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ADJUDICATING IN ANARCHY: AN EXPRESSIVE THEORY OF INTERNATIONAL DISPUTE RESOLUTION

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ABSTRACT

Frequent compliance with the adjudicative decisions of international institutions, such as the International Court of Justice (ICJ), is puzzling because these institutions do not have the power domestic courts possess to impose sanctions. This Article uses game theory to explain the power of international adjudication via a set of expressive theories, showing how law can be effective without sanctions. When two parties disagree about conventions that arise in recurrent situations involving coordination, such as a convention of deferring to territorial claims of *first possessors*, the pronouncements of third-party legal decision makers—adjudicators—can influence their behavior in two ways. First, adjudicative expression may construct *focal points* that clarify ambiguities in the conven-

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tion. Second, adjudicative expression may provide *signals* that cause parties to update their beliefs about the facts that determine how the convention applies. Even without the power of sanctions or legitimacy, an adjudicator's focal points and signals influence the parties' behavior. After explaining the expressive power of adjudication, this Article applies the analysis to a range of third-party efforts to resolve international disputes, including a comprehensive review of the docket of the International Court of Justice. We find strong empirical support for the theory that adjudication works by clarifying ambiguous conventions or facts via cheap talk or signaling. We claim that the theory has broad implications for understanding the power of adjudication generally.

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INTRODUCTION

In 1872, an international arbitral tribunal set up by treaty ruled that Great Britain had to pay $15.5 million to the United States for damages caused by a ship, the *Alabama*, built in Britain and sold to the Confederacy during the Civil War.[1] The panel had no means of enforcing its judgment, but Great Britain duly complied, launching the modern era of interstate dispute resolution.[2] Almost a century later, the International Court of Justice (ICJ) decided a case that facilitated the delimitation of the continental shelf between Germany, Denmark, and the Netherlands, ending a high stakes dispute and allowing those countries to proceed in developing gas and mineral resources.[3] Quite recently, the ICJ helped resolve a diplomatic feud related to Belgium's attempt to arrest a former Minister of Foreign Affairs from the Congo.[4] In each of these cases, and many more, international adjudication successfully resolved significant conflict between nations. Adjudication generated compliance notwithstanding the absence of external sanctions to *enforce* the decisions. Compliance without centralized sanctions contradicts our conventional image of how legal systems operate. The result is a puzzle at the heart of international law. Given the so-called "anarchic"[5] environment of international relations, why would nations bother to comply with the decisions of international tribunals?

This question is part of a larger one. In recent years, political scientists and international lawyers have identified compliance with international law as the central problem for analysis.[6] Despite high

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1. *See* 1 J.G. WETTER, THE INTERNATIONAL ARBITRAL PROCESS 27-173 (1979).

2. *See* JOHN G. COLLIER & VAUGHAN LOWE, THE SETTLEMENT OF DISPUTES IN INTERNATIONAL LAW: INSTITUTIONS AND PROCEDURES 33 (1999).

3. North Sea Continental Shelf Cases (F.R.G. v. Den., F.R.G. v. Neth.) 1969 I.C.J. 3 (Feb. 20).

4. Case Concerning the Arrest Warrant of 11 April 2000 (Congo v. Belg.) 2002 I.C.J. 1 (Feb. 14), *available at* http://www.icj-cij.org.

5. HEDLEY BULL, THE ANARCHICAL SOCIETY: A STUDY OF ORDER IN WORLD POLITICS xii (1964).

6. ABRAM CHAYES & ANTONIA HANDLER CHAYES, THE NEW SOVEREIGNTY: COMPLIANCE WITH INTERNATIONAL REGULATORY AGREEMENTS 1-29 (1995); George W. Downs et al., *Is the Good News About Compliance Good News About Cooperation?*, 50 INT'L ORG. 379, 379-80 (1996); Andrew Guzman, *A Compliance Based Theory of International Law*, 90 CAL. L. REV.

profile instances of noncompliance, most writers seem to agree with Louis Henkin's famous assessment that "almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time."[7] Scholars disagree, though, on precisely *why* nations do so. Traditional international lawyers contend that international law works because it is perceived largely as morally authoritative and legitimate.[8] Realists have long contended that international law is epiphenomenal, that nations generally comply only because their international obligations are usually congruent with national interests.[9] Finally, institutionalists claim that international institutions influence state behavior by facilitating communication and disseminating information about member nations.[10] The choice between these theories goes to the heart of whether international law matters: only by knowing the

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1823, 1825 (2002); Oona Hathaway, *Do Human Rights Treaties Make a Difference?*, 111 YALE L.J. 1935 (2002); Daniel Ho, *Compliance and International Soft Law: Why do Countries Implement the Basle Accord?*, 5 J. INT'L ECON. L. 647, 647 (2002); Harold Hongju Koh, *How Is International Law Enforced?*, 74 IND. L.J. 1397 (1999); Harold Hongju Koh, *Why Do Nations Obey International Law?*, 106 YALE L.J. 2599 (1997); Kal Raustiala & Anne-Marie Slaughter, *International Law, International Relations and Compliance*, *in* HANDBOOK OF INTERNATIONAL RELATIONS 538-58 (Walter Carlsnaes et al. eds., 2002); Beth A. Simmons, *Compliance with International Agreements*, 1 ANN. REV. POL. SCI. 75, 75 (1998).

7. LOUIS HENKIN, HOW NATIONS BEHAVE 47 (1979) (emphasis omitted); *see also* Charles Kegley & Gregory Raymond, *International Legal Norms and the Preservation of the Peace 1820-1964*, 8 INT'L INTERACTIONS 171, 173 (1981) (providing empirical support for assertion that national behavior is consistent with international law); David G. Victor & Kal Raustiala, *Conclusions*, *in* THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS: THEORY AND PRACTICE 659, 661 (David G. Victor et al. eds., 1998). *But see* Peter M. Haas, *Choosing to Comply: Theorizing from International Relations and Comparative Politics*, *in* COMMITMENT AND COMPLIANCE 43, 44 (Dinah Shelton ed., 2000) (explaining that "empirical studies suggest that national compliance is uneven at best").

8. *See, e.g.*, THOMAS FRANCK, THE POWER OF LEGITIMACY AMONG NATIONS 41-49 (1990).

9. John J. Mearsheimer, *The False Promise of International Institutions*, 19 INT'L SEC. 5, 6 (1995); *see also* 5 THUCYDIDES, THE HISTORY OF THE PELOPONESSIAN WAR, *reprinted in* THE LANDMARK THUCYDIDES 352 (Richard Crawley trans., Robert B. Strassler ed., 1998) (quoting the Athenians in a Melian dialogue, "right ... is only in question between equals in power, while the strong do what they can and the weak suffer what they must").

10. *See* ROBERT KEOHANE, AFTER HEGEMONY: COOPERATION AND DISCORD IN THE WORLD POLITICAL ECONOMY 49-64 (1984); Robert Axelrod & Robert O. Keohane, *Achieving Cooperation Under Anarchy: Strategies and Institutions*, *in* COOPERATION UNDER ANARCHY 226 (Kenneth A. Oye ed., 1986); Robert O. Keohane & Lisa L. Martin, *The Promise of Institutionalist Theory*, 20 INT'L SEC. 39, 45 (1995); Beth Simmons, *See You in "Court"? The Appeal to Quasi-Judicial Legal Processes in the Settlement of Territorial Disputes*, *in* A ROAD MAP TO WAR: TERRITORIAL DIMENSIONS OF INTERNATIONAL CONFLICT 205, 208 (Paul F. Diehl ed., 1999) (using the term "rational functionalism" for the concept).

reasons for compliance can we assess whether international law has the potential to become a powerful independent force in world affairs.

To date, however, the focus of the compliance literature has been almost exclusively on *primary* compliance with international norms, embodied either in customary international law or in treaty obligations.[11] Relatively neglected is the question of *secondary* compliance: why states comply with decisions rendered by international courts. This is the question we address. Stated differently, this Article seeks to explain why some states are willing to comply with their primary international obligations *only after* a third party adjudicator has articulated those obligations.

Our approach is both theoretical and empirical. The explanation we offer is rooted in game theory, which has been used successfully in a variety of problems in international organization. With few exceptions, however, the central game concept has been the prisoners' dilemma. This Article focuses on a different concept— coordination. Coordination games describe situations where parties have fully or partially common interests that can be achieved only if they coordinate their strategies among multiple possible equilibria.[12] Below, we explain why we think this model more closely approximates many strategic situations in the real world. This Article seeks to move coordination to a central place in the evolving study of international law and institutions.

A focus on coordination produces the Article's principle theoretical contribution—an *expressive* theory of adjudication. Our expressive claim has four steps. First, we contend that the need for coordination is pervasive, even in situations of international conflict. For example, when the value of disputed territory is low relative to the costs of military action, international competition for territory takes the form of a coordination game known as Hawk/Dove. In this case, each nation prefers to gain the territory by having the other side defer to its claim, but each considers the worst possible outcome to

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11. *See* Simmons, *supra* note 6, at 78 (characterizing "compliance with standing, substantive rules often embodied in treaty arrangements" as first order compliance as contrasted with second order compliance with third-party decision making) (citations omitted).

12. ERIC RASMUSEN, GAMES AND INFORMATION: AN INTRODUCTION TO GAME THEORY 29 (3d ed. 2001).

be a military conflict resulting from mutual claims to the territory. Thus, despite their conflicting interest over territory, the parties may have a common interest in avoiding war.

Second, we use evolutionary game theory to explain how conventions emerge over time—*even in a state of anarchy*—from the interactions of players in coordination situations.[13] Such conventions often benefit players by avoiding conflict and maintaining cooperation. For example, for those territorial disputes that take the form of the Hawk/Dove game, nations may come to expect that the first possessor of a territory will play Hawk and that others will play Dove. As long as every nation can determine who the first possessor is, the property-like convention will avoid conflict.

Third, we describe why conventions are inevitably imperfect. Ambiguities in the underlying expectations, and in the facts the convention makes relevant, prevent players from coordinating in every situation. For example, a first possession convention regarding territory will fail to coordinate expectations in cases where there are divergent understandings of what constitutes possession, divergent understandings about possible exceptions to the possession convention, or divergent beliefs about the particular facts that define possession. Uncoordinated expectations will lead to conflict, as two nations play Hawk expecting the other to play Dove.

Finally, we explain how a third party's expression can resolve ambiguity, in the convention or the facts, and thereby influence behavior of players in a coordination game. We do not place any reliance on the nations' ideological commitments, such as a perceived obligation to obey legitimate adjudicative determinations. Instead, expression works partly as cheap talk[14]—by constructing a *focal point* around which parties coordinate—and partly because third-party *signals* cause players to update their beliefs about the state of the world. In either case, expression can change the action a selfish party chooses to play. We also identify why adjudication combining cheap talk and signaling exerts a more powerful influence on the parties' behavior than either type of expression can achieve in isolation. The resulting theory of adjudication has broad application, not only explaining international adjudication but also

13. *See infra* Part II.B.1.
14. *See infra* Part II.C.1.a.

broader comparative questions of dispute resolution and the origins of domestic systems of adjudication.

On the empirical side, we test our theory by considering a variety of evidence about international adjudication. We examine the early history of international dispute resolution, provide three extended case studies of major adjudications prior to the creation of the ICJ, and conduct a quantitative analysis of the decisions of this latter tribunal. Indeed, we have conducted the most comprehensive empirical review to date of the contentious docket of the ICJ, which we contend provides considerable support for our expressive theory of adjudication.

The Article proceeds as follows: Part I begins by stating more carefully the puzzle of compliance with international adjudication. Part II presents the expressive theory of adjudication. This part claims that coordination games can be used to describe a broad range of international phenomena. It also explains how third-party dispute resolution resolves coordination problems expressively. Part III discusses various examples of international dispute resolution from the perspective of this expressive theory with special attention to the docket of the ICJ. We argue that dispute resolution processes help parties resolve the underlying and ubiquitous problem of coordinating among multiple equilibria. The last Part provides a conclusion.

I. THE PUZZLE OF COMPLIANCE WITH INTERNATIONAL ADJUDICATION

A. Unexplained Compliance with International Dispute Resolution

Studying compliance with international norms raises certain methodological issues. Oran Young defines compliance as "occur[ing] when the actual behavior of a given subject conforms to prescribed behavior, and non-compliance or violation occurs when actual behavior departs significantly from prescribed behavior."[15] Measuring the level of compliance with international norms, however, is not straightforward. As Beth Simmons notes: "[C]ompliance

15. Simmons, *supra* note 6, at 77 (quoting ORAN R. YOUNG, COMPLIANCE AND PUBLIC AUTHORITY 104 (1979)).

is rarely a transparent, binary choice. Actors' behavior is often intentionally ambiguous, dilatory, or confusing, and frequently takes place under conditions in which verification ... is difficult.... [and] highly context-specific."[16] Compliance with, for example, a ruling of the ICJ may be decades in coming, with a different outcome than the one the court required, albeit one that still satisfies the parties.

Notwithstanding these problems, studies of international adjudication find a high degree of compliance. In the introduction we gave three noteworthy illustrations—compliance with the decisions rendered in the *Alabama* (1872), *North Sea Continental Shelf* (1969), and *Case Concerning the Arrest Warrant of 11 April 2000* (2002).[17] More generally, previous scholars have claimed there is complete or nearly complete compliance with final decisions (on the merits) of the ICJ.[18] In a later section, we present an exhaustive review of the ICJ docket and conservatively estimate compliance with ICJ decisions to be sixty-eight percent, although some real noncompliance also is identified.[19] Similarly, studies of General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO) dispute resolution find "quite high" levels of compliance.[20]

This high level of compliance is a puzzle for rational choice theory. Rationalist approaches fail to predict compliance with international judicial institutions, such as the ICJ, because they

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16. *Id.* at 78-79 (citations omitted); *see also* Richard Bilder, *Beyond Compliance: Helping Nations Cooperate*, *in* COMMITMENT AND COMPLIANCE, *supra* note 7, at 65, 67 ("Obligation and no-obligation, compliance and breach, shade imperceptibly into one another .... Issues of compliance and breach are frequently part of the ongoing game or process of international interaction rather than something subsequent to and apart from it."); Haas, *supra* note 7, at 61-64 (discussing constructivism and compliance).

17. *See supra* notes 1-4 and accompanying text.

18. COLLIER & LOWE, *supra* note 2, at 178 (claiming that previously "all decisions were, sooner or later, complied with") (citation omitted); COMPLIANCE WITH JUDGMENTS OF INTERNATIONAL COURTS 35 (M.K. Bulterman & M. Kuijer eds., 1996) (explaining that most decisions are complied with).

19. *See infra* note 239 and accompanying text.

20. *See, e.g.*, ROBERT E. HUDEC, ENFORCING INTERNATIONAL TRADE LAW: THE EVOLUTION OF THE MODERN GATT LEGAL SYSTEM 286 (1993); Warren F. Schwartz & Alan O. Sykes, *The Economic Structure of Renegotiation and Dispute Resolution in the World Trade Organization*, 31 J. LEGAL STUD. 179, 200 (2002) (finding "the level of compliance with trade commitments is quite high").

lack the power to sanction a nation for failing to comply.[21] In the absence of centralized sanctions, a rationalist must wonder why there is *any* compliance with the adjudications of international institutions.

One possible answer is selection bias. If the only cases that go before international bodies for dispute resolution are those most capable of resolution, either because of their stakes or the issue area involved, then high compliance is unsurprising. Some argue, therefore, that the fact of compliance cannot tell us much about compliance in general or the power of international law to constrain state behavior.[22]

Selection bias exists, but it does not resolve the puzzle of adjudicatory compliance. Even if international dispute resolution draws the "easy cases," selection biases leave unexplained what it is about certain cases that make them easy to resolve. If one believes the realist critique that international law is epiphenomenal, then there should be no easy cases. A realist might, of course, maintain that parties would undertake the same behavior in the absence of dispute resolution. But this is implausible; if parties knew in advance the precise solution to their dispute, based on their relative power, they would not bother going through the process of third-party dispute resolution, which is costly and time consuming. States would not turn to third parties unless they played some role in helping the states to resolve problems. Consequently, if states do not know in advance the precise solution to their dispute, then the process of international dispute resolution has had some effect and has generated compliance.

A second possible answer to the puzzle of compliance is reputation.[23] Andrew Guzman argues that concerns about reputation can

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21. In contrast, traditional international lawyers who focus on legitimacy as the primary determinant of compliance tend to overpredict compliance. *See* Downs et al., *supra* note 6, at 380-82.

22. *See id.* at 383 (noting that "we do not know what a high compliance rate really implies").

23. *See* P. K. Huth, *Deterrence and International Conflict*, 2 ANN. REV. POL. SCI. 25, 41-42 (1999) (explaining that there are relatively few studies on international reputations); Beth Simmons, *International Law and State Behavior: Commitment and Compliance in International Monetary Affairs*, 94 AM. POL. SCI. REV. 819, 820 (2000) ("[G]overnments make commitments to further their interests and comply with them to preserve their reputation for predictable behavior in the protection of property rights."); Simmons, *supra* note 10, at 210

secure compliance, particularly where stakes are low.[24] With low stakes, the reputation benefits that states will obtain from compliance will offset the costs of noncooperation. Reputation is, however, an incomplete way of explaining compliance with international adjudication. If reputation were strong enough to compel compliance with adjudication, one wonders why it was not also strong enough to resolve the dispute *without* adjudication. Why is reputation too weak to induce compliance before a third party pronounces a nation's legal obligations, but still strong enough to induce compliance after such a pronouncement?

A related problem with the reputation explanation is the fact that reputation may be compartmentalized across states.[25] The United States might flout international obligation *X* owed to, say, Iran but at the same time fulfill obligation *X* to India, Peru, and Germany. If so, what will the latter three states infer about a judicial decision that finds the United States failed to observe the obligation vis-à-vis Iran? The states might infer that the United States is less likely to cooperate with *them* in the future, which means they might find it worthwhile to diminish their cooperation with the United States at the present time. This reaction would constitute a reputation *sanction* for the United States' breach of its obligation to Iran. But there is another possibility. India, Peru, and Germany might perceive that the United States has strong interests in maintaining cooperation with *them* that do not exist for Iran. The three states may then reason that they can safely ignore the United States' breach of its legal obligations to Iran. If so, the United States suffers no loss of reputation among any states other than the one to whom it breaches its obligations. If breaching its obligations to Iran creates no reputation spillover to its relationship with other countries, then the United States should also be willing to ignore its legal obligations to Iran, both before and after international adjudication.

(arguing that states comply because long-run reputational cost outweighs short-term gain).

24. Guzman, *supra* note 6, at 1883 ("The likelihood that reputational effects will be sufficient to ensure compliance grows smaller as the stakes grow larger.").

25. *See* George W. Downs & Michael A. Jones, *Reputation, Compliance, and International Law*, 31 J. LEGAL STUD. 95, 108-09 (2002) (describing how segmented reputations develop).

In the end, perhaps reputation will have a role to play in explaining adjudication, but not without a greater understanding of how third-party expression changes the reputation calculus. The puzzle of compliance thus remains. We need to understand why and for what cases states turn to international institutions for dispute resolution.

B. The Broader Puzzle of Compliance Without Sanctions

Compliance with international adjudication is actually only one illustration of the more general problem of explaining compliance in contexts where a tribunal lacks coercive enforcement power. Obvious examples include certain alternative forms of dispute resolution, such as nonbinding arbitration. Even in a nation's courts, however, enforcement is often less effective than deterrence theorists might think necessary to compel compliance. Historically, we know of at least one legal system that shared many features with the current system of international law. For several hundred years, Iceland had a stable legal system not unlike the current international system.[26] It had a type of legislature to make laws, and courts to decide cases, but no public enforcement of the courts' decisions. In other words, Icelandic institutions made law and declared rights, but no governmental institutions existed to enforce those declarations.

When someone won a court case in Iceland, enforcement would be left to private parties.[27] Typically, legal cases involved killing of an individual for which blood money had to be paid. If one failed to pay damages as determined by an adverse judgment, the original claimant could come back to the adjudicator, who would then declare the defaulting defendant an outlaw (meaning the defendant could be killed without the killer incurring legal liability).[28] Consider the puzzle though: The immunity granted to the killer of an outlaw is merely the right to be free from judgments issued by

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26. *See* DAVID FRIEDMAN, LAW'S ORDER 263-67 (2000); Richard Posner, *Medieval Iceland and Modern Legal Scholarship*, 90 MICH. L. REV. 1495, 1496-97 (1992) (reviewing WILLIAM I. MILLER, BLOODTAKING AND PEACEMAKING: FEUD, LAW AND SOCIETY IN SAGA ICELAND (1990)).

27. FRIEDMAN, *supra* note 26, at 264.

28. *Id.*

a court that had *no power* to enforce its judgments. Without adjudicatory enforcement power, it is not apparent why the defendant would feel any more protected when his death would produce a judicial declaration of liability than when it would not. Yet, despite the purely expressive power of the court, the Icelandic system provided sufficient incentives for many people to pay judgments.[29]

The legal institutions in the international system are similar to those in medieval Iceland. Several international institutions are quasi-legislative in their power to create law, while a proliferating number of judicial institutions adjudicate disputes. But international law still famously lacks a central enforcer, in other words, an executive. This so-called "anarchic"[30] situation means that laws must be enforced frequently through self-help. Yet, like the pronouncements of the court in medieval Iceland, the decisions of international tribunals are still largely effective in the cases presented to them.[31] Compliance with international adjudication will help explain the Icelandic courts and more generally provide insights into the evolution of domestic court systems. In the next Part, we offer a theory that explains judicial compliance in both contexts.

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29. While this system would seem to allow the stronger parties to avoid paying judgments rendered against them, Iceland had a market in claims, so that a successful but weak claimant could transfer his claim to a stronger party for enforcement of the judgment. This system worked so long as power asymmetries among the players were not too great. Apparently Iceland had some social surplus, but not an enormous one. There were enough resources to support a few public officials. There were not enough resources, however, so that a powerful individual could hire enough other powerful people as retainers to form a state. Presumably, whenever one faction would gather a number of powerful individuals so as to try to coerce others, it would lose judgments. As the number of judgments against the prospective ruler rose, so did the incentive for other powerful individuals to challenge the person so as to gain the payment due earlier but weaker plaintiffs. This may have created a mechanism for internal stability and an equilibrium of power. *See id.* at 263-67.

30. BULL, *supra* note 5, at 130.

31. Of course, there are some important distinctions. Arguably, inequality of power is more severe in the international system than in a society of individuals. *See* FRIEDMAN, *supra* note 26, at 265-67.

II. THE COORDINATING FUNCTION OF ADJUDICATION

Several writers recently have applied concepts of game theory to international law.[32] Game theory discussions of international law, like other uses of game theory in law, focus frequently on *n*-person versions of the prisoners' dilemma.[33] Though we do not dispute that this model provides great insight into the situations nations and individuals frequently face, we join a small group of theorists[34] who explicitly stress the significance of a different and equally frequent

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32. *See, e.g.*, Jeffrey L. Dunoff & Joel P. Trachtman, *Economic Analysis of International Law*, 24 YALE J. INT'L L. 1, 43-44 (1999); Jack L. Goldsmith & Eric A. Posner, *A Theory of Customary International Law*, 66 U. CHI. L. REV. 1113, 1121 (1999); John K. Setear, *An Iterative Perspective on Treaties: A Synthesis of International Relations Theory and International Law*, 37 HARV. INT'L L.J. 139, 147 (1996); John K. Setear, *Responses to Breach of a Treaty and Rationalist International Relations Theory: The Rules of Release and Remediation in the Law of Treaties and the Law of State Responsibility*, 83 VA. L. REV. 1, 123-26 (1997); Paul Stephan, *Courts, Tribunals and Legal Unification—The Agency Problem*, 3 CHI. J. INT'L L. 333, 338-43 (2002); Edward T. Swaine, *Rational Custom*, 52 DUKE L.J. 559, 573-82 (2002).

