* believes it to be at least *X*% probable that *B* defected. If *A* begins believing it is far greater than *X*% likely that *B* defected, then even after a contrary signal from the third party, *A* may still believe it is *X*% (or more) likely that *B* defected. Stated more generally, both disputants may start out with such confidence in their beliefs and such doubts about the third party's perceptive abilities that, after adjudication, they do not change their beliefs sufficiently to avert conflict. In genuinely close cases, the parties may not be so confident in their beliefs, but the third party may also lack confidence and therefore form only a very weak belief about what the facts show. If the arbiter can only determine and signal that

Wu & Robert Axelrod, *How to Cope with Noise in the Iterated Prisoners' Dilemma*, 39 J. CONFLICT RESOL. 183 (1995).

103. In these sorts of situations, strategies more complex than Tit-for-Tat may be better. For example, the error may be such that a player can “accidentally” defect and then realize his mistake before the next round. If so, then a form of “contrition” might help to sustain cooperation. For example, the accidental defector in round *n* contritely cooperates in round *n* + 2 despite having been punished by the other player's defection in round *n* + 1. See SUGDEN, *supra* note 33, at 110; Wu & Axelrod, *supra* note 104; Robert Boyd, *Mistakes Allow Evolutionary Stability in the Repeated Prisoner's Dilemma Game*, 136 J. THEORETICAL BIOLOGY 47 (1989).

104. In the language of the prior note, *B* may expect *A* to show “contrition” by accepting this punishment and still cooperating in round *n* + 2. Because *A* regards *B*'s defection as unprovoked, however, *A* responds to *B*'s defection in round *n* + 1 with his own defection in round *n* + 2.

105. Cf. Sainty, *supra* note 102.

there is, say, a fifty-one percent probability that the facts favor party *A* then he will ordinarily fail to cause *B* to update his beliefs sufficiently to induce him to play a different strategy. Close cases are among the situations most likely to produce a dispute. Yet, again, a true signal here would do little to cause the disputants' beliefs to converge to a common understanding.¹⁰⁶

Of course, if a single third party's signal fails to resolve the dispute, it is always possible that additional third party signals may do the trick. But this possibility reveals the second problem with the signaling model: it implies that disputants would seek out too many third parties. If two parties to a dispute recognize the possible advantage of receiving the signals of others, so as to avoid conflict caused by ambiguous facts, then they would presumably prefer to seek signals of a great many third parties, who collectively have the potential for producing greater belief change and greater accuracy than any one individual.¹⁰⁷ This is a problem because adjudication is typically centralized in a single tribunal or institution, often with a single member (perhaps with limited appeals) who provides the dispute resolution services.¹⁰⁸ Disputants may choose between many different fora, and may appeal from one decision maker to a higher ranking one, but they do not just gather a large number of opinions and aggregate them as signaling implies.¹⁰⁹

The story thus far is pessimistic. There appears to be no room for expressive adjudication based on economic models of correlated equilibria, focal points, or signaling. But the story becomes more optimistic in the next Part where I consider how these elements interact.

III. A RECONSTRUCTED THEORY OF ADJUDICATIVE EXPRESSION: THE SYNERGY OF CORRELATED EQUILIBRIA, FOCAL POINTS, AND SIGNALS

Adjudication can work expressively by combining in a particular way the different elements just discussed. An adjudicator will wield an expressive influence on disputants if he offers a signal where appropriate and a focal point for correlating strategies where appropriate. The synergy between

106. Posner & Yoo, *supra* note 87, do not address this problem.

107. Similarly, the theater-goer selecting a movie or consumer selecting an appliance is ordinarily interested in knowing of as many reviews as possible (which explains the popularity of web sites that compile reviews, such as www.metacritic.com). More generally, the Condorcet Jury Theorem explains why, under certain circumstances including the assumption that any one individual is more than fifty-percent likely to be correct, the belief of a majority of individuals is more likely to be correct than any one individual. See Dharmapala & McAdams, *supra* note 7.

108. The problem—that the theory does not fit the practice of adjudication—is greater still because signaling can work to align the disputants' beliefs even if they do not receive the same signal (or set of signals). There may be some advantage to making the signals common knowledge but there is nothing to say that purely private signals could not play an important role in resolving disputes. So we are left unable to explain why adjudication involves the declaration of a single signal to both parties.

109. Indeed, Posner & Yoo observe that some of the most effective international adjudication comes from ad hoc arbitration before a single individual. See Posner & Yoo, *supra* note 87, at 27 (about one-third of ad hoc arbitrations between 1794 and 1989). When more than a single individual is used, a common number is three.

these types of expression arises because each type works to address weaknesses in the other. Recall the two problems with seeking to correlate strategies around randomly constructed focal points: (1) disputants don't need a third party and (2) randomization invites strategic exploitation. Signaling, however, does necessitate a third party and, as explained below, signaling works to minimize the problem of strategic disputing. Recall also the two problems with signaling: (1) when the evidence of the relevant facts is closely divided, signaling will be too weak to cause disputants to agree on the facts; and (2) signaling does not explain centralization of dispute resolution into a single tribunal. The construction of focal points, however, does necessitate a centralized source of adjudicative expression and focal points can, as explained below, facilitate the correlation of strategies even when the signal is too weak to change the losing party's beliefs.

Section A describes the synergy between these various expressive elements. I conclude that, in common circumstances, adjudicative expression can itself induce even selfishly motivated disputants to comply. The rest of this Part extends and qualifies this expressive claim. At the end of Section A, I acknowledge that the theory at that point only shows how third-party determination of *facts* can influence behavior. Section B then turns toward the legal side of adjudication. I claim that ambiguities in the conceptual categories underlying conventions generate conflict between individuals. I then show how adjudicative expression can influence behavior by clarifying these conventional categories. Section C extends the entire analysis from two- to multi-party disputes. As explained, while two-party disputes frequently correspond to matters of private law, multi-party disputes often correspond to issues of public law. Finally, Section D identifies the limits of the theory of adjudicative expression by recounting the conditions in which it will not apply, where some other mechanism for generating compliance is strictly necessary.

A. Declared Fact-Finding as a Focal Signal: The Basic Theory in Three Steps

1. Step One: The Screening Function of Arbitral Signals

I objected to the correlated equilibrium and focal-point theories because they invite strategic exploitation and they don't explain the need for a third party. Signaling overcomes both problems. First, by calibrating expression to the strength of the disputant's case, adjudicative signaling ameliorates the problem of strategic disputing otherwise caused by randomization. To see this point it will help to assume, for simplicity, that an arbiter will consider the evidence and reach one of only three beliefs: (i) that the facts clearly favor party *A*, (ii) that the facts clearly favor party *B*, or (iii) that the facts do not clearly favor either side because the evidence is closely divided. Assume for now that the third-party arbiter adopts a policy of signaling his particular belief to the parties, including his indecision in case

(iii). If the disputants receive signal (i) or (ii), then they will both update their beliefs in light of this new information. This updating might cause the losing party to update his beliefs sufficiently to align them with the prevailing party, but I defer discussing these outcomes until the next subsection. By contrast, signal (iii) is unlikely ever to cause either party to update its beliefs sufficiently to align them with the other party. Signal (iii) seems too weak to cause the parties to change their behavior, and therefore too weak to avert conflict.

But signal (iii) is nonetheless important for its screening function. When the facts are closely divided, a signal of this fact raises the probability that the dispute is genuine because both sides actually believe the facts favor their position. Thus, the signal that the case is a close one provides some evidence to each party that the other side is not raising the dispute strategically. As such, while still refusing to randomize as a general mechanism for resolving disputes, the parties can benefit from following a strategy of randomizing in this kind of case. A player will not necessarily fear strategic exploitation from correlating his strategy with a random event in just those cases where a neutral arbiter has signaled that the facts do not clearly favor either side. Signaling screens out those cases where the parties would be exploited by using randomization and leaves those where they would not.

Put differently, to address the problem of strategic disputes, we need a mechanism that tends to resolve disputes against the party who raises a dispute strategically. A signal does this. The more probable one party believes it is that the facts favor the other party, the more the former will anticipate that the arbiter will signal in favor of the latter.¹¹⁰ Thus, although a party may not be able to tell whether the other party's claim of dispute is genuine or strategic (because he may be confident in his position in either case), he will still expect to win the adjudication far more often when the other side's claim is strategic. And a party expects to lose disputes when he decides to raise a dispute strategically. With these assurances in place, the parties may then agree to randomize in the cases where the arbiter believes the facts are unclear.

Of course, an arbiter will err on occasion, so this solution is not perfect. A party will still expect to win some small number of strategic disputes. If adjudication were costless, then any positive error rate would prevent expressive adjudication from working because the creation of a strategic dispute would have a possible upside (the favorable result when the adjudicator errs) and no possible downside. But adjudication is not free. One cost is any fee the arbiter charges. Another is the time and resources adjudication requires. A final cost is a loss of one's credibility before the set of possible arbiters. The danger here is that "crying wolf" too

110. Though I assume for simplicity that the arbiter can form only one of three possible beliefs—favoring one or the other party or favoring neither—this way of phrasing the point shows that the argument works if we assume a continuous range of possible beliefs.

often will earn one a reputation for inventing disputes—a reputation that will make one more likely to lose future adjudications.¹¹¹ These costs constitute disincentives to inventing disputes because parties are certain to incur costs and yet unlikely to gain the benefits of winning the adjudication. The point is not that the system will necessarily, or even probably, deter all strategic disputes but that it can deter enough of them to make the parties want to randomize in disputes the arbiter says are “close.”¹¹² Subsequently, the outcome selected at random is now focal, which creates self-fulfilling expectations this outcome will occur.

In addition, note that signaling requires a third party. A randomizing device such as a coin flip cannot signal. Because the parties do not know in advance whether or not they need a signal to screen out a strategic dispute, they require a third party in every dispute.

In sum, signaling solves the objections I raised to the focal point and correlated equilibrium theories. A signal necessitates a third party and third-party signaling ameliorates the strategic problem by making it less likely strategic disputants will prevail. The next step is to address the objections I previously raised to signaling.

2. *Step Two: Disputants Correlate Strategies with the Arbitral Signal*

With the threat of strategic disputing sufficiently limited, the parties can simply correlate their strategies with the arbiter’s signal regardless of how much they update their beliefs. In other words, the disputants can benefit by treating the signal as if it were perfectly accurate even though they know it is not. The reason is simply the logic of the correlated equilibrium. I objected to that logic in Part II only because of the two problems that, as just indicated, signaling resolves.

To see the point, return again to the simplified assumption that the arbiter will consider the evidence and form one of three beliefs: the facts (i) clearly favor party *A*, (ii) clearly favor party *B*, or (iii) do not clearly favor either side. The last subsection addressed only signal (iii); now consider the effect of signals (i) or (ii). If an accurate arbiter sends these signals, the los-

111. Of course, reputational concerns might themselves prevent a dispute because at least one of the parties might always give in rather than risk a reputational loss. But reputation works imperfectly because information about others’ past actions is imperfect. For the same reason, information costs might allow an individual to avoid a bad reputation despite raising many strategic disputes. But various informational devices can make this reputational market work fairly well. For example, disputants might invest in acquiring the evidence of their opponents’ litigiousness. Note also the advantage of having a single arbiter in a small community who might simply remember what individuals are most likely to raise disputes strategically.

112. The concern over error rate, however, points again to the importance of the arbiter’s accuracy for generating compliance (on this self-interested basis). The more accurate the arbiter is, the rarer it will be that he rules in favor of an individual who created a dispute strategically, and therefore the lower the risk of adjudicatory exploitation. Thus, signaling accuracy matters not only as it did in a prior section—where more accurate signals produce more updating which produces more behavioral change—signaling accuracy also matters because the arbiter is using signaling to identify the cases that are genuine disputes for which the parties can agree to randomize without fear of exploitation.

ing party will sometimes update his beliefs sufficiently to align them with the other party, thereby resolving the dispute. I noted two objections above: (1) that if a party's prior belief about the relevant facts is sufficiently strong, he will not change his belief enough to change his behavior (even though he does revise his estimate of the probabilities somewhat), and (2) that disputants would always seek signals from multiple sources and not from a centralized adjudicator.

The crucial point, however, is that, even if the parties are unpersuaded by an adjudicative signal, it will still benefit them *ex ante* to correlate their strategies with this signal and only this signal. And once they seek adjudication, the resulting declaration will make focal a particular outcome, creating self-fulfilling expectations that it will occur.

The parties will favor adjudication *ex ante* as long as the arbiter is unbiased; if so, then each party will expect to prevail in adjudication of genuine disputes about fifty percent of the time. As the Brown and Ayres example demonstrated, there are many situations where the parties are better off correlating their strategies with a random event because the parties then each have an equal chance at getting their preferred payoff, while at the same time reducing to zero the chance of noncoordinated outcome that harms them both. Put differently, prior to adjudication each party expects to be in the situation described above—unpersuaded by an adjudicative signal contrary to one's position—no more often than to be in the opposite position—the recipient of a favorable adjudicative signal that does not persuade the other party. Because failing to resolve the dispute is costly to both sides, each is better off accepting this equal chance of prevailing, which means correlating their strategies with the arbiter's public signal.¹¹³ Thus, the idea of coordinating on a focal signal explains how adjudication works when the signal is too weak to influence behavior via its direct affect on beliefs.

Moreover, correlating strategies with a public signal requires identifying in advance the *one and only* signal that will serve as the focal basis for coordinating, which explains why the parties seek a centralized and hierarchical set of adjudicative signals (with possible but limited appeals). As explained above, the focality of the agreed-to adjudication is necessary to produce *ex post* compliance with the endorsed outcome rather than its opposite and rather than with some competing expression.¹¹⁴ That the expression has to be focal explains why adjudication tends to be centralized in a single actor or institution.

113. Stephenson's rational choice account of the institution of judicial review makes a similar point, at least implicitly. Stephenson, *supra* note 17, does not avert to the problem of strategic disputing, nor the concepts of a focal point or correlated equilibrium. Nonetheless, his formal model of judicial review implicitly mixes signaling with the idea of a correlated equilibrium in a way similar to what I have described.

114. See *supra* Part II.B.2.

3. *Step Three: The Arbiter Sends an Undifferentiated Signal*

Having completed the penultimate step in the argument, I reach a final objection. The process just described still does not map onto adjudication because adjudicators do not send signals like the third one described above that fail to favor either side. Courts do not say “too close to call” (and disputants do not employ random devices after such signals). Here, I offer to explain how and why randomization is concealed.

Suppose again that an arbiter assesses the competing claims of the disputants, and concludes that the facts: (i) clearly favor party *A*, (ii) clearly favor party *B*, or (iii) do not clearly favor either side. But now suppose that the arbiter only sends one of two signals: that *A* prevails or that *B* prevails. The arbiter maps the signals to his beliefs by following this strategy: “If I reach conclusion (i) then I will signal ‘*A* prevails.’ If I reach conclusion (ii) then I will signal ‘*B* prevails.’ If I reach conclusion (iii) then I will randomly choose between delivering the signal ‘*A* prevails’ and the signal ‘*B* prevails.’” In other words, the arbiter no longer differentiates in his signal between the cases where he perceives the evidence to be clear and those where he perceives the evidence to be unclear. Instead of publicly identifying the close cases where the disputants could gain by randomizing, the arbiter himself randomizes in those cases and then sends one of the signals he would send when the evidence actually favored a particular party.

From the parties’ perspective, there is no difference in following a strategy that randomizes in certain cases the arbiter identifies and following a strategy that permits the arbiter to randomize in those same cases. If *A* and *B* are planning on correlating strategies with signals (i) and (ii) and randomizing after signal (iii), then they would also be willing to correlate strategies with signals (i) and (ii) and to allow the arbiter to randomize after reaching the decision that previously resulted in signal (iii). From the parties’ perspective, nothing of importance changes in moving from the fully candid to the more discreet arbiter. At this point we reach a process that looks more like adjudication, where the arbiter purports to decide every case and resists full disclosure of his own uncertainties about the dispute.

The question arises, however, why arbiters rarely reveal their own indecision. If I am right in thinking that an arbiter occasionally reaches belief (iii), why do we observe a near universal refusal to signal this indecisiveness? One answer is that individuals are more likely to comply with decisions they regard as legitimate and that individuals are less likely to perceive as legitimate a decision where the arbiter admits uncertainty and randomizes. But there is a self-interested reason I want to identify if only because the idea of an undifferentiated signal cuts against my claim above that individuals competing for the job of arbiter will signal their actual beliefs. If that is true, why not signal one’s actual indecision?