33. The dominance of the prisoners' dilemma model in international law discussions applying game theory reflects the centrality of that model in international relations theory. *See* KEOHANE, *supra* note 10, at 67-84; Stephen Haggard & Beth A. Simmons, *Theories of International Regimes*, 41 INT'L ORG. 491, 504-06 (1987); Walter Mattli, *Private Justice in a Global Economy: From Litigation to Arbitration*, 55 INT'L ORG. 919, 922-23 (2001).

34. The closest theoretical approach to our own is found in 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 (Judith Goldstein & Robert O. Keohane eds., 1993). In particular, Garrett & Weingast stress the importance of coordination that exists within an iterated prisoners' dilemma game, the way that ambiguity can undermine cooperative solutions, and the ability of focal points to stabilize cooperation around a particular understanding. Our approach differs in the following ways: we generalize the problem of coordination by discussing additional games, particularly Hawk/Dove; we use evolutionary game theory to identify three forms of ambiguity that infect conventions; we propose a signaling model that works in conjunction with a cheap talk construction of focal points to explain adjudication; and we apply the model to international adjudication.

In addition, there is some literature on coordination as it relates to various aspects of international law and relations. Perhaps the earliest piece is Duncan Snidal, *Coordination Versus Prisoners' Dilemma: Implications for International Cooperation and Regimes*, 79 AM. POL. SCI. REV. 923 (1985). *See also* Kenneth W. Abbott, *"Trust But Verify": The Production of Information in Arms Control Treaties and Other International Agreements*, 26 CORNELL INT'L L.J. 1, 20-23 (1993) (using Stag Hunt games); Jack Goldsmith, *Sovereignty, International Relations Theory and International Law*, 52 STAN. L. REV. 959, 964 (2000); Goldsmith & Posner, *supra* note 32, at 1134 (asserting that customs can emerge when one solution becomes focal); Stephen D. Krasner, *Global Communications and National Power: Life on the Pareto Frontier*, 43 WORLD POL. 336, 336-49, 351-65 (1991).

strategic problem, that of *coordination*.[35] Even when nations or individuals have common interests, they may fail to reach their mutually best outcome because they may fail to coordinate.

To illustrate, consider a slight alteration in the story from which prisoners' dilemma gets its name. Suppose the prosecutor has enough evidence to convict two prisoners of a serious crime unless they have a good alibi; because the prisoners are guilty, their only chance to fabricate an alibi is for each to provide an alibi for the other. The prisoners then know they must offer an alibi at the first opportunity to be believed by the ultimate factfinder, but the prosecutor separates them before they can communicate what alibi to use. The prisoners know they will fail to persuade the factfinder if they offer *different* alibis (e.g., *A* says she was at *B*'s apartment while *B* says she was at *A*'s apartment). Because they had not agreed in advance, their exact convergence of interests will not guarantee that they reach their mutually preferred outcome. They may fail to coordinate.

At the societal level, the most common illustration of a coordination game is the decision as to which side of the road to drive. Each driver has the same interests as every other driver, namely to drive on the same side of the road as everyone else—whether it be left or right. Yet without some coordinating mechanism, there is no guarantee that all drivers will initially choose the same side. Noncoordination will cause traffic accidents. Thus, a total concurrence of interests does not guarantee that the parties will coordinate on *either* of their best outcomes.

It is important to note that these two examples are *pure* coordination games because the parties' interests are perfectly aligned. Although nations sometimes may find themselves in a pure coordination game, we think it obviously far more common that nations have divergent interests. Probably for this reason, many theorists slight the significance of "mere coordination."[36] This view

35. On coordination games, see generally RUSSELL W. COOPER, COORDINATION GAMES: COMPLEMENTARITIES AND MACROECONOMICS (1999); EDNA ULLMANN-MARGALIT, THE EMERGENCE OF NORMS 74-133 (1977); Robert Sugden, *Conventions*, *in* 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 453-60 (Peter Newman ed., 1998).

36. Guzman, *supra* note 6, at 1859; *see also* Downs et al., *supra* note 6, at 579-80; Benedict Kingsbury, *The Concept of Compliance as a Function of Competing Conceptions of International Law*, 19 MICH. J. INT'L L. 345, 345-48 (1998); Antonio F. Perez, *The*

is erroneous. Although *pure* coordination games are rare, whether between individuals or nations, that does not mean that coordination is rarely significant. To the contrary, even when nations have some sharply divergent interests, they may also retain some interest in coordinating their conduct. Thomas Schelling called these situations "mixed motive" games.[37] These mixed motive games model common situations, including many disputes between nations. Indeed, because the world is complex, it is more likely that two nations will have a mix of shared and conflicting interests rather than *only* shared interests or *only* conflicting interests.

There are a number of mixed motive games involving coordination which are useful for modeling international relations. Cataloging these various games and the international situations they represent might obscure the focus of this Article, which is to demonstrate how adjudication works expressively in any setting involving coordination. Thus, for the purpose of brevity this Article will focus primarily on one mixed motive game, alternatively called Hawk/Dove or Chicken. This game illustrates how adjudication works expressively, although these findings generally apply to other coordination games.

This Part proceeds as follows: Section A introduces examples of mixed games of conflict and cooperation. Section B describes the results that occur when nations encounter such coordination situations repeatedly over time. This iteration can produce conventions—a form of spontaneous order that emerges even in a state of anarchy. Although conventions facilitate coordination, Section B also describes two kinds of ambiguity that undermine conventions and impede coordination. Section C then describes how mere expression can resolve these ambiguities and thereby facilitate coordination between nations. Expressive adjudication works both as a *signal* of the third party's beliefs and as a way of constructing a *focal point*. Section D then extends this basic model to answer certain objections. Finally, Section E notes the limits to expressive

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International Recognition of Judgments: The Debate Between Private and Public Law Solutions, 19 BERKELEY J. INT'L L. 44, 59 n.72 (2001) (contrasting problems of "true cooperation" like the prisoners' dilemma with those of "mere coordination").

37. THOMAS C. SCHELLING, THE STRATEGY OF CONFLICT 89 (1963).

adjudication—situations where achieving compliance requires the threat of sanctions.

A. The Pervasive Problem of Coordination

As noted above, most applied game theory is fixated on the *n*-person prisoners' dilemma game. We wish to redirect some of this scholarly energy toward the problem of coordination. This section illustrates the pervasiveness of the coordination problem with two (of many possible) examples. First, the section identifies the underappreciated coordination element in the iterated prisoners' dilemma game. We do not want readers to infer that our subsequent focus on the Hawk/Dove game arises because the element of coordination is peculiar to that less familiar situation. Second, this section introduces Hawk/Dove, which models many disputes between nations.

1. Coordination in the Iterated Prisoners' Dilemma Game

In legal theory and political theory, the most familiar game by far is the one-shot prisoners' dilemma (PD). The PD game is ubiquitous in legal, political, and economic analysis.[38] As Figure 1 illustrates, given the payoffs, *R* (the row player) prefers defecting no matter what *C* (the column player) does. If *C* cooperates, *R* receives 5[39] from defecting and 2 from cooperating; if *C* defects, *R* receives 1 from defecting and 0 from cooperating. Because *C*'s incentives are the same, the only equilibrium is Defect/Defect, which is Pareto-inferior to Cooperate/Cooperate.

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38. *See, e.g.*, RUSSELL HARDIN, COLLECTIVE ACTION (1982); KEOHANE, *supra* note 10; MANCUR OLSON, JR., THE LOGIC OF COLLECTIVE ACTION (1968); RASMUSEN, *supra* note 12, at 19-21; Thomas W. Merrill, *Pluralism, The Prisoner's Dilemma, and the Behavior of the Independent Judiciary*, 88 NW. U. L. REV. 396 (1993); John Shepard Wiley, Jr., *Reciprocal Altruism as a Felony: Antitrust and the Prisoner's Dilemma*, 86 MICH. L. REV. 1906 (1988).

39. Ordinarily, those numbers reflect a standardized unit of preference satisfaction such as "utils." One can instead imagine them as dollars or some other material benefit if those tangible effects are the only consequences of the different outcomes and if there are no differences in the marginal value of single unit of the benefit at different levels of consumption.

Figure 1: A PD Game

	Cooperate	Defect
Cooperate	2 2	5 0
Defect	0 5	1 1

Almost as familiar as the dismal prediction of the one-shot PD game is the more complex equilibrium prediction when the game is repeated indefinitely. Under this condition, the folk theorem recognizes the additional possibility of mutual cooperation. If the discount rate is sufficiently low, meaning that players care enough about the future, they may each forgo defection to preserve the possibility of future cooperation. Thus, they may play some contingently cooperative strategy, like the Tit-for-Tat strategy made famous by Robert Axelrod.[40] Mutual defection across every round still remains a possibility, however. Thus, there are multiple (pure strategy) equilibria to the iterated PD game. The players will seek to *coordinate* among these equilibria.[41]

There is a second, more substantive reason for regarding the iterated PD game as at least potentially a game of coordination: Even where the parties can successfully assure each other that they

40. That strategy is to cooperate on the first round and then, in each subsequent round, to play the same strategy that the opponent played in the prior round. ROBERT AXELROD, THE EVOLUTION OF COOPERATION (1984). For an excellent discussion, see Paul G. Mahoney & Chris W. Sanchirico, *Competing Norms and Social Evolution: Is the Fittest Norm Efficient?*, 149 U. PA. L. REV. 2027 (2001) [hereinafter Mahoney & Sanchirico, *Is the Fittest Norm Efficient?*]. For an argument favoring an alternative reciprocal strategy, termed "Def-for-Dev," see Paul G. Mahoney & Chris W. Sanchirico, *Norms, Repeated Games, and the Role of Law*, 91 CAL. L. REV. 1281, 1291-99 (2003).

41. Assuming players value the future sufficiently, each wants to play Tit-for-Tat if the other does, yet each still wants to play All Defect if the other does. Mutual Tit-for-Tat produces a higher payoff for each than does All Defect, but Tit-for-Tat is riskier than All Defect because of the particularly low payoff one gets from cooperating in the first round if the other player defects. Thus, when players value the future sufficiently, the iterated PD game presents something like a Stag Hunt game, a type of coordination game. *See* Mahoney & Sanchirico, *Is the Fittest Norm Efficient?*, *supra* note 40, at 2140-42.

will cooperate, there often will be more than one way to cooperate. When there are two or more means of cooperating, each of which can produce an equally desirable outcome, the players need to coordinate on one particular *means* of cooperation. A few other theorists have noted this coordination aspect of the iterated PD game,[42] but its significance has not been fully appreciated.[43]

Consider an international trade example. Assume that trade barriers result from a PD as follows: two sovereign leaders each realize they are better off with free trade rather than mutual trade barriers, but given the influence of domestic interest groups, each leader prefers to impose import barriers in a given round, regardless of the other leader's decision. Because the trade game is repeated, however, mutual cooperation, where each nation lowers the barriers, is a possible outcome. In this case, the defect strategy is clear: maintain trade barriers at existing levels. What about "cooperation"? In the conventional description of a PD game, such as that in Figure 1, some specified lowering of barriers is the *only* means of cooperating. The problem of trade barriers is more complex, however, and it may create multiple means of cooperating. For example, facially nondiscriminatory domestic health and safety regulations can create implicit tariffs when they impose greater costs on imported goods than on domestically produced goods.[44] A free trade agreement must include some control of implicit tariffs, but there are a variety of possible solutions: nations might lock in their existing regulations, permit new regulations only when

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42. To our knowledge, the only discussion of the point within law and economics occurs in two articles by Jack Goldsmith and Eric Posner. *See* Jack L. Goldsmith & Eric A. Posner, *Moral and Legal Rhetoric in International Relations: A Rational Choice Perspective*, 31 J. LEGAL STUD. 115 (2002); Goldsmith & Posner, *supra* note 32. Perhaps the first and most elaborate statement is found in Garrett & Weingast, *supra* note 34, at 179. *See also* Barry R. Weingast, *A Rational Choice Perspective on the Role of Ideas: Shared Belief Systems and State Sovereignty in International Cooperation*, 23 POL. & SOC'Y 449 (1995).

43. We find no reference to the point in standard texts on applied game theory. *See, e.g.*, RASMUSEN, *supra* note 12, at 18.

44. For instance, nation *A* might ban the sale of food products exposed to a particular pesticide. Suppose that the pesticide is widely used in nation *B* but not in nation *A*, and suppose further that alternative pesticides do not work as well in nation *B* as in nation *A* (perhaps because the insect species that attack crops are hardier in nation *B*). As a result, the pesticide regulation raises the costs of producing food products in nation *B* for export to nation *A*. In turn, the higher production costs raise the price of food imported into nation *A*, and therefore, the regulation works like a tariff.

previously adopted by some other benchmark nation, or permit such regulations while requiring additional offsetting tariff reductions to neutralize their trade effect. Thus, there is more than one way to cooperate; the nations need to select among cooperative "plans."

If at least two cooperative plans produce the Pareto-optimal payoffs, then we have added a second level of required coordination to the iterated PD game. Instead of facing the simple defect or cooperate options, the players face a choice that includes defect, cooperate by plan 1, or cooperate by plan 2. If the game is repeated indefinitely between two players who value the future sufficiently, many equilibria now emerge, including: (1) mutual Tit-for-Tat where the players understand that only the behavior required by plan 1 constitutes cooperation, (2) mutual Tit-for-Tat where the players understand that only the behavior required by plan 2 constitutes cooperation, and (3) all defect. At best, if the players choose different cooperative plans, they will achieve an outcome that is Pareto-inferior to following the same cooperative plan. Worse, players seeking cooperation on the basis of different plans may interpret each other's behavior as defection. If so, the result of uncoordinated cooperative efforts is a cascade of defection.

Given the complexity of the real world, the idea that there is usually only one efficient means of cooperating, let alone one immediately known to both parties, seems doubtful. Thus, if the iterated PD game models common situations, as theorists assume, then the need for coordination is likely to be pervasive.

2. Coordination in the Hawk/Dove Game

Now we turn to a less familiar game, but one that is particularly useful for describing certain conflicts that law can sometimes resolve expressively. The game is called Hawk/Dove or Chicken. Starting with Figure 1, suppose six of the eight payoffs from the PD game are held constant, represented by the three outcomes of Cooperate/Cooperate, Defect/Cooperate, and Cooperate/Defect. Suppose we change only the two payoffs for the outcome Defect/Defect by lowering each from 1 to -1. Along with a re-labeling of the strategies (for reasons explained below, we replace Cooperate with Dove and Defect with Hawk), the result is Figure 2.

Figure 2: A Hawk/Dove or Chicken Game

	Dove	Hawk
Dove	2 2	5 0
Hawk	0 5	-1 -1

In some respects, the payoffs differ only slightly from the one-shot PD game. The essential difference is that the ranking of the third and fourth best outcomes is reversed.[45] The simple reversal in payoff rankings, however, produces a large behavioral change. There are now two pure strategy equilibria:[46] Hawk/Dove and Dove/Hawk. Thus, even in the one-shot Hawk/Dove game, and also in the iterated version, multiple equilibria exist.

A common interpretation of the Hawk/Dove game is that the players are disputing over a resource, broadly understood. Each player chooses between an aggressive Hawk strategy, insisting on getting the resource, and a passive Dove strategy, deferring to the other. When Hawk is played against Dove, the player using the aggressive strategy gains the disputed resource while the other player receives nothing. When Dove is played against Dove, the players divide the resource or allocate it randomly between themselves. When Hawk is played against Hawk, the players clash in some costly way. The alternative name for this game, "Chicken," comes from a classic James Dean movie depicting a dangerous contest where teenagers drive their cars directly at each other to see

45. In Figure 1, each player ranks his payoff in the southeast cell as the third best outcome; but now, in Figure 2, each player ranks his payoff in that cell as the fourth best (i.e., the worst) outcome. By contrast, in Figure 1, each player ranks the bad mismatch payoff (the lower of the two payoffs in the northeast and southwest cells, which represent a mismatch in strategies) as the fourth best (i.e., the worst) outcome instead of the third best outcome as in Figure 2.

46. An equilibrium is defined as a strategy combination where each player pursues a best strategy. RASMUSEN, *supra* note 12, at 18. In other words, at an equilibrium, no player has an incentive to unilaterally change strategies because each is playing his best response to what the others are doing.

who will "chicken out" and swerve to avoid a collision. The outcome of two aggressive strategies is a head-on collision.[47] The same analysis applies to drivers at an intersection, who are less interested in honor than in proceeding without delay while the other waits.

More generally, the name "Hawk/Dove" derives from the idea that the Hawk/Hawk outcome is any kind of fighting. Although the outcome of Hawk/Hawk for each player is uncertain, as 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. Thus, the coordination aspect is that both players wish to avoid the nonequilibrium outcome of Hawk/Hawk. The players have conflicting motives, however, because each prefers to play Hawk to the other's Dove.[48]

In sum, the need for coordination is pervasive. The *pure* coordination game often used to illustrate the idea of coordination is rare. The problem of coordination arises in many situations, however, including the iterated PD game and the Hawk/Dove game, both of which model strategic situations that commonly arise among nations.

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47. *See* REBEL WITHOUT A CAUSE (Warner Brothers 1955); *see also* KEITH MURNIGHAN, THE DYNAMICS OF BARGAINING GAMES 116-28 (1991).

48. In sections below focusing on territorial conflict between nations, we will make extensive use of this interpretation of the Hawk/Dove game. For now, however, consider a wholly different interpretation of Figure 2 that is also relevant to the international arena. Imagine that some third party has violated a legal rule or norm, and that players *R* and *C* are the two potential enforcers who could sanction the third party. Assume also that effective enforcement requires only one nation to act. Enforcement is costly, so *R* and *C* each selfishly prefer that the other incur the cost of enforcement, but each regards nonenforcement as the worst possible outcome. Thus, Hawk here represents nonenforcement and Dove represents incurring the cost of enforcement. The game is similar to a prisoners' dilemma game because each prefers free-riding on the effort of the other; the key difference is that each also prefers doing his part if the other does *not* do his part. An example might be the use of military force to enforce peace treaties or United Nations resolutions. When two warring nations sign a peace accord, *other* states in the region might prefer that some state send military forces to enforce the peace, even if the state itself has to do it, but each would most prefer that others do the enforcement.

B. The Emergence of "Imperfect" Conventions in Iterated Coordination Games

Because there is no central enforcer for nations, theorists often liken international relations to anarchy or the "state of nature" that Thomas Hobbes described as existing between individuals prior to the creation of a state.[49] According to the Hobbesian view, the only power that can bring order to the state of nature is force;[50] in particular, it is necessary to create a sovereign by giving him a monopoly on force. By contrast, David Hume argued that order can arise more gradually from the state of nature, even in the absence of a state.[51] Evolutionary game theory describes how such spontaneous order can occur.[52]

In this section, we briefly review this game theory literature and use it to explain how order can emerge among nations even in the absence of a central enforcer. We call this form of order a convention.[53] Although conventions represent successful coordination, gaps in conventions always exist, and these imperfections represent a failure to coordinate. In a later section, we contend that international adjudication influences the behavior of states by *perfecting* (i.e., completing or clarifying) these conventions.

1. The Evolution of Conventions: Background

When a population of players repeatedly encounters a particular game, repetition can eventually produce strong expectations about what strategies others will use. The resulting expectations fre-

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49. THOMAS HOBBES, LEVIATHAN 186 (C.B. MacPherson ed., 1968).

50. *Id.*

51. *See* DAVID HUME, A TREATISE OF HUMAN NATURE 484 (L.A. Selby-Bigge ed., 2d ed. 1978).

52. *See, e.g.*, K.G. BINMORE, 1 GAME THEORY AND THE SOCIAL CONTRACT: PLAYING FAIR (1994); DREW FUDENBERG & DAVID K. LEVINE, 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).

53. *See* Richard H. McAdams, *Conventions and Norms: Philosophical Aspects*, *in* 4 INTERNATIONAL ENCYCLOPEDIA OF THE SOCIAL & BEHAVIORAL SCIENCES 2735-41 (Neil J. Smelser & Paul B. Balkes eds., 2001). For a similar definition, see Sugden, *supra* note 35, at 453-60. The origin of the rational choice analysis of conventions is in DAVID LEWIS, CONVENTION: A PHILOSOPHICAL STUDY (1969).

quently produce a convention. This section will briefly describe some of the evolutionary game theory literature about the emergence of conventions, but in keeping with our general approach, we do not formally derive the results. We will also illustrate the point using only the iterated Hawk/Dove game, but it should be fairly straightforward to see how conventions arise in other iterated coordination games, such as the iterated PD game.[54]

In game theory, the term "convention" does not refer to an international agreement or treaty, but to a particular pure strategy equilibrium that emerges in an iterated game when more than one is possible.[55] A convention arises when the players observe some asymmetry in the state of the world that distinguishes their roles in the game and begin to play a pure strategy based on the role they occupy. The most famous and important example of this is the emergence of *the convention of property*.[56] In particular, Robert Sugden and Jack Hirshliefer have separately used game theory to explain David Hume's claim that property is a convention.[57] 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 game. The use of the iterated Hawk/Dove game is plausible in those cases where (a) the fighting capabilities of the players are roughly equal (otherwise there may be a dominant strategy for 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

54. Recall the previous point that players in an iterated PD game may need to coordinate on the means of cooperation, when there is more than one form of cooperation that produces the Pareto-optimal outcome. *See supra* text accompanying note 42. Among a population of nations, the particular form of cooperation that emerges in these circumstances is a convention.

55. *See* McAdams, *supra* note 53, at 2738 (defining a convention as "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") (emphasis omitted).

56. *See* JACK HIRSHLEIFER, ECONOMIC BEHAVIOUR IN ADVERSITY 223-34 (1987); BRYAN SKYRMS, EVOLUTION OF THE SOCIAL CONTRACT 63-79 (1996); ROBERT SUGDEN, THE ECONOMICS OF RIGHTS, CO-OPERATION, AND WELFARE 55-103 (1986).

57. *See* HUME, *supra* note 51, at 490 (stating that property "arises gradually, and acquires force by a slow progression, and by our repeated experience of the inconveniences of transgressing it"); *see also* Peter Vanderschraaf, *The Informal Game Theory in Hume's Account of Convention*, 14 ECON. & PHIL. 215 (1998).

resource (and hence, the worst outcome for both sides is a Hawk/Hawk fight).[58]

Given these assumptions, each player chooses between three strategies: (1) to play Dove; (2) to play Hawk; or (3) to "mix" by playing Dove with probability p and Hawk with probability $(1-p)$. This third option is called a "mixed strategy." How will the players behave when the game is repeated? One possibility is what game theorists call a mixed strategy equilibrium.[59] At a mixed strategy equilibrium, the average player has a value of p such that no one has an incentive to change his own probability of taking each action. If this were the end of the story, a property convention would not exist. Indeed, no convention would exist because it would be impossible to discern much order from the probabilistic behavior of each individual in a given iteration.

Suppose, however, that whenever the players are in an iteration of this Hawk/Dove game, they jointly notice an asymmetry in their roles. Any persistent factual distinction will suffice to create different roles. For instance, suppose they notice that one of them is currently in physical possession of the property and the other one is not. By itself, this simple observation creates two new possible strategies contingent on one's role. In addition to the previous three possibilities, now it is possible to play: (4) Hawk when possessor and Dove when nonpossessor or (5) Dove when possessor and Hawk when nonpossessor.[60]

At first, the existence of these new strategies need not disturb the mixed strategy equilibrium—the average player still will mix strategies with the probabilities noted above. Suppose, however, that at some point a random perturbation, caused by individual experimentation or a change in the population of players, causes a small deviation from the mixed equilibrium. If the perturbation causes the possessor/nonpossessor difference to become correlated with the strategy played and the players notice this correlation, then the initial move away from the mixed equilibrium will be self-reinforcing. Suppose, for example, that it becomes slightly more

58. *See* HIRSHLEIFER, *supra* note 56, at 223-34; SUGDEN, *supra* note 56, at 55-103.

59. *See* SCHELLING, *supra* note 37, at 97 n.12.

60. As a final set of possibilities, one could (6) mix by playing strategy (4) with probability p and strategy (5) with probability $(1-p)$.

likely than p that *nonpossessors* will play Dove. Now all players have a greater incentive to play Hawk when they are the possessor. In turn, as the probability that the possessor will play Hawk rises above $(1\text{-}p)$, there is a greater incentive to play Dove when one is the nonpossessor. The shift in strategies will reach a stable point only when everyone follows the new strategy (4) of playing Hawk when the possessor and Dove when the nonpossessor. Of course, if the original perturbation makes it more likely that nonpossessors play Hawk, the result is the opposite convention where everyone plays new strategy (5).

The former convention, where nonpossessors defer to possessors, is the property convention. Though nothing guarantees this convention will arise,[61] 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 she is a possessor or nonpossessor in a given case, and as long as the game is Hawk/Dove, the property convention (or its opposite) will eliminate Hawk/Hawk fights.

This analysis is immediately relevant to international relations. Nations, like individuals, vie for control of territory. When the land or body of water at issue is especially valuable, each nation may be better off taking its chances at seizing control by force, with the only equilibrium being a military conflict. Similarly, when one nation is far stronger than the other, it may have a dominant strategy of seizing the territory. But where territory is not especially valuable compared to the costs of conflict, and where the nations are of roughly equal power, they may face a Hawk/Dove game with multiple equilibria. Each nation wants the other to defer to its territorial claims. The outcome depends on the expectations of the leaders governing each nation. If nation A expects that nation B will play Hawk, then A will want to play Dove; but if A expects B to play Dove, A will want to play Hawk. What could produce such expectations? As with the Hirshleifer-Sugden theory of property, national

61. Sugden, however, argues that the property convention is more likely to arise than is the opposite convention. *See* SUGDEN, *supra* note 56, at 89-91.

leaders may come to recognize and depend on asymmetries in the situation that distinguish the roles of the nation.[62] One obvious possibility is that nations come to expect the *possessor* of territory to play Hawk and the *nonpossessor* to play Dove. With no third-party enforcer, the nations could arrive at a common practice of deferring to the possessor, that is, to observe a convention of territoriality.[63]

There is no guarantee that the equilibrium that emerges will be a convention. In the iterated Hawk/Dove game, for example, the players may each wind up playing a mixed strategy, playing Hawk with probability p and Dove with probability $(1-p)$. If the players do not use a pure strategy, there is no clear regularity of behavior based on the role one occupies and no convention. Sometimes a convention will arise, however, and when it does, it provides a form of spontaneous order that can prevent Hawk/Hawk fights.

The next question, however, is *how well* the convention will work to provide order and avoid conflict. The expectations underlying conventions will never be coordinated perfectly. Ambiguity in the convention thus ensures conflict.

2. The Imperfect Nature of Conventions: The Problem of Ambiguity

The prior section presents conventional behavior in stark terms. When there is a convention governing in a domain, for example when first possessors play Hawk, it seems to cover all possible situations in a straightforward manner. Real world conventions do not work so effortlessly.[64] 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 the other will do. Without common expectations, the players will sometimes fail to coordinate their behavior.[65] This section examines how

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62. *Id.* at 70-71.

63. Arguably, the convention of deferring to the party in possession is the most likely to emerge because possessing a territory creates military advantages in conflict over it (e.g., better knowledge of the terrain; defense is easier than offense).

64. *See* ERIC A. POSNER, LAW AND SOCIAL NORMS 177-79 (2000); Garrett & Weingast, *supra* note 34.

65. They may still coordinate by accident. For example, there may be no common

expectations diverge despite the presence of a convention, in other words, the *imperfection* of conventions. There are two basic problems: (1) the convention itself may be ambiguous because it is based on a *fuzzy* asymmetry or there is uncertainty about its completeness; and (2) there is uncertainty about the factual state of the world that determines how the convention applies.[66]

We illustrate by returning to the territorial convention discussed above, where repetition of the Hawk/Dove game may produce the convention of deferring to first possessors. Upon reflection, however, *possession* of land is sometimes an ambiguous concept. There may be no doubt that land is first possessed by a nation if its subjects are the only group to settle and physically occupy the land. There is probably no doubt that land is *not* first possessed by nation *A* if its citizens have never seen or visited the land before the citizens of nation *B* settle and occupy it (even if, for instance, the citizens of nation *A* declared their intent to settle there). In between these cases, however, are cases where possession is not so clear. When 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. We consider each source of ambiguity in turn.

a. Conventional Ambiguity

First, the convention itself may be ambiguous. One reason is that the asymmetry underlying the convention may be *fuzzy*, at least in part.[67] To give a realistic example using the possession convention,

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expectation about whether to drive on the left or the right side of the road, but the drivers may get lucky and choose the same side.

66. We will illustrate these ambiguities using only one game—the iterated Hawk/Dove game—though it should be obvious that the same kind of problem will arise in the iterated PD game, as well as other situations. Recall that a convention in an iterated PD game defines the particular form of cooperation that emerges when more than one form is possible. *See supra* note 42 and accompanying text. The ambiguities explored in this section may produce different beliefs about whether the acts of a particular nation constitute cooperation or defection. These differing beliefs can destroy cooperation, as where nation *A* believes nation *B* defected in round n, while nation *B* believes it cooperated. As a result, *A* may punish *B* by defecting in round $n + 1$, and expect *B* to show contrition by continuing to cooperate, but *B* may regard *A*'s punishment as a defection requiring *B* to punish *A* in round $n + 2$. The result is a cascade of defection.

67. This idea follows from the general concept of "fuzzy sets." *See, e.g.*, Claudio A. Cioffi-

suppose the players notice not only the asymmetry of physical possession but also a temporal asymmetry, in other words, *when* physical possession occurred. The combination of these asymmetries, possession and time, produces a more complex set of roles the players can occupy: not just the (1) current possessor and (2) current nonpossessor, but also the (3) original possessor and (4) original nonpossessor. The larger set of possible roles creates a larger set of possible conventions. One obvious possibility is the familiar idea of first possession.[68] The common expectation may be that everyone will play Dove against the *original* possessor of the firewood, who will always play Hawk. Perhaps another expectation is that everyone but the original possessor will play Dove against the current possessor, who will play Hawk against everyone but the original possessor.[69] In this fashion, national leaders may come to expect that other national leaders will play Hawk or Dove depending on the asymmetry of *first* possession of territory.[70]

With this more refined convention, now consider a latent ambiguity. *When* exactly does territorial possession occur? Suppose that at time 1, a naval captain from nation *A* is the first to observe, chart, and announce a claim to an uninhabited and unclaimed island. No one from nation *A* lands on the island. At time 2, a citizen of nation *B* lands on the island, plants a national flag, announces a claim to the island, and then departs. No one from nation *B* spends

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Revilla, *Fuzzy Sets and Models of International Relations*, 25 AM. J. POL. SCI. 129 (1981).

68. *See, e.g.*, Carol M. Rose, *Possession as the Origin of Property*, 52 U. CHI. L. REV. 73 (1985).

69. We will not detain ourselves with the exact probabilities that this convention will emerge. We 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. Others, however, show why efficiency does not ensure that the convention will emerge or survive over time. *See* Mahoney & Sanchirico, *Is the Fittest Norm Efficient?*, *supra* note 40, at 2058-63. For this Article's purposes, all that matters is that the convention is possible, thus illustrating the problem of ambiguity that plagues conventions.

70. Evolutionary game theory may therefore explain the actual practice of nations in recognizing the claims of first possession over territory. Again, the point is not that nations will always comply with the convention—sometimes the territory is so valuable that the game is not Hawk/Dove, where two equilibria involve the avoidance of conflict, but a PD game in which conflict is the only equilibrium. However, where the stakes are sufficiently low compared to the costs of conflict, the game is Hawk/Dove and the convention reflects the expectations that determine which equilibrium occurs.

any more time on the island. At time 3, a few citizens of nation *C* land on the island, build living quarters and commercial structures, and make the island their home and trading post. Officials of nation *C* announce a claim to the island but otherwise ignore it. At time 4, officials of nearby nation *D* discover that an island inhabitant murdered someone on the island, and these officials claim and exercise jurisdiction over the crime. The resulting trial of murder is the first formal process any nation carries out for acts that occur on the island. Now suppose that any two of these nations decide to begin using the island in a way that is inconsistent with any other territorial claim. Given the set of expectations constituting a first possession convention, who will play Hawk and who will play Dove?[71] The ambiguity in possession prevents there from being any clear expectation about what a given nation will do.[72] While the ambiguity lasts, the nations may fail to coordinate and end up in a Hawk/Hawk fight.[73]

The convention may be ambiguous for another reason. Even if the underlying asymmetry is perfectly clear, it is always *potentially*

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71. 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. The convention might arise because ninety percent of the time there is a shared understanding of what nation first possessed a territory, even though there is no shared understanding about exactly when possession first occurred. This would occur if, ninety percent of the time, the same nation first observes, plants a flag on, settles, and exercises criminal jurisdiction over a territory. Thus, even without a sharp understanding of which of these acts defines possession, if they usually favor the same nation, it may pay for nations to adopt strategies based on first possession. On the other hand, perhaps ten percent of the time the concept's application is uncertain because, as in the hypothetical, different nations took each of the steps associated with first possession.

72. The same is true of possession underlying the property convention among individuals. As in the famous case of *Pierson v. Post*, 3 Cai. R. 175 (N.Y. Sup. Ct. 1805), suppose *A* hunts a fox for hours, corners it, and is about to grab hold of it, when *B* appears out of nowhere and grabs the fox. Who is the first possessor? If physical grabbing is required for possession, then *B* is the first possessor; if some broader concept of control is sufficient, then *A* is. *See* Rose, *supra* note 68, at 76.

73. There are several possibilities. Nations might attempt to play strategies based on their differing views of who the first possessor was, which will lead to conflict whenever two nations believe they are the first possessor. On the other hand, nations might attempt to play a mixed strategy when they believe the first possessor is ambiguous. There will be a mixed strategy equilibrium in which a predictable level of conflict will arise when more than two nations probabilistically select Hawk for a given iteration of the game. Finally, there could be a mix of these two possibilities in which some nations play strategies based on their view of who the first possessor was and other nations play mixed strategies. This too would produce conflict.

incomplete. That is, there may be uncertainty about whether the set of expectations constituting a convention is subject to exception. Because there are always more asymmetries than are relevant to the players' behavior, a question naturally arises: Which asymmetries do *not* matter? We have already seen a possible evolutionary path the property convention may take: First, the players engage in 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, for example, the weather on the day the territorial dispute arises. It is difficult, however, 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 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 nation *A* is the first possessor and occupier of territory, but its citizens leave the area, and *A* ceases to exercise legal jurisdiction over the territory for twenty years. During this time, the citizens of nation *B* occupy the land, nation *B* announces its claim to the territory, and *B*'s officials begin exercising legal jurisdiction over it. Suppose *A* is silent about the territory for twenty years, but then reasserts its claim, demanding that *B* cease to exercise jurisdiction over the territory.

Given the first possession convention, will the nonoriginal possessor, nation *B*, play Dove? *B* will play Dove if it assumes that the *only* asymmetries relevant to nation *A*'s behavior are those embodied in the concept of first possession. It is possible, however, 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. In other words, it is possible that the players will adopt more complex strategies that render incomplete the original description of the convention—that it always favors first possessors. 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 may get a convention similar to what the common law terms adverse possession[74] and what international law calls acquisitive prescription.[75]

There is no guarantee, however, that the extended occupancy exception will arise. As a result, when first possessor *A*'s toleration of *B*'s twenty-year occupancy initially occurs, or occurs for the first time within memory, there will be uncertainty about whether the new asymmetry between the players will matter. The ambiguity of potential incompleteness is pervasive because *new* circumstances are pervasive and they inevitably raise the question of how the old convention now applies.[76] Although repetition may eventually resolve the ambiguity, conflicting beliefs about the relevance of the new asymmetry may produce conflict, as each nation plays Hawk expecting the other to play Dove.[77]

b. Factual Ambiguity

Even if the convention is perfectly clear, so that everyone expects the same behavior in a given situation, there may be disagreement about what the factual situation is. Thus, the second reason expectations diverge in the presence of a convention is the familiar problem of *imperfect information*. Even when the players have common and precise beliefs about the convention and its completeness, they may make mistakes about the facts that determine how the convention applies. As a result, the players may harbor inconsistent beliefs, resulting in inconsistent expectations about what behavior the convention requires. Regarding territory, nations

74. *See* Rose, *supra* note 68, at 79.

75. IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 150-56 (5th ed. 1998).

76. 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 is also an infinite or large number of potential role-defining 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 usually the potential that new circumstances, not accompanying past Hawk/Dove interactions, might influence how the current Hawk/Dove interaction will occur.

77. Again, as explained in *supra* note 73, the players might play pure strategies associated with what they think is or will be the convention, or they might play mixed strategies. Either will produce conflict some of the time.

A and *B* may jointly adhere to the convention of first possession but each may believe it is the first possessor. For example, suppose *A* and *B* each believe it is sufficient for establishing first possession of an uninhabited island that one of its agents was the first to plant a flag on the island. Suppose, however, the leaders of each country believe one of their own naval officers was the first to plant a flag on some island, believing that the other nation was second in time. One of the two nations is mistaken, but their inconsistent beliefs may cause each to play Hawk. As with conventional ambiguity, imperfect information can produce Hawk/Hawk conflict in an iterated Hawk/Dove game.

C. "Perfecting" Conventions Without Sanctions: Two Forms of Third-Party Expressive Influence

All of the preceding is background for the claim we now present. Adjudication works in part by clarifying ambiguity in the underlying conventions players observe, thereby facilitating coordination between the players.[78] The narrower claim is that *international* adjudication works primarily for this reason.[79] Because international adjudicators facilitate coordination by clarifying conventions,

78. This Article contributes generally to the economic analysis of alternative dispute resolution, that is, of nonstate adjudication mechanisms that lack the power of coercion. The closest parallel within that literature is Steven Shavell's examination of alternative dispute resolution. *See generally* Steven Shavell, *Alternative Dispute Resolution: An Economic Analysis*, 24 J. LEGAL STUD. 1 (1995). Shavell considers how nonbinding adjudication may give the parties a signal of how their case will be resolved by a full trial. *See generally id.* We examine signaling below, but in our theory the signal is not influential because it predicts the later decision of a central enforcer, but instead because it influences how nations choose their strategies in the absence of a central enforcer. *See also* Ian Ayres & Jennifer Brown, *Economic Rationales for Mediation*, 80 VA. L. REV. 323 (1994).

79. A few theorists have noted the relevance of coordination to understanding certain aspects of international treaties. *See* sources cited *supra* note 34. Even this literature tends to ignore the relevance of *third parties* to coordination, however, focusing instead on how nations can solve coordination problems through treaty and other inter-party communications. The only significant attention to third-party influence is in Garrett & Weingast, *supra* note 34, at 191-97 (discussing the role of the European Court of Justice in the integration of the European Community) and Weingast, *supra* note 42 (discussing GATT institutions). *See also* James D. Morrow, *The Laws of War, Common Conjecture and Legal Systems in International Politics*, 31 J. LEGAL STUD. 41, 43-48 (2002) (emphasizing the treaty as the means of resolving ambiguities about how to treat prisoners of war and other laws of war, but also noting that the Red Cross, a third party, provides information to each side during war about how the other side treats its prisoners).

no central enforcer is required. Third-party expression clarifies conventions and influences behavior in two ways. First, in a coordination situation, *cheap talk* construction of a focal point directly influences expectations without changing payoffs. Second, signals cause parties to change their beliefs about relevant facts, which determine what strategy they will choose. Neither point requires moralistically motivated national leaders nor ideological deference to legitimate institutions.[80]

1. How Third-Party "Cheap Talk" Influences Behavior in Coordination Games: The Focal Point Theory

One way to influence the behavior of the parties in a game like Hawk/Dove is to change the payoffs. Legal sanctions, for example, could transform a Hawk/Dove game into a game with only one equilibrium representing compliance with the law. Unlike a PD game, however, *changing the payoffs is not the only way to influence behavior in a Hawk / Dove game.* When there are multiple equilibria, the payoffs are, by definition, insufficient to determine fully the outcome the players will reach. In other words, with multiple equilibria, the payoffs may fail to create determinate expectations among the players about what other players will do. What then determines these expectations? Game theory is forced to admit that they might come from just about anything. In particular, *nonpayoff* factors create expectations that produce a particular equilibrium. Our claim is that adjudication works, in part, by expressively manipulating these nonpayoff influences.[81]

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80. In both cases, we continue the above illustrations involving the iterated Hawk/Dove game, though the analysis applies to conventions arising from other iterated games.

81. This section elaborates the analysis of Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649 (2000), particularly by focusing it on adjudication. Garrett and Weingast made a similar claim, and were the first to apply the focal point analysis to international law. *See* Garrett & Weingast, *supra* note 34. As noted above, however, much of their application to the European Community's internal market requires signaling rather than cheap talk, yet they provide no signaling theory (as we do below). Other theorists have briefly noted the importance of focal points to law. *See* Robert Cooter, *Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms*, 86 VA. L. REV. 1577, 1593-94 (2000); Jonathan R. Hay & Andrei 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) (stating that legislation may provide a focal point); David Strauss, *Common Law Constitutional*

a. An Introduction to Cheap Talk and Focal Points

Thomas Schelling's *The Strategy of Conflict*[82] remains remarkably relevant after more than four decades, in part because Schelling focuses on an aspect of game theory that is difficult or impossible to model mathematically—the selection of equilibrium in a coordination game.[83] Game theory has since focused on elaborate mathematical refinements that narrow the possible range of equilibria. But when the multiplicity of equilibria stubbornly persists, as it often does, Schelling still has much to say about which one will emerge.[84]

Schelling identifies two sources of influence on strategy selection in a coordination game. First, in the pure coordination game, the

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Interpretation, 63 U. CHI. L. REV. 877, 910-19 (1996) (explaining that a written constitution may provide a focal point).

82. SCHELLING, *supra* note 37.

83. Whether it is impossible or merely difficult is arguable. Schelling claimed that coordination, via focal points or otherwise, depended "more on imagination than on logic, more on poetry or humour than on mathematics." *Id.* at 97. Certainly, it has proved difficult for game theorists using a rational actor model to describe focal points formally. A few theorists have recently made the attempt. *See* Michael Bacharach & Michele Bernasconi, *The Variable Frame Theory of Focal Points: An Experimental Study*, 19 GAMES & ECON. BEHAV. 1, 1-5 (1997) (applying the Variable Frame Theory in an attempt to explain the capacity to coordinate using focal points); Andrew M. Colman, *Salience and Focusing in Pure Coordination Games*, 4 J. ECON. METHODOLOGY 61, 61-63 (1997) (arguing that focal point selection in pure coordination games are rationally explained by a payoff-dominant form of reasoning called the Stackleberg heuristic); Robert Sugden, *A Theory of Focal Points*, 105 ECON. J. 533, 533-35 (1995) (presenting a theory of how labeling of outcomes can influence decisions in games and attempting to show that focal points can be brought within the scope of game theory). Others have argued that what is focal cannot be defined merely by rationality, but requires some psychology. *See* Sanjeev Goyal & Maarten Janssen, *Can We Rationally Learn to Coordinate?*, 40 THEORY & DECISION 29, 30 (1996) (arguing that individual rationality considerations are not sufficient for coordination and that some form of common background has to be assumed for rational learning to coordinate to take place); Sugden, *supra* note 76, at 409-10 (arguing that analysis of inductive learning pattern recognition and analogy are crucial to an adequate explanation of the social evolution of conventions). Sugden appears not to believe his prior paper on the subject fully succeeds in explaining the rational perception of a focal point.

84. *See* SCHELLING, *supra* note 37, at 291-303. Indeed, it is the frustration over the indeterminacy that occurs when there are multiple equilibria, an indeterminacy that makes cultural and psychological factors relevant, that drives game theorists to search feverishly for new mathematical ways of eliminating possible equilibria. *See* AVINASH DIXIT & SUSAN SKEATH, GAMES OF STRATEGY 213 (1999) (noting that many game theorists "would prefer the outcome to depend only on an abstract specification of a game" rather than the messy concept of a focal point).

players may simply agree on which equilibrium they will reach. If the question is where *A* and *B* will meet, the obvious solution is for *A* and *B* to communicate on the subject.[85] Later, this kind of communication became known in game theory as "cheap talk" because it is not costly to make.[86] Experiments confirm the intuition that players who are permitted to use cheap talk prior to playing a coordination game are therefore more likely to succeed at coordinating.[87]

If players cannot communicate or fail to agree,[88] Schelling identified an alternative mechanism for coordination—focal points. An equilibrium is focal if it has some feature that draws unique attention to itself, making it stand out among all equilibria.[89] If for some psychological, historical, or cultural reason, 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.[90] Such an equilibrium is selected for no other reason than its uniqueness, if sufficiently obvious, causing the players to expect others to focus on it.[91] The resulting expectations are self-fulfilling: Once a player believes the other players are headed for a particular equilibrium, the player's best response is to engage in the strategy associated with that equilibrium.[92]

The easiest context for illustrating the focal point concept is the pure coordination game. Suppose you have plans to meet a friend in

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85. *See* SCHELLING, *supra* note 37, at 91.

86. Talk or communication is "cheap" when it is "costless, nonbinding, and nonverifiable." DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW 303 (1994).

87. *See* Vincent Crawford, *A Survey of Experiments on Communication Via Cheap Talk*, 78 J. ECON. THEORY 286, 286-92, 295 (1998) (describing the effect of "cheap talk" on coordination game experiments).

88. 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.

89. *See* SCHELLING, *supra* note 37, at 54.

90. *See id.* at 57-58.

91. *See id.* at 59.

92. The point is not that every player is *certain* that others will play the focal strategy (though they could be), but that as any one player believes it more probable that the others will play the focal strategy, it becomes more and more in the interest of that player to do so as well. *See id.* at 57-58.