The answer is that the arbiter is concerned about revealing his fallibility. Disputants seek accurate adjudicators. The need for the arbiter to project accuracy (to obtain future opportunities) creates an incentive to con-

ceal his failure to form a determinative belief, that is, to conceal the fact that he had to randomize. In a sporting event, for example, a referee who has to resort to randomization twenty times a game will seem less competent than a referee who has to resort to randomization only five times a game, other things equal. Even though everyone knows there are some calls that are too close for anyone to determine, those competing to be referees will understandably engage in a race to the bottom, where the bottom means the referee claims never to require randomization because, in every case, he has actually determined the relevant facts.¹¹⁵

To summarize: the success of adjudication does not depend entirely on the sanctions law threatens nor the willingness of moral agents to defer to the judiciary's perceived legitimacy. In circumstances of multiple equilibria, individuals motivated by selfishness (in general or in a particular context) have an incentive to seek out and comply with adjudication, even when the arbiter lacks the power to sanction. I rejected some explanations for this result. Disputants do not generally want to correlate their strategies on the focal points the arbiter constructs entirely at random because that would invite strategic exploitation. And a losing party will often remain unpersuaded by adjudicative signals favoring the prevailing party. But there is nonetheless a synergy between focal points, correlated equilibria, and signaling. Expressive adjudication can, therefore, generate some compliance because disputants benefit by correlating their behavior on the arbiter's focal signal.

B. From Finding Facts to Setting Precedent: The Expressive Power of Rule Articulation

As I have developed the theory, it seems that third-party expression can resolve only factual disputes and influence only the behavior of the disputants. If so, then this is a theory of dispute resolution but not adjudication. Judicial bodies, particularly common-law courts, wield the additional power of precedent, which involves resolving ambiguities in rules rather than facts, and by which courts influence the future behavior of parties other than the disputants. If the expressive theory cannot account for this power—if precedent depends strictly on sanctions for legitimacy—then it has a narrow, and arguably disappointing, scope. In this section, however, I explain how third parties can also use expression to resolve disputes that arise from ambiguities in the formal or informal rules that govern behavior. Mere expression can influence behavior by sharpening the common understanding of what formal or informal rules require.

115. One might object that an individual cannot really *randomize* without referring to an external object like a coin or die, which would then reveal what the arbiter wishes to conceal. But it is not necessary to randomize literally. In an athletic competition, for example, a referee might alternate, so that the first "tie" goes to Team A, the second to Team B, the third back to Team A, and so forth. This description also fits what many sports fans suspect of many actual referees.

Existing theory already demonstrates the expressive power of rule articulation in the context of private contracts. Most commonly, scholars employ the idea of a potentially self-enforcing agreement arising from an iterated PD game.¹¹⁶ When two individuals are in this situation they will benefit if they can sustain a cooperative equilibrium, as where each individual employs a strategy that conditions his cooperation on the other player's cooperation. For example, two nations might agree to restrain tariffs. But the players will not sustain the cooperative equilibrium if they do not have concordant expectations about what behavior will constitute cooperation as well as common beliefs in each round about whether the other has engaged in that behavior. In the example, they have to agree on what constitutes a tariff.

The problem with self-enforcing agreements is that expectations and beliefs inevitably diverge. Garrett and Weingast emphasize that there is often more than one way to cooperate to achieve the Pareto-optimal outcome.¹¹⁷ To create concordant expectations, therefore, the parties must agree on what each will regard as cooperative and defective behavior. Yet the agreement they create will, like all contracts, be incomplete.¹¹⁸ Success may then depend on third-party adjudication to resolve ambiguities. Because the iterated PD game is generally thought to describe a common situation, this story suggests a broad role for expressive adjudication.

This analysis of formal order, however, omits half the story—arguably the more interesting half. Where other theorists have stressed the example of self-enforcing agreements, in this section I emphasize spontaneous order or conventions that arise without agreement or other design.¹¹⁹ I follow Lon Fuller's distinction between “contract law”—meaning the rules created by the two parties to a contract to govern their interaction (*not* the government's rules for contracts)—and “customary law”—meaning the rules that arise without design to govern the interaction of individuals in a larger population.¹²⁰ In these terms, existing analysis focuses on the role for ex-

116. See Jack L. Goldsmith & Eric A. Posner, *A Theory of Customary International Law*, 66 U. CHI. L. REV. 1113, 1170–72 (1999); Posner & Yoo, *supra* note 87, at 13; Stephenson, *supra* note 17, at 60–64.

117. See Garrett & Weingast, *supra* note 17.

118. See *id.*; Posner & Yoo, *supra* note 87, at 15.

119. A substantial literature in law and economics addresses the interaction of formal and informal order. For a comprehensive review and bibliography, see Richard H. McAdams & Eric B. Rasmusen, *Norms in Law and Economics*, in THE HANDBOOK OF LAW AND ECONOMICS (A. Mitchell Polinsky & Steven M. Shavell eds., forthcoming 2005). This literature mostly uses the term “norm” to refer to informal order, but I distinguish between “norms” and “conventions.” See also Richard H. McAdams, *Conventions and Norms: Philosophical Aspects*, in 4 INT'L ENCYCLOPEDIA OF THE SOCIAL AND BEHAVIORAL SCIENCES 2735–41 (Neil J. Smelser & Paul B. Baltes eds., 2001). Roughly speaking, a convention is “the coordinated expectations that sustain a pure-strategy Nash equilibrium, in circumstances where multiple pure strategy equilibria are possible, and the behavioral regularity that the equilibrium represents.” *Id.* at 2738. Thus, a convention is explained by game theory with no need for additional concepts. By contrast, a norm is a behavioral regularity sustained in part by normative attitudes in which individuals at least approve others' conformity to the regularity and/or disapprove their nonconformity. See McAdams & Rasmusen, *supra*; Philip N. Pettit, *Virtus Normativa: Rational Choice Perspectives*, 100 ETHICS 725, 725 (1990).

120. Fuller, *supra* note 6, at 13–20.

pressive adjudication in the context of contract law but not customary law.¹²¹ To include the latter, I briefly describe some of the evolutionary game-theory literature about the emergence of conventions, using the iterated Hawk/Dove game to illustrate. I claim that expressive adjudication can resolve disputes about what behavior a convention requires in a given situation, and that such resolutions create effective precedent for future behavior in similar situations.¹²²

Subsection 1 briefly describes the evolution of informal order, specifically, conventions. Subsection 2 explains how conceptual ambiguities in the categories of a convention cause conflict. Subsection 3 explains how expressive adjudication can resolve such conflict by setting a precedent for future behavior.

1. *The Emergence of Informal Order*

Evolutionary game theory is a particularly mathematical—some would say abstruse—area of game theory.¹²³ Yet even an informal understanding provides a useful but neglected tool for understanding the relationship between law and custom.¹²⁴ Indeed, this theory is arguably what Fuller had in mind when he decried the absence of “any inquiry into the actual social processes through which this [customary] law came into being and by which it is sustained.”¹²⁵

Evolutionary theory shows that, when a population of players repeatedly encounters a particular game, repetition can eventually produce a strong pattern of expectations about what strategies others will use. Thus,

121. The primary exception is my prior work, Ginsburg & McAdams, *supra* note 8, which provides a preliminary statement of what follows in the text. Posner & Yoo, *supra* note 87, briefly develop a similar point about customary international law, but do not discuss the mechanisms that produce conventions, the causes of conventional ambiguity, or the importance of focal signals to compliance.

122. This is a very different claim than the argument I advanced in McAdams, *Attitudinal Theory* *supra* note 7, at 374–78, that courts could influence future behavior by signaling the attitudes of a community regarding the regulated behavior. That “attitudinal theory” of expressive law assumes that individuals seek the “esteem” or approval of others, as well as to avoid shame or “disesteem,” and that a court (like a legislative body) could signal the local pattern of approval and disapproval. The theory that follows in the text explains the expressive power of precedent even if neither of those assumptions is true.

123. See, e.g., DREW FUDENBERG & DAVID K. LEVIN, *THE THEORY OF LEARNING IN GAMES* (1998); LARRY SAMUELSON, *EVOLUTIONARY GAMES AND EQUILIBRIUM SELECTION* (1997); H. PEYTON YOUNG, *INDIVIDUAL STRATEGY AND SOCIAL STRUCTURE: AN EVOLUTIONARY THEORY OF INSTITUTIONS* (1998); SKYRMS, *supra* note 21.

124. One of the few efforts at applying the evolutionary literature to customary law is Randal C. Picker, *Simple Games in a Complex World: A Generative Approach to the Adoption of Norms*, 64 U. CHI. L. REV. 1225 (1997).

125. Fuller, *supra* note 6, at 5. Decades ago, Fuller envisioned customary law’s language of interaction as follows:

To interact meaningfully men require a social setting in which the moves of the participating players will fall generally within some predictable pattern. To engage in effective social behavior men need the support of intermeshing anticipations that will let them know what their opposite numbers will do, or that will at least enable them to gauge the general scope of the repertory from which responses to their actions will be drawn.

Id. at 2. He also refers to “interactional expectancies” and a sociological term—“complementary expectations”—all of which are in tune with the game theory I am about to describe. *Id.* at 3, 5, 9.

in the common situations where there is more than one possible equilibrium,¹²⁶ a pattern of expectations can emerge that sustains a pattern of behavior because each person is best off conforming to the behavioral pattern given that he expects everyone else to do so. The resulting pattern of expectations and behavior is a “convention.”¹²⁷ An obvious example is the problem of coordinating driving on the left or right side of the road; the practice that emerges is a convention. Once a conventional pattern of behavior spontaneously arises (e.g., driving on the right), it tends to be self-sustaining. That is, even though conventions arise without design, conformity to conventions is “self-enforcing” because a person is worse off by being the only one (or one of a few) to deviate from the convention (as by driving on the left when everyone else drives on the right).

To illustrate, my primary example for the remainder of the article is property. The convention of property is perhaps the most discussed example in the evolutionary literature.¹²⁸ Here, I briefly describe one account.¹²⁹ Robert Sugden and Jack Hirshliefer (separately) used evolutionary game theory to explain David Hume’s claim that property is conventional.¹³⁰ They posit that, in a “state of nature,” with no state to enforce property rights, disputes over particular resources (e.g., a set of firewood) may be modeled by an Iterated Hawk/Dove (“HD”) Game. In their models, Hawk refers to an aggressive claim to the resource, Dove is deference to the others’ claim, the Hawk/Hawk outcome is violence, and the Dove/Dove outcome is an even split of the resource. The use of the Iterated HD Game is a plausible model for those cases where (a) the fighting capabilities of the players are roughly equal (otherwise there may be a dominant strategy for

126. Or, as Fuller termed, there is more than one possible “system of stabilized interactional expectancies.” *Id.* at 10.

127. See DAVID K. LEWIS, CONVENTION: A PHILOSOPHICAL STUDY 42 (1969); McAdams, *supra* note 119, at 2738; Postema, *supra* note 64, at 176.

128. See JACK HIRSHLIEFER, ECONOMIC BEHAVIOUR IN ADVERSITY 223–34 (1987); SUGDEN, *supra* note 33, at 55–103; see also JOHN MAYNARD SMITH, EVOLUTION AND THE THEORY OF GAMES (1982). In the law and economics literature, see discussions in ROBERT C. ELLICKSON, ORDER WITHOUT LAW 156, 174–76, 179 (1991); POSNER, *supra* note 92, at 177–79; Kenton K. Yee, *Ownership and Trade from Evolutionary Games*, 23 INT’L REV. LAW & ECON. 183, 187–94 (2003). I have discussed the example several times beginning with McAdams, *Focal Point*, *supra* note 7. Indeed, this section draws on Ginsburg & McAdams, *supra* note 8, at 1253–56. See also Richard H. McAdams, *Conformity to Inegalitarian Conventions and Norms: The Contribution of Coordination and Esteem*, 88 THE MONIST 238–50 (2005).

129. It is not important to my expressive point that one believe that what follows is the best account of the origin of property. For example, though the theory following in the text explains property as emerging from a state of nature, one can instead use evolutionary game theory to explain property as arising spontaneously from a collectivist regime where resources are shared. See Samuel Bowles & Jung-Kyoo Choi, *The First Property Rights Revolution* (Oct. 28, 2002) (unpublished manuscript, on file with author). This has the advantage of corresponding to known history, specifically, the human transition from hunter/gathering societies involving sharing to agricultural ones involving private ownership of land. Nonetheless, I use the analysis in the text as an illustration, because the analysis is more established and considerably simpler.

130. See DAVID HUME, A TREATISE OF HUMAN NATURE (L.A. Selby-Bigge ed., 2d ed. 1978) (1740, Book 3, Part 2, Section 2) (property “arises gradually and acquires force by a slow progression, and by our repeated experience of the inconvenience of transgressing it”); see also Peter Vanderschraaf, *The Informal Game Theory in Hume’s Account of Convention*, 14 ECON. & PHIL. 215, 230–45 (1998).

the better fighter to play Hawk and the weaker player to play Dove) and (b) the costs of fighting over the resource are large compared to the value of the resource (and hence, the worst outcome for both sides is a Hawk/Hawk fight).

If these assumptions are correct, one can view property as a complex set of expectations that emerges over time in the iterated game. According to Hirshliefer and Sugden, the key is that the individuals observe some feature of the repeated situation that distinguishes or labels their roles in the game.¹³¹ One such asymmetry is the fact that one of them is currently in physical possession of the property in dispute and the other is not. By itself, this observation creates new possible strategies such as: (1) when possessor play Hawk and when nonpossessor play Dove, or (2) when possessor play Dove and when non-possessor play Hawk. Finally, the existence of these new strategies creates two new possible equilibria where everyone plays strategy (1) or everyone plays strategy (2). For example, if everyone else is playing strategy (1), then when you are the possessor, you expect the other player to play Dove, and when you are the nonpossessor, you expect the other player to play Hawk. Your best reply is then to play Hawk when possessor and Dove when nonpossessor, which is to say to play strategy (1) like everyone else. The result is a first approximation of the convention of property.

Though nothing guarantees that this convention will arise (everyone playing strategy (2) is also possible),¹³² the theory demonstrates that the social practice of property can emerge from the repeated interactions of individuals in a state of nature, without a third-party enforcer creating or protecting property rights. Significantly, the analysis does not require that individuals act morally or perceive property as legitimate. Moreover, as long as every player can perfectly determine whether he is a possessor or nonpossessor in a given case, the property convention (or its opposite) will eliminate Hawk/Hawk fights.¹³³

131. See HIRSHLEIFER, *supra* note 128, at 223–34 (1987); SKYRMS, *supra* note 121; SUGDEN, *supra* note 33, at 55–103; McAdams, *supra* note 128.

132. Sugden argues that the property convention is more likely to arise than is the opposite convention because of payoff differences between possessors and nonpossessors. See SUGDEN, *supra* note 33, at 89–91. Yee, *supra* note 127, concurs on this point. Hirshliefer makes the claim regarding land, that territoriality is likely to be adaptive given that possessors tend to know better and be better matched with land than nonpossessors. See Jack Hirshliefer, *Privacy: Its Origin, Function, and Future*, 9 J. LEGAL STUD. 649, 657–58 (1980). See generally Michael J. Casimir, *The Dimensions of Territoriality: An Introduction, in MOBILITY AND TERRITORIALITY: SOCIAL AND SPATIAL BOUNDARIES AMONG FORAGERS, FISHERS, PASTORALISTS AND PERIPATETICS 1* (Michael J. Casimir & Aparna Rao eds., 1992). Nonetheless, as a general matter, the selection of particular equilibria in evolutionary game theory is highly contingent. As Fuller, *supra* note 6, at 33, anticipated: “[I]f we seek to discover constancies among the different systems of customary law we shall find them in the interactional processes by which those systems come into being, rather than in the specific product that emerges, which must of necessity reflect history and context.”

133. Of course, as I discuss below, each player cannot perfectly determine whether he is a possessor or nonpossessor, because the concept of possession is subject to residual ambiguity and possible exceptions.

Note also that the evolutionary process will not stop at such a simple convention (nor need it ever stop). Suppose the players notice not only the asymmetry of physical possession but also a temporal asymmetry—when physical possession occurs. The combination of these asymmetries—possession and time—produces a more complex set of roles the players can occupy: not just (1) the current possessor and (2) the current nonpossessor, but (3) the original possessor and (4) the original nonpossessor. The larger set of possible roles creates a larger set of possible conventions. One obvious (but not inevitable) possibility is the familiar idea of first possession.¹³⁴ The common expectation may be that everyone will play Dove against the original possessor, who will always play Hawk (and perhaps also that everyone but the original possessor will play Dove against the current possessor, who will play Hawk against everyone but the original possessor).¹³⁵ In this fashion, individuals may come to expect that others will play Hawk or Dove depending on the asymmetry of first possession.