New York City on a particular day, but you failed to agree on a specific time or place. If you and your friend merely select the time and place at random among all of the possibilities, the chances of meeting will be vanishingly small. Yet when Schelling surveyed some of his Yale colleagues and students, he found that over half selected the same place, Grand Central Station, and almost everyone selected the same time, noon.[93] In Schelling's terminology, the equilibrium that emerges, Grand Central Station at noon, is a focal point.[94] There is something about the nonpayoff features of this equilibrium that his subjects expected others to find salient.[95] Experiments confirm that, in games of multiple equilibria, salient non-payoff features (focal points) significantly facilitate coordination.[96]

b. Using Third-Party Cheap Talk to Construct a Focal Point

For our purposes, 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 coordination game, to influence the players in the game merely by communicating in favor of a particular outcome.[97] By endorsing a particular outcome in the common view or hearing of the players, the third party makes that equilibrium *stand out* from the rest, which may then create self-

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93. *Id.* at 55 n.1, 56.

94. *Id.* at 57.

95. *See id.* at 54, 57-58.

96. *See* Bacharach & Bernasconi, *supra* note 83, at 37-39 (describing focal point play's effects on pure coordination matching games); 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) (finding that players in simple bargaining games with multiple equilibria are able to achieve coordination by using shared ideas of prominence to lead them to focal points); Judith Mehta et al., *Focal Points in Pure Coordination Games: An Experimental Investigation*, 36 THEORY & DECISION 163, 163-64, 182-83 (1994) (using experiments to confirm the hypothesis that in coordination games players use salience to identify focal points on which they can coordinate); Judith Mehta et al., *The Nature of Salience: An Experimental Investigation of Pure Coordination Games*, 84 AM. ECON. REV. 658, 672 (1994) (using formal experiments to confirm Schelling's conclusion that use of focal points increased the success of players in coordination games).

97. Of course the third party is in some larger game. One should ask, what are his incentives for giving a particular message? The Article addresses this issue below. *See infra* notes 113-15 and accompanying text.

fulfilling expectations that others will play the strategy associated with that equilibrium. In this way, third-party cheap talk *constructs* a focal point.

Consider one of Schelling's illustrations. Suppose that two drivers approach a busy intersection on different roads. The traffic light is broken and there is a traffic jam. 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. Thus, the two drivers are playing a Hawk/Dove game, similar to the version known as Chicken. In this context, Schelling observed the likely effect of "the bystander who jumps into an intersection and begins to direct traffic."[98] The bystander's suggestions do not change the payoffs because the bystander cannot sanction drivers for failing to comply. Thus, the drivers continue to have conflicting interests. Nonetheless, because "coordination requires the common acceptance of *some* source of suggestion,"[99] one suspects that the bystander's suggestion will influence the drivers' behavior. By calling attention to one outcome, the relevant hand signals make that outcome focal.[100] Experimental studies confirm Schelling's intuition.[101]

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98. SCHELLING, *supra* note 37, at 144.

99. *Id.* (emphasis added). Looking to another traffic example, Schelling notes, "[t]he 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." *Id.*

100. *See id.*

101. For empirical evidence specific to the context of the Hawk/Dove game, see RICHARD H. MCADAMS & JANICE NADLER, A THIRD MODEL OF LEGAL COMPLIANCE: TESTING FOR EXPRESSIVE EFFECTS IN A HAWK/DOVE GAME, 1, 33-34 (Northwestern Univ. Sch. of Law, Law & Economics Working Paper No. 03-14, 2003), *available at* http://www.ssrn.com/abstract=431782 (describing experimental results showing that the law generates compliance by *inter alia*, "facilitating coordination around a focal outcome"). *See also* Rick K. Wilson & Carl M. Rhodes, *Leadership and Credibility in N-Person Coordination Games*, 41 J. CONFLICT RESOL. 767, 788-89 (1997) (finding that leaders sending cheap talk messages significantly improved coordination of their followers in coordination games); IRIS BOHNET & ROBERT COOTER, EXPRESSIVE LAW: FRAMING OR EQUILIBRIUM SELECTION? 1-4 (U.C. Berkeley Law & Economics Working Paper No. 31- 2001), *available at* http://www.ssrn.com/abstract=452420 (describing the effects of nondeterring penalties in prisoners' dilemma game, crowding game, and coordination game to demonstrate the power of legal expression to coordinate); J.R. Tyran & L.P. Feld, Why People Obey the Law: Experimental Evidence from the Provisions of Public Goods (2002) (unpublished manuscript, on file with authors).

In this example, there was no prior agreement by the parties to listen to or obey the bystander. For this reason, we can see that the focal power of third-party cheap talk does not *require* such agreement. But we now wish to extend Schelling's analysis to show how such agreement *increases* the likelihood of coordination. The ex ante selection of a third-party "coordinator" endows that individual with greater power to influence behavior. This is the case for coordination by design.

To understand this claim, we must focus on the role that common knowledge plays in the concept of a focal point. What makes an outcome focal is not merely that it stands out to each individual, but 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. Except by accident, coordination requires something approaching common knowledge that others will perceive one equilibrium as unique. In the above example, the third party was able to create this common knowledge because of two factors: (1) the message, the bystander's hand signals, was believed to be sufficiently visible to everyone so that each player was likely to assume that the other perceived it; and (2) there was no other competing message, nor any other factor tending to make focal some other outcome. Both factors are important; uncertainty about whether others received the third party's message will create uncertainty about the needed common knowledge; also, competing messages will create uncertainty about which outcome is most salient to the other players. Either factor weakens the third party's behavioral influence.

There is an obvious solution to these two problems. Players could agree in advance where, or to whom, to look in the event they need to coordinate. Consider another of Schelling's examples. He noted that the caller at a square dance will control what the participants dance, even if they prefer to dance something else.[102] The dancers face a mixed motive coordination game because each wants to coordinate with other dancers, but individuals differ in the dances they most prefer. Why do they listen to the caller? We think the key

102. *See* SCHELLING, *supra* note 37, at 144 ("[T]he participants of a square dance may all be thoroughly dissatisfied with the particular dances being called, but as long as the caller has the microphone, nobody can dance anything else.").

is that the participants *agree* in advance to who will be the caller. Even though the expressions of agreement are cheap talk (there being no externally imposed sanction for those who fail to keep their promise to obey the caller), the advanced designation of a coordinator gives the designated individual a special ability to influence the individuals who made the designation. First, the common knowledge that the players identified one person as the coordinator creates greater certainty that everyone pays attention to what *this individual* says. Second, even if everyone pays attention to other speakers and there is common knowledge of this fact, the designation of an individual as coordinator makes her message unique and therefore salient. Thus, a prior cheap talk agreement to select a coordinator gives *that individual* greater power to influence the players via cheap talk.

c. Using Cheap Talk to Clarify Conventions: Resolving Conventional Ambiguity

To connect the cheap talk discussion to the prior analysis of conventions,[103] recall that the ambiguities that plague conventions are fuzziness and potential incompleteness.[104] Together, these ambiguities can lead to Hawk/Hawk conflict. Using cheap talk to construct a focal point provides one way of overcoming the problem of conventional ambiguity.[105]

First, cheap talk can clarify a convention by eliminating the fuzziness of the underlying asymmetry. Recall the discussion of the property convention based on first possession.[106] Four countries might each believe they were the first possessor of an island territory because one was the first to observe the island, another the first to plant a flag on it, another to first settle it, and another the first to exercise legal jurisdiction over it.[107] Now imagine a dispute between two of these nations, *B* and *C*, where *B* is the first to plant a flag on the island and *C* is the first to have citizens occupy it. Just

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103. *See supra* Part II.B.

104. *See supra* Part II.B.2.a.

105. We defer until later a discussion of how cheap talk might resolve factual ambiguity. *See* discussion *infra* Part II.D.2.

106. *See supra* notes 68-77 and accompanying text.

107. *See supra* text accompanying notes 70-73.

like the bystander in the road signaling one car to stop and the other to proceed, a third party who proclaims that one of the nations is entitled to the island is likely to influence how the players behave. Specifically, suppose that only one third party speaks on the issue, or, more likely, only one whom the nations designated in advance as the coordinator. If the third party states "the territory belongs to *C*," then she makes salient the outcome where *C* plays Hawk to *B*'s Dove, which tends to create self-fulfilling expectations that that particular outcome will occur.[108]

Second, cheap talk can clarify the completeness of a convention. Recall that uncertainty about what new facts may be relevant to the strategies of others will impede coordination, and in the Hawk/Dove game, will lead to conflict.[109] In our territory discussion, we discussed the potential uncertainty over whether the amount of time the current occupier had possessed territory mattered to how the players would behave.[110] Specifically, suppose the citizens of nation *A* are absent from the territory for twenty years and that the citizens of nation *B* now occupy that land. When nation *A* reasserts its claim to the territory after twenty years, third-party expression can again influence behavior merely by creating a focal point. If the third party states "*A* is entitled to the territory," or "the first possessor retains his interest in land unless she allows others to control it without objection for more than forty years," or both, then she makes focal the outcome where *A* plays Hawk to *B*'s Dove. Again, the resulting expectations tend to be self-fulfilling. For both types of ambiguity, the third party's statement works to resolve the dispute without a Hawk/Hawk conflict.

It should be fairly obvious that 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

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108. If the third party instead states "possession of a territory does not occur until a nation physically occupies and settles a previously uninhabited and unclaimed land," she is likely to have influenced the outcome to the same effect. This statement directly addresses only the convention and not the particular dispute, but *B* and *C* are each likely to infer that the clarification favors *C* and therefore are more likely to reach the outcome where *C* plays Hawk and *B* plays Dove. If *B* and *C* then comply with the third-party statement, we can imagine that the precedent of that outcome indirectly clarifies the convention in future cases, that is, that future parties in the same position will expect the party in *C*'s position to play Hawk.

109. *See supra* notes 73-77 and accompanying text.

110. *See supra* notes 73-77 and accompanying text.

carefully articulates the legal rule in a case of first impression. What we are adding here is an understanding of how the court, merely by this process of clarification, can influence behavior. Like the bystander in the intersection, the third party who points to and makes salient one particular means of cooperating is likely to create self-fulfilling expectations that each player will select the strategy associated with that outcome. One of the players will want to resist the third party's suggestion that she play Dove, but the third party's cheap talk expression may cause her to do so anyway, because that expression has now made that outcome focal.[111]

2. How Third-Party Signaling Influences Behavior in Iterated Coordination Games: The Informational Theory

Sometimes a third party may issue messages that are not cheap talk, but signals. In this section, we argue that signaling provides third parties with a second expressive means of influencing the behavior of individuals in a coordination game. Given imperfect information, third parties can influence behavior by expressions that signal their private information about the state of the world.[112]

We begin with a banal illustration of signaling: the messages a referee sends in an informal game of soccer. By informal, we mean that the referee has no sanctioning power; the teams are not part of

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111. The same may be said of other coordination situations including those modeled by the iterated PD game where there is more than one way to cooperate. As discussed above, *supra* Part II.B.2.a, there may be ambiguities in the conventions that define cooperation and defection, caused by fuzzy boundaries or potential incompleteness. Cheap talk may make one particular definition focal, thereby clarifying the convention and aligning the players' expectations about future rounds. For example, two nations might each agree by treaty to solve a social dilemma by restricting fishing in some way. Despite best efforts, the treaty may contain terms with fuzzy boundaries or potential incompleteness about possible exceptions. Third-party cheap talk may maintain cooperation by clarifying the boundaries and the exceptions.

112. The closest analyses to this Article's are Shavell's, as explained *supra* note 78, and 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). Dharmapala and McAdams examine signaling as a source of compliance with legislative enactments, independent of sanctions leading to deterrence. *Id.* at 2-3. The model of legislative aggregation of information, however, is not appropriate for adjudication, especially by single individuals. They also emphasize information that influences one's personal well-being directly, such as the harms of secondhand smoke, rather than information useful for discerning or applying a convention. *Id.* at 4.

a formal league that punishes players for failing to obey the referee. One might wonder why competitors would even bother having a referee who lacks the ability to enforce his decisions. The answer is signaling.

Players on opposing teams share expectations defined by the rules of the game. Whether soccer is modeled as iterated Hawk/Dove or PD game, rule enforcement derives from the behavior of the players in the game, who will threaten some costly conflict or sanction (such as fighting, gossip, or quitting the game) if the other team tries to claim or deny a goal contrary to the rules. To a significant degree, this second-party enforcement works. Sometimes, however, the players disagree about the governing facts. For example, they may disagree about whether, in a particular case, the ball crossed the line in front of the net. In these cases, each side might believe the other is trying to cheat, and the resulting sanctioning behavior could make both sides worse off.

This is the problem that signaling ameliorates. A third party can signal what she believes the state of the world is (e.g., whether the ball crossed the line). To take an extreme case, suppose that a bystander with a digital camera photographs the moment when the goalie falls in front of the kicked ball, and that digital image reveals that the ball clearly crossed the line. We can easily imagine that this image, provided by a third party, would cause the players to update their beliefs about the relevant events. To a lesser degree, a referee provides the same service, at least if the players believe her to be sufficiently accurate, meaning that she is perceptive and unbiased. Hearing what the referee thought happened, players will "update" their beliefs in the direction of the referee's. At least in close cases, players who initially disagree with the referee may come to agree with her, or at least to be in sufficient doubt of their own beliefs, that they defer to the other team. As a result, the game can continue and both teams are better off.

Return now to an example of the iterated Hawk/Dove game in which imperfect information causes nations A and B to each believe it is the first possessor of an island territory. The source of the disagreement is factual. The leaders of A and B each believe that one of her naval captains was the first to plant a national flag on the

island. One of the two nations is mistaken, but their inconsistent beliefs may cause each to play Hawk, producing serious conflict.

Consider that national leaders, knowing that information is imperfect, may adopt strategies accounting for the possibility of mistake. We will not discuss all of the various possibilities. The key is that national leaders are still likely to play some strategy that is sensitive to their perception about the state of the world. One might play Hawk when she believes the state of the world, more likely than not, favors her (in other words, makes her nation the first possessor under the relevant convention) or play Dove otherwise. Alternatively, a leader might play Hawk with certainty only when she is more than *X*% confident that the state of the world favors her, mix Hawk and Dove with certain probabilities if she is between *X*% and *Y*% certain, or play Dove with certainty if she is less than *Y*% certain. Or she might play Hawk and Dove with probabilities that are a continuous function of her level of confidence that the state of the world favors her.

Given any such strategy, new evidence about the state of the world can influence the strategies selected by causing the players to update their beliefs about the world. One type of new evidence will be the stated views of a third party. As a simple example, suppose the two national leaders each use a strategy sensitive to whether they believe it is more or less than 50% likely that the relevant facts—when each captain planted the flag—favor their nation. Suppose the issue is a close one and that leader *A* believes her captain planted the first flag with a 55% probability while leader *B* believes her captain planted the first flag with a 55% probability. Thus, if nothing changes, the nations will each insist on getting their way and the result will be a Hawk/Hawk clash that each regrets. But if a third party, believed by both sides to be perceptive and unbiased, announces that *A*'s captain planted the first flag, the leaders of *A* and *B* may update their beliefs, so that *B* now believes it more than 50% likely that *A*'s claim occurred first and therefore defers to *A*'s insistence on the territory.

To cause individuals to update their beliefs about the state of the world, the third party must provide what is taken to be independent evidence of what actually happened. Two elements are necessary for the third party to provide this independent evidence: *ability* and

motive. To be able to signal, the third party must have private information about the relevant state of the world. In the soccer example, a bystander had such private information in the form of his own photographic evidence. It is also private information, however, if an individual reviews the existing evidence provided by the parties, such as evidence of when the two captains planted their flags, and evaluates it with her own unique experience and perspective.

To be motivated to signal, the third party must have an incentive to reveal her actual beliefs about what she observes, that is, to signal her beliefs. This requires that she would incur some costs for failing to speak or for speaking something other than what she actually believes. A possible cost is the loss of future opportunities to serve as an adjudicator.[113] That is, we assume that a third party expects to receive some benefit for acting as an adjudicator, whether it be money, prestige, influence, or something else. We also assume that the greater the third party's reputation for accuracy, the greater her opportunity for being hired as an adjudicator.[114] If so, then an adjudicator will want to adopt a strategy that maximizes her chances that players will ask her to serve as an adjudicator again in the future. As explained further below, players will only agree to accept an adjudicator who appears to be accurate, meaning perceptive and unbiased. Players will measure accuracy by the disparity between their beliefs and what an adjudicator signals. Although different people will see things differently, an adjudicator who actually believes that she observed state of the world X can minimize the disparity in her signals and what others believe by signaling X. Even if she is not highly confident of X, her belief that X occurred means it is more likely that the average belief among the players is X rather than something else. Therefore, she will want to express what she actually believes.

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113. One could also assume that the third party gains utility from expressing her actual beliefs.

114. Accuracy creates opportunity in both a relative and an absolute sense. First, third parties will compete against each other for the job of adjudicator; disputants will hire those who are the most accurate relative to others. Second, the disputants will insist on a certain absolute level of accuracy, for reasons explained more fully below. In general, disputants will pay more for a signal they believe is more accurate because the stronger the third party's reputation for accuracy, the more likely the disputants will update their beliefs in response to a signal, creating a greater chance at avoiding conflict.

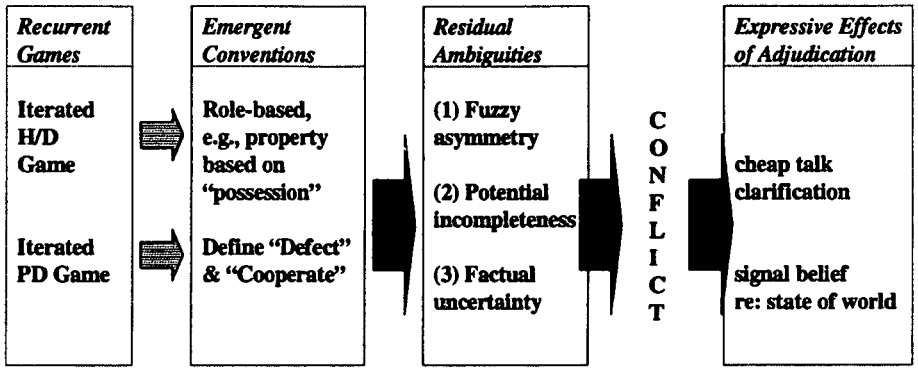
Given this motive, the third party's statement of the state of the world is a signal of her private information. Her statement works like the photographic evidence, though in most cases the influence over the beliefs of the players would be weaker. Nonetheless, in some circumstances even a small degree of updating of national leaders' beliefs may change the strategy they play.[115] Because the national leaders update their beliefs in the same direction, they may develop more common beliefs about who will play Hawk, with the result that a Hawk/Hawk clash is averted.

In sum, in iterated coordination games, third-party expression can influence the behavior of nations in at least two ways. First, cheap talk can clarify ambiguities in the convention, due to fuzziness and potential incompleteness. Second, signals can clarify ambiguities in the facts. In the former situation, nations select strategies based in part on what they expect other nations to do, and cheap talk construction of a focal point can directly influence those expectations. In the latter situation, nations select strategies based on their beliefs about the state of the world and signaling can influence those beliefs. Neither effect requires that the third party be able to impose sanctions on a noncomplying nation, nor that national leaders recognize the moral authority of legitimate adjudication.

Figure 3 provides a graphic illustration of the theory. When the third party clarifies ambiguities in a convention, resolving its fuzziness or potential incompleteness, she acts like a common law court by *stating the law* as it applies to the case. When the third party reviews evidence of the facts and articulates her view of them, she is acting like a court by *finding the facts*. Before applying the theory to international adjudication, however, some extensions are necessary to answer some possible objections.

115. The same can be said in the context of conventions arising out of other games, such as an iterated PD game. For example, two nations might agree by treaty to limit their fishing in certain waters, but there might arise a factual dispute about whether one of the nations has complied with the limits. If so, then a third-party signal might cause the relevant actors in each nation to update their beliefs in the same direction, thereby creating common beliefs that prevent cooperation from unraveling.

Figure 3: Overview of the Expressive Theory of Adjudication



D. The Demand for Expressive Adjudication and the Synergy Between Cheap Talk and Signaling

To explain fully how adjudication works expressively, we need to address two more questions. First, having described how expressive adjudication can influence the behavior of disputants, the question remains whether disputants would want to be so influenced. Absent a central enforcer to compel a nation to adjudicate, the process requires the consent of both parties. Will disputants consent to expressive adjudication? Second, we have explained cheap talk as a solution to ambiguities in *conventions* (caused by fuzziness and potential incompleteness) and signaling as a solution to ambiguities in the *facts* that determine how conventions apply. A natural question is whether cheap talk can also solve problems of factual ambiguity and whether signaling can also solve problems of conventional ambiguity. If so, are both components strictly necessary to the theory, or is one redundant to the other? This section addresses these issues together, contending that both components

are necessary, and, indeed, that the synergy of cheap talk and signaling induces disputants to seek out both.

1. The Demand for Adjudication (and the Need for Signaling)

Absent a central enforcer to coerce nations into a process of adjudication, the parties must agree to submit their dispute to the adjudicator. Otherwise, one or more of the nations might act preemptively before the adjudicator announces its decision, refuse to cooperate with the adjudicative process, or somehow commit itself to ignoring the adjudicator's expression. Consequently a critical question is whether the parties will be motivated to submit their dispute to adjudication.

One part of the answer should be immediately apparent. When third-party expression facilitates coordination, it benefits the players—at least ex ante, which is what matters for inducing consent to adjudication. In an iterated Hawk/Dove game, expressive adjudication raises the expected payoffs for each player by eliminating the possibility of a mutually destructive Hawk/Hawk outcome. To illustrate, assume players interact in the Hawk/Dove game in Figure 4 below. Without anything to make either equilibrium focal, game theory predicts that players will use a mixed strategy, playing Dove with probability p (where $0 < p < 1$) and Hawk with probability $(1\text{-}p)$. Given the payoffs of this matrix and assuming risk neutrality, the mixed strategy equilibrium occurs where $p = 1/3$.[116] For each player, the expected value of the game at this equilibrium is 2/3, or .67.[117] This payoff includes a 4/9 chance of the costly Hawk/Hawk outcome. If, however, the two players designate a third party to randomly select one player to play Hawk and the other Dove, and they follow this cheap talk message, the expected outcome is now 2.[118] The third party thus creates an expected gain of 1 and 1/3 for

116. One solves for p by determining at what value the expected payoffs for playing Hawk equal the expected payoffs for playing Dove.

117. One determines the expected payoffs for one round of the game by multiplying the equilibrium probability of each of the four outcomes by its value and summing the results.

118. Each player expects to receive the favored message, i.e., be told to play Hawk, with probability of 1/2, giving each player a 50% chance of playing Hawk against Dove (valued at 4) and a 50% chance of playing Dove against Hawk (valued at 0). Ayres & Brown, *supra* note 78, use this effect of randomization to explain mediation.

each player. By creating a focal point via cheap talk, the third party eliminates the possibility of a Hawk/Hawk clash. This point is crucial because it suggests that players in a coordination game, even one with conflict, will have an incentive to seek the expression of third parties.

Figure 4

	Dove	Hawk
Dove	2 2	4 0
Hawk	0 4	-1 -1

This analysis makes explicit one feature of cheap talk that until now remained implicit—that it has to give each side a roughly equal chance to *win*. To be attractive to the parties to a dispute, the content of cheap talk messages needs to be more or less *random*. If instead, *A* and *B* believe that *C* will, for example, designate *A* as the winner in 90% of disputes, then for most payoffs (including Figure 4),[119] *B* would not agree ex ante to designate *C* as the adjudicator. Choosing a third-party adjudicator is itself a coordination game, one that parties engaged in hard bargaining might not solve. But there is an obvious focal solution in selecting a cheap talk adjudicator: pick one who is 50% likely to give a message favorable to *A* and 50% likely to give a message favorable to *B*.[120] When the players require

119. For Figure 4, we originally noted that each player expects to receive a payoff of .67 at the mixed strategy equilibrium and a payoff of 2 from an unbiased third party who gives each player a 50% chance of playing Hawk against Dove. But if the third party gives *A* a 90% chance of playing Hawk against Dove and gives *B* a 10% chance, then *B* expects a payoff of .4 (10% chance of 4 and a 90% chance of 0). Thus, *B* would prefer the mixed strategy to the use of this biased third party.

120. The possibility of a 50/50 split makes this game of selecting an adjudicator much easier to resolve than the underlying Hawk/Dove game. The 50/50 split is a natural focal

a cheap talk solution, they are most likely to agree in designating an adjudicator when they perceive her to give each an equal chance of winning.[121]

Now we can introduce an important strategic limitation to cheap talk: *Disputes are endogenous to the method of dispute resolution.* Thus, if players accept randomized cheap talk as a solution to conventional or factual ambiguity, then they will encourage others to create *bad faith* disputes, when they *pretend* there is a conventional or factual ambiguity in order to win a 50% chance of the matter in dispute. With such a large chance of winning any dispute, a nation will claim to be the first possessor by asserting expectations it does not actually hold. For example, a nation that first discovered but never occupied or claimed a territory will assert, contrary to the facts, that it believes the settled expectations are that first discovery determines first possession.[122] Even if the conventional claim is entirely absurd, such as "we should win the territory because in French our nation's name is spelled with fewer letters," the prospect of a random solution gives a nation the incentive to make the claim. Our initial analysis of cheap talk omitted this problem because there we used examples with *genuine* fuzziness in the factual asymmetry defining the players' roles and *genuine* uncertainty about possible exceptions to the convention. Given a random solution, however, players will invent bad faith disputes. Because of this strategic problem, no nation will want to

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point, where there is no natural focal point in the Hawk/Dove game (at least not in cases of conventional or factual ambiguity).

121. That the players require a cheap talk message chosen more or less at random raises another question: If randomization is desired, why don't the players *bypass the third party adjudicator* and use some arbitrary device like a coin flip to give them each an equal chance at resolving the dispute in their favor? The players could agree to endow a random event, like a coin landing heads up or tails up, with the message of "*A* wins" or "*B* wins." It may appear that third-party cheap talk is unnecessary, because coin flipping is cheaper. As explained in the text, however, third parties are needed for signaling. Because players will not agree whether they need signaling or cheap talk, they will instead leave the task of randomizing to the third party once she determines that there is nothing to signal.

122. As another example, even though past play produces settled expectations that occupying land cannot supercede the rights of the first possessor in fewer than twenty years, a nation who has occupied the land for ten years may claim that it believes that time period is commonly understood to be sufficient.

use randomized cheap talk to resolve all conventional or factual disputes.[123]

This strategic problem reveals the necessity of signaling. As discussed above, signaling can resolve conflict arising from factual ambiguity by causing players to update their beliefs. Note that signaling can have this effect despite the strategic problem just identified. Because the players believe the third party will signal his usually accurate belief about the facts, they will believe that a player raising a bad faith dispute, one that is contrary to his actual beliefs, will have a poor chance of prevailing. The higher the confidence a nation has that the relevant state of the world favors it, the higher its confidence that it will prevail before an accurate adjudicator. For example, when describing the strategic problem, we noted that if cheap talk were random, then a player would assert the existence of an ambiguity even when the facts were entirely clear. But when the facts are entirely clear, the third party will perceive as much, and with near certainty she will signal in favor of the party favored by the clear facts. It is precisely because signals are not random, but rather are correlated with the third party's view of the state of the world, that signaling can overcome the strategic problem.

Of course, an adjudicator will make some factual errors. If there were no cost to seeking adjudication, then players would still bring bad faith disputes, claiming to believe facts they do not actually believe for the purpose of benefitting from an adjudicative error, however small. Adjudication does, however, impose costs on the players such as lost time and the adjudicator's fees. Given such costs, players will prefer to avoid adjudication if the chances of winning are too low, which they will be when the player realizes the facts clearly favor the other player. Thus, the availability of adjudication need not create new disputes or not so many as to outweigh the advantage of adjudication. Within plausible parameters, when the convention actually creates consistent expectations,

123. Various other strategies seem possible. One is to forgo all cheap talk adjudication. Another possible strategy is to use one's own level of certainty over the convention or facts to determine whether to seek cheap talk. Thus a nation that believes it has the right to the territory, based on the convention and facts, might agree to a cheap talk adjudication if it is only *X*% to *Y*% sure of its claim, but not if it is more than *Y*% sure. In any event, there will be plenty of occasions when one side or the other refuses to seek out third-party cheap talk.

the player expected to play Dove will do so rather than incur the cost of obtaining an adjudicative signal that will not favor her. Only when the conventional ambiguities actually create divergent expectations, in other words, when each party expects the other to play Dove, will each be willing to incur the cost of adjudication. Indeed, the cost of adjudication is attractive because the willingness to adjudicate identifies the case as one that, without adjudication, is likely to produce a Hawk/Hawk outcome.

To illustrate using the payoffs of Figure 4, assume that the error rate is 10% and the cost of adjudication for each party is 1. Suppose that national leaders of *A* and *B* each believe that *A* is the first possessor and thereby the party entitled to the territory under the existing expectations. Would *B* pretend to believe otherwise in order to force an adjudication? No, because the cost of adjudication of 1 is greater than the expected gain of .4 (a 10% chance of winning 4). If *B* is not willing to engage in adjudication, then *A* can be confident that *B* is going to play Dove. *A* would ignore *B*'s cheap talk statements to the contrary. Conversely, if *B* is willing to incur the costs of adjudication, then its talk of playing Hawk is no longer *cheap*; *B* is now signaling a genuine intent to play Hawk. If *A* intends to play Hawk and discerns that *B* is likely to play Hawk as well, then *A* will prefer to adjudicate. Because *B*'s incentives are the same, *B* will also want to adjudicate. Given two parties willing to adjudicate, the prospect of a Hawk/Hawk outcome without adjudication looms large and is even more probable than in the mixed strategy equilibrium.

In sum, if a third party's signal is sufficiently accurate by being perceptive and unbiased, then only those who believe the convention entitles them to play Hawk will want to bear the costs of adjudicating. At the same time, being willing to bear those costs is a signal that one truly intends otherwise to play Hawk, so mutual willingness to incur the costs of adjudication identifies the dispute as one for which a Hawk/Hawk outcome is likely in the absence of adjudication. In this situation, each party expects to gain by adjudicating.

2. The Need for Cheap Talk (and Why Adjudicators Do Not Distinguish Their Signals from Their Cheap Talk)

Originally, we discussed signaling only as a solution to factual ambiguity, but signaling also works to resolve disputes based on apparent disagreement over the content of the convention due to fuzziness and potential incompleteness. If settled expectations underlying a convention are entirely clear and not fuzzy, then this is also a fact the third party can *signal*. For example, if a nation claims that possession occurs at discovery rather than occupation, and this clearly contradicts existing expectations among nations of the world, then a third party need not randomize between the parties, but instead will signal that existing expectations treat possession as occupation. Similarly, if expectations are settled about the absence of a particular exception to a convention because the convention *is* complete, then this, too, is a fact a third party can signal. Even though the adjudicator will occasionally err, as with factual disputes, players may have the incentive to seek adjudication of all convention-based disputes.

At this point, however, one must ask what cheap talk contributes to the expressive theory of adjudication. If signaling can work for resolving disputes caused by ambiguity in the convention, is cheap talk useful? The answer is straightforward: Cheap talk is needed whenever the factual or conventional issue is so close that the adjudicator has nothing to signal. In certain circumstances, the exact contours of the convention or the factual state of the world will be so difficult to determine that signaling will fail to prevent fact-based conflict. In these cases, cheap talk can succeed.

To illustrate by returning to the soccer example, suppose two soccer teams appoint an informal referee prior to their game. In the game, there is a scoring dispute about whether the ball crossed the line in front of one team's goal. Suppose that the referee could not tell whether the ball had crossed the line. Signaling her indecision, she states that it was too close to call. The statement signals her belief that it is *close to* 50% likely that the ball crossed the line and *close to* 50% likely that it did not. The problem here is that it is extremely unlikely that the statement will avert conflict. If players on both teams believe it is more than 50% likely that the state of the

world favored their position, they will probably continue to believe as much after the signal, though perhaps with slightly less confidence. The point is general: Whenever the third party cannot signal conclusively about the particular outcome, the weak signal is likely to fail to change beliefs sufficiently to avert conflict.

The signal of indecision, however, *does* accomplish something very important. If the third party is perceptive and unbiased, her indecision makes it very likely that the factual dispute is *genuine* rather than strategic. If the dispute were in bad faith, it is not likely that the adjudicator would find the underlying issue too close to call. Thus, when the third party signals indecision, the probability that the dispute is in bad faith is very low. It is precisely in this context that the players can benefit by resolving their conflict by some process of randomization. One way to randomize is to permit the third party to randomize and then announce the results by a cheap talk message informing one party to play Hawk and the other to play Dove.

To continue the soccer illustration, assume that the informal referee follows this strategy: (1) when she believes that the ball crossed the line in front of Team *A*'s net, she will say "Team *B* scored"; (2) when she believes that the ball did not cross the line in front of Team *A*'s net, she will say "Team *B* did not score"; and (3) when she does not know whether the ball crossed the line, she will say "too close to call. I couldn't tell." As previously stated, messages (1) and (2) can influence the players' behavior under a signaling theory. The third message influences behavior by identifying those cases when teams can agree to randomize without fear of exploitation. It therefore makes it more likely that the teams will agree to use a randomizing device to resolve their dispute. Stated differently, when Team *A* believes it has scored and Team *B* disputes it, each team might adopt this strategy: (1) if the referee rules in our favor, play Hawk; (2) if the referee rules against us, play Dove; and (3) if the referee claims not to know, then randomize.[124]

124. More complex strategies are possible. A team might, for example, agree to randomize only if the referee claims not to know *and* the team is between 50% and 75% certain of whether the goal scored, but to play Hawk if the referee claims not to know and the team is more than 75% certain that it scored. The point is simply that the third-party signal can substantially increase the situations in which the players will agree to use randomization.

One way to randomize is to allow the third party to randomly select a cheap talk message. Thus, suppose the referee follows the strategy that includes rules (1) and (2) above (ruling in favor of the relevant team when the facts are clear), but modifies the third rule to the following: (3) when she does not know whether the ball crossed the line, she will randomly select between the messages of (1) and (2). Thus, she never *says* that she is uncertain of the outcome, but when she is, she randomizes on her own and simply announces a substantive outcome, either that the goal is good or that it is not. From the two teams' perspectives, it does not matter whether they randomize or the third party does. Obeying a referee who follows this three-part strategy is no different than obeying a referee who follows the previous three-part strategy, which differed only because she discloses when she is uncertain. In either case, the teams will win all disputes when the referee believes their view of the facts, will lose all disputes when the referee believes the other side's view of the facts, and will win 50% of the disputes when the referee is undecided. Thus, cheap talk and signaling work synergistically.

One final point is that most adjudicators, including referees, never admit their indecision and never explicitly randomize. Regardless, this theory can still explain adjudication. As noted above, we assume that third parties compete for the job of adjudicator, for prestige, money, or something else, and this competition drives them to reveal their actual beliefs. Consider this exception, however: Even if the players authorize the adjudicator to randomize in the face of her indecision, the adjudicator might prefer to conceal actual indecision. There is, of course, the idea external to game theory that an adjudicator's decisions might enjoy greater obedience via some kind of *legitimacy* only if they reflect the adjudicator's actual judgment, rather than randomization; however, we offer a rational choice explanation. For factual disputes, players desire accurate adjudicators (referees). The need for the adjudicator to project accuracy creates an incentive to conceal her *failure* to form a determinative belief, that is, to conceal the fact that she had to randomize. In the soccer context, 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,

all other things being 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, she has actually determined the relevant facts.[125]

For reasons similar to those just noted about facts, cheap talk will also work, despite the strategic problem, when the convention is genuinely ambiguous; in other words, when a convention actually does embody fuzzy asymmetries or remains potentially incomplete, then the adjudicator can influence behavior by clarifying it. As an illustration, we described the problem of when first possession occurs. This type of case represents a legal question of first impression. As such, there are no settled expectations and therefore nothing for the adjudicator to signal other than indecision.[126] At the same time, the conflict that arises in these cases is not strategic: as long as the adjudicator will signal when expectations are settled, then the players will benefit from following the adjudicator's cheap talk when expectations are unsettled. Thus, when the dispute arises because of genuine ambiguity in the convention, cheap talk is the only form of expression that can influence the parties. Again, however, cheap talk works here only because the players believe the adjudicator will signal when she has a definite belief about the relevant expectations.

To answer the questions posed at the outset of this section: (1) both signaling and cheap talk uniquely contribute to the expressive

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125. 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 referee wishes to conceal. Referees in these situations, however, do not literally randomize. More likely, they alternate, so that the first tie goes to Team *A*, the second to Team *B*, the third back to Team *A*, and so forth. From the team's perspective, what makes randomizing work is that each of two teams has an equal expected value, which is also true of this nonrandom alternating pattern as long as there is no way to determine which team will be given the benefit of the first tie. This description also fits what many sports fans suspect of many actual referees. The same might be true of legal adjudicators.

126. For simplicity, we have omitted a final possible factor. Some conventions may be more efficient than others. Where there are no settled expectations, the players may prefer that the adjudicator select the convention that maximizes joint welfare. This is likely when the players expect the ruling to apply to them in the future and do not know which role they will then occupy. We leave this complication for subsequent work, because incorporating efficiency concerns will not affect the basic claim of this Article.

power of adjudication, and (2) disputants will benefit from seeking out expressive adjudication. When an adjudicator forms a decisive belief about the expectations defining a convention or about the facts the convention makes relevant, then the adjudicator can influence the behavior of the players by signaling her belief. When an adjudicator, after considering the relevant evidence, remains indecisive about the convention or facts, then she can influence the behavior of the players by providing cheap talk. Without signaling, the strategic problem creates a strong disincentive for players to comply with cheap talk. Without cheap talk, signaling will fail whenever the adjudicator is unable to signal a strong belief about the disputed facts or convention. With the combination of cheap talk and signaling, however, each party is better off ex ante by seeking adjudication. Not only does each function where the other does not, but signaling identifies the cases where cheap talk *can* work.

We offer the above theory to explain how international adjudication works in a world without legal sanctions. One should note, however, the generality of the theory: The expressive account explains the expressive power of any adjudication. In addition, the expressive theory is useful for explaining the origins of adjudication. We noted above how the judiciary in medieval Iceland announced decisions but left enforcement to the parties themselves. Such a result should be perplexing given a theoretical focus on sanctions, but cheap talk and signaling are sufficient to explain why the decisions of Icelandic courts generated compliance.

Before moving to the empirical analysis, this Article addresses a final theoretical point: the conditions under which adjudication will *fail* to work expressively.

E. The Limits of Expression and the Need for Legal Sanctions

Having identified the expressive power of adjudication, we must now emphasize that our theory has a limited domain and that outside that domain, compliance continues to depend upon sanctions or other factors. In addition, even within the relevant domain the prior analysis implicitly identifies a number of conditions necessary for expression to influence behavior.

The domain of our expressive theory is a game involving coordination between multiple equilibria. Some games have just one equilibrium, in which case the payoffs alone determine how the players will behave, and the expressive effects we have identified will not apply. In the context of international relations, there are two common situations that are likely to represent a single equilibrium game impervious to expressive influences. First, *severe inequalities* of power may create situations where the only equilibrium is that the strong nation wins the dispute. The strong nation's best strategy may be to act aggressively and take the resource at issue regardless of what the weak nation does. If so, then mere expression will not change the outcome. Second, even between two nations of roughly equal power, if the dispute involves very *high stakes* for one or both nations, the only equilibrium may be conflict. If one or both of the two nations in the game perceive that losing the disputed resource would destroy its economy, then one or both nations may prefer to act aggressively no matter what the other one does. One or both may be better off bearing the costs of conflict and having some chance of winning the resource, rather than deferring to the other and having no chance of winning.

The Hawk/Dove game represents neither the situation of power imbalance nor high stakes. The Hawk/Dove game arises most commonly because two nations of roughly equal power compete over some low or moderate stakes resource. In this circumstance, the expected cost of conflict exceeds the expected benefits of winning the resource, so the worst outcome for both is a Hawk/Hawk clash. Again, this game models common situations, but certainly far less than all situations of conflict.

Even within the domain in which expression potentially resolves conflict, there is no guarantee that it *will* resolve conflict. For signaling and cheap talk to function, there needs to be some third party that the two nations each regard as unbiased and as possessing the necessary expertise. Obviously, this will not always be the case. For signaling, the nations must not be too confident in their beliefs about the state of the facts or the state of the convention. If they are, then even though each nation will consent to adjudication, it is unlikely that the loser in adjudication will update its beliefs

sufficiently to change the strategy it will play. Nevertheless, in many cases adjudication can be effective.

We now turn to the evidence supporting our thesis: That when the specified conditions exist, international adjudication exerts expressive influence on state behavior.

III. APPLYING THE MODELS: THE EXPRESSIVE EFFECT OF INTERNATIONAL DISPUTE RESOLUTION

This Part discusses how interstate dispute resolution exploits the power of third parties to influence outcomes in coordination games. Section A briefly reviews the history of third-party involvement in the resolution of disputes between nations. Section B then provides three case studies drawn from dispute resolution prior to the establishment of the ICJ in 1946, demonstrating how the signaling and focal point models usefully explain the various functions being served. Section C turns specifically to the ICJ, describing and explaining countries' compliance with the court's decisions. Our comprehensive review of the ICJ docket reveals that the court receives a wide variety of types of claims. The disputes the court *resolves*, however, include a large number of what are essentially international property disputes that can be resolved either by providing a signal of the state of the world or clarifying the underlying international conventions. This theory thus explains which disputes are ultimately resolved by the court and how the court resolves them.

A. A Brief History of Interstate Dispute Resolution

Interstate dispute resolution originated in ancient times.[127] It was particularly well developed in the form of arbitration among the ancient Greek city-states.[128] The Greeks attributed the origin of arbitration to the gods of Olympia, whose interactions paralleled the relations among city-states.[129] Arbitration was sometimes carried

127. *See, e.g.*, DAVID BEDERMAN, INTERNATIONAL LAW IN ANTIQUITY 16 (2001).

128. *See* SHEILA AGER, INTERSTATE ARBITRATIONS IN THE GREEK WORLD 337-90 B.C. (1997); BEDERMAN, *supra* note 127, at 8 n.14, 93-94 (noting that arbitration was not practiced much among Romans or other ancient civilizations, with the exception of Persia).

129. This religious sanction was used to legitimate the practice. BEDERMAN, *supra* note 127,

out by intergovernmental organizations, known as *amphictyones*, which were formed among several states that shared religious sites, as well as by city-states.[130] The disputes they resolved typically involved issues of territory, with historical and mythic evidence of title arrayed against claims of use or possession.[131] The arbitrators did not rely on centralized enforcement. We do not know precisely how many of these decisions were enforced, but there seems to be evidence of substantial compliance in the absence of centralized enforcement.[132]

In the modern period, an important juncture in the development of routine procedures for use in international dispute resolution was the *Alabama* arbitration between the United States and Britain, concluded in 1872 and referred to at the outset of this Article.[133] The *Alabama,* built in Britain and sold to the Confederacy, sunk many Union merchant ships. The United States claimed that the sale of the ship violated Great Britain's obligations of neutrality, and Britain disagreed. Several years after the end of the Civil War, the Washington Treaty of May 1871 called on the parties to submit the dispute to arbitration. The arbitral tribunal, involving one national of each party and three neutrals, found that Britain violated its

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at 82.

130. The object was to preserve these sites from violence; the organizations could arbitrate disputes among its members as well as provide protection in wartime. *Id.* at 61. The Oracle of Delphi served as one such arbitrator early on, but was not particularly good at it. Bederman notes the case of Clazomenae and Cyme who were fighting about the ownership of a temple between their two territories. The Oracle ruled that ownership would go to the first to make a sacrifice at the temple. Rather than resolve the dispute, this expression intensified it as both city-states raced to the temple to physically possess it. The Oracle was also apparently a poor signaler, and the city-states ultimately secularised arbitral practice accordingly. *Id.* at 83 (claiming that the Oracle's awards "typically lacked the clarity and precision needed to settle the matter authoritatively").

131. *See* AGER, *supra* note 127, at 4; BEDERMAN, *supra* note 127, at 84.

132. BEDERMAN, *supra* note 127, at 8 n.14.

133. *See supra* notes 1-2 and accompanying text; *see also* SHABTAI ROSENNE, THE WORLD COURT 5 (5th ed. 1995); Henry T. King, Jr. & James D. Graham, *The Origins of Modern International Arbitration*, 51 DISP. RES. J. 42, 48 (1996); Monroe Leigh et al., *International Law Societies and the Development of International Law*, 41 VA. J. INT'L L. 941, 941 n.1 ("It was widely held at the time that the Geneva Arbitration of 1872 averted a potential armed conflict between the United States and United Kingdom ...."). *But see* David Caron, *War and International Adjudication*, 94 AM. J. INT'L L. 4, 9 (2000) (arguing that claims that the award averted war are "somewhat exaggerated").

obligations and further specified the obligations of neutral states in wartime.[134]

In terms of the framework set out in Part II, this dispute arose over fuzziness in the convention on neutrality. The laws of war are of ancient origin, and included not only obligations on the parties to a conflict, but also obligations on neutral states not to support either party militarily. Ordinary commercial transactions with combatant parties, however, were generally considered to be legal. How extensive were the obligations of a neutral government to ensure that ordinary commercial transactions did not involve war material? This issue was fuzzy: There were multiple possible solutions, and the parties held different views as to which solution should be adopted. The United States claimed that Britain was under an obligation by virtue of her neutrality not to sell warships to either side; the British government argued that the *Alabama* had been built as a merchant ship and had been fitted at sea as a warship, after which it had escaped from Britain.[135] Britain did not consider itself to have provided war material to the Confederacy.