So stated, however, one can immediately discern a possible objection to an expressive theory of precedent. Given that this form of unintentional, spontaneous order can prevent Hawk/Hawk fights, why is adjudication necessary? Indeed, given settled expectations, how can pure expression influence behavior? On the one hand, if the policymaker favors the existing convention, then there is no need for any intervention, including adjudication. On the other hand, if a policymaker wants to change the prevailing convention, by redirecting settled expectations toward some other behavior (e.g., a switch to driving on the left), then mere expression is insufficient. Sanctions and/or legitimacy are strictly necessary to upset a self-sustaining convention. Thus, if I am going to explain a role for expression given these constraints—to prove the precedential power of adjudicative expression—I must explain why spontaneous forces do not fully coordinate behavior without the need for adjudication.

The next subsection advances just this sort of claim, arguing that expressive adjudication can effectively set precedents for conventional behavior before expectations are firmly settled. This is not a surprise because genuine disputes arise because expectations are not firmly settled. The problem is one of residual ambiguity about the conceptual categories the individuals use in forming their expectations. With enough time for endless trial and error, evolutionary game theory shows that individuals could re-

134. See, e.g., Richard A. Epstein, *Possession as the Root of Title*, 13 GA. L. REV. 1221, 1241–42 (1979); Carol M. Rose, *Possession as the Origin of Property*, 52 U. CHI. L. REV. 73, 74–75 (1985); cf. Richard A. Epstein, *The Allocation of the Commons: Parking on Public Roads*, 31 J. LEGAL STUD. 515, 528–30 (2002).

135. I will not discuss the probabilities that this convention will emerge. I do note that a first possession convention is more efficient than a current possession convention (because the latter diminishes the incentive to invest in property, given the difficulty of continuously “holding” it). This efficiency gives the convention a greater resilience that makes it more likely to persist over time. But others have shown why efficiency does not ensure that the convention will emerge or survive over time. See Mahoney & Sanchirico, *supra* note 101, at 2028. For my purposes, all that matters is that the convention is possible, so it can illustrate the problem of ambiguity that plagues conventions.

solve residual ambiguities without design. But ambiguity will cause conflict during the period of uncertainty, possibly a very long time, creating an advantage to intentional clarification of the convention.¹³⁶

2. *Conceptual Ambiguity in Informal Order*

In the prior subsection, the existence of a convention—e.g., first possessors play Hawk—seems to cover all possible situations in a straightforward manner. Real-world conventions do not work so flawlessly.¹³⁷ Despite the presence of a convention, there always remains the possibility that a situation will occur in which the players lack common expectations about what each other will do. As Gerald Postema describes it, while “the standard situations needing coordination are provided for,” “[t]here may . . . be substantial differences of opinion in the community regarding what the convention requires in some specific instances.”¹³⁸ Without common expectations, the players will frequently fail to coordinate their behavior.¹³⁹

Garrett and Weingast make this point with respect to the contracts that define cooperation in an iterated Prisoners’ Dilemma—a form of intentional order. Because contracts are always incomplete, some event for which the contract is not fully specified may cause the parties’ expectations to diverge. Here, I extend the problem of ambiguity to explain the imperfection of spontaneous conventions (unintentional order). There are two problems: the convention may be ambiguous because (1) it is based on a fuzzy asymmetry or (2) there is uncertainty about its completeness.

I will illustrate these points with the property convention discussed above. Repetition of the HD Game may produce the convention of deferring to first possessors. This theory is useful for explaining why those claiming to own things often seek to communicate their claim to the world by various markings, such as boundary markings or other physical markers on land.¹⁴⁰ This sort of communication avoids misunderstandings about who is in possession, which in the HD Game described above is necessary and sufficient to avoid the Hawk/Hawk outcome. The problem, however, is that despite these efforts, possession often remains ambiguous, a point well

136. I leave aside the possibility that intentional resolution of the ambiguity will, on average, lead to better or worse conventions. This is obviously an important and interesting issue, related to the question of whether formal rules can improve upon the level of welfare created by informal order—conventions or norms. See, e.g., Mahoney & Sanchirico, *supra* note 101, at 2058–62; Posner, *supra* note 64. Nonetheless, the purpose of this article is to establish that selfish individuals have an incentive (other than sanctions and legitimacy) to comply with adjudicative judgments.

137. See POSNER, *supra* note 92, at 177–79; Garrett & Weingast, *supra* note 17.

138. Postema, *supra* note 64, at 178.

139. They may still coordinate by accident. For example, there may be no common expectation about whether to drive on the left or the right side of the road, but if the drivers may get lucky and choose the same side.

140. See Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1328–30 (1993); Epstein, *Allocation of Commons*, *supra* note 134, at 521–33; Rose, *supra* note 134, at 81–82.

made by the property scholar Carol Rose.¹⁴¹ Where possession is ambiguous, the roles the players occupy will be ambiguous, and they may each expect the other to play Dove, with the result being a Hawk/Hawk conflict. Consider two types of ambiguity.¹⁴²

a. Fuzzy Boundaries

The convention may be ambiguous because the boundaries of the asymmetry underlying it are fuzzy, at least in part.¹⁴³ Recall that the convention arises because the players mutually observe an asymmetry that distinguishes their roles in each play of the game, and then play strategies based on what role they occupy. What asymmetries the players notice in their situation depends on the conceptual categories they use for understanding their situation.¹⁴⁴

As an example, consider an ambiguity in the property convention of first possession. When exactly does possession occur? One of the more famous property cases poses this question regarding a wild fox. In *Pierson v. Post*,¹⁴⁵ Post hunted a fox for a time and was about to shoot it when Pierson appeared, killed the fox, and took it. If possession required killing or physical grabbing, then the Pierson was the first possessor; if some broader concept of control (or investment in acquiring control) is sufficient, Post was the first possessor.¹⁴⁶ The same issue arises in other cases where individuals attempt to transform other wild animals or gas reserves into property.¹⁴⁷ Similarly, nations disputing over a territory often have different ver-

141. See Rose, *supra* note 134, at 82–88. She identifies two ambiguities I do not explicitly pursue in the text, though these work in favor of the argument I am developing. One is the problem that possession (or the “text” of possession) may occur at the “wrong” time—after multiple parties have expended effort seeking to acquire the resource. *Id.* at 82–84. A second problem is the problem of differing audiences—that symbols of possession that seem clear to one community or culture will be unclear to another. *Id.* at 84–88.

142. The following six paragraphs draw on Ginsburg & McAdams, *supra* note 80, at 1256–61.

143. The idea here follows from the general concept of “fuzzy sets.” See, e.g., GEORGE J. KLIR & TINA A. FOLGER, *FUZZY SETS, UNCERTAINTY, AND INFORMATION* (1988); Lotti Zadeh, *Fuzzy Sets*, 8 *INFO. & CONTROL* 338–53 (1965).

144. There is much that might be said at this point about the connection between evolutionary game theory and theories of social construction, but I want merely to observe that the conceptual categories will invariably distinguish the players’ roles only imperfectly. See, e.g., James Johnson, *Is Talk Really Cheap? Prompting Conversation Between Critical Theory and Rational Choice*, 87 *AM. POL. SCI. REV.* 74 (1993); John W. Schiemann, *Meeting Halfway Between Rochester and Frankfurt: Generative Salience, Focal Points, and Strategic Interaction*, 44 *AM. J. POL. SCI.* 1 (2000). Cf. Richard H. McAdams, Comment on the Annual Presidential Address to the Law & Society Association, *Cultural Contingency and Economic Function: Bridge-Building from the Law & Economics Side*, 38 *LAW & SOC’Y REV.* 221, 222–23 (2004).

145. 3 *Cai. R.* 175 (N.Y. Sup. Ct. 1805).

146. The Court ruled for Pierson, holding that one must bring the animal within “certain control” before one possesses and therefore owns it. See discussion in Rose, *supra* note 134, at 76.

147. The whaling industry, for example, struggled in the 19th century with the question who first possesses a whale, the one who first harpoons it or the one who first harpoons it with a secure line from the harpoon to the ship or boat. See ELLICKSON, *supra* note 128, at 191–206. Rose, *supra* note 134, at 77 n.21, cites cases discussing similar possession issues concerning oil and gas.

sions of the precise point at which possession of the territory first occurred.¹⁴⁸

In disputes of this sort, the boundary defining the convention is fuzzy, and therefore, the convention is (at the moment) ambiguous. The ambiguity prevents there being any clear expectation about what a given person will do. While the ambiguity lasts, the individuals may fail to coordinate and end up in a Hawk/Hawk fight.¹⁴⁹

b. Potential Incompleteness

The convention may be ambiguous for another reason. Even if the boundaries of the underlying asymmetries are perfectly clear, the convention is always potentially incomplete. That is, there may be uncertainty about whether the set of expectations constituting a convention is subject to exception. There are usually more asymmetries present in a situation than are likely to be relevant to the players' behavior. The question always arises: which asymmetries do not matter? We have already seen a possible evolutionary path the property convention may take: first the players play strategies based on the asymmetry of possession, then the players add the further asymmetry of time and play strategies based on first possession. But would the process stop at two asymmetries? Some asymmetries seem irrelevant—e.g., the names of the parties—but it is difficult to specify in advance the criteria by which some asymmetries are relevant and some are not. Without criteria for relevance there can always be a divergence of expectations concerning new asymmetries. Every convention—every set of expectations—might be subject to an exception based on facts that have not previously occurred, at least not in the precise combination now present.

To illustrate, suppose that *A* is unquestionably the first occupier of a plot of land, but that he vacates the area, after which *B* occupies the land openly for twenty years. Suppose *A* is silent about *B*'s use of the land for this time, but then reasserts his claim, demanding that *B* vacate the plot. Given the first possession convention, will the non-original possessor (*B*) play Dove? *B* will play Dove if he assumes that the only asymmetries relevant to *A*'s behavior are those embodied in the concept of first possession. But it is possible that the players will take account of another time asymmetry (in addition to who possessed the territory first), which is how long the current possessor has been in possession. Even in a state of nature, it is

148. See discussion of international examples in Ginsburg & McAdams, *supra* note 8, at 1258–59.

149. If the ambiguity in the roles of “original possessor” and “original nonpossessor” were sufficiently severe, it would be unlikely that any convention would arise based on that asymmetry. But the convention might arise because the asymmetry works in what Postema, *supra* note 64, at 178, calls the “standard case,” while ambiguity arises only in the residual case. This would occur if, for example, ninety percent of the time, the same individual first tracks, corners, kills, and grabs a wild animal. Thus, even without a sharp understanding of which of these acts defines possession, if they usually favor the same individual, it may pay for individuals to adopt strategies based on first possession. But perhaps ten percent of the time, the concept's application is uncertain because different individuals take each of the steps associated with first possession.

possible that the players will adopt more complex strategies that render the original description of the convention—that it always favors first possessors—incomplete. The convention that eventually emerges might instead be deference to the first possessor *except* when the current possessor has occupied and claimed the territory for more than, say, twenty years, in which case everyone defers to the current possessor. In other words, we might get the convention similar to what the common law terms adverse possession.¹⁵⁰

There is, however, no guarantee that the extended occupancy exception will arise. As a result, when these hypothetical facts—first possessor *A* tolerates *B*'s twenty-year occupancy—first occur (or occur for the first time within memory), there will be uncertainty about whether the new asymmetry between the players—one being a current possessor of long duration and the other not—will matter. The ambiguity of potential incompleteness is common because new circumstances are pervasive and they inevitably raise the question of how the old convention now applies.¹⁵¹ Although repetition may eventually resolve the ambiguity, conflicting beliefs about the relevance of the new asymmetry may produce conflict, as each plays Hawk expecting the other to play Dove.

3. *Using Expressive Adjudication to Resolve Ambiguity and Create Precedent for Future Behavior*

When conventional ambiguity causes conflict, a third party may influence the behavior of the two disputants by offering a clarification of the convention. Unlike the resolution of a factual dispute, however, a third party's clarification of a convention can, if sufficiently publicized, influence the future behavior of the disputants and others in the community in which the convention exists. An adjudicator's focal signal concerning the convention creates a precedent for future behavior by making salient to community members a particular solution to a recurring coordination game. Aligning expectations in this way is usually socially valuable because it works to avoid conflict without the need for future services of conflict resolution.

To begin, I should define the difference between a genuine and strategic dispute in this context. A genuine dispute exists because the players actually have divergent expectations, which occur either because there is either residual fuzziness in the asymmetry that defines the behavior for this

150. See Rose, *supra* note 134, at 79. See discussion of international examples in Ginsburg & McAdams, *supra* note 8, at 1260–61.

151. Lawyers are familiar with the idea that the facts of two cases are never *exactly* alike. As a logical matter, there are an infinite (or at least large) number of “circumstances” in a situation that may distinguish the roles of the two players. There are also an infinite (or large) number of potential redefining circumstances that arise *for the first time* in every conflict. See Robert Sugden, *The Role of Inductive Reasoning in the Evolution of Conventions*, 17 LAW & PHIL. 377 (1998). As a result, there is always (or usually) the potential that new circumstances, not accompanying past HD interactions, might influence how the current HD interaction will occur.

circumstance, or uncertainty about the possible exceptions in the broader convention for this circumstance. A strategic dispute exists when the parties actually have consistent expectations, but one party pretends otherwise in an effort to gain some advantage from disputing.

At this point, all of the above analysis of factual disputes carries through to conceptual disputes. First, from the parties' perspectives, they would benefit from a randomized solution to their genuine disputes caused by fuzzy boundaries or potential incompleteness.¹⁵² But they do not want to commit to a strategy of randomizing all disputes because they would make themselves vulnerable to strategic exploitation.¹⁵³ Signaling, however, can ameliorate this problem.¹⁵⁴ What is different in this context—with disputes over the content of the convention—is what the third party signals: *his beliefs, if any, about the existing state of expectations in the relevant community*. For example, if an individual seeks to raise a strategic dispute by contesting the relevance of first possession to the expected behavior when in fact nearly everyone in the community expects the first possessor to play Hawk, then the third party can signal his belief that the existing convention clearly sides with the person who is the first possessor. Similarly, if one disputant claims to believe that there is an exception to the ordinary expectation (e.g., first possession does not apply when the first possessor is a minor), but the third party believes that the existing expectations clearly reject such an exception (e.g., because there are clear precedents applying first possession to cases involving minors), then he can signal his beliefs that existing expectations clearly sides with the first possessor.

Signaling lowers the returns to strategic disputing, which (as previously argued) makes it possible that the parties will benefit in the remaining cases by following the adjudicator's randomly selected recommendation—a constructed focal point. These genuine disputes are the cases of first impression where there really is some fuzziness in a conventional boundary or some uncertainty about a possible exception. As long as each party expects to win with a probability close enough to fifty percent, then both may benefit from correlating their strategy with the third party's recommendation, thereby reducing to zero the probability of the noncoordinated outcome each prefers to avoid.

As stated above, however, the additional significance of the adjudicator's resolution of conventional ambiguity is that it may serve as a precedent for the future behavior of the disputants and of other parties. The reasoning here is based on focal point analysis. The disputants tend to follow the third party's recommendation because their common knowledge that each is focusing unique attention on this message makes the third party's recommended outcome salient; salience tends to create self-fulfilling expectations that the salient outcome will occur. The same effect can occur for

152. See *supra* text accompanying notes 143–51.

153. See *infra* text accompanying notes 157–60.

154. See *supra* Part III.A.

those not a party to the present dispute if the adjudicatory declaration is publicized sufficiently. When future disputants face the same situation of multiple equilibria, their best choice of behavior depends on what they expect the other to do. If nothing else creates determinate expectations, common knowledge of the outcome of a prior adjudication of this issue may suffice.¹⁵⁵ Certain ritualistic qualities of adjudication can create common knowledge of the decision among parties other than the disputants.¹⁵⁶

Thus, a decision like the one in *Pierson v. Post*, if publicized, tends to support the expectations that a hunter in the position of Pierson (who is the first to kill the animal) will play Hawk and that a hunter in the position of Post (who came close but had not yet killed or captured the animal) will play Dove. If there had been no settled expectations at the time the court decided *Pierson v. Post*, because the case genuinely was one of first impression, the case could have created such expectations in parties involved in similar disputes in the future. When the issue is relitigated, the court may find that the current expectations support a particular outcome, and may then signal that fact. Focal signals thus provide a way of sharpening the convention for everyone.