In this case, there was no real factual dispute, but rather a question as to whether the conventions governing the obligations of neutral states rendered Britain liable for the damage caused by the *Alabama*. The Tribunal found that Britain was indeed liable and required to pay $15.5 million in compensation to the United States, which Britain duly paid.[136] The arbitration thus generated compliance in the immediate dispute before it and also clarified the scope of the convention, holding that a neutral government in wartime is obligated to use due diligence to prevent the equipping or building, within its jurisdiction, of any vessel that it should believe is intended to participate in war, and to prohibit belligerent powers from using its ports or waters as the base of naval operations or military supply.[137]

Inspired by this successful arbitration, the Hague Peace Conferences of 1899 and 1907 sought to facilitate the peaceful settlement of interstate disputes, providing for commissions of inquiry,

134. King & Graham, *supra* note 133, at 48.
135. *Id.*
136. *Id.* at 49.
137. *See* Eric C. Bruggink, *The "Alabama" Claims*, 57 ALA. LAW. 339, 342 (1996).

conciliation, mediation, arbitration, and adjudication and a Permanent Court of International Arbitration (PCIA).[138] The PCIA maintains lists of arbitrators available to states, publishes rules governing arbitration and other procedures, and holds international conferences on arbitration.[139] Although states frequently resorted to the PCIA before the first World War,[140] its caseload declined after the 1922 creation of the Permanent Court of International Justice (PCIJ), and the PCIA has not heard an interstate case since 1932.[141] Its docket has been limited to a handful of ad hoc arbitrations since that time.[142]

The creation of the PCIJ marked a turning point in the institutionalization of international dispute resolution.[143] For the first time, a standing body existed that could hear the entire range of interstate claims. This institutionalization into a standing body allowed the development of a reputation for quality and gave the dispute resolver an incentive to signal accurately. The PCIJ heard a wide range of cases before World War II suspended its operations,[144] and the court heard its last case in 1939.[145] Nevertheless, in its lifetime it decided many important issues and laid the foundation for the establishment of the ICJ in 1946.[146]

B. Three Pre-ICJ Case Studies

This section applies the model developed in Part II to three well-known disputes of the pre-war period, one settled by the PCIJ, one by a conciliator, and one settled by ad hoc arbitration. In each, the

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138. *See* COLLIER & LOWE, *supra* note 2, at 35-36.

139. *Id.* at 36.

140. ROSENNE, *supra* note 133, at 17 (stating that fourteen disputes were handled by the PCIA between 1902 and 1920).

141. COLLIER & LOWE, *supra* note 2, at 36-37. It has, however served as a registry for interstate arbitrations.

142. Arbitration is also needed in a number of international trade and investment agreements. Prominent examples include NAFTA's Chapter 11, which provides for arbitration of disputes between individual investors and states, and the ICSID regime, which hosts arbitration of disputes involving foreign investors. In addition, there is an extensive practice of international commercial arbitration that is beyond the scope of this paper.

143. *See* BROWNLIE, *supra* note 75, at 709-10.

144. *Id.* at 710.

145. 1 J.H.W. VERZIJL, THE JURISPRUDENCE OF THE WORLD COURT 599 (1965).

146. BROWNLIE, *supra* note 75, at 17-19; VERZIJL, *supra* note 145, at 57-58.

dispute resolver used a combination of cheap talk and signaling to resolve a coordination problem.

1. Eastern Greenland

As European colonial power extended its reach over the globe, it was natural that the delimitation of borders would become an increasingly salient problem. This led to an increasing demand for border demarcation. One well-known example was the *Legal Status of Eastern Greenland* case of 1933,[147] concerning the question of whether Denmark or Norway had title to the vast, sparsely inhabited territory of Greenland.[148] The case focused on ambiguities in the convention defining the acquisition of sovereignty over previously unclaimed territory.[149] Ultimately, the PCIJ resolved the dispute and avoided a potentially costly conflict by rendering a decision with which the parties complied.

a. History

The history of territorial claims to Greenland is convoluted. Originally discovered by an outlaw exiled from Iceland after a blood feud, Greenland became part of the Norwegian empire in the thirteenth century, an empire that subsequently united with Denmark in 1381.[150] The colonies established there disintegrated and were abandoned until a second Danish-Norwegian colony was established in the eighteenth century under the authority of the Norwegian-chartered Greenland Company.[151] Eventually, the Company's operations were moved to Copenhagen along with the monarchy.[152] The ambiguous status of a Norwegian-chartered company under a combined monarchy based in Denmark set the

147. Legal Status of Eastern Greenland (Nor. v. Den.), 1933 P.C.I.J. (ser. A/B) No. 53 (Apr. 5).

148. *Id.* at 23.

149. *See id.* at 45.

150. OSCAR SVARLIEN, THE EASTERN GREENLAND CASE IN HISTORICAL PERSPECTIVE 3-6 (1964).

151. *Id.* at 10-11.

152. *See id.* at 11.

stage for both countries to claim primary authority over the territory.[153]

In 1814, Norway and Denmark were separated by the Treaty of Kiel, by which Denmark ceded claims over Norway to Sweden.[154] Denmark negotiated an article in the Treaty of Kiel purporting to reserve Greenland and other overseas colonies from territory being ceded to the Swedish king.[155] This act of cession was later used by Denmark to argue that it had sovereignty prior to and after 1814.[156] Norway, in contrast, argued that this article of the Treaty had violated its international rights, since Norway had been a separate sovereign during the period of union with Denmark, and hence Denmark had no ability to cede Norwegian colonies.[157] Norway refused to recognize the Treaty of Kiel, though it undertook other obligations called for in the treaty.[158]

An 1826 treaty between Denmark and Norway recognized Danish sovereignty over Greenland and other colonies.[159] Norway's position thereafter was that any Danish sovereignty over Greenland was limited to those areas of permanent settlement where Denmark had established an *effective occupation*.[160] This was consistent with a general view in international law that effective occupation was necessary for international title.[161] Norway continued to hunt, fish and explore parts of western and northern Greenland as *terra nullius*, territory that was open to all because it had not been assimilated into a state.[162] Over time, Danish concerns about its title grew, and it obtained from the United States in 1916 an assurance that the United States "[would] not object to the Danish Government extending their political and economic interests to the whole

153. *Id.* at 12.
154. *Id.* at 13-15.
155. *Id.* (noting that Edmund Burke had cleverly made this provision).
156. Lawrence Preuss, *The Dispute Between Denmark and Norway over the Sovereignty of East Greenland*, 26 AM. J. INT'L L. 469, 470-71 (1932).
157. SVARLIEN, *supra* note 150, at 15.
158. *Id.*
159. *Id.* at 21.
160. *Id.* at 22.
161. 1 L. OPPENHEIM, INTERNATIONAL LAW 557, 562-63 (H. Lauterpacht ed., 8th ed. 1955).
162. SVARLIEN, *supra* note 150, at 22-25.

of Greenland."[163] Three years later, Denmark asked Norway to clarify its position, and the Norwegian foreign minister made a verbal declaration to the effect that it would not oppose Danish plans in Greenland.[164] When Denmark sought written confirmation, however, none was forthcoming.[165]

A later agreement between the two countries, signed in 1924, reserved each country's position on the status of the territory while establishing a *modus vivendi*.[166] The agreement allowed both states access to the territory for shipping, scientific research, and hunting and fishing, while acknowledging the need for conservation and asserting that disputes would be resolved by the PCIJ in the Hague. The parties thus agreed to take steps to avoid conflict for a limited period of time while leaving open the underlying issue of sovereignty.

In 1930, the controversy came to a head. Norway announced it was appointing an official with police power over Norwegian citizens in the disputed region.[167] Denmark perceived this act to be an assertion of sovereignty, and Denmark protested by sending a large expeditionary force.[168] The Hawk/Dove game was engaged, with potential for military conflict, as both parties pursued aggressive strategies.

Denmark then proposed sending the issue to the PCIJ for final resolution on the question of sovereignty. Norway agreed, but, on July 10, 1931, occupied additional areas so that if the court found that eastern Greenland was *terra nullius*, Norway already would have established an effective occupation.[169] The Danish argument was that Norway's actions violated the existing legal situation, while Norway asked the court to declare that Denmark had no sovereignty over the region. Denmark argued that the Norwegian foreign minister's 1919 oral assurances precluded Norwegian occupation.[170]

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163. Convention between the United States and Denmark for Cession of Danish West Indies, Aug. 4, 1916, U.S.-Den., 39 Stat. 1706, 1715.

164. SVARLIEN, *supra* note 150, at 29-30.

165. *Id.* at 30.

166. *Id.* at 36.

167. *Id.* at 37.

168. *Id.*

169. *See id.* at 38-39.

170. Legal Status of Eastern Greenland (Den. v. Nor.), 1933 P.C.I.J. (ser. A/B) No. 53, at

b. Ambiguities

The *Eastern Greenland* case involved at least three ambiguities. First, there was fuzziness in the convention of acquiring international territory. Both parties agreed that the convention existed and accepted basic notions of sovereignty that supported the convention. They disagreed, however, as to which actions should be considered as demonstrating sovereignty. Roman law had placed great emphasis on occupation as the key for acquiring territory that had no previous owner.[171] As stated earlier, there is good reason to believe that giving title to those in physical possession is a useful convention because the possessor is likely to play the aggressive strategy in defense of the territory.[172]

The general formulation for title over unclaimed territory is effective occupation defined as taking possession and establishing administration over territory,[173] and "displaying only such activity as would be shown, under analogous circumstances, by any State normally organized."[174] This formulation, however, does not indicate exactly what actions are necessary to establish effective occupation in any particular case. Does it require constant occupation by permanent settlement? Occasional patrols? A mere claim accompanied by an act like planting a flag? There is, therefore, fuzziness in the convention; multiple answers are possible as to the question of exactly what acts are required to establish effective occupation over a particular territory.

Second, even if the convention on territorial acquisition had not been fuzzy, there were several sources of potential incompleteness.[175] One concerned the conventions by which states become

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36-37 (Apr. 5); *see also* SVARLIEN, *supra* note 150, at 42.

171. SVARLIEN, *supra* note 150, at 51.

172. *See supra* text accompanying notes 60-63.

173. 1 OPPENHEIM, *supra* note 161, at 557.

174. Alfred Verdross, *Règeles généralses du droit international de la pais*, *in* 30 ACADÉMIE DE DROIT INTERNATIONAL, RECUIL DES COURS 271, 370 (1929), *translated in* SVARLIEN, *supra* note 150, at 57.

175. One issue, which did not turn out to be dispositive, was the effect of the loss of the colonies from the fourteenth through the sixteenth centuries. Even assuming a state had acquired title to territory, would that title survive a long gap in possession and administration? Ultimately, the court found that this issue was unimportant because,

bound. It is well accepted that authorities such as heads of state and foreign ministers can bind their states through undertakings in their official capacities. What if the *form* of communication is not written but oral? More specifically, did a unilateral oral declaration by Norway estop it from claiming territory later? The Danish government considered the foreign minister's verbal declaration a binding commitment, meaning that Norway had formally waived its objections to Danish sovereignty. Norway considered it a mere *demarche*, a statement of intent but not a binding promise.

Finally, there was ambiguity about the state of the world. The court had to clarify the factual matter of whether Danish acts of authority had extended to places beyond the settled areas, something necessary for Denmark's claim of complete title.

c. Results

The court ultimately agreed with Denmark's position. First, the court considered the effect of the Norwegian foreign minister's verbal declaration and found that the circumstances of the declaration rendered it binding on the state making it.[176] Next, the court resolved the ambiguity concerning territory. Because of Greenland's vast area, Denmark could not assert effective occupation in the sense of possession through settlement, but rather sought to establish occupation through a display of state authority.[177] The court found that Denmark undertook such acts of authority, and that Danish action had been sufficient to establish an effective

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regardless of the answer, Denmark's claim flowed from the Treaty of Kiel signed well after the reestablishment of the colony in Greenland. *See* SVARLIEN, *supra* note 150, at 42. The court traced the entire history of the occupation and noted that the Danish-Norwegian kingdoms had indeed exercised acts of sovereignty from 1381 onward through legislation and administrative actions. *Id.* at 43. These had been directed at Greenland and had derived from Norwegian actions. When the Treaty of Kiel ceded Norway to Sweden and reserved Greenland, these territories remained with the remnant of the Danish-Norwegian empire, namely Denmark. *Id.* at 46.

176. In part, it was easier to reach this result because there were no disputes about the facts. Norway admitted the existence of the verbal statement and it had been recorded, so there were no evidentiary problems regarding the verbal statement of the foreign minister. Legal Status of Eastern Greenland (Den. v. Nor.), 1933 P.C.I.J. (ser. A/B), No. 53, at 36-37 (Apr. 5). One might imagine that in other circumstances, evidentiary concerns would prevent a court from according binding status to oral declarations.

177. SVARLIEN, *supra* note 150, at 41.

occupation, given the "Arctic and inaccessible character of the uncolonized parts of the country."[178] The particular type of action necessary for effective occupation in this case, however, might be different from a case where territory was habitable and welcoming.

The ambiguities in this case required both cheap talk and signaling by the PCIJ. The court had to clarify ambiguities in various conventions on acquiring territory and binding states. It could do so by *cheap talk* that selected among multiple possible solutions and by *signaling* its belief in the state of these conventions, as well as underlying factual issues. The final vote of twelve to two found Danish sovereignty over all of Greenland.[179] Norway promptly revoked its proclamation asserting control, providing "an outstanding example of how judicial process instead of armed force can be made to settle disputes between sovereign states."[180]

2. Palmas Island *Arbitration*

Another well-known case involving third-party resolution of international territorial disputes was the *Palmas Island* arbitration between the United States and the Netherlands.[181] This case involved "most of the international substantive law of real property" in a dispute over a small, sparsely inhabited island, located between the American colony of the Philippines and the Dutch colony of Indonesia.[182] At issue, again, were the principles by which title was obtained to territory. Although the territory at issue was itself of little value, there was risk of exacerbating the dispute between the two parties, and a subsequent need to resolve the local coordination problem. Ultimately, an international arbitral panel resolved the issue, averting conflict and articulating the standards of international territorial law.

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178. Legal Status of Eastern Greenland (Den. v. Nor.), 1933 P.C.I.J. (ser. A/B), No. 53, at 50-51 (Apr. 5).

179. *Id.* at 75.

180. SVARLIEN, *supra* note 150, at 74.

181. Island of Palmas (U.S. v. Neth.), 2 R.I.A.A. 829 (Perm Ct. Arb. 1928); *see also* ROBERT Y. JENNINGS, THE ACQUISITION OF TERRITORY IN INTERNATIONAL LAW 88-126 (1963).

182. Philip C. Jessup, *The Palmas Island Arbitration*, 22 AM. J. INT'L L. 735, 735 (1928).

a. History

The Spanish discovered the island of Palmas in the sixteenth century but never utilized it.[183] Some time thereafter the Dutch East India Company, which had established a colony in present-day Indonesia, made contacts with various local chiefs, and it was, in part, these contacts on which the Netherlands based its claim.[184] The Americans claimed that the island was part of the territory ceded by treaty from Spain in 1898.[185] Failing to negotiate an agreement as to the disposition of the territory, the parties concluded a special agreement calling for a determination by an arbitrator in 1925.[186]

b. Ambiguities

The case involved three ambiguities involving conventions, the facts, and the question of governing law. The first ambiguity involved the conventions by which title to territory is determined in international law. Each party put forward alternative principles, and the task of the arbitrator was to determine which of these principles constituted the actual state of the convention. The United States advanced two principles, discovery and contiguity, as giving rise to sovereignty. First, the Spanish acquired the territory through discovery, an acceptable manner of taking title to land.[187] This title, it was argued, was intact when the Spanish ceded the Philippines following the Spanish-American War of 1898.[188] Second, the United States argued it should have title by virtue of the contiguity of the territory to the main Philippine islands to which title was uncontested.[189] The United States argued that the island was essentially a part of the Philippine archipelago, and that not every inch of the archipelago needed to be physically possessed to gain title.[190] The

183. *Id.* at 738-39.
184. *Id.* at 744.
185. *Id.* at 737.
186. *See Palmas*, 2 R.I.A.A. at 831-34.
187. *Id.* at 837.
188. *Id.*
189. *Id.* at 854.
190. Jessup, *supra* note 182, at 742-43 (asserting that the arbitrator misapprehended the American argument).

Dutch contested the American view of the convention for taking title, arguing that title required subsequent acts beyond mere discovery, and rejecting contiguity as a coherent principle for establishing title.[191]

Second, besides the issues of the current state of the convention, there was an issue as to the law of which period of time should govern. The United States' position was that international law granted title to the discoverer at the time Spain first discovered the island of Palmas in the sixteenth century.[192] This was consistent with the doctrine of inter-temporal law, as the principle was known in international law.[193] The Netherlands argued that a present dispute had to take into account changing conceptions of law, because the issue of possession was evolving and subject to changing rules.[194]

The third ambiguity was a factual dispute between the two nations requiring signaling to resolve. The Dutch contested Spanish discovery, claiming that the Dutch East India Company had been the first external actor to possess the territory and exercise sovereignty in 1677.[195] Both parties brought much evidence, dating back to the sixteenth century, involving various contacts, map evidence, and contemporary accounts of the island. The task of the arbitrator was to signal its beliefs about the facts of first discovery.

c. Results

The arbitrator accepted the position of the Netherlands on both the question of which convention should govern and on the state of the current law.[196] He found that contemporary international law was the relevant governing principle. He further found that international law required an effective occupation involving a "continuous and peaceful display" of the functions of a state.[197] The

191. *See Palmas*, 2 R.I.A.A. at 837.
192. *Id.* at 837.
193. BROWNLIE, *supra* note 75, at 126-27.
194. *Id.* at 127.
195. *See Palmas*, 2 R.I.A.A. at 855-56.
196. *Id.* at 867-69; *see also* SVARLIEN, *supra* note 150, at 50-51 (criticizing the logic of this position); Jessup, *supra* note 182, at 739-40 (same).
197. *Palmas*, 2 R.I.A.A. at 868.

Spanish title based on discovery had only given *inchoate* title, and thus the United States could not accede to it without showing continuous exercise of authority.[198] The arbitrator also rejected the contiguity theory offered by the United States.[199]

Accepting the Netherlands' argument on this point did not resolve all the outstanding questions, for there was still the factual ambiguity as to which state had established an effective occupation. The arbitrator first attributed the acts of the Dutch East India Company, which had contacted various local chiefs, to the Netherlands itself.[200] The arbitrator then noted that there had been no recorded acts of Spanish occupation prior to the 1898 treaty purporting to cede the Philippine islands to the United States. Just prior to this, the Dutch had officially visited the island of Palmas in 1895 and 1898.[201] This exercise of authority gave the Netherlands actual title, at least vis-à-vis Spain, according to the arbitrator. Since Spain did not have title, it could not have ceded the territory to the United States.[202]

As in the *Eastern Greenland* case, the issue was *resolved* by the third party because there were no subsequent conflicts over the territory, a situation we characterize as compliance. While not a high stakes dispute, this decision laid the groundwork for the resolution of future territorial disputes by clarifying conventions and determining which asymmetries mattered as between competing sovereign claims. The tribunal clarified the ambiguity in the convention to rule that, under international law, discovery, without any further display of authority or occupation of an island, did not demonstrate ownership where another state exercised actual authority over the same island. The arbitrator further noted that displays of sovereignty must be open and public, though they do not require special notice.[203]

198. *See id.* at 869.

199. *See id.* ("The title of contiguity, as understood as a basis of territorial sovereignty, has no foundation in international law.").

200. *Id.* at 868.

201. *Id.*

202. *Id.* at 869.

203. *Id.* at 868.

3. Conciliation of Japanese Loans

Another example of successful interstate dispute resolution concerned the conciliation[204] of a dispute related to a series of bonds issued by Japan on European markets before World War I.[205] The ambiguity concerned whether the loans were to be paid back in the 1950s at nominal value given the unanticipated inflation caused by the intervening wars. This dispute involved a question of valuation, and illustrates how cheap talk and signaling can interact in resolving high stakes disputes.

a. History

Prior to World War I, Japan issued bonds to finance its industrialization. When European bondholders demanded repayment on a gold standard in the 1950s, the Japanese government countered by seeking to repay the loans at nominal value, a significantly lower amount because of inflation related to the two intervening world wars.[206] The parties submitted their dispute to the head of the International Monetary Fund, who suggested a conciliator.[207] The conciliator, in turn, appointed a jurist and two economists to advise on the resolution. The conciliator's report proposed an equitable solution, which was accepted by the parties.[208]

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204. Conciliation is a mechanism of dispute resolution that involves both fact-finding and explicitly nonbinding recommendations. A conciliator's proposals take effect if adopted voluntarily by the parties. Conciliators are not restricted to using legal norms in their proposals. The paradigm case is when a third party elucidates facts and offers a single solution. This solution might work either by creating a focal point or a signal of the conciliator's views of the facts and what would constitute a fair outcome. Like many of the other mechanisms discussed here, conciliation is an option to which many treaties refer, has been promoted by the United Nations and other organizations, and was a relatively common method of resolving disputes in the early years after the Hague peace conferences. G.A. Res. 50, *United Nations Model Rules for the Conciliation of Disputes between States*, U.N. GAOR, 50th Sess., 87th mtg. ¶¶ 1-4, U.N. Doc. A/RES/50/50 (1995); INT'L BUREAU OF THE PERMANENT COURT OF INT'L ARBITRATION, PERMANENT COURT OF ARBITRATION OPTIONAL CONCILIATION RULES (1996). Conciliation has been more limited since the establishment of the United Nations in 1945.

205. *See* JEAN-PIERRE COT, INTERNATIONAL CONCILIATION 96-97 (R. Myers trans., 1972).

206. *See id.* at 96.

207. *Id.*

208. *Id.* at 97. Another similar dispute was resolved by the President of the International Bank for Reconstruction and Development in 1960, and the ICJ was asked to resolve a similar

b. Ambiguities

This dispute can be characterized as an iterated prisoners' dilemma. International financial markets involve capital issuers and borrowers in various countries engaged in repeated prisoners' dilemma games. In a single iteration, paying back a loan might be costly to the borrower, but the borrower that defaults will not be able to borrow in the future. Any two industrialized states are likely, over time, to have in their territory both creditors and debtors, and therefore will develop norms of reciprocity and produce a cooperative equilibrium wherein each state has an interest in ensuring payback of loans by debtors in its jurisdiction. This gives rise to a convention called *pay back obligations* that parties are likely to observe as being in their self-interest.

In terms of the framework offered in Part II above, this game involves a problem about the potential incompleteness of the convention of loan repayment. Assuming that the parties to the loan agreements did not anticipate two world wars and rapid inflation, it is plausible that their agreement did not correctly specify how the rate would vary under such circumstances. The convention—both in the narrow sense of the actual loan agreement and the broader convention of "pay back obligations"—did not cover the precise question of the valuation of the bonds in the circumstances that arose. Should the question remain unresolved, each party would believe the convention favored its position and justified its sanctioning the other. There would be a danger that the cooperative equilibrium of the iterated prisoners' dilemma would give way to mutual defection; the prior pattern of borrowing and repaying would be less stable. The parties thus need a solution to help resolve what the precise scope of the convention required.