Finally, when the case is one of first impression, I have proceeded up to now on the assumption that the adjudicator will randomly choose between the possibilities.¹⁵⁷ But while randomization may be appropriate for resolving factual disputes when the evidence is evenly divided, there will usually be reasons to prefer one way of resolving the conventional ambiguity over another. More likely, considerations of efficiency or fairness justify resolving the ambiguity in a particular way. In general I have nothing to say about such matters here. Given the way I have described the problem, however, one general consideration for selecting a resolution is the degree of clarification that different resolutions permit. Some methods of clarifying a convention to resolve the existing dispute may work to align expectations for a broad range of future situations; others may provide minimal clarity beyond the precise situation.¹⁵⁸ The point is familiar to lawyers as

155. There are several layers to the possible precedential effect. First, if the future potential disputants have common knowledge of how the prior disputants behaved postadjudication, even without knowing of the existence of the adjudication, that knowledge may generate self-fulfilling expectations of the same outcome. Second, if the future potential disputants also have common knowledge of the prior adjudication and its resolution, that resolution may strengthen the self-fulfilling expectations that it will occur. Finally, if there is any weight given by one adjudicator to the conventional clarification of another adjudicator, past adjudications not only make a particular outcome focal, but also predict the outcome another adjudicator would reach. Even without adjudicating the dispute, this expected resolution may further strengthen the expectations of what will occur. This latter point explains how stare decisis may contribute to compliance. See *infra* text accompanying notes 222–32.

156. See CHWE, *supra* note 73.

157. Cf. Postema, *supra* note 64, at 201 (“[I]f judicial duty is ultimately conventional . . . , there will be controversial cases in which, because there is no coordinated solution, there is no judicial *duty* to decide to controverted issue in a particular way.”).

158. Rose, *supra* note 134, at 77–78, emphasizes how courts defined property rights as deriving from possession in such a way that emphasized the need for clear principles that would communicate to the world the fact and boundaries of an individual’s claim.

the choice between bright-line rules and standards. Thus, in *Pierson v. Post*, the rule favoring the party who first kills and holds the animal provides a clearer demarcation of possession than would a rule favoring the one who hunted the animal for a “sufficient time” or who came “close” to capturing it.¹⁵⁹

In contrast to my original focus on the process of adjudicating facts, the process just described is the “law” part of adjudication. Sharpening the definition and clarifying the completeness of a convention are what a court does when it precisely states the legal rule in a case of first impression. What I am adding here is an understanding of how the court, merely by expression, can influence behavior. Like the bystander-in-the-intersection, the third party who points to and makes salient one particular outcome (in a game of multiple equilibria) is likely to create self-fulfilling expectations that each player will select the strategy associated with that outcome. One of the parties in the present dispute, and one party in each future dispute, will want to resist the adjudicator’s suggestion that he play Dove, but the third-party’s cheap talk expression will cause him to do so anyway because he now expects the other party to play Hawk.¹⁶⁰

That an adjudicative announcement today can avoid or resolve disputes tomorrow is significant. Society may gain considerably from having the convention clarified in this manner by aligning expectations and avoiding conflict. In Part IV, I explore some implications of the expressive theory, and contrast dispute resolution with the prospective effect of dispute avoidance.

C. *From Two-Party to Multi-Party Interactions: Adjudicating Public Disputes*

The discussion thus far has addressed only two-party disputes. I selected this dyadic focus merely for ease of exposition. At each point, I could have developed the theory of expressive adjudication using a game with more than two parties, but it was easier to develop the ideas in the context of simpler disputes. Now, however, I wish to extend the analysis to

159. There is a substantial literature on the general choice between rules and standards. See, e.g., Richard Craswell & John E. Calfee, *Deterrence and Uncertain Legal Standards*, 2 J.L. ECON. & ORG. 279–301 (1986); Louis Kaplow, *A Model of the Optimal Complexity of Legal Rules*, 11 J.L. ECON. & ORG. 150, 161 (1995); Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 621–23 (1992). The analysis here identifies one new consideration: rules are more likely than standards to clarify expectations and thereby avoid conflict expressively. I make no claim that this advantage is decisive, even where it applies (on which, see *infra* text accompanying notes 214–15). Because one can frequently rely on sanctions or legitimacy to enforce either rules or standards, the real normative significance is a trade-off: if sanctions are scarce, then one may prefer to use them more to enforce standards instead of rules because the latter are more likely than the former to work expressively.

160. The same may be said of situations of *intentional* order, such as those arising from potentially self-enforcing agreements arising in an Iterated PD game. As discussed above, there may be ambiguities in the agreements or conventions that define “cooperation” and “defection,” caused by fuzzy boundaries or potential incompleteness. Adjudication may make one particular definition focal, thereby clarifying the convention and aligning the players’ expectations about future rounds.

multi-party disputes. Multi-party disputes are more likely to constitute public disputes, tracking what we consider to be matters of public law.¹⁶¹ An example is criminal law, which may be seen as a dispute between an individual and his community.

To begin, consider a distinction some norms theorists draw between second-party and third-party systems of informal enforcement.¹⁶² Recall that, in game theory, once an equilibrium is reached, each party plays its best response to what it expects the other to do. Violating a convention can therefore be said to carry its own punishment. When the convention arises from the interaction of just two parties, this punishment is second-party enforcement, where the second party is the individual in the game who is, in a sense, the victim of the first party's violation. For example, if the driving convention at intersections is for the driver on the left to yield to the driver on the right, then one might say that the convention is "enforced" against each driver-on-the-left by each second-party driver-on-the-right, because the latter will collide with the former if he disregards the convention.¹⁶³

By contrast, a considerable literature in and out of legal scholarship discusses the existence of third-party enforcement of conventions and norms.¹⁶⁴ In contrast to the terminology I have used where the third party is the arbiter or adjudicator in the disputing triad (which I will henceforth refer to with the term "adjudicator"), third party in this context refers to private individuals who participate in sanctioning the norm violator other than an immediate victim of the violation. For example, Robert Ellickson reports on third-party enforcement of property-related norms among ranchers in Shasta County, California.¹⁶⁵ Lisa Bernstein describes third-party enforcement of trading norms in various trade associations.¹⁶⁶

161. Technically, of course, a dyadic dispute need not be private because one or both parties might be a public official acting in an official capacity. And a multi-party dispute might arise within a private organization, such as a trade association. Nonetheless, public disputes are more likely to be public, and, in any event, extending the expressive theory to cover multi-party cases will demonstrate the wider scope of the theory.

162. See ELLICKSON, *supra* note 128, at 130–32; Terry L. Anderson & Peter J. Hill, *Cowboys and Contracts*, 31 J. LEGAL STUD. 489, 495–96 (2002); McAdams, *Focal Point Theory*, *supra* note 6, at 1685.

163. Of course, the collision imposes symmetrical harms on both parties, so the victim of the violator suffers as much as the violator. Nor is the collision caused by the victim for the purpose of punishing the violator; it is instead the natural result of the failure to coordinate. Nonetheless, the term "second-party" sanction is still useful to describe the source of the expected harm—from the other involved party—that ordinarily causes an individual to comply with the convention. More importantly, it distinguishes systems where the source of the expected harm is a third party, as the text explains.

164. See, e.g., ELLICKSON, *supra* note 128, at 126–31, was perhaps the first to emphasize third party enforcement in his discussion of norms. Mahoney & Sanchirico explain third party enforcement solely as an equilibrium. See Paul G. Mahoney & Chris William Sanchirico, *Norms, Repeated Games, and the Role of Law*, 91 CAL. L. REV. 1281 (2003). Using the distinction developed in McAdams & Rasmusen, *supra* note 119, and McAdams, *supra* note 119, I would say that Ellickson discusses third-party enforcement of "norms," while Mahoney & Sanchirico discuss third-party enforcement of "conventions." The point I make in this subsection applies to either form of third-party enforcement.

165. ELLICKSON, *supra* note 128, at 29–64.

166. Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724 (2001); Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765 (1996);

Various theories seek to explain this phenomena. Third parties might incur costs to enforce a norm because: (1) they have internalized the norm and expect to enjoy feelings of pride or virtue when they enforce it and/or to suffer guilt if they do not enforce it;¹⁶⁷ (2) they value the esteem of others and expect to gain esteem from observable enforcement efforts and to suffer shame from the observable failure to enforce;¹⁶⁸ (3) they wish to signal certain attractive traits or abilities by their willingness to incur enforcement costs;¹⁶⁹ or (4) they are in an equilibrium in which they expect others to punish them for failing to enforce the norm.¹⁷⁰

Whatever the explanation for norm enforcement, the expressive adjudication theory applies to these third-party enforcement systems just as it does when the dispute arises within second-party enforcement systems. With multiple parties there is, of course, the dispute that exists between the individual suspected of a norm violation and the third parties who suspect him of it. But to explain the effect of expressive adjudication, I will instead focus on the disputes that arise *among* the potential third-party sanctioners.

Any system of third-party enforcement requires that third parties form beliefs about what the norm requires and whether a particular individual has met those requirements. Disputes arise in such systems when the third parties disagree about either issue. If the norm requirements are ambiguous because the conceptual boundaries are fuzzy or potentially incomplete, then some third parties may believe that the facts constitute a norm violation while others believe they do not. Even if the norm requirements are clear, if the facts are ambiguous then some third parties may believe that the accused individual violated the norm while others believe he did not.

In either case, the failure of the third parties to agree whether sanctioning is required is costly and potentially destructive to the system of enforcement. The problem is that the third parties who disagree with one another are likely to regard each other's subsequent behavior as constituting a norm violation. The reason is that in a third-party system the failure to punish a norm violator ordinarily constitutes a norm violation and the un-

Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115 (1992).

167. See, e.g., LOUIS KAPLOW & STEVEN SHAVELL, FAIRNESS VERSUS WELFARE 62–81 (2002); Cooter, *supra* note 66; Peter H. Huang & Ho-Mou Wu, *More Order Without More Law: A Theory of Social Norms and Organizational Cultures*, 10 J.L. ECON. & ORG. 390 (1994); see also Kahan, *supra* note 67. In Kahan's reciprocity theory, what is internalized is not a particular behavior (e.g., promise keeping) but the more abstract obligation to reciprocate the behavior of others (e.g., keeping promises when others keep theirs).

168. See, e.g., GEOFFREY BRENNAN & PHILIP PETTIT, THE ECONOMY OF ESTEEM (2004); Tyler Cowen, *The Esteem Theory of Norms*, 113 PUB. CHOICE 211, 221–22 (2002); Robert C. Ellickson, *The Market for Social Norms*, 3 AM. L. & ECON. REV. 1, 18–20 (2001); Richard H. McAdams, *The Origin, Development and Regulations of Norms*, 96 MICH. L. REV. 338, 353–55 (1997); Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1019–21 (1995); Pettit, *supra* note 119, at 753–54.

169. See, e.g., POSNER, *supra* note 92, at 18–27 (2000).

170. Mahoney & Sanchirico, *supra* note 164.

justified punishment of an individual who is not a norm violator ordinarily constitutes a norm violation. Thus, suppose that an individual, *C*, commits an act that may or may not be theft, which is a norm violation in his community. In response, the other individuals in the community form a belief about whether *C* violated the norm against stealing. As it turns out, the issue is contentious, and half the group—the *As*—believe he did; the other half—the *Bs*—believe he did not. Given these beliefs, the *As* proceed to punish *C* but the *Bs* do not. Now the problem arises. The *As* now believe that the *Bs* have, by doing nothing, violated the (secondary enforcement) norm requiring the punishment of thieves. The *Bs* instead believe that the *As* have violated a norm against unjustifiably punishing *C*. Given the logic of the third-party enforcement, in the next time period, the *As* should punish the *Bs* and the *Bs* should punish the *As*.¹⁷¹ The problem may not stop there because the *Bs* are likely to regard the *As*' punishment of them as a norm violation, just as the *As* are likely to regard the *Bs*' punishment of them. So it possibly continues round after round, essentially destroying the third-party enforcement system. Even if things do not proceed this far, any disagreement is costly because sanctioning is costly for both the one administering and receiving it. Third parties therefore prefer to reach a common understanding about whether an individual violated a norm.

Now consider the services an adjudicator can provide toward this end. First, the adjudicator might provide a random focal point around which the third parties could correlate their strategies, where all sanction *C* when the adjudicator announces "*C* stole and should be punished" and all refrain from sanctioning when the adjudicator announces "*C* didn't steal and should not be punished." But, as explained in Section II.A, expressive adjudication will not work if it provides only randomly selected focal points. One reason is that, if adjudication could succeed by randomly selecting outcomes, then the disputants could more cheaply randomize themselves without an adjudicator.

The other, more fundamental problem is analogous to the strategic issue noted in Section II.B: if one selects the focal point for correlating strategies randomly, then the enforcement system will offer little, or no, deterrent to norm violations. Deterrence of theft (or any act) requires that there be a greater probability of punishment if one has committed theft (the act) than if one has not. Other things equal, one maximizes deterrence by moving the probability of punishment for violators towards one hundred percent and the probability of punishment for nonviolators towards zero. Deciding disagreements randomly does neither, but makes it equally possi-

171. The norm might allow an excuse for "good faith" but erroneous beliefs, so that members need not punish (1) one who wrongly refuses to punish a norm violator in the good faith belief that he is not a norm violator nor (2) one who wrongly punishes a nonviolator in the good faith belief that he is a violator. But the excuse merely pushes the problem to a higher level. Given the underlying problem—ambiguity in the convention or facts—there is no way to avoid disagreement in deciding whether others have acted in good faith (or acted in good faith in deciding whether others acted in good faith, and so on). That disagreement then leads to the problem identified in the text.

ble that violators and nonviolators will be punished. Put differently, if the only thing we care about is coordinating the punishment decisions of third parties, then we could coordinate by correlating our decisions with a random event, or indeed merely by agreeing never to punish anyone (or to punish everyone once a year on a given date). But because we also care about something besides coordination—deterring theft (and other norm violations)—we also care about the accuracy of the adjudicatory declaration, which means we want the adjudicator to provide a signal about what happened.

Nonetheless, for reasons explored in Section II.C, signaling alone will not work. First, if the adjudicator merely signaled his beliefs, then he would not resolve disagreement in many cases because the *As* and *Bs* would not change their beliefs sufficiently to change their sanctioning behavior. Also, if the adjudicative declaration was merely a signal, the third parties would then seek a multitude of signals rather than the signal of a single adjudicator (or a single set of hierarchically arranged adjudicators). Indeed, for a system of third-party norm enforcement, the best signal would probably be a public vote of all third parties on the need for sanctions, which would do the most to induce those in the minority to update their beliefs in the direction of the majority. Public voting, however, looks quite different than adjudication.

The solution, as explained in Section III.A for the two-party context, is that expressive adjudication works via the synergy among correlated equilibria, focal points, and signaling. First, an adjudicative declaration does provide a focal point around which third parties can correlate (and thereby coordinate) their sanctioning decisions. As a result, third parties act in unison and do not need to sanction each other in subsequent rounds for making the wrong sanctioning decision. Second, the adjudicative declaration also supports deterrence by operating as a signal of what an accurate adjudicator actually believes. By signaling his usually accurate belief, the adjudicator will be more likely to declare the norm violated when it is than when it is not. Put differently, the accurate adjudicator facilitates deterrence (as well as coordination) by ruling that a violation occurred when he strongly believes it did and ruling that no violation occurred when he strongly believes it did not. If the accurate adjudicator cannot form a firm belief, because the case is a close one, it is likely that the third parties are badly divided as well. In this case, when close to fifty percent of third parties are prepared to sanction and fifty percent are not, his deciding ran-

domly does not change the expected sanction,¹⁷² but the benefits of coordination are now at their greatest.¹⁷³

The synergy then explains why adjudication is needed rather than something else. Because the expressive influence depends partly on signaling, it requires a human adjudicator rather than a randomizing device. Because the expressive influence depends partly on focal point creation, it requires that the third parties designate one particular individual (or one set of hierarchically arranged individuals) as their adjudicator rather than a much larger set. Finally, as explained in Section III.B, these conclusions hold whether the dispute is factual or legal. That is, the focal signal provided by adjudication coordinates third-party sanctioning whether the cause of third-party disagreement (over an alleged norm violation) is differing beliefs about the relevant facts or about what the norm requires.¹⁷⁴

Thus, expressive adjudication works for multi-party as well as two-party disputes. Given the danger presented by uncoordinated sanctioning, an adjudicator can influence sanctioning behavior without wielding the power of sanctions or legitimacy. When the group is a private organization, like a trade association, the adjudication may still concern private disputes. Where the group is a community or society, the adjudication now concerns public disputes, such as criminal law.

D. Limits of Adjudicative Expression: The Need for Legal Sanctions and Legitimacy

Adjudicative expression can influence behavior by resolving disputes of fact and convention, and the latter resolution can also influence the behavior of those not a party to the present dispute. Readers may too quickly infer from my defense of this expressive power that I do not believe that sanctions or legitimacy are necessary for compliance. I want to be clear, however, that the domain for expressive adjudication is far narrower than that of all disputes, which means there are conditions in which compliance depends strictly on the presence of either sanctions, deference to legitimate authority, or some other mechanism. The expressive theory does not apply to disputes outside its domain and does not predict perfect compliance even in its domain.

172. In those cases where the evidence is so evenly divided that half of observers conclude that the suspected individual did violate the convention and half conclude he did not, we should expect that a true violator is as likely to be sanctioned as a true nonviolator. As a result, the sanctioning system at this point produces no deterrence, so coordinating by a random device will not make matters worse for deterrence.

173. When the third parties are equally divided, their coordination is at its lowest possible point, which means their tendency to punish each other in subsequent rounds—for failing to punish a violator or for punishing a nonviolator—is at its greatest.

174. In the latter case, where the norm requirements are ambiguous (because of fuzziness or potential incompleteness), the adjudicator clarifies it and his articulation of the requirement serves as a focal point for coordinating enforcement. If the norm is already clear (in which case the dispute may have arisen because some third parties were acting strategically by disputing the existence of a norm violation they did not want to punish), the adjudicator merely signals the content of existing expectations.

Initially, the domain of the expressive theory is limited to what Schelling called “mixed motive” games. Thus, the first condition for expressive power is a situation of multiple equilibria where the parties have both conflicting and common interests. This is the case in the ubiquitous iterated Prisoners’ Dilemma game because, even though the cooperative equilibrium may be possible, it is riskier to cooperate and be vulnerable to exploitation than it is to defect. Another possible barrier to coordination is that the parties conflict over which equilibrium should prevail (as in BOS and HD). In practice, this tends to represent situations where parties of roughly equal power both regard the continuation or escalation of the dispute—as by mutual resort to self-help—as the worst possible outcome. In the discussion, I provided a number of illustrative disputes that I believe take place much of the time in this setting—negotiations between business partners, traffic conflict, public smoking, and property disputes between neighbors.

By contrast, some games have just one equilibrium, in which case the payoffs alone determine how the players will behave, and none of the expressive effects will apply.¹⁷⁵ There are two common situations that are likely to represent a single equilibrium game that is impervious to expressive influences. Severe inequalities of power may create situations where the only equilibrium is that the stronger party wins the dispute. Here, the stronger party’s best strategy is to assert its interest aggressively, even at the expense of continuing or escalating the dispute, no matter what the weaker party does. If so, then mere expression will not change the outcome. Continuing with the example of property, an individual who is particularly good at physical combat may simply take what he pleases unless the court can generate compliance via sanctions or legitimacy.

Another single equilibrium situation exists, even between two individuals of roughly equal power, if the object in dispute involves high stakes relative to the cost of conflict, or conversely, the disputing costs are low relative to the value of the object in dispute. The right model here is the one-shot Prisoners’ Dilemma.¹⁷⁶ The situation may arise because one party claiming a disputed resource perceives that losing it would be catastrophic, so that party wants to act aggressively no matter what the other party does. If losing is the worst outcome, then the party will be better off bearing the costs of conflict, and having some chance of winning the resource, than to defer to the other, and have no chance of winning. An example would be a dispute over property that constitutes a large fraction of the wealth of one or both parties. Another example is an arms race between nations where falling behind the other ensures a loss of sovereignty.

175. Another possibility is that there are multiple equilibria but there is no conflict over which outcome is best. Given the usual possibility of communication (as is usually present where adjudication would be possible), there is no “dispute” to be resolved.

176. Note that one can easily transform a HD game into a Prisoners’ Dilemma by raising the payoffs for mutual aggression (the lower right-hand cell in Figure 2) to the point where it is regarded by each player as the third best, rather than worst, outcome (in Figure 2, raising the -1 payoffs to 1 would suffice).

Conversely, sometimes the costs of conflict are very low relative to the object in dispute. The high conflict costs in the Hawk/Dove game arise because, among other reasons, the decisions are simultaneous. At roughly the same time, two drivers decide whether to proceed at current speeds through an intersection and two neighbors contesting a property line decide whether to back down or stand fast. The conflict here—a collision or violence—occurs when each chooses the aggressive strategy not knowing what the other will choose. By contrast, some situations involve sequential decisions. Here the party moving second always has the opportunity to avoid the costly Hawk/Hawk outcome by responding to Hawk with Dove. For example, as long as the person who litters or pollutes is able to complete his act before anyone stops him, then he may not expect a violent reaction from one who later discovers his act. As a result, the game is really one-half of a Prisoners' Dilemma where an individual may be better off deciding to litter or pollute, regardless of whether others do.¹⁷⁷ In general, when the payoffs dictate one equilibrium, there is no room for the expressive influences described here.

There is a second condition to the theory of expressive adjudication. Even when there are multiple equilibria, the adjudicator's ability to influence the parties' behavior depends on the presence of ambiguities in the facts or the expectations defining the convention. If the facts and convention are clear, the parties will resolve their dispute accordingly. The party who receives his less preferred outcome will not even perceive himself as having a dispute with the party who receives his most preferred outcome because each party's expectations about how to proceed in the situation are so settled.¹⁷⁸ If so, then there will be no dispute brought to the adjudicator. But, even if there is an individual who raises a dispute and challenges the prevailing convention, the expressive power is limited. I mentioned that an adjudicator has some ability to set a precedent and thereby influence parties other than the disputants. But if these other party's expectations are entirely settled—the convention is unambiguous—then it is highly unlikely

177. Recent experimental work challenging the standard economic prediction is quite relevant here. These experiments show that people are more cooperative in one-shot Prisoners' Dilemma and more "spiteful" in the Dictator and Ultimatum Games than is predicted by perfectly rational self-interest. See, e.g., Colin Camerer & Richard H. Thaler, *Ultimatums, Dictators and Manners*, 9 J. ECON. PERSP. 209 (1995); Ernst Fehr et al., *Strong Reciprocity, Human Cooperation, and the Enforcement of Social Norms*, 13 HUM. NATURE 1 (2002); Joseph Henrich et al., *In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies*, 91 AM. ECON. REV. 73 (2001). If so, then one might expect that a sequential Hawk/Dove game might still have multiple equilibria. If the person playing second might out of spite play Hawk in response to Hawk, then the person playing first might want to play Dove. Or, if the person playing second might, acting out of some concern for fairness, reciprocate Dove with Dove, then the person playing first might want to play Dove. (A similar result might also occur among purely selfish individuals in iterated settings where one can establish a reputation for playing Hawk.) As a result, the Hawk/Dove game might be more common than is indicated in the text by the strict requirement of simultaneity.

178. This is why social movements often begin by "consciousness raising," i.e., the effort to make individuals who are disadvantaged by the current convention aware of their disadvantage, as well as the corresponding advantage for certain others.

that adjudicative expression, by itself, will change any behavior. In short, the expressive power is conservative; it works merely to clarify existing conventions. To change unjust or inefficient conventions requires another compliance mechanism.

As a third condition, even if there is a situation of multiple equilibria and ambiguity, there is no guarantee that adjudicative expression will resolve conflict. There needs to be some third party whose signals each disputant regards as sufficiently accurate to screen out strategic disputes. If the perceived error rate is too high, there is too great an opportunity for strategic disputing. Moreover, for both the signaling function and the cheap talk construction of focal points there needs to be some third party whom each disputant regards as sufficiently unbiased or impartial. Neither party wants to submit its dispute to an individual it expects to side with the other party. Thus, for any given dispute, there needs to be an individual mutually perceived as relatively disinterested and possessing the necessary expertise. Obviously, this will not always be the case. In short, expressive power is real, but it supplements, rather than replaces, the other mechanisms of compliance—sanctions and legitimacy.¹⁷⁹

IV. THE POWER OF ADJUDICATIVE EXPRESSION: IMPLICATIONS

As stated at the outset of this article, legal compliance is a fundamental matter for social science and legal theory. To understand the causal mechanisms of compliance is to understand how law works. The expressive theory I have articulated offers a third way of explaining adjudicative compliance, one that is distinct from the two dominant theories—sanctions and legitimacy. I hope this new approach will prove useful to those who study adjudicative procedure. Because such work tends to assume a particular theory of how adjudication works, there is much to be done to explore what the expressive theory implies for procedural scholarship. In this final Part, I offer only to begin this line of research by explaining a few of the positive and normative implications of the expressive theory of adjudication.

A. *Positive Implications*

The power of adjudicative expression implies that there will be some compliance with adjudication even without the threat of sanctions or legitimacy. In the first section below, I examine some examples of otherwise puzzling compliance. The expressive theory also reveals a positive theory of how government adjudicators wield the power of sanctions. As explained in the second section, we can use expression to make law and gov-

179. Recall also that in some settings the third party can render the best expressive “service” not by a single declaration made to both parties (the subject of this article), but by communicating separately and privately (and sometimes differently) to each disputant, as in facilitative mediation and shuttle diplomacy. *Supra* note 36.

ernment endogenous to models of adjudication, rather than merely assuming their existence.

1. *Explaining Compliance Without Sanctions*

An expressive theory of adjudication helps to explain the effectiveness of both judicial and quasi-judicial bodies in situations where they lack the ability to impose sanctions. Here I discuss one historic and three contemporary examples.

At various times in history, judicial bodies emerged before the governmental apparatus existed to enforce their decisions. The clearest example of this phenomenon may be medieval Iceland, where, for several centuries, citizens tended to comply with the decisions of the courts despite the courts' lacking the power to sanction noncompliance.¹⁸⁰ As William Miller observes, saga Iceland's legal culture showed a surprising "proclivity for law, legalism, and litigiousness."¹⁸¹ The legal codes were elaborate and comprehensive.¹⁸² Though there was not a separate legal profession, "[l]egal expertise flourished."¹⁸³ Yet "Iceland developed [its] legal system . . . in the absence of any coercive state institutions."¹⁸⁴ Despite the elaborate pyramid of jurisdictions and complex scheme of venues and judicial competence, there was no provision for any executive power. It was up to the litigants to serve process on their opponents, maintain order in court, and enforce court judgments in their favor. Ultimately, the sanction behind legal judgment and arbitrated settlement was self-help, most often appearing in the guise of the bloodfeud.¹⁸⁵

Contrary to our conventional understanding of law, there was "no state apparatus to pretend to monopolize the legitimate use of force. . . . [T]here was no sheriff to issue a summons to a hostile party, to keep the peace in

180. See WILLIAM I. MILLER, *BLOODTAKING AND PEACEMAKING: FEUD, LAW, AND SOCIETY IN SAGA ICELAND* 228 (1990). There has also been some discussion in the law and economics literature. See DAVID FRIEDMAN, *LAW'S ORDER* 263–67 (2000); Richard A. Posner, *Medieval Iceland and Modern Legal Scholarship*, 90 MICH. L. REV. 1495 (1992) (reviewing WILLIAM I. MILLER, *BLOODTAKING AND PEACEMAKING* (1990)).

181. MILLER, *supra* note 180, at 226. Miller also refers to the era as having a "cultural obsession with law." *Id.* at 227.

182. See generally *id.* at 222–57. For example, the code "attempted to regulate virtually every facet of farm management from employment contracts to the separation of and accounting for hay blown into a neighbor's field." *Id.* at 223. The section of the code on procedure spanned more than 100 pages. *Id.* at 248.

183. *Id.* at 226.

184. *Id.* at 224.

185. *Id.* at 20–21; see also *id.* at 181 (The blood feud "provides the sanction behind arbitrated settlements and legal judgments, in effect serving as the executive power of a polity that has no other formally instituted state executive apparatus."); *id.* at 188 ("[T]he successful prosecution or defense of a legal claim could never be accomplished alone. The litigant needed bodies to make sure his adversary did not disrupt the court, railroad the judgment, or simply use his advantage in numbers to forgo law in favor of battle or to do these things himself if his adversary were undermanned."); *id.* at 228 ("[T]his mass of rules was mercifully unaccompanied by any state enforcement mechanism Law enforcement, like self-help, was the responsibility of the wronged party or his successor.").

the court, or to execute the judgment. It was up to free adult males to do the work of law.”¹⁸⁶

Of course, courts did declare a sanction, which ranged from a simple fine up to “full outlawry (*sköggangr*)—which meant a loss of all juridical status and property, privileging anyone to kill the outlaw and indeed obliging the prosecutor to do so.”¹⁸⁷ But this declaration itself is not a sanction; its implementation depended on the efforts of private parties. Also, the immunity granted to the killer of an outlaw was merely the right to be free from adverse judgments issued by a court that had no power to enforce its judgments. Yet “there must have been more to getting an outlawry judgment than simply being put back into the same problem one had before going to law: killing the enemy.”¹⁸⁸ Here, then, is the puzzle: “[W]hy people made as much use of the law as they did, [and] why the law occupied such a prominent position in the constitution of Icelandic society,”¹⁸⁹ given that courts lacked the power of sanctions?

One can read Miller to support a legitimacy theory, that the court’s declaration made the adjudicated winner’s violence more legitimate than the loser’s. But the theory of expressive adjudication is also quite consistent with the evidence, given the emphasis Miller makes on the background threat of private violence. Individual litigants could enforce or resist a judgment only by gathering the support of their kin. “[Power] meant having others think one had the ability to muster bodies to assist in the various procedures that made up a legal action.”¹⁹⁰ Even after the defendant was initially declared an outlaw, there was still time for him to gather forces to resist enforcement because a defendant was not “fully outlawed” until a subsequent procedure occurred two weeks after the initial judgment.¹⁹¹ As Miller states: “outcomes reached by *talk*, although not rare, took place within the shadow of violence.”¹⁹²

Translated into game theory, the situation is one with multiple equilibria similar to a Hawk/Dove game where the Hawk/Hawk outcome is violence. The expected costs of the violence was probably higher than the expected costs of giving in to the other’s demand, yet each most preferred to have the other give in to him. In this setting, it is easy to believe that a court could influence the behavior of the parties by providing a focal signal.

186. *Id.* at 232.

187. *Id.* at 234.

188. *Id.* at 236.

189. *Id.*

190. *Id.* at 245.

191. *Id.* at 244.

192. *Id.* at 236 (emphasis added). The background of possible violence was inherent in everyday life of the time. *See id.* at 187 (“In every incident there lurked the possibility of escalation, the possibility that the most trivial offense could transform good relations into feud.”). As with litigation, settlements were governed by the same background threat. *See id.* at 271 (“The stakes were high and at any moment the peacemaking cause might fail. In fact, it was the very real possibility of failure that made the ritual work, that gave it the ability to convince others that what motivated the claimant was not fear or avarice. For if the claimant suspected that the observing community doubted his mettle, the predictable rhythms of the settlement dance could abruptly cease to be replaced by a dance of a different beat.”).

The court's willingness to signal ameliorated the threat of strategic disputing, so that individuals benefited from correlating their strategies with the court's declaration. In the remaining cases of genuine disputes, the court's declaration made focal a particular outcome and thereby created self-fulfilling expectations that it would occur. Like the bystander in the intersection directing traffic, the court's expression influenced each side's expectations of how the other would proceed. Once the court announced a winner, it appeared the winner would fight and this expectation made it more difficult for the loser to gather or retain kin to fight on his behalf.¹⁹³

Courts in modern legal systems do wield sanctions, but there are some contemporary examples of effective sanctionless adjudication. The most obvious is the nongovernmental adjudication that occurs in various types of alternative dispute resolution. Given the pervasiveness of ADR, it is important to understand fully its effect. The theory of expressive adjudication here supplements the work of Brown and Ayres, who identify economic rationales for mediation.¹⁹⁴ Their work emphasizes the role of facilitative mediators as (usefully noisy) informational conduits between the parties, frequently accomplished in an *ex parte* meeting with a single party. The expressive theory instead emphasizes the importance of the final declarations of arbitrators, made in the presence of both parties, and around which the parties may then correlate their strategies. I return to ADR in the normative discussion below.

Moving closer to conventional courts, international tribunals often succeed in adjudicating disputes despite their inability to credibly threaten nations with sanctions for failing to comply. Tom Ginsburg and I recently reviewed all the decisions by the International Court of Justice (ICJ) and we conservatively estimated a compliance rate of sixty-eight percent.¹⁹⁵ Other scholars find high compliance with other international tribunals.¹⁹⁶

193. As another historic example, Andrea McDowell, finds the Hawk/Dove game useful for modeling disputes among mines during the Californian gold rush, where early courts had only a weak or non-existent threat of legal sanctions. Andrea McDowell, *Real Property, Spontaneous Order, and Norms in the Gold Mines*, 29 *LAW & SOC. INQUIRY* 771 (2004); see also Andrea McDowell, *From Commons to Claims: Property Rights in the California Gold Rush*, 14 *YALE J.L. & HUMAN.* 1 (2002). She observes compliance with adjudicative declarations, but attributes them primarily to the threat of private third-party enforcement, those miners other than the one immediately victimized by "claim-jumping." As explained above in Section III.C, expressive adjudication can facilitate third-party enforcement by creating a common understanding of when the third parties must punish a rule breaker. Regarding the dispute resolution that occurred during the long overland trip to the California mining camps, see generally JOHN PHILLIP REID, *LAW FOR THE ELEPHANT* (1980).