The job of a third party in such a situation is twofold. First, it must decide whether or not any adjustment should be made for radical inflation. Second, if the answer is yes, it must determine the magnitude of the adjustment. Once the third party decides that an adjustment is required, the determination of the amount requires

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case involving Norwegian loans in 1957, but found it had no jurisdiction. Case Involving Certain Norwegian Loans (Fr. v. Nor.), 1957 I.C.J. 7 (July 6).

both signaling and cheap talk. First, the conciliator must exclude values that fall *outside* the range of plausible amounts; and second, she must choose a solution within the remaining range. The exclusion of implausible amounts is a signaling function, even though the conciliator may not send the signal explicitly to the parties. The selection of a solution *within* the acceptable range likely involves elements of randomization. The conciliator chooses a solution that becomes focal, even though neither party may believe that it represents the *precise* level of the value of the loans.[209]

c. Results

The conciliator offered the solution that the loans be repaid at twelve times their nominal value.[210] This was a combination of implicit signaling and cheap talk. The conciliator employed economists and made efforts to take into account the various devaluations of the two countries' currencies, meaning that the actual range within which the equitable determination occurred did not appear to be large.[211] At the same time, the determination of the value within this range involved cheap talk. The combination of signaling and cheap talk helped resolve the dispute, and payment was duly made in accordance with the report.[212]

C. The International Court of Justice

The above three case studies concerned different types of institutions to resolve disputes. Although the precise mode of dispute resolution differed—judicial determination in *Eastern Greenland*, ad hoc arbitration in *Island of Palmas*, and conciliation in *Japanese Loans*—all involved a combination of cheap talk and signaling to varying degrees. This section focuses on the ICJ in the Hague. As the main judicial organ of the United Nations, the ICJ is the most prominent international court and a centerpiece of the hopes and aspirations of many international lawyers that their

209. Sometimes the third party may simply signal the range, and suggest the parties bargain to a solution.

210. COT, *supra* note 205, at 97.

211. *See id.*

212. *Id.*

institutions may resolve conflict.[213] This section discusses the caseload of the ICJ in detail and argues that it has been effective when it focuses on resolving coordination problems among states.

1. Background of the ICJ

The ICJ was founded in 1945 under the United Nations (UN) Charter.[214] If one views dispute resolution on a continuum of formality, from mediation on the one hand to binding judicial decision on the other, it is important to note that the ICJ is more like a consensus-based arbitral body than the name "court" would suggest.[215] In the ICJ, unlike in most domestic court processes, states are entitled to pick a judge ad hoc to serve on the court in instances when they do not already have a judge of their nationality present.[216] Similarly, unlike most national courts, states can choose to allow the court to decide cases on the basis of equity (*ex aequeo et bono*) rather than on purely legal considerations.[217] These features

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213. *See* U.N. CHARTER art. 92. There has been a recent proliferation of other standing international tribunals, such as the International Tribunal for the Law of the Sea (ITLOS), and the Appellate Body of the Dispute Settlement Mechanism of the World Trade Organization (WTO). The increasing number of these standing bodies, along with the creation of a number of ad hoc tribunals, have led some observers to note that the proliferation of dispute-resolving bodies entails risks of inconsistency and forum shopping. Roger Alford, *The Proliferation of International Courts and Tribunals: International Adjudication in Ascendance*, 94 AM. SOC. INT'L L. PROC. 160, 164-65 (2000); Jonathan I. Charney, *The Impact on the International Legal System of the Growth of International Courts and Tribunals*, 31 N.Y.U. J. INT'L L. & POL. 697, 698 (1999); Rosalyn Higgins, *The ICJ, the ECJ, and the Integrity of International Law*, 52 INT'L & COMP. L.Q. 1, 12-13 (2003); Cesare P.R. Romano, *The Proliferation of International Judicial Bodies: The Pieces of the Puzzle*, 31 N.Y.U. J. INT'L L. & POL. 709 (1999); Shane Spelliscy, *The Proliferation of International Tribunals: A Chink in the Armor*, 40 COLUM. J. TRANSNAT'L L. 143 (2001); Stephan, *supra* note 32, at 333-34. Given our expressive theory, the competition among tribunals may be productive. If there were a monopoly on third-party adjudication in a context without centralized sanctions, the third-party adjudicator would have less incentive to provide accurate signals. Competition means that alternative coordinators can compete with each other to provide accurate adjudication. This is particularly true when a single treaty regime gives states options as to the mode of dispute settlement. *See, e.g.*, United Nations Convention on the Law of the Sea, Nov. 16, 1994, art. 188, 1833 U.N.T.S. 3, 476.

214. U.N. CHARTER art. 97.

215. *See* ROSENNE, *supra* note 133, at 19 (discussing the influence of arbitration on international adjudication).

216. Statute of the International Court of Justice, art. 31, I.C.J. Acts & Docs [hereinafter ICJ Statute].

217. *Id.* art. 38(2).

more resemble ad hoc arbitration than a domestic judicial process. Further, the consensual character of the sources of international law means that states have, at least in theory, agreed to the norms under which the decision will be made just as in private contracts to arbitrate. This is especially apparent for cases that are submitted to the ICJ by special *compromis* or under the treaty jurisdiction.

Rather than serving as a court of general jurisdiction covering all international disputes, jurisdiction of the ICJ is, essentially, voluntary in character. Under Article 36 of the Statute of the ICJ, the court has jurisdiction over (1) cases referred to it specifically by the parties by special agreement (hereinafter abbreviated SA); (2) cases provided for in treaties and conventions, including the UN Charter; and (3) cases between parties that have submitted to compulsory jurisdiction of the court under the so-called "Optional Clause" of Article 36(2).[218]

The first two categories of jurisdiction are essentially coextensive with what would be exercised by any arbitral tribunal. Essentially, a treaty or special agreement, like a private contract, provides advance agreement to submit disputes to a particular forum.[219] The more complex source of jurisdiction is the Optional Clause. Countries that have deposited a declaration accepting jurisdiction under Article 36(2) agree to the court's jurisdiction to hear any case involving any other country that has also accepted the Clause.[220] It was anticipated that the Optional Clause would provide a means for ever-increasing numbers of states to submit to jurisdiction, and facilitate the goals of international cooperation held by the drafters of the UN Charter.[221] Unfortunately, the Optional Clause has been,

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218. *Id.* art. 36. On the history of the Optional Clause, see Leo Gross, *Compulsory Jurisdiction Under the Optional Clause: History and Practice*, *in* THE INTERNATIONAL COURT OF JUSTICE AT A CROSSROADS 19 (Lori Fischer Damrosch ed., 1987). The court also has advisory jurisdiction by which it can give opinions on any legal question if requested to do so by a competent international organization within the United Nations System. *See* ICJ Statute arts. 65-68. In addition, parties may request that the other party participate in a case, notwithstanding the fact that there is no legal basis of jurisdiction; such cases are called *forum prorogatum* and have never led to a decision on the merits. There has not been an instance when a party sought this type of jurisdiction since 1959.

219. The ICJ will only hear treaty disputes based on those treaties that specifically designate the ICJ as a forum for disputes, and a relatively small percentage of treaties include such clauses. *See* Guzman, *supra* note 6, at 1873.

220. ICJ Statute art. 36(2).

221. In keeping with idealistic views of international lawyers at the time, it was assumed

by and large, a failure.[222] There is much lamentation among international lawyers about the reluctance of countries to submit to compulsory jurisdiction.[223] In the words of one member of the ICJ, this failure "prevents the International Court of Justice from fulfilling its essential role."[224]

At the same time, the ICJ docket is larger than ever before, causing judges to call for increasing its budget.[225] There is a disjunct here. The court is the busiest in its lifetime, yet some observers believe it is failing to fulfill its role. We argue that the court *is* indeed fulfilling its essential role: that is, helping states to consensually resolve coordination games.[226] The idea that the ICJ has other essential functions relies on an idealistic misunderstanding of the nature of international adjudication. In particular, this idea assumes the court can do more than it can. Understanding the

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that the Optional Clause would be widely used. As more countries submitted to compulsory jurisdiction, more disputes would be resolved and global conflict would decline. *See, e.g.*, SHABTAI ROSENNE, THE LAW AND PRACTICE OF THE INTERNATIONAL COURT 419 (Martinus Nijhoff ed., 1985) (finding the Optional Clause a "valuable element in the general organization for peace").

222. *See, e.g.*, Robert Keohane et al., *Legalized Dispute Resolution: Interstate and Transnational*, 54 INT'L ORG. 457, 480-81 (2000); Shigeru Oda, *The Compulsory Jurisdiction of the ICJ: A Myth?*, 49 INT'L & COMP. L.Q. 251, 252 (1999).

223. *See, e.g.*, RICHARD FALK, REVIVING THE WORLD COURT (1986); THE INTERNATIONAL COURT OF JUSTICE AT A CROSSROADS, *supra* note 218, at 3-182.

224. Oda, *supra* note 222, at 251.

225. Gilbert Guillaume, Speech to the General Assembly of the United Nations (Oct. 30, 2001).

226. The essentially consensual character of ICJ jurisdiction helps explain in part why the other major dispute resolution body established early in the twentieth century, the Permanent Court of International Arbitration (PCIA), also housed in the Peace Palace in the Hague, has been nearly moribund for most of its life. The 1998 Annual Report of the PCIA provides a complete listing of the cases submitted to arbitration by the Permanent Court "or [c]onducted with the [c]o-operation of the International Bureau." P.C.I.A. Ann. Rep. 29 (1998). Only nine such cases are listed since 1938, and in some of these the role of the PCIA is limited to serving as or designating an appointing authority in the event the parties fail to agree upon on arbitrator. *Id.* at app. 2. Some scholars have puzzled over why there is so little interstate arbitration. *See, e.g.*, Mattli, *supra* note 33, at 945-46. It seems fairly clear that the ICJ already has enough consensual elements to satisfy party demands, so there is little benefit from a separate arbitral institution. In addition, the PCIA is more court-like than private arbitration, in that decisions are typically published. This means that at the international level the distinction between adjudication and arbitration is less sharp than in a domestic legal system, so there is little advantage to going before the PCIA. Indeed, our framework suggests that when two alternative institutions provide the same service at the international level, one of the institutions is likely to become *focal* over time as it develops a reputation for successful dispute resolution. The ICJ has done so, while the PCIA has become marginal.

ICJ as an essentially consensual body helps to understand what international adjudication can and cannot do in the absence of sanctions.

Once a case is filed, an ICJ proceeding can contain a number of phases. First, there are sometimes requests for provisional measures akin to injunctive relief which can occur before or after jurisdictional objections. In some cases, the denial of such a request can effectively resolve the dispute by eliminating the object at issue.[227] Second, states can object to jurisdiction. Third, if any jurisdictional objections were overruled, the court can conduct a merits phase. In this phase the court resolves the substantive issues of fact and law that have given rise to the dispute. The court does so in accordance with the *compromis*, or with the treaty provisions calling for judicial dispute resolution. This phase requires signals as to contested states of the world and cheap talk to provide possible outcomes. Figure 5 below diagrams the stages of a dispute in terms of time, with optional phases in brackets.

Figure 5: Chronology of ICJ Disputing

Time →

[Parties negotiate a clause calling for ICJ jurisdiction]	Dispute arises	Party or parties file a claim	[Request for provisional measures]	[Jurisdictional Objections]	Merits Phase	Compliance?

227. In the Case Concerning the Vienna Convention on Consular Relations (Para. v. U.S.), 1998 I.C.J. 248 (Apr. 9), Paraguay sued the United States regarding Francisco Breard, one of its nationals who was arrested for murder and subsequently executed by the State of Virginia, without having been informed of his treaty right to communicate with the Paraguyan consulate about his detention. *Id.* at 249. Paraguay requested provisional measures to stay the execution, which the Court subsequently approved. *Id.* at 250. The United States, however, argued that it had no power to stop the State of Virginia from executing Breard. Although the Secretary of State eventually wrote a letter to the State of Virginia, Breard was executed. Paraguay subsequently discontinued the proceedings. *Id.* In a later case with similar facts, Germany continued the suit after the execution of one of its nationals and the court found that the United States had committed an international wrong. The Lagrand Case (F.R.G. v. U.S.), 2001 I.C.J. (June 27), *available at* http://www.icj-cij.org.

Like medieval Iceland, but unlike most domestic legal systems, there is no centralized enforcement of ICJ decisions. Although the UN Charter requires member states to comply with such decisions, the dissatisfied party's only recourse is to seek enforcement from the Security Council under Article 94 of the UN Charter.[228] The Security Council, under that provision, is empowered to "make recommendations or decide upon measures to be taken to give effect to the judgment," a weak formulation.[229] Such requests for enforcement are rare and the Security Council has never acted to enforce an ICJ decision, making compliance voluntary if it occurs at all.[230]

2. *The ICJ as Coordinator: Evidence of Compliance*

Is there evidence that international adjudication resolves coordination problems? The next two sections consider cases that have been resolved by the ICJ and provide some suggestion that the primary function of the court is to resolve situations in which states are in mixed games of coordination and conflict. Our approach is both interpretive and empirical; it marshalls evidence that supports this interpretation, rather than proving a hypothesis. It is a difficult task, however, to reason backwards from observed cases to the processes by which cases come to court. As an empirical matter, significant selection bias among cases referred to international adjudication likely exists.[231] The filed cases emerge from a much broader universe of potential claims.[232] In particular, only the disputes capable of resolution likely come before the court, which leads to a high level of observed compliance.

This Article's theory engages this selection bias, and explains why it operates by focusing on not what cases are *filed* before the ICJ, but what cases are *resolved* by the ICJ. Although there may be multiple reasons that countries file cases,[233] many of these cases will

228. U.N. CHARTER art. 94.

229. *Id.* at para. 2.

230. Attila Tanzi, *Problems of Enforcement of Decisions of the ICJ and the Law of the United Nations*, 6 EUR. J. INT'L L. 539 (1995).

231. *See generally* Simmons, *supra* note 6 (asserting selection bias may differ across international issue areas).

232. William R. Felstiner et al., *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming ...*, 15 LAW & SOC'Y REV. 631, 632 (1980).

233. Scholars who have asked why it is that countries send cases to the ICJ suggest that

be incapable of resolution by a court lacking the power of sanctions. This theory predicts not just that *easy* cases will be resolved, but that the *only* cases effectively resolved by the ICJ will be coordination problems. In this subset of cases, each party can anticipate that the other party will comply with an adverse decision in the absence of centralized enforcement, thereby making signaling and cheap talk effective.

To date, scholars have provided very little evidence of what kind of cases come before the ICJ and what kind of cases are successfully resolved by it. The Appendix contains a dataset of the complete docket of contentious cases before the ICJ since 1947, broken down by type of issue, basis of jurisdiction, and other characteristics of the pairs of disputants. We analyze below the forty-one cases of the docket (out of 129 total filed claims to date), for which there have been either decisions rendered on the merits or an order for provisional measures that might require compliance, to determine what characteristics are associated with successful adjudication and compliance.

Table 1: Basis of Jurisdiction in Cases Proceeding to Merits

Basis of Jurisdiction	# of Decisions on Merits	% of Decisions on Merits (n=41)
Special Agreement	14	34
Tacit Consent	9	22
Jurisdiction Contested	18	44
TOTAL	41	100

Table 1 provides the jurisdictional bases for these cases. Truly consensual cases form a significant subset of the disputes in which

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the decision to file is complex. Dana Fischer's 1982 qualitative study looked at four major ICJ cases, and drew three major conclusions about the circumstances under which countries take cases to court. Dana D. Fischer, *Decisions to Use the International Court of Justice: Four Recent Cases*, 26 INT'L STUD. Q. 251, 255, 271 (1982). First, he concluded that countries prefer to initiate litigation when they believe it will help them in negotiation with the other party. *Id.* at 271. Second, Fischer noted that countries sometimes view a court decision as helping them to save face with domestic constituencies. *Id.* Third, Fischer also argued that the parties sometimes seek to clarify the law. *Id.* at 272 (noting especially the *North Sea Continental Shelf* Cases, involving existing treaties that were unclear on the rules of delimitation).

a decision was issued on the merits. Jurisdiction in fourteen cases was established by special agreement by the parties, and there was tacit consent to jurisdiction, meaning there were no preliminary objections to the asserted bases of jurisdiction, in nine others. Thus, in nearly a third of cases filed before the ICJ and nearly sixty percent of cases for which a decision on the merits was issued, jurisdiction was consensual.

The cases were coded for full or partial noncompliance. Given the difficulty of establishing compliance as an empirical matter, the coding focused on prominent instances of *noncompliance* because they were easier to observe by using simple but broad criteria. Any case in which a party delayed implementation of an order by greater than one year counted as an instance of noncompliance. Examples include the *Corfu Channel* case when Albania took more than four decades to pay a sum to Great Britain,[234] and the first *Asylum* case in the 1950s, when the court found that a Colombian grant of asylum to a Peruvian dissident was not in conformity with the law, yet Colombia did not end the asylum.[235] For border disputes, we examined whether there were continuing hostilities or contestation of the border within a year of the decision. The coding also included any case wherein one party withdrew from compulsory jurisdiction after the decision. Thus, the behaviour of the French after the *Nuclear Tests* case[236] and the United States after the *Nicaragua* case[237] were coded as instances of noncompliance. In these instances the parties found that continued resolution was not helpful. Finally, the coding included any case in which the court issued provisional measures that were ignored. This would include the recent case involving the execution in the United States of the Paraguayan national Breard in defiance of the court's explicit orders.[238] Using these criteria, we counted thirteen instances of full or partial

234. Corfu Channel (Alb. v. U.K.), 1949 I.C.J. 243 (Dec. 15).

235. Asylum (Colom. v. Peru), 1950 I.C.J. 266, 277 (Nov. 20).

236. Nuclear Tests (N.Z. v. Fr.), 1974 I.C.J. 457 (Dec. 20).

237. Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.), 1984 I.C.J. 392 (Nov. 26).

238. *See* Case Concerning the Vienna Convention on Consular Relations (Para. v. U.S.), 1998 I.C.J. 427 (June 8).

noncompliance out of forty-one cases for a compliance rate of sixty-eight percent.[239]

Next we wish to test alternative theories of compliance. There are two main rival sets of hypotheses that purport to explain compliance with international law. One set of theories is ideology-based and focuses on the legitimacy of the decision-making process or the character of the disputants. In particular, liberal theory argues that international law is a project of liberal states, and suggests that liberal states are more likely to comply.[240] To test ideology-based theories, we use in this empirical study an independent variable, DEMOCRACY, which reports the sum of democracy scores of the pair of disputants reported in the POLITY III database (ranging between 0 and 20). This variable tests the proposition that compliance is more likely when both disputants are democratic. The prediction is that this variable will produce a positive coefficient in a regression with compliance as the dependent variable.[241]

Another theory draws on rationalist assumptions, but describes compliance as resulting from a state's concern with reputation.[242] To capture this theory, we use a variable, Shared UN Scores (SUN), that might plausibly predict compliance by virtue of capturing state similarity and density of relationships. Our assumption is that more similar states care more about each other's positive reputation for compliance.[243] To illustrate, the United States might be more concerned about the reputational loss from noncompliance with a

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239. See *infra* Appendix for coding.

240. *See* Anne-Marie Burley, *Law Among Liberal States: Liberal Internationalism and the Act of State Doctrine*, 92 COLUM. L. REV. 1907, 1920-21 (1992); Andrew Moravcsik, *Taking Preferences Seriously: A Liberal Theory of International Politics*, 51 INT'L ORG. 513, 514-15 (1997); Andrea Kupfer Schneider, *Getting Along: The Evolution of Dispute Resolution Regimes in International Trade Organizations*, 20 MICH. J. INT'L L. 697, 763 (2002) ("[I]t is more likely that the International Adjudication Regime will work better with democratic states committed to upholding the rule of law."); Anne-Marie Slaughter, *International Law in a World of Liberal States*, 6 EUR. J. INT'L L. 503, 508 (1995).

241. Note that it is arguable that the democracy score of the losing party is the only relevant variable to test the proposition that only liberal states are likely to comply with ICJ decisions. For many ICJ decisions, determining the "loser" is difficult. Either party can violate a decision demarcating a border, for example. Nevertheless, our results are robust to alternative specifications of the data using only the democracy score of the party we coded as having the primary obligation to comply.

242. Guzman, *supra* note 6, at 1861.

243. Although states that are not similar may also care about reputation, we assume that states that are similar will care more about reputation.

decision in a dispute with the United Kingdom than with Libya. In addition, more similar states are likely to have more interactions, and thus have greater power to sanction one another in the future. SUN reports the percentage of shared votes in the United Nations General Assembly for the disputants during the year in which they filed the case at the ICJ. A high SUN score indicates similarity of votes at the United Nations and is a proxy for shared policy positions. The prediction is that a higher SUN score will lead to higher compliance, and thus that the independent variable will have a positive coefficient in the model estimation.

Coordination theory is captured in PRELIM that reports whether preliminary objections were overruled in the case. PRELIM is a dummy variable that takes value one if objections were filed and overruled, and takes value zero if no objections were filed.[244] The assumption is that disputes where one party objected to jurisdiction are likely to be less consensual and hence less likely to elicit compliance. If a state objects to the court's jurisdiction, this suggests that the underlying game is *not* primarily one of coordination and one state believes that it would be better off without the adjudicator's expression. This occurs if the costs of continuing conflict are *not* such that both states would be better off with a resolution of the dispute, which means the game is *not* Hawk/Dove. If a state is in this circumstance, neither signaling nor focal points are likely to induce the state to change its behavior.

If reputation concerns or legitimacy were the primary determinants of compliance, there is no reason to think that the level of compliance would fall when jurisdictional objections were overruled. Indeed, one could argue that reputation benefits would be *enhanced* by compliance after such a decision: compliance even after objecting to jurisdiction would presumably be *better* for a state's reputation. Similarly, for legitimacy theorists, the state would be showing its willingness to comply even in an adverse situation, which would presumably demonstrate its commitment to the rule of law. For liberal theorists, there ought to be no difference between the willingness to comply before and after an adverse jurisdictional ruling, because the democratic nature of the state remains constant.

244. Note that if objections were filed and upheld by the ICJ, the case would be over and there would be no decision capable of generating compliance.

To test which theory best explains compliance, we utilize a simple logit model with the three proxy variables, DEMOC, PRELIM, and SUN, as independent variables and compliance as the dependent variable. The following figure reports the results of a logit regression with this model.

Figure 6: ICJ Compliance Model—Logit Results

SUMMARY OUTPUT y = COMPLIANCE

Model Summary	
-2 Log likelihood	40.3
Cox/Snell R Square	0.23
Nagelkerke R square	0.33
Observations	41
% observations of compliance correctly predicted	82.1%
% observations of noncompliance correctly predicted	61.5%
Overall percentage	75.6%

	Coefficient	*Standard Error*	*Significance*
Constant	2.89	1.08	0.03
PRELIM	-2.42	.79	0.01
DEMOC	-0.08	0.06	0.18
SUN	0.11	0.93	0.9

The regression results show that the strongest predictor of compliance, and the only variable to reach statistical significance, is a lack of preliminary objections. The negative sign and statistically significant coefficient indicate that PRELIM negatively predicts compliance. Cases in which preliminary objections were overruled were those least likely to result in compliance. Consistent with our expressive theory, compliance is most likely to occur when both sides want adjudication.

One interesting result that we found is that there appears to be no support for the hypothesis that democratic nations are more likely to observe international law. Dispute resolution between democratic countries was slightly *less* likely to generate compliance, though the effect was too small to treat as reliable. This result contrasts with the views of those scholars who argue that international law, as a reflection of distinctively liberal values, is more likely to be complied with by liberal states.[245] In several of the celebrated instances of noncompliance with the ICJ decisions in recent decades, it is precisely the liberal states (France and the United States) that have failed to abide by the adjudicated decision, and have in fact withdrawn from the regime of the ICJ Optional Clause in response to adverse decisions. The negative correlation in this small sample between democracy and compliance should not be overstated, but in this particular realm this result hardly supports the arguments that liberal democracies are in fact more likely to comply. The large number of ICJ cases involving countries such as Libya, involved in six ICJ cases, shows that nondemocratic countries also have a need for coordination and are willing to comply with decisions.