194. See Brown & Ayres, *supra* note 22.

195. Ginsburg & McAdams, *supra* note 8, at 1310–11.

196. See, e.g., ROBERT E. HUDEC, *ENFORCING INTERNATIONAL TRADE LAW: THE EVOLUTION OF THE MODERN GATT LEGAL SYSTEM* 286 (1993); *COMPLIANCE WITH JUDGEMENTS OF INTERNATIONAL COURTS* 35 (M.K. Bulterman & M. Kuijer eds., 1996) (most decisions complied with); *THE SETTLEMENT OF DISPUTES IN INTERNATIONAL LAW: INSTITUTIONS AND PROCEDURES* 178 (John G. Collier & Vaughan Lowe eds., 1998) ("all decisions were, sooner or later, complied with"); Warren F. Schwartz and Alan O. Sykes, *The Economic Structure of Renegotiation and Dispute Resolution in the World Trade Organization*, 31 *J. LEGAL STUD.* S179, S200 (2002) ("the level of compliance with trade commitments is quite high").

Ginsburg and I explain this compliance as arising from a tribunal's ability to provide focal points and signals in situations of multiple equilibria. The compliance rate with the ICJ is high, we claim, because nations tend to bring to the ICJ those disputes for which these factors are sufficient to generate compliance. Indeed, we find low compliance in cases lacking mutual consent to the adjudication, i.e., where the ICJ overrules one party's jurisdictional objection and later rules against the same party on the merits. By contrast, we find a large part of the ICJ's success occurs in territorial disputes where both parties desire the adjudication to resolve ambiguities in facts or conventional categories defining possession. As with ADR, I return to the subject of international adjudication in the normative discussion below.

Moving to domestic courts, a final example of sanctionless adjudication is judicial review of the decisions by other governmental branches. Most obvious is the problem of constitutional review. Legal theorists commonly debate the normative question involved—whether unelected courts should overrule elected legislatures and executives—under the rubric of the “counter-majoritarian difficulty.”¹⁹⁷ But they tend to ignore the intriguing positive question—how do courts succeed in getting other branches to comply with their decisions? The question arises not only in constitutional cases—as where a court purports to invalidate a statute or executive order—but whenever a court rules against a government party, as in cases involving contract claims or administrative challenges. The mechanisms for compliance are puzzling because the judiciary lacks material power over the other branches of government, while the legislature and executive hold important power over the judiciary. As Matthew Stephenson puts the question, why do the parts of government with “the money and guns” listen to the part with neither?¹⁹⁸

Stephenson's answer is fully compatible with the theory of focal signals. He imagines that the constitutional constraints the courts enforce in a democracy are essentially a contract between two political parties that expect to alternate control of government. Because the leaders of the political parties are risk averse, each is willing to forgo implementing its most extreme policy preferences when it is in power in exchange for the other party's leader forgoing its most extreme policy preferences when it is in power. Although he does not describe the situation as an iterated Prisoners' Dilemma, that is the structure he imagines, where each side can benefit from an agreement of constraint. The agreement would be self-enforcing except for “noise” that produces divergent factual beliefs about whether each side has honored the agreement. The parties can then gain by each conditioning its strategy on the judiciary's decision. In my terms, the judiciary here is providing a focal signal. Because it is a signal, it ameliorates the

197. For a critical review, see, e.g., Barry Friedman, *The Birth of an Academic Obsession: The History of the Countermajoritarian Difficulty, Part Five*, 112 YALE L.J. 153 (2002).

198. See Stephenson, *supra* note 17, at 60.

problem of strategic disputing. Because it is focal, it creates self-fulfilling expectations of how the parties will behave. Where noise creates ambiguities that threaten to destroy cooperation in an iterated Prisoners' Dilemma, a focal signal can resolve the ambiguity and preserve cooperation.

In each of the four cases just discussed—medieval Iceland, ADR, international adjudication, and judicial review—there is an important rival hypothesis: that the adjudicator achieves compliance solely because disputants deferred to what they perceived to be its legitimate authority. As I said in the introduction, I will not here compare the two hypotheses, but leave that empirical analysis to future research. For now, I want to explain two ways that the expressive theory complements legitimacy theory. One way is timing. It takes time for an institution to acquire legitimacy. If a new adjudicative institution lacks sanctions (as in the above examples) and at the very beginning lacks legitimacy, then it would appear to have no way to generate compliance. Yet if everyone ignores the adjudicative institution, its failure may prevent it from ever being perceived as legitimate. The expressive theory, however, explains how a new institution could generate compliance in the first instance, thereby surviving long enough to acquire legitimacy.

The second point is one of reinforcement. Even if most of the compliance that occurs in the absence of sanctions were attributable to the common belief that the adjudicator is legitimate, we should expect that this motivation will fail for some extraordinary individuals who do not perceive a court's legitimacy, or are indifferent to it, and will also fail for some ordinary individuals in very high-stakes disputes. Indeed, given the failures of compliance in a world with sanctions, we should imagine that in a world without sanctions no motive for compliance is redundant but that each contributes causally to whatever compliance occurs.

Note one final implication. There is a substantial economics literature on the settlement of litigation.¹⁹⁹ That literature seeks to explain the factors that determine when litigants will settle, and for what amount. Given the economic assumption that the only mechanism for compliance is the threat of legal sanctions, the settlement literature assumes that the threat of court-imposed sanctions is an essential part of the settlement story. On the standard view, if a court had no ability to impose sanctions, then a defendant would have no reason to defend himself or to offer the plaintiff any positive sum to settle the case.²⁰⁰ But where adjudicative expression will induce

199. For overviews, see SHAVELL, *supra* note 2, at 387–470; Kathryn E. Spier, *Litigation*, in THE HANDBOOK OF LAW AND ECONOMICS (M. Polinsky & Steven Shavell eds., forthcoming 2005).

200. Shavell, *supra* note 2, at 445–50, points out that nonbinding arbitration may influence the settlement behavior of parties because they will regard the arbitrator's award as a signal of the result of a full-fledged trial. I do not regard this as an expressive theory because it requires the threat of legal sanctions, which the arbitration then predicts.

A subset of the settlement literature discusses whether defendants would pay to settle “NEV” lawsuits—those where the plaintiff has a “negative expected value” because the costs of maintaining the suit exceed the expected gains from trial. See SHAVELL, *supra* note 2, at 419–23; Spier, *supra* note 199. This analysis suggests that there may be circumstances where defendants would pay to avoid such

compliance, this is no longer the case. Even without the threat of judicial sanctions, a party who expects to comply with an adjudicator's adverse judgment will have an incentive to incur costs seeking to win the proceeding. For that reason, it is possible a party will prefer to settle with the other party to avoid those costs.²⁰¹ Thus, it is no surprise that (as previously discussed) Garrett and Weingast find that Denmark backed down in a case before the European Court of Justice when it expected to lose the case and to comply.²⁰² And it is perfectly understandable that medieval Iceland, whose courts had no sanctioning power, nonetheless saw a large amount of private arbitration in the shadow of the law.²⁰³ In general, the suit-and-settlement literature applies to all the sanctionless adjudication just discussed—medieval Icelandic courts, nonbinding arbitration, international adjudication, and litigation involving government parties. The settlement literature has a broader domain than previously understood.

2. *Understanding the Endogeneity of Legal Sanctions*

The expressive theory of adjudication also offers a way of seeing law and government as arising endogenously within a third-party sanctioning system. Too often, theorists take the existence of government and legal sanctions as a given. Much of the recent work on norms, for example, including my own, treats norm origin as puzzling without reflecting on the puzzle of law's origin.²⁰⁴ Social norm scholars commonly write about how law can supplement norms when norm sanctions are inadequate or how law can change undesirable norms.²⁰⁵ Both approaches treat law as exogenous, without its operation as requiring explanation.

In an otherwise excellent article, Paul Mahoney and Chris Sanchirico fall prey to this sort of thinking.²⁰⁶ Consider what they term the "counterfactual problem."²⁰⁷ They raise this problem for the supposed stability of equilibria in iterated games, their chief example being a particular coopera-

suits, given the costs of defending against them. Even if true, the analysis assumes that the defendant will incur costs defending against such suits in order to prevent the plaintiff from winning a default judgment. But if the court can impose no sanctions, then the conventional view would be that the defendant's expected loss is always zero, and remains so even if the defendant spends nothing defending himself.

201. Of course, if the parties have beliefs about the nonnegotiated outcome that will permit them to settle, they might ordinarily be expected to do so before the filing of suit. Events during litigation, however, may cause the parties to change their beliefs about the likely adjudicatory outcome or the likely costs of adjudication, either of which may provide a new basis for settlement.

202. Garrett & Weingast, *supra* note 17, at 195.

203. See MILLER, *supra* note 180, at 259–99; *see id.* at 271 ("Then as now people were aware that lawsuits had a settlement value. After initial informal attempts to arbitrate had been rejected, plaintiffs often prosecuted lawsuits with the sole intention of coercing recalcitrant defendants to agree to submit to arbitration.").

204. See, e.g., McAdams, *supra* note 7; Sunstein, *supra* note 9, at 903.

205. See, e.g., McAdams, *supra* note 7, at 397–408, 424–32; Sunstein, *supra* note 9.

206. See Mahoney & Sanchirico, *supra* note 164.

207. *Id.* at 1300–08; *see also* Cristina Bicchieri, *Self-Refuting Theories of Strategic Interaction: A Paradox of Common Knowledge*, 30 ERKENNTIS 69, 71–72 (1989).

tive equilibrium in an n -person iterated Prisoners' Dilemma. As an improvement on Axelrod's Tit-for-Tat,²⁰⁸ Mahoney and Sanchirico propose an equilibrium in which each individual plays "Defection for Deviation" (Def-for-Dev), defined as follows: "1) Start in round one by cooperating with all opponents; 2) Defect against a player if and only if she deviated from the def-for-dev strategy in the immediately preceding round."²⁰⁹ In the equilibrium in which everyone plays this strategy, third-party retaliatory defection is an informal sanction that deters unjustified defections.

After demonstrating the advantages of the Def-for-Dev equilibrium, Mahoney and Sanchirico go on to raise the following concern. The key to the equilibrium is the set of expectations that underlie it. Everyone punishes a defector because everyone otherwise expects to be punished themselves. But what happens if there is a defection? The counter-factual problem is that, in equilibrium, defection would be perfectly deterred; the fact of defection is inconsistent with the set of expectations underlying the cooperative equilibrium. A defection will therefore cause individuals to rethink their expectations; doubting one's prior expectations will undermine the stability of the equilibrium. Thus, they conclude, the stability of the cooperative equilibrium is less than it first appears.

Mahoney and Sanchirico offer this solution: legal sanctions. They view the imposition of legal sanctions for defection as the critical mechanism that ensures the stability of cooperative expectations and a cooperative equilibrium. Mahoney and Sanchirico recognize, however, that the counter-factual problem might also infect the imposition of legal sanctions: "Of course, this moves the counterfactual problem up a level. When we establish a second-order norm that the court's decision will be honored, how can we know what to do if another player disregards the court's decree?"²¹⁰ To answer this concern Mahoney and Sanchirico assert:

Yet, in an important respect, the situation here is not the same. The difference lies in the government's ability and willingness to force compliance irrespective of community beliefs. The possibility that *the defendant* in a lawsuit ignores the court's decree does not lead to the counterfactual problem because the incentive compatibility for *the defendant* of following the decree does not rely solely on a common understanding in the community that such court decrees are followed. Rather, the incentive compatibility of following the

208. AXELROD, *supra* note 101.

209. Mahoney & Sanchirico, *supra* note 164, at 1296. One of the main purposes of the article is to demonstrate this strategy's superiority to the much discussed strategy of Tit-for-Tat, and its ability to explain the existence of norms based solely on expectations of punishment (i.e., without tinkering with the utility function). *See id.* at 1291–98.

210. *Id.* at 1309. They continue:

Accepting the premise that the norm of honoring the court's decree is incentive-compatible for each individual given that such a norm is commonly accepted in the community, then an individual's failure to honor that decree would call into question whether the norm is really commonly accepted—and then we are back to the same counterfactual perplexity that we encountered in a world without the court.

Id.

decree is grounded in the court's ability and willingness to punish *the defendant* irrespective of (or at least with less dependence upon) how *the defendant's* behavior might affect any common understanding among community members. The court's capacity and resolve to back its commands with force provide a solid platform on which society can build more complex informal enforcement systems

Thus, although law—meaning centralized commands backed by force—may constitute only a small portion of the total rule-making and enforcement system, it is a necessary one. Without it, the remaining parts of the system may unravel in the face of uncertainty about whether all players continue to expect one another (and expect that others expect, and so on) to continue to comply with the extant norms.²¹¹

In this regard, Mahoney and Sanchirico err.²¹² They mistakenly imagine that the counter-factual problem in the legal context arises because a *defendant* ignores the court's order. To the contrary, in the context of legal sanctions, the counter-factual problem arises when a government official responsible for enforcing the court's order chooses instead to ignore it, or indeed when the human being responsible for creating the court's order—the judge—refuses to issue it. As such, the counter-factual problem that undermines formal legal sanctions is exactly parallel to the counter-factual problem that undermines informal third-party sanctions.

To see the point, we need only consider the obvious fact that a government or legal system depends entirely on third parties—sheriffs, police, bailiffs, judges, marshals, wardens, parole officers, etc.—to impose legal sanctions. The judge must issue the decree; the sheriff must seize the defendant's property; the warden must keep him locked up. The crucial question is why these individuals engage in the cooperative behavior of sanctioning law violators. Why do they incur the costs of doing their job? The answer is that they expect to be sanctioned if they don't. But what happens if one of these legal actors nonetheless defects? According to the counter-factual logic, their defection will cause other legal actors to question their prior expectations. Here the problem stands exactly as it did for private sanctioning without the court—any of these government officials expects to be sanctioned if he fails to enforce the decree only because the enforcement norm is a “common understanding,” yet if anyone does refuse to enforce it, his noncompliance causes everyone to question whether law enforcement is

211. *Id.* at 1309–10 (emphasis added).

212. As an empirical matter, it is doubtful that legal sanctions are *necessary* to the existence of third-party sanctions, given historic evidence of such sanctioning in societies without a state. For example, anthropologists have found third-party sanctioning systems that punish violations of religious obligations and sexual taboos among state-less societies. See, e.g., BRONISLAW MALINOWSKI, CRIME AND CUSTOM IN SAVAGE SOCIETY 50, 53, 65–68, 80 (1926); EDWARD EVANS-PRITCHARD, THE NUER, A DESCRIPTION OF THE MODES OF LIVELIHOOD AND POLITICAL INSTITUTIONS OF A NILOTIC PEOPLE 162–69 (1947). And, as discussed *supra* text accompanying notes 180–92, there is historical evidence of compliance with courts that wielded no credible threat of legal sanctions. See, e.g., MILLER, *supra* note 180, at 224 (compliance with sanctionless adjudication in medieval Iceland).

really a “common understanding.” In short, if the counterfactual problem can undermine expectations regarding informal sanctions, it can equally undermine the expectations of formal sanctions. Law is not a *deus ex machina* that saves third-party sanctioning from collapse. Law is simply one form of third-party sanctioning.

Indeed, one might be tempted to make the opposite mistake by positing that it is the threat of informal sanctions that step in to cause legal actors—the sheriffs, police, judges, etc.—to cooperate and to rescue the legal system from the counterfactual problem. But this too treats formal and informal systems of sanctioning as if they each operated with logic distinct from the other. Instead, it makes more sense to embrace a unified theory of third-party sanctioning, by starting with one of several existing norms theories. Under most of these theories, as explained above, some mechanism—internalization, esteem, signaling, etc.—creates a motive for enforcing the norm and this motive sustains the enforcement system.²¹³ The explanation works for both informal and formal enforcement; it is not strictly necessary for legal sanctions to support informal sanctioning nor for informal sanctioning to support legal sanctions (though such interactions are, of course, possible and likely).

At this point, however, the analysis of Section III.C comes to bear. Whether the sanctioning system is private or public, a key requirement is that third parties coordinate their sanctioning decisions; the failure to coordinate will undermine any system of third-party sanctions. Expressive adjudication facilitates this coordination. Indeed, third-party sanctioning may be impossible without a system of adjudication, but that system does not require the adjudicator to wield sanctions or influence via mechanisms of legitimacy.

The fact that mere expression suffices to coordinate sanctioning allows one to explain legal sanctions rather than assuming their existence. Legal sanctions—and indeed government—can arise endogenously. As a first stage, imagine a private and informal system of third-party enforcement. To coordinate sanctioning, a community employs a private actor to arbi-

213. Alternatively, there might be no solution to the counter-factual problem, which then renders both formal and informal systems of third-party sanctioning unstable. My main reasons for rejecting this possibility have nothing to do with the expressive theory pursued in this article, but with my views about the right theory of informal order. The other major point Mahoney & Sanchirico advance in their article, *supra* note 164, at 1286, is that third party sanctioning can succeed based on nothing more than the common expectations that one will be punished for failing to sanction violators. Thus, they reject what other norms theorists (including myself) have termed as “the second order collective action problem” of enforcement and reject as unnecessary the different solutions these theorists offer. *Id.* at 1298–91. Yet, as I have shown in the text, the only solution Mahoney & Sanchirico propose to the counter-factual problem—legal sanctions—is also subject to that problem. I believe this shows that there really is a secondary collective action problem in norm enforcement—that expectations alone aren’t sufficient—so that one of these other theories (internalization, esteem, signaling, etc.) is necessary. I also believe the other theories then succeed in solving this enforcement problem and explaining the possibility of third-party sanctioning. If so, then as I argued in Section III.C, the expressive theory of adjudication can assist any such system of third-party sanctioning, regardless of the particular supporting mechanism and regardless of whether the system is formal or informal.

trate norm violations, essentially disputes between an individual and the community. As explained in Section III.C, this arbiter now influences whether private third parties will sanction a suspected norm violator. If the arbiter proclaims that the accused did violate the norm, then the other group members will punish him. If the arbiter proclaims otherwise, they will not punish him. Thus, the arbiter now effectively wields the power of sanctions.

Although the conceptual continuum between private and governmental actors is long and contentious, the scenario I am describing could easily evolve to the point where the community understands the adjudicator to be a public actor—a court—with the parallel understanding that the rule being enforced is “law.” Now a government official wields the power of sanctions. Eventually, the community may require other public actors to assist in administering punishment—sheriffs, wardens, etc.—and the punishment inflicted will be understood as inflicted as a legal sanction. If so, then we can treat legal sanctions—at least judicial sanctions—as arising endogenously within a model of expressive adjudication.

B. Normative Implications: The Trade-Off in Dispute Resolution and Dispute Avoidance

In this section I explore some of the normative implications of the expressive theory, specifically, those peculiar to adjudicative law making. The positive theory explored above has some normative implications for law generally, whether created through adjudication or through legislative or executive declaration. For example, the fact that a law of any source can construct a focal point for coordination favors the use of rules over standards because achieving a focal effect depends on aligning expectations precisely.²¹⁴ Also, because any expressive effect depends on publicity, optimal law enforcement will depend on how resources are allocated toward generating publicity for rules as well as toward the more traditional concerns for the certainty and severity of punishment.²¹⁵ Though these are interesting issues, I defer such points for later research that is not focused on adjudication. I explore here only the normative consequences for adjudicative processes.

The primary normative conclusion I draw is that there is a trade-off between the backward-looking function of adjudication—to resolve dis-

214. Where the situation allows an expressive effect, that potential should be folded into the broader analysis of that trade-off. See, e.g., sources cited *supra* note 159. There is a parallel point for positive theory: that we will observe rules used more commonly in those situations where legal expression can influence behavior and standards used more commonly where the expressive theory does not apply.

215. The point here is not that the government needs to publicize its threat or imposition of sanctions in order to maximize deterrence. The point here is that, where legal expression serves to construct a focal point, the more the focal point is publicized, the greater the alignment of expectations, and the more situations that will be resolved without conflict and without the threat of sanctions. Again, a positive implication is that, where the expressive theory applies, we will observe the state advertising its law more aggressively than when the theory does not apply.

putes—and the forward looking function—to avoid disputes. The trade-off directly implicates the normative choice between public and private systems of adjudication. At least if we focus solely on the expression dimension of compliance, private adjudication has a comparative advantage in dispute resolution while public adjudication has a comparative advantage in dispute avoidance.

1. *Impartiality and the Advantage of Consensual Dispute Resolution*

One implication of the expressive theory presented here is that the perception of adjudicative impartiality matters to dispute resolution for reasons other than legitimacy. Impartiality matters to both the analysis of a correlated equilibrium and of signaling. First, where adjudication can work by creating a correlated equilibrium, I previously noted that the key condition is that each side has a sufficient probability of winning the message it prefers.²¹⁶ Brown and Ayres illustrate by assuming that a mediator flips a coin.²¹⁷ If so, then each side has exactly a fifty-percent chance of getting its preferred outcome which, combined with the avoidance of the uncoordinated outcome, makes the expected return higher with adjudication than without. As an example, in the Hawk/Dove payoffs of Figure 2, each party expected a payoff of .67 without adjudication and a payoff of 2 with randomized adjudication.²¹⁸ The point I made at the time was that randomization was not essential, but that the parties will each prefer adjudication as long as each expects to prevail with a probability sufficiently close to fifty percent. Now let us examine that point in more detail.

Suppose that a party perceives that the adjudicator is biased in favor of the other party. For example, with the same payoffs as in Figure 2, suppose that one party believes that in the event of a “genuine dispute” (i.e., the adjudicator believes the factual or conceptual issue is “too close to call”), the adjudicator is ten-percent likely to rule in his favor and ninety-percent likely to rule in favor of the other party. Focusing on this outcome, the expected returns for this party after adjudication are now only .4 (ninety-percent chance of receiving zero and ten-percent chance of receiving four), which is lower than he expected without adjudication. As a result, this individual will refuse to consent to adjudication with this particular adjudicator.²¹⁹ Instead, given these payoffs, each party needs to believe it is at least 16.75% probable that it will win in this scenario in order to consent to the adjudicator.

216. See *supra* text accompanying notes 22–23.

217. Brown & Ayres, *supra* note 22, at 375.

218. See Figure 2, *supra* Part II.A.2.

219. Surprisingly, this need for neutrality does not arise in the Battle of the Sexes Game of Figure 1. There, without a mediator, each party expects to receive .83 in the mixed strategy equilibrium. Yet even if a party expects an adjudicator to decide in favor of the other party with 100% probability, his expected return—1—is higher than without adjudication. Of course, a party will still prefer an adjudicator that is less biased in the other party's favor and for that reason will not consent to such a biased adjudicator if a better one is available (better meaning less biased against him, unbiased, or biased in his favor).

Second, signaling also requires a degree of impartiality. A party who believes the adjudicator is biased against him will be less persuadable; given an adjudicative signal contradicting his current beliefs, he will update his beliefs more when he thinks the adjudicator is neutral than when he thinks the adjudicator is biased against him. Moreover, only a sufficiently accurate signal will screen out strategic disputes; the party perceiving adjudicative bias against him will still fear strategic exploitation if he is known to comply with a biased adjudicator. If so, then it will not pay an individual to correlate his strategy with the adjudicative signal.

The result is clear: a party will not consent to even purely expressive adjudication if the perceived bias is too great.²²⁰ When a party refuses consent because of perceived bias, what will happen if the adjudication proceeds anyway and the adjudicator (as he expected) rules against him? Though the threat of sanctions may still generate compliance, the expressive effect is severely weakened or eliminated. First, recall from Section II.B that the consensual designation of a coordinator is necessary to solve the dual problems of common knowledge (that we are each aware of what the adjudicator declared, each believes that the other is aware, each believes that each believes the other is aware, and so on) and of competing messages (that the adjudicator's message stand out among all others). Absent mutual consent, these problems remain to prevent the correlation of strategies from being focal. Second, the party who believes the adjudicator is biased against him will update his beliefs less in response to the adjudicative signal. Finally, because the party perceiving adjudicative bias against him will fear strategic exploitation, he will take costly action to commit himself to ignoring the adjudication, seeking to tie his hands against compliance (as by resorting more quickly to violent self-help).

There are two specific normative implications. First, perceived impartiality is even more important to compliance than previously appreciated. The traditional justification for impartiality is legitimacy—that individuals comply with an adjudicative outcome because they perceive it to be legitimate, and they will only perceive it to be legitimate if it is unbiased. For those convinced of legitimacy theories of compliance, impartiality now has a double significance because a second compliance mechanism depends on it. For those who are skeptical of legitimacy theories, or for contexts in

220. Interestingly, the expressive theory does not require strict impartiality, but only a limit to the degree of bias. In the above BOS example, a party would tolerate a very high degree of bias. If, for some reason, there was only one possible adjudicator who a party perceived to be heavily biased in favor of the other side, he would still consent as long as the bias did not exceed a 83.25% chance of the other side prevailing. Schelling may have had this feature in mind when he wrote: "The white line down the center of the road is a mediator, and very likely it can err substantially toward one side or the other before the disadvantaged side finds advantage in denying its authority." SCHELLING, *supra* note 31, at 144 (emphasis added). Nonetheless, the tolerance for bias is a function of the specific payoffs. If one wants to maximize the chances that adjudication will attract the interest of and compliance from both sides, then one should design a system so that each side will perceive itself as being fifty-percent likely (or more) to prevail when randomization is required.

which one is skeptical of such theories, there is still a reason to care about perceived bias.

Second, focusing solely on expressive grounds of compliance, there will be more compliance when adjudication is consensual than when it isn't. This is not to say that consent is necessary to expressive compliance. What is necessary is merely the perception of impartiality. But while the parties may or may not perceive that nonconsensual adjudication is impartial, consent ensures that the parties believe the adjudicator is impartial because they will mutually consent to adjudication only when they mutually perceive the arbiter to be impartial. Moreover, the requirement of consent may give potential adjudicators a strong incentive to develop a reputation for impartiality. Indeed, as I discuss below, Posner and Yoo use this last insight to argue against the "independence" of international tribunals, by which they mean the adjudicative characteristic of nonconsensual jurisdiction and permanent judges.²²¹ To ensure impartiality, they instead recommend "dependent" tribunals composed of arbitrators selected by disputants. Stated more generally, we might say private dispute resolution is likely to be better than public dispute resolution at using expression to induce the losing party to comply.

2. *The Market Failure in Precedent and the Advantage of Public Adjudication*

Courts and commentators have long noted the prospective value of adjudication—that society benefits from a judicial system that articulates and clarifies rules.²²² Though there are some situations where ambiguity might lead to more desirable conduct,²²³ clearly articulated rules more commonly benefit society by allowing individuals to plan effectively for the future and to avoid costly disputes.

The expressive theory deepens our understanding of the benefits of precedent in two ways. Most basically, the theory shows how the benefits accrue even if the adjudicator lacks the power of sanctions or legitimacy. If it is sufficiently publicized, legal expression can by itself clarify conventions—removing the fuzziness and incompleteness of contracts and custom.

221. Posner & Yoo, *supra* note 87.

222. See Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073, 1075 (1984); William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 249 (1976). The Supreme Court recognizes the clarifying value of precedent when it insists that courts decide the relevant constitutional rule before deciding whether the rule was sufficiently clear that its violation overcomes a qualified immunity. See *Wilson v. Layne*, 526 U.S. 603, 609 (1999) ("Deciding the constitutional question before addressing the qualified immunity question also promotes clarity in the legal standards for official conduct, to the benefit of both the officers and the general public."); cf. *United States v. Leon*, 468 U.S. 897, 925 (1984) (recognizing a good faith exception to the exclusionary rule for fourth amendment violations, but noting that "[i]f the resolution of a particular Fourth Amendment question is necessary to guide future action by law enforcement officers and magistrates, nothing will prevent reviewing courts from deciding that question before turning to the good-faith issue").

223. See, e.g., Brown & Ayres, *supra* note 18.

Sanctions and legitimacy may increase the salience of legal expression, and enhance its clarifying function, but they are not essential to it.²²⁴

The second implication is more complex. It is that the private market for adjudication will not supply an optimal quantity or quality of precedent. The problem is that the disputants and the private adjudicator will tend to undervalue the effect the adjudicative resolution can have on future behavior. Although the disputants and adjudicator have every incentive to exploit the potential of expression for resolving the current dispute, they have an insufficient incentive to care about the precedential effect on future disputes in which they are not participants. Put differently, a private market will supply an optimal amount of dispute resolution, but not an optimal amount of dispute avoidance. As I will develop, this analysis then has implications for current debates over alternative dispute resolution and international adjudication.

There are three related problems: (1) that effective precedent is a public good, (2) that selfish adjudicators paid by the case prefer to maximize future disputes, and, (3) that creating clarity through a system of precedent requires coordination. First, the precedent that clarifies a convention and the publicity given to the precedent are public goods.²²⁵ Once the clarifying precedent is produced and publicized, it costs nothing for other individuals to use it in deciding how to behave. Nor can those who bear the costs of precedent recapture all its benefits. Thus, the disputants who pay for adjudication will not want to pay for the optimal degree of precedential clarity or publicity. Indeed, disputants will not want to bear any precedential costs if they do not expect to find themselves in a similar situation in the future.²²⁶ If the disputants expect to encounter the identical situation with other parties in the future, they might *ex ante* (before they know the adjudicative winner and loser) agree to bear some costs to create and publicize an adjudicative clarification. But they will not be willing to do so to the socially optimal degree as long as there are other parties besides themselves who will encounter the situation as well and would benefit from the clarification. The social optimum is to invest in precedent up to the point where the marginal social costs equal the marginal social benefits, but the disputants will invest only to the point where the marginal private costs equal their marginal private benefits. Such is the problem of public goods.

224. Of course, if the convention itself actually harms social welfare, then the clarification might be undesirable because it might further entrench the convention.

225. See, e.g., BAIRD ET AL., *supra* note 51, at 313 (“A good is a public good when the marginal cost of supplying it to an additional consumer is close to zero. A radio broadcast is a prototypical public good. Although the program is costly to produce, once a signal is broadcast, it costs nothing for each additional viewer to tune in to a program.”).

226. For example, a landowner whose dispute with his neighbor arises from unusual facts—say, a conflict in official surveys—might never expect to have such a dispute again. Nor would they wish to incur any precedential costs if they do expect to encounter the situation again, but only with the same party to the current dispute who will already know of the precedent without any publicity of it, or if the adjudicative winner could influence future disputants merely by revealing the outcome of the prior adjudication.

As serious as the public goods problem is, a second problem concerns the motivation of the adjudicator. A selfish private adjudicator is not merely indifferent to his decision's precedential effect; if his income depends on the number of disputes he resolves, then he has an interest in maximizing future disputes, which he can accomplish by preserving ambiguous conventions and "ambiguating"²²⁷ clear conventions.²²⁸

Finally, even if there were no motivational problems for disputants or adjudicators, precedent can clarify conventions only if there is coordination. There will be no focal effect if adjudicators involved in different but similar disputes issue conflicting statements about the convention and equal publicity is given to each. To coordinate, different adjudicators must give weight to the articulations of other adjudicators and each must attempt to reconcile different, possibly conflicting articulations. Yet we know that doctrinal synthesis is horribly complex. There is usually more than one plausible means of interpreting and reconciling precedent, and frequently a difference of opinion about which means is best. Though a system of precedent seeks to solve a first-order coordination problem among disputants, precedent itself requires a second order of coordination among adjudicators.

Among a large number of adjudicators, centralization and hierarchy are powerful tools for speeding up the process of coordinating precedent.²²⁹ When different adjudicators articulate inconsistent clarifications, we may say that the adjudicators themselves have a dispute. For various reasons, each prefers his own precedent. With enough time, the set of all adjudicators may eventually reach a common understanding. But to resolve these adjudicators' disputes more quickly, and allow faster coordination on precedent, the disputing adjudicators can benefit by turning to a third adjudicator and deferring to his focal signal. The adjudicators thus solve their higher order coordination problem by a higher order of adjudication. We conventionally achieve this clarification only by an appeal (by the original disputants) to a higher court. Thus, even if disputants and private adjudicators were ideally motivated, the market would be very slow to work out the inconsistencies in precedent compared to the possibilities of a centralized system.

227. Cf. Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. CHI. L. REV. 943, 972, 988 (1995).

228. Market competition might ameliorate this incentive problem if private adjudicators develop a reputation for their precedents' effect and if disputants care about that effect. As just discussed, however, disputants will generally not care (or not care enough) about the precedential effect, and they will patronize adjudicators without respect to their reputation for precedential clarity. Even when disputants do care about precedent, there is reason to doubt that the reputation market would work this way, given the informational complexity of the issue. Assessing an adjudicator's precedent requires attributing particular disputes to particular ambiguities—matters that academic doctrinalists spend their careers debating.

229. A large number of decentralized adjudicators might eventually settle on a particular means of clarifying an ambiguous convention, just as individuals acting without adjudicators might *eventually* settle on a particular refinement of the convention without adjudication (and just as a group of improvising musicians might eventually improvise a complete symphony without a composer or conductor). But in either case the time required may be staggering, during which time there are many costly disputes.

The upshot is a new justification for a governmental system of authoritative adjudicators, hierarchically arranged—a judiciary. Traditional justifications for the judiciary turn on the existence of sanctions and legitimacy. If one believes sanctions are essential to the judiciary having any effect on behavior, then one justifies the judiciary by the need for a single governmental institution to wield such sanctions.²³⁰ If one believes adjudicative legitimacy is essential to achieving adjudicative compliance, then one justifies a judiciary by an argument it has a unique potential for legitimacy.²³¹

I do not seek to reject these claims, but only to add an expressive justification for publicly provided adjudication. To isolate the expressive element, my analysis assumed that adjudicators lacked the power of sanctions and legitimacy. But rather than revealing that government had no role to play once stripped of these powers, the analysis shows that the private market in adjudication will fail to supply enough precedent. To increase the quantity and quality of precedent, we require some level of subsidy and centralization. First, like other public goods, government enhances social welfare by using taxes to support a judiciary, paying some of the costs of precedent creation and publicity that the disputants will not willingly bear. Second, government might better motivate adjudicators by paying them a salary that is not based on the number of disputes they resolve. At a minimum, a fixed salary avoids motivating selfish adjudicators to maximize future disputes. Moreover, given that clear precedents work to avoid disputes or to facilitate settlements prior to formal adjudication, a fixed salary gives adjudicators an incentive to provide clear precedents as a way of decreasing their work load. Third, government may achieve the coordination of precedent by claiming primacy for its adjudicators and then by arranging them hierarchically, with higher courts empowered to choose among inconsistent precedents.²³²

230. This view is a subset of the Hobbesian justification for the existence of government, which has been subject to serious criticism. See, e.g., GREGORY S. KAVKA, *HOBBESIAN MORAL AND POLITICAL THEORY* (1986).

231. A potential problem with this justification is that government is probably not necessary to enjoy legitimacy. See, e.g., Mark C. Suchman, *Managing Legitimacy: Strategic and Institutional Approaches*, 20 *ACADEMIC MGMT. REV.* 571, 573–74 (1995).

232. This analysis is consistent with economic theories of stare decisis. See Erin O'Hara, *Social Constraint or Implicit Collusion? Toward a Game Theoretic Analysis of Stare Decisis*, 24 *SETON HALL L. REV.* 736 (1993); Eric Rasmusen, *Judicial Legitimacy as a Repeated Game*, 10 *J.L. ECON. & ORG.* 63 (1994). These theories imagine judicial norms arising internally from an iterated Prisoners' Dilemma game, rather than being imposed from without. The "all defect" equilibria is that judges indulge their political preferences and ignore each others' opinions; the "cooperative" equilibrium is that judges constrain their opinions and follow precedent. According to the theory, the cooperative equilibrium produces two benefits for judges: they achieve greater influence over future cases they don't decide and they can reduce their workload by encouraging settlement via clear precedent.

If the prospect of future influence is a sufficient motivation, the theory implies that private adjudicators might—to some degree—follow each others' precedent, which might suggest that centralization is unnecessary. But the analysis itself reveals advantages to a public system of adjudication. One is that a longer time horizon increases the prospects for cooperation in an iterated Prisoners' Dilemma. A public system can uniquely provide judges life tenure, which O'Hara reports increases the actual practice of following precedent. O'Hara, *supra*, at 774–75. Second, the other benefit judges receive for cooperating on precedent—decreasing their workload with clear precedent—assumes that adjudica-

In sum, even if the government did not give its adjudicators the power of sanctions and even if the government did not enjoy legitimacy, there is a strong justification for the government to create a judiciary in order to subsidize and coordinate precedent creation. The private provision of adjudication is inferior to government in avoiding rather than merely resolving disputes.

3. *The Adjudicative Trade-Off as Applied to ADR and International Adjudication*

The prior two subsections reveal an unfortunate trade-off between dispute resolution and dispute avoidance. Absent sanctions and legitimacy, a private system of adjudication, based on consent, will generate a higher degree of compliance than a public, nonconsensual system. Higher compliance means that more of the costs of disputing are avoided. In short, considering only expressive effects, private adjudication is superior at dispute resolution. But, for the reasons just explained, and again considering only expressive effects, a public system of adjudication is superior at providing precedent and therefore superior at dispute avoidance. The avoidance and resolution of disputes are at odds with one another.

The trade-off between dispute avoidance and dispute resolution has particular significance in the context of adjudication without sanctions. Consider two examples. One is the desirability of ADR when used in place of public adjudication, as with binding arbitration. In recent years, there has been a stark decline in the number of trials in the United States, matched by an increase in the use of ADR and settlement, both encouraged by courts.²³³ Some of the ADR literature praises this shift by measuring how the disputants favor ADR's procedures, and possibly how ADR saves them money.²³⁴ By itself, however, this is no justification for ADR. If private dispute resolution appeals to disputants merely because it avoids imposing on them the costly process of articulating and publicizing clear precedent, then the benefit to the individual disputants comes at a cost to

tors are paid by salary, which also favors a public system. Finally, this effort at sustaining cooperation in a multi-party Prisoners' Dilemma will be plagued by factual and conceptual ambiguity, producing disagreement among third-party judges about whether a particular judge has violated the norms of following precedent. Rather than have each private adjudicator decide on his own whether to "sanction" this judge by refusing to follow his precedent, it is helpful to have a "meta-judge"—a higher court—who can coordinate this decision so that either all judges follow or no judges follow the precedent.

233. See generally Gillian K. Hadfield, *Where Have All the Trials Gone? Settlements, Nontrial Adjudications, and Statistical Artifacts in the Changing Disposition of Federal Civil Cases*, 1 J. EMPIRICAL LEGAL STUD. 705 (2004); Judith Resnik, *Migrating, Morphing, and Vanishing: The Empirical and Normative Puzzles of Declining Trial Rates in Court*, 1 J. EMPIRICAL LEGAL STUD. 783 (2004); Judith Resnik, *Civil Processes*, in THE OXFORD HANDBOOK OF LEGAL STUDIES 748 (Peter Cane & Mark Tushnet eds., 2003).

234. See, e.g., BARBARA MEIERHOEFER, COURT-ANNEXED ARBITRATION IN TEN DISTRICT COURTS 46, 63–69, 77–83, 111–18 (1990); E. Allan Lind et al., *In the Eye of the Beholder: Tort Litigants' Evaluations of Their Experiences in the Civil Justice System*, 24 L. & SOC'Y REV. 953, 980 (1990).

society. Better dispute resolution may mean worse dispute avoidance. Although the optimal degree of precedent refinement involves weighing the relevant costs and benefits, the existence of such benefits means that there can be such a thing as too little adjudication.²³⁵

A second example is international adjudication. Ironically, as domestic adjudication in many nations moves more towards private systems, the recent international trend is to the creation of tribunals modeled on domestic courts. Most academic commentary favors the trend.²³⁶ Eric Posner and John Yoo, however, have dissented, arguing that a tribunal is more likely to succeed in generating compliance if it is more like private arbitration.²³⁷ They put the point in terms of the “dependence” or “independence” of the tribunal, where dependence means the disputing nations must agree to hire the particular individuals who adjudicate their dispute. By contrast, certain international tribunals are more independent because they have permanent members—judges—and a form of compulsory jurisdiction. The jurisdiction is not compulsory in the same sense as exists in domestic courts because nations must have agreed to accept jurisdiction and they remain free to withdraw their consent. But because withdrawal requires advanced notice, jurisdiction is compulsory for a period of time.²³⁸

Given the above analysis, I agree with Posner and Yoo’s claim that the dependence of international adjudicators, who lack the power of sanctions, will enhance the rate of compliance. Their point is that dependence provides a particular incentive for impartiality. A dependent tribunal knows it cannot get future disputes to resolve unless both disputants then consent, and it cannot get both disputants to consent unless it enjoys a reputation for impartiality. I would add to this that a dependent tribunal also has an incentive only to resolve those cases for which purely expressive adjudication will generate compliance. As I explained in Section III.D, there are some disputes in which an individual has a dominant strategy. A dependent tribunal will not decide these cases because the nation with a dominant strategy will not consent to a meaningless adjudication. But an independent tribunal might decide these cases, incurring costs for everyone without altering behavior.

Nonetheless, the analysis of this article reveals two weaknesses in the Posner and Yoo position. One is that it is possible to generate compliance even if the tribunal is independent (and even when it lacks the power of sanctions), as long as the disputants believe the tribunal is impartial. Al-

235. Even in public adjudication, there is a danger that excessive settlement will undermine rule articulation. See Fiss, *supra* note 222, at 1085 (“A settlement will thereby deprive a court of the occasion, and perhaps even the ability, to render an interpretation.”).

236. See, e.g., Laurence Helfer & Anne-Marie Slaughter, *Toward a Theory of Effective Supranational Adjudication*, 107 *YALE L.J.* 387 (1997); Robert O. Keohane et al., *Legalized Dispute Resolution: Interstate and Transnational*, in *LEGALIZATION AND WORLD POLITICS* 73 (Judith L. Goldstein et al. eds., 2001).

237. See Posner & Yoo, *supra* note 87, at 17–19.

238. *Id.* at 21.

though the desire to attract future opportunities to resolve disputes creates one incentive to remain impartial, the absence of that incentive does not guarantee that tribunals with compulsory jurisdiction are biased. As Posner and Yoo acknowledge, there is an effort in structuring the tribunals to ensure their impartiality.²³⁹ Moreover, even independent international tribunals must worry that nations will, over time, withdraw from the tribunal's jurisdiction, as France and the United States have withdrawn from the ICJ's "optional clause" jurisdiction.²⁴⁰ The threat of withdrawal provides an incentive for impartiality that is arguably equivalent to the incentives arbitrators have to attract future cases. International tribunals are still a long way off from having the independence of domestic courts with truly compulsory jurisdiction from which individuals cannot withdraw.²⁴¹

There is a more serious problem. Even if Posner and Yoo are correct that dependent courts are better at dispute resolution, independent courts are more likely to excel at dispute avoidance. The factors that facilitate the creation of useful precedent—explained above—include the factors that make a tribunal independent in Posner and Yoo's terms: that participating nations subsidize its operation, that its constituent judges are paid a salary rather than by the number of cases resolved, and that a single institution can coordinate the selection of a particular precedent. Posner and Yoo themselves mention at one point that a centralized judiciary can better create a "coherent jurisprudence,"²⁴² though this observation plays no role in their subsequent analysis and policy recommendations. They even observe that the ICJ "is considered by many to have the final word on questions of international law,"²⁴³ but do not acknowledge that this perception gives the ICJ a unique ability to create focal precedents. Given the value of clear precedents for avoiding disputes, it remains possible that any reduction in the ICJ's ability to resolve disputes is more than offset by its enhanced abil-

239. *Id.* at 31–32. For the ICJ, for example, no state can have more than one citizen serve as a judge on the 15-judge tribunal, but any state involved in a case that does not have one of its nationals on the Court can appoint an ad hoc judge for that case.

240. *Id.* at 33–35.

241. Indeed, the right analogy here is between independent international tribunals and independent domestic courts engaged in constitutional review. When the parties-in-interest include the executive or legislative branches of government, even a domestic court depends on essentially voluntary enforcement. As discussed above in Section IV.A, the court cannot itself "sanction" the executive or legislative branch because it depends on the executive branch to enforce its orders and on the legislative branch to fund its existence. Yet domestic courts still manage to generate compliance. The reason, according to recent scholarship on the U.S. Supreme Court, is that the judiciary acts with sensitivity to how its decisions will be received, mostly avoiding genuinely counter-majoritarian decisions that other branches might ignore. See, e.g., Mark A. Graber, *The Nonmajoritarian Difficulty: Legislative Deference to the Judiciary*, 7 *STUD. AM. POL. DEV.* 35 (1993); Michael J. Klarman, *What's So Great About Constitutionalism?*, 93 *NW. U. L. REV.* 145 (1998); Michael J. Klarman, *Rethinking the Civil Rights and Civil Liberties Revolutions*, 82 *VA. L. REV.* 1 (1996); Steven L. Winter, *An Upside/Down View of the Countermajoritarian Difficulty*, 69 *TEX. L. REV.* 1881 (1991). One might expect the same sensitivity by the ICJ, which requires impartiality for survival, both because nations will withdraw from its jurisdictions and ignore its decisions if it is perceived to be biased.

242. Posner & Yoo, *supra* note 87, at 24.

243. *Id.* at 35.

ity to avoid disputes.²⁴⁴ Indeed, it is possible that the nations creating the ICJ (and other such independent tribunals) are solving a collective-action problem inherent in the creation of clear precedent. Cooperation here may consist of sacrificing one's ideal dispute resolution mechanism as a means of contributing to the public good of dispute avoidance.

In sum, besides the general importance of any mechanism by which law induces compliance, there are several specific implications to the theory of expressive adjudication. The power of adjudicative expression explains the function of tribunals that lack the power of sanctions and legitimacy, offers a way of viewing law and government as arising endogenously within a system of third-party sanctions, and reveals an important trade-off in dispute resolution and avoidance.

V. CONCLUSION

This article offers a "third way" of thinking about adjudication. Where the two conventional theories of adjudicative compliance emphasize threatened sanctions and perceived legitimacy, I emphasize the selfish interest of disputants in correlating their strategy with the adjudicator's focal signal. To reach this conclusion, I first identified how one's choice of behavior often depends on how one perceives certain facts and conventions. Conventions arise from both intentionally created expectations—as where two parties agree how to order their affairs—and unintentionally created expectations—as where a population slowly settles on a particular equilibrium behavior for a given situation. Second, I identified how in either case ambiguity causes conflict. The problem is not only uncertainty about the facts, but also the inevitable fuzziness and potential incompleteness of the expectations defining a contract or convention.

Expression resolves this ambiguity. There is a synergy among three roles that adjudicative expression serves: as a device for correlating strategies, as a means of constructing focal points, and as a signal of information. When the relevant facts or conventions are ambiguous, an adjudicator can resolve disputes by signaling his beliefs—which works by screening out strategic disputes with sufficient probability and then by providing a focal point that creates self-fulfilling expectations for how the individuals will proceed. When the ambiguity is conventional, the adjudicator's clarification of the convention can set a precedent and thereby affect the behavior of parties other than the immediate disputants. Thus, expressive adjudication can both resolve existing disputes and, by articulating clear precedent, avoid fu-

244. Posner & Yoo also purport to measure the success of tribunals like the ICJ by the rate at which they are "used" to resolve disputes. But this measure completely ignores the effect of a tribunal's good precedent, which may prevent disputes by prospectively clarifying the relevant conventions. Indeed, measuring use may make a tribunal appear successful when it is intentionally retaining unclear conventions and ambiguating clear conventions. Because successful dispute avoidance decreases a tribunal's use, while successful dispute resolution increases its use, the rate of use is not a good measure of a tribunal's success. *Id.* at 32.

ture ones. This analysis applies both in dyadic and multi-party disputes, which includes (and frequently corresponds to) private and public disputes.

My claim for the expressive power of adjudication has a limited domain—situations of multiple equilibria where the parties, despite conflicting over which equilibrium should prevail, mutually prefer to coordinate to avoid certain outcomes. In practice, this tends to represent situations of potentially self-enforcing contracts (modeled by the iterated Prisoners' Dilemma game) and situations where the parties both regard the continuation or escalation of the dispute—as by mutual resort to violent self-help—as the worst possible outcome (modeled by the Hawk/Dove game). Though limited, this domain is significant and therefore the theory described here reveals an important new way in which adjudication achieves compliance, or more generally, of how law *works*.

In addition to offering a better understanding of legal compliance, the power of adjudicative expression helps to explain various instances of sanctionless but effective adjudication, from medieval Icelandic courts to modern ADR, from international adjudication to judicial review of the actions of other governmental branches. The expressive theory also offers a way to understand adjudicative sanctions endogenously, as arising out of a process of informal third-party sanctions. Finally, the expressive theory reveals a fundamental trade-off between dispute resolution and dispute avoidance. Looking solely at the expressive effect, the institution best designed to induce the disputants to resolve their dispute is private, while the institution best designed to create clear precedent is public. Where other mechanisms secure compliance—such as sanctions—public institutions may avert the trade-off. But where sanctions are unavailable, as in nonbinding arbitration and international adjudication, the best institution for resolving disputes is not the best for avoiding them.