Note also that reputation theory has a hard time explaining the significance of jurisdictional objections. Jurisdictional objections are an indication that a state views an adverse decision as costly. Yet, we observe that states are unwilling to comply in these circumstances. Whereas one might be able to construct an ad hoc reputation-based account of this phenomenon, we believe that coordination provides a superior theoretical predictor of compliance.

3. The ICJ as Coordinator: Types of Cases

We next examine in detail the subject matter of ICJ cases that are filed and the subset that are ultimately resolved. We believe that the types of cases heard by the court tend to be those that have significant elements of coordination. Table 1 shows the ICJ docket

245. For example, Anne-Marie Slaughter famously argued that liberal democracies are more likely to comply with their obligations than other states. *See* Slaughter, *supra* note 240, at 522-23.

categorized by subject matter. We describe the dynamics of each type of case below.

Table 2: Subject Matter of Contentious ICJ Cases

Subject Matter	Number of Cases Filed and Closed (% of Total Cases Filed & Closed)	Number of Decisions on Merits+ (% of Total Decisions on Merits)	% of Filed Cases Leading to Merits Decisions	Number of Decisions Complied with (Compliance Rate of Decisions on Merits)
Borders/Maritime Delimitation	24 (29%)	21 (48%)	88%	18 (86%)
Use of Force	23 (28%)	5 (13%)	22%	2 (40%)
Private property rights, including espousal of claims	13 (16%)	2 (7%)	15%	2 (100%)
Diplomatic or consular relations	8 (10%)	7 (17%)	88%	3 (43%)
Other	14 (7%)	6 (12%)	43%	3 (50%)
TOTAL	82	41	50%	28 (68%)

+ includes cases in which the only outcome was an order for provisional measures.

The table shows that half of ICJ cases filed do not lead to a final decision on the merits but are disposed of in some other manner. These early disposals might be a result of jurisdictional objections being upheld. They might also result from states withdrawing from cases for a variety of reasons. These reasons might include: settlement, removal of the offending condition that gave rise to the dispute, or decision by the applicant state that further pursuit of the case will not benefit it.[246]

246. Another possibility is that the case was filed for reasons other than the desire to reach a decision on the merits. For example, if a state files a case in the ICJ to gain publicity in its dispute, or to secure an advantage in bilateral bargaining, there is no reason to expect the state to necessarily pursue the claims all the way to the merits stage.

Comparing the percentages of cases filed and decisions on the merits, it is striking that different types of claims have different likelihoods of leading to decisions on the merits. One should of course be careful about drawing overall conclusions about different categories of disputes and compliance rates based on such a small number of cases.[247] Nonetheless, a clear pattern emerges. Cases involving borders and diplomatic protection, for example, are very likely to lead to a final decision on the merits. On the other hand, use of force and individual property rights cases are less likely to do so. Applicant states in these latter types of cases seem to be filing cases for another purpose rather than trying to achieve a final resolution. Compliance rates also reflect this. The majority of border cases filed led not only to decisions but to compliance. Very few of those disputes involve the use of force.

Why is it that some types of cases are more likely to generate decisions on the merits and compliance? Reputation and legitimacy theories do not produce clear predictions on variance. We think the answer lies in the role of dispute resolution in solving coordination games. Specifically, when the underlying dispute involves coordination, the possibility of judicial resolution increases dramatically. In

247. For example, the compliance figure for the category of disputes involving diplomatic protection is distorted by three filed cases in the early 1950s. *See* Haya de la Torre (Colom. v. Peru), 1951 I.C.J. 71 (June 13); Request for Interpretation of the Judgment of November 20th, 1950, in the Asylum Case (Colom. v. Peru), 1950 I.C.J. 395 (Nov. 27); Asylum (Colom. v. Peru), 1950 I.C.J. 266 (Nov. 20). These cases concerned the Peruvian politician Victor Haya de la Torre who sought protection in the Colombian Embassy in Lima after a failed coup attempt. *Asylum*, 1950 I.C.J. at 272. Colombia argued that de la Torre had committed a political offense and was entitled to asylum and safe passage under regional customary international law in Latin America. *Id.* at 273-78. The initial case concerned the interpretation of an agreement by the two countries to allow either one to institute proceedings before the court. The court's first decision found that Peru did not have to give safe passage, and that the asylum was not wholly proper, but the court did not determine the merits of the underlying dispute. *Id.* at 288. As a result, Colombia immediately requested that the court interpret the decision. *Request for Interpretation*, 1950 I.C.J. at 396-97 (stating that the court's earlier decision "contain[ed] gaps of such a nature as to render its execution impossible"). The court's second interpretation was not satisfactory to the parties, because the court decided the interpretation request was inadmissible. *Id.* at 403-04. Ultimately, the court's third decision was a solomonic determination that Colombia was not obligated to surrender the refugee, but that the asylum should have ended after the first judgment. *Haya de la Torre*, 1951 I.C.J. at 82. This brief story illustrates the difficulty of determining whether compliance has occurred in a particular case. The initial decisions failed to elicit compliance. However, the ultimate determination that Haya de la Torre could leave the embassy occurred within a reasonable enough time, so the final decision is coded as eliciting compliance.

contrast, when the underlying dispute involves another game with a single equilibrium, it is less probable that dispute resolution can be effective. Factors that might influence whether there is a coordination game include the costs of conflict: When both parties' worst outcome is conflict, that is, the cost of conflict relative to losing the case is high, the parties have a greater interest in coordinating. In contrast, when one party is much stronger than another, the stronger party may not have an interest in coordinating because the costs of conflict for that party are small relative to losing the dispute.

The following subsections elaborate on how border disputes and diplomatic protection involve coordination problems the court can assist in resolving.

a. Border Disputes

Twenty-four ICJ cases filed and twenty-one decisions on the merits involved borders and maritime delimitation, an area that has received surprisingly little attention in the literature on the links between international law and international relations.[248] Border and maritime delimitation is the major function of the ICJ, however, comprising over a third of the nonadvisory jurisdiction of the court.[249] Border disputes are frequently submitted by special agreement to the court. Indeed, all but two disputes submitted under special agreement to the court concerned border or maritime delimitation.

Border cases are in essence a Hawk/Dove game that arises out of the convention of property discussed earlier.[250] The institution of property arises out of a simple convention that possessors play

248. *But see* A ROAD MAP TO WAR, *supra* note 10; Evan Luard, *Frontier Disputes in Modern International Relations*, *in* THE INTERNATIONAL REGULATION OF FRONTIER DISPUTES 7 (Evan Luard ed., 1970) (describing the important role of frontier disputes in international relations, especially in the areas of national power assertion and distribution of economic resources); Jonathan Charney, *Progress in Maritime Boundary Delimitation Law*, 88 AM. J. INT'L L. 227, 227 (1994) (noting "there are more judgments and awards on maritime boundary disputes than on any other subject of international law"); Guzman, *supra* note 6, at 67-68.

249. The Permanent Court of International Arbitration in the Hague also has conducted some arbitrations concerning these issues. *See, e.g.*, Eritrea-Yemen Arbitration, 40 I.L.M. 900 (2001).

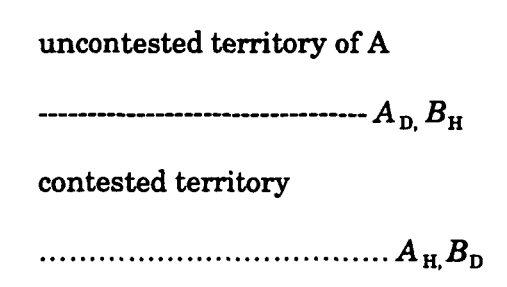
250. *See supra* notes 56-63 and accompanying text.

Hawk and nonpossessors play Dove. This might lead one to predict that in allocating international territory, nations might simply follow a rule that says that first possessors defend territory. This convention, however, like others, is subject to ambiguities. Rarely do nations physically *possess* every inch of a putative border in the sense of having soldiers stationed along it; such expenditure of resources would be prohibitive. States can reduce the costs of exclusion by developing conventions about borders, but this requires coordination as to where the precise border lies. For various reasons, there may be ambiguities as to where a border lies.

Imagine two states, *A* and *B*, that share a border and are trying to decide precisely where it is. The central problem is that each state would prefer to have more territory, but would like to avoid a war over borders with its neighbor. The underlying dynamics of the game thus involve both conflict and cooperation. The states are in conflict because each would prefer to capture more territory by moving the border farther toward the other party, but the states share an interest in avoiding a costly war.

The border game is illustrated in Figure 7. *A* and *B* each choose whether to send their troops into the contested territory (Hawk) or to stay out of it (Dove). As represented in Figure 7, the four possible strategy combinations are $\{A_H, B_D\}$ $\{A_H, B_H\}$ $\{A_D, B_H\}$ $\{A_D, B_D\}$. The dotted lines represent the two equilibria.

Figure 7: The Border Game



A would prefer to set the border at the dotted line $\{A_H, B_D\}$, while *B* would prefer to set the border at the dashed line $\{A_D, B_H\}$. If both play the aggressive strategy $\{A_H, B_H\}$, they will have a possibly

violent border conflict as they meet between the two lines. If both play the passive strategy (A_D, B_D), the territory between the two lines will be lost to both, although they avoid a costly war.

What the parties to the border game need is a third party to identify a line so that the parties will know precisely how far to send their troops. Perhaps because the existence of a line is more important than the location of it, it is generally recognized that problems of border delimitation can involve extralegal considerations even though equity is not one of the conventional sources of international law.[251] This is consistent with the notion that judges are not applying a pre-existing legal rule but resolving the dispute to solve a problem of coordination.

These principles are well illustrated in what is perhaps the most famous international decision on maritime delimitation, the *North Sea Continental Shelf* case.[252] This case is typical of a high-profile dispute over valuable territory. This dispute arose with the discovery of mineral resources in the North Sea during the 1960s, which led to heightened competition among the coastal states for control over the continental shelf. Just as scarcity among individuals can lead to pressures for private property rights in a previously common property regime,[253] greater demand for resources led to demand to delineate a boundary between states' maritime zones.[254]

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251. *See* North Sea Continental Shelf Cases (F.R.G. v. Den., F.R.G. v. Neth.), 1969 I.C.J. 3 (Feb. 20); Maritime Delimitation and Territorial Questions (Qatar v. Bahr.), 40 I.L.M. 847, 892-94 (July 2001) (adjusting equidistance line in light of equitable principles). That border problems are fundamentally coordination problems in character may be reflected in Article 62(2) of the Vienna Convention on treaties, which states that changed circumstances may not be the basis of a party asserting unilateral suspension of obligations. Vienna Convention on the Law of Treaties, May 23, 1969, art. 62(2), 1155 U.N.T.S. 331, 347 (signed but not ratified by the U.S. on Apr. 24, 1970), *reprinted in* 8 I.L.M. 679. Because border problems are frequently random solutions to problems of coordination, and lie at the basis of the modern system of territorially distinct nation states, it is especially important not to re-open the solution once reached. To do so threatens permanent instability.

252. *North Sea Continental Shelf Cases*, 1969 I.C.J. at 3; *see also* Wolfgang Friedmann, *The North Sea Continental Shelf Cases—A Critique*, 64 AM. J. INT'L L. 229 (1970) ("The decision of the International Court of Justice in the *North Sea Continental Shelf Cases* is surely one of the most interesting as well as debatable decisions in the history of the Court.") (citation omitted).

253. *See, e.g.*, Martin J. Bailey, *Approximate Optimality of Aboriginal Property Rights*, 35 J. LAW & ECON. 183, 185-86 (1992); Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350-51 (1967).

254. The legality of these claims had only recently developed in international law, following

The geography of the North Sea was such that if each state asserted its maximum legal claim, the claims would conflict with those of others. Thus, the states had to negotiate agreements delimiting the various zones of exclusive exploitation. Whereas most of the delimitation was achieved by negotiation, West Germany was unable to resolve all delimitation issues with Denmark and the Netherlands, and concluded special agreements with each state calling on the ICJ to declare what principles and rules were applicable to the delimitation.[255] The court joined the cases.[256]

The major function of the court was to clarify which interpretation of the convention of delimitation was applicable.[257] One interpretation was expressed in the Continental Shelf Treaty, part of a package of agreements adopted by the first UN Conference on the Law of the Sea, and called for equidistance from the shore as the principle for delimitation in such circumstances.[258] Germany, however, had a concave coast that would give it a relatively small portion of the shelf under this rule.[259] Germany argued instead that equity should be applied, so that a large state with a long but concave coastline would be given a "just and equitable share" of the shelf.[260] In the alternative, Germany argued that the equidistance principle should be modified in accordance with the "special circumstance" of a concave coastline, to use a favorable baseline for determining equidistant shares of the shelf.[261] Germany thus emphasized the potential incompleteness of the convention, asserting that principles employed in delimiting a *normal* coastline should not apply to the particular circumstances of this case.

One of the major issues for the court was whether the Continental Shelf Treaty was applicable to the dispute notwithstanding the fact

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the 1945 proclamation by President Truman claiming exclusive rights for the United States to exploit its own continental shelf. Proclamation No. 2667, 3 C.F.R. §§ 67-68 (1943-1948) (Sept. 28, 1945). The 1958 Law of the Sea conventions further developed and codified these rules. Law of the Sea: Convention on the Territorial Sea and the Contiguous Zone, Apr. 29, 1958, 15 U.S.T. 1606, 1608, 516 U.N.T.S. 205.

255. *North Sea Continental Shelf Cases*, 1969 I.C.J. at 12-13.

256. *Id.* at 19.

257. *See id.* at 6.

258. *Id.* at 10.

259. *See id.* at 17.

260. *Id.* at 20.

261. *Id.* at 21.

that Germany was not a party to the treaty.[262] This involved clarifying the state of an ambiguous convention about the circumstances when treaties reflect customary international law. Did the Continental Shelf Treaty *codify* customary international law, in which case the rules would apply to Germany, or was it a progressive *development* of international law, in which case Germany could not be bound without its consent? The court answered that the latter was the case.[263] Thus the equidistance principle had not become a part of customary international law.[264]

This finding, however, did not fully answer the question of how the Shelf was to be delimited. In the absence of binding rules, the court determined that equitable principles had to be applied in delimiting the Shelf.[265] Here the court had a task of choosing among many asymmetries to select one that would be salient for the task. In the end, the court adopted language that was favorable to Germany, by asserting the "natural prolongation" of the land territory as a principle to guide subsequent negotiations.[266] Natural prolongation was similar to the solution offered by Germany, in that it emphasized the size and length of the German coastline. In fact, the land territory was simply one possible asymmetry on which to focus. Contemporary commentators criticized the court for selecting just one among many possible asymmetries.[267]

The underlying game was a Hawk/Dove game, like other border disputes involving valuable territory. The problem for the states in this case was ambiguity as to the scope of the conventional rules regarding the delimitation of boundaries: the convention was both fuzzy in the sense that the current state of the law was unclear, and potentially incomplete in the sense that it was not certain whether the North Sea situation was exceptional, even had the general principles been clear. The role of the Court decision was to clarify

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262. *Id.* at 3, 6.

263. *Id.* at 41.

264. *See id.* at 46.

265. *Id.* at 47.

266. *See id.*

267. *See, e.g.*, Friedmann, *supra* note 252, at 239 (criticizing the decision and noting that the court took "one particular and limited aspect out of the thousands of inequalities of natural bounty"); *see also North Sea Continental Shelf Cases*, 1969 I.C.J. at 239 (Lachs, J., dissenting) ("[A] much wider spectrum of factors should be taken into account—e.g., the comparative wealth and economic potential of the States concerned.").

these ambiguities. The Court's solution had elements of cheap talk, selecting particular asymmetries to focus on in delimitation, which was then sufficient to help the parties overcome the Hawk/Dove game. After the Court decision, the parties were ultimately able to resolve the problem themselves by concluding delimitation agreements.[268]

b. Other Property-Type Disputes

Even aside from defining borders, much of the jurisdiction of the ICJ involves conventions about property, that is, the extent of a state's physical control over territory on land or sea. An interesting and typical example is a case (categorized along with six similar cases as "Other" in Table 2) that arose in the context of decolonization.[269] Portugal had a small number of colonies in Southwest India at the time of Indian independence from Britain. The colonies

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268. A further element of coordination involves domestic actors. Fischer notes that the goal of the resolution in *North Sea* was "a negotiated settlement in which, by definition, no government was going to have its way completely." Fischer, *supra* note 233, at 271. In particular, the presence of a legal decision allowed the Danish government to make territorial concessions that they otherwise could not have. This blame-shifting element may also be present in noncoordination situations, such as the *Nuclear Tests* case. Nuclear Tests (Austl. v. Fr.), 1973 I.C.J. 338 (Aug. 28). One can view this as a two level game, where an adverse decision on the international plane helps a government gain latitude on the domestic plane. The state gains credit for trying to advance national interests, and has an excuse for begging off the aggressive strategy once the court decides against it.

Other types of border issues involve simple fuzzy asymmetries. In 1959, the Dutch and Belgian governments asked the court to determine whether a small parcel of land belonged to the Dutch commune of Baarle-Nassau or the Belgian commune of Baerle-Duc. Sovereignty Over Certain Frontier Land (Belg. v. Neth.), 1959 I.C.J. 209 (June 20). The land in question involved overlapping plots that were not contiguous to the other portions of the respective communes. The border between the two communes had been established in a note between them in 1841, but a note drafted by the Mixed Boundary Commission established by the two governments two years later listed the plots differently with the result that two plots of land were alleged to have remained with the Belgian commune. *See id.* at 213-16. The Dutch argument was, in part, one of adverse possession, that acts of sovereignty over the land since the 1840s established it as Dutch territory. *Id.* at 227. In terms of our framework, this is the fuzzy asymmetry raised by questions of adverse possession or acquisitive prescription. Does physical possession give title? Which state was in the position to play the role of possessor? The court turned to evaluating the various acts of each state vis-à-vis the territory and found that Belgium had not given up its claims of sovereignty that were definitively established by the national-level Mixed Boundary Commission. *Id.* at 227-30. The result was a decision with which there has been compliance.

269. Right of Passage over Indian Territory (Port. v. India), 1960 I.C.J. 6 (Apr. 12).

included two enclaves completely surrounded by Indian territory, which normally would allow rights of overflight and passage between them. India's stated policy was to end all vestiges of European colonialism from the subcontinent. When an internal insurrection in 1954 ended Portuguese control, India suspended all rights of passage to the enclaves, preventing Portugal from reestablishing its authority.[270] Portugal filed a suit demanding reestablishment of a right of passage to the territories.[271]

This case also concerned a type of Hawk/Dove dispute. Portugal could have sought to reclaim the enclaves by force, but India might have responded with force leading to a war. Portugal's other option was to acquiesce, but this was not attractive for the signal it might provide to other colonies considering a revolt. Thus, Portugal's first-best outcome would be to retake the enclaves without Indian challenge (a Hawk/Dove outcome), its second-best outcome would be to acquiesce to India's blockade (a Dove/Hawk outcome), and its worst outcome would be to challenge India and end up in war (the Hawk/Hawk outcome). Similarly, India's best outcome was to maintain the blockade without challenge by Portugal (Hawk/Dove), its second-best outcome would be to allow passage without fighting Portugal (Dove/Hawk), and its worst outcome would be to be challenged by Portugal (Hawk/Hawk).

The court in this case was asked to clarify the scope of the convention through signaling its views on the particular history of the territory. The court could help the parties determine which strategy the other party was likely to play by clarifying the scope of the conventions governing rights of passage. Indeed, the precise decision issued by the court directly affected these strategies, for the court's decision issued in 1960 held that a right of passage *had* existed in 1954 for Portugal, but had been limited to civilian and not military purposes. This effectively meant that Portugal could not reassert control over the territory without violating international law. Given that an insurgent government had been set up in the enclaves, this meant that India had effectively won the dispute and continued to blockade Portuguese military travel. Subsequently,

270. *See id.* at 24-25.
271. *Id.* at 26.

India occupied the territories in question and eventually annexed them.[272]

c. Diplomatic and Other Immunities

Diplomatic immunities constitute eight of the eighty-two filed cases, with a high proportion of those leading to a merits decision.[273] Sovereign and diplomatic immunity is an ancient body of customary international law, reflecting the dynamics of reciprocity.[274] Diplomatic representatives are "hostages" to the other side. Killing the foreign king's envoy means that your own envoy is likely to be killed, providing for a self-enforcing solution to a stag hunt game. Imagine a game in which states can choose to respect or not respect the foreign envoy. Both states would prefer to respect each other's envoys; but if they believe the other state will not, they will reciprocate and coordination will occur around the "no respect" outcome. Most of the time, states coordinate in respecting envoys. It is only in rare circumstances, such as the Iranian revolution, that states target the diplomatic and consular property of other states.[275]

Despite this apparently self-enforcing nature of the game, there is still room for ambiguities in the convention of diplomatic protection. There is the need to specify, especially in an ongoing iterated prisoners' dilemma, what actions will constitute defection or cooperation. Should one party move to an off-equilibrium

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272. *Id.* at 24-25. Another category of cases concerns property expropriation. Typically at issue in these cases is an expropriation by one state of the property of another state or its national. In the latter case, the government is espousing the claim of one of its citizens. *See* Electronica Sicula S.p.A. (ELSI) (U.S. v. Italy), 1989 I.C.J. 17 (July 20); Barcelona Traction, Light and Power Co. (Belg. v. Spain), 1970 I.C.J. 6 (Feb. 5). The motivation of a government in such a case may be face-saving: For domestic reasons, neither state would like to admit it is wrong, but espousing the claim allows a creditor state to show its investors that it is doing *something* about the dispute. The underlying disputes in such cases frequently concern a convention whose precise coverage is unclear, namely the norm against taking of property without compensation. This convention, which receives wide agreement as a general principle, raises many issues, such as: what standard of compensation is required and whether it is met in a particular case, whether a regulation can constitute a taking, and what state action is required to attribute interference with property to a state. By clarifying the convention, the court can help the parties coordinate their strategies.

273. *See supra* Table 2.

274. *See* Goldsmith & Posner, *supra* note 32, at 1151; Swaine, *supra* note 27, at 562.

275. *See* United States Diplomatic and Consular Staff in Tehran (U.S. v. Iran), 1980 I.C.J. 42 (May 24).

strategy, turning to a third party can help return the parties to the equilibrium path.

Frequently these disputes involve questions of the scope of conventions on diplomatic immunities. For example, a recent Belgian law provided for "universal jurisdiction" in international criminal cases involving human rights violations.[276] International criminal cases typically involve military commanders and senior political figures who are sometimes protected by special immunities. In April 2000, the Belgian government issued an arrest warrant for the Minister of Foreign Affairs of the Congo, Abduluye Yerodia, on charges of war crimes and crimes against humanity.[277] The Congo claimed that a sitting Minister of Foreign Affairs enjoyed a form of immunity from criminal prosecution, akin to that given to diplomats and heads of states, to allow him to perform his duties.[278] The court agreed and found the issuing of the arrest warrant to be illegal.[279] The arrest warrant was subsequently quashed, and the Belgian government also passed domestic legislation to conform to the terms of the decision.[280] Thus, the decision generated compliance.

This case required the court to clarify the scope of applicable rules when two sets of conventions come into conflict. One set is the ancient law of diplomatic and other immunities. The other is the recent efforts to expand international criminal law and to hold leaders accountable for war crimes. Which convention should trump required a judicial determination.

Furthermore, there was ambiguity as to whether a particular class of person, namely the sitting minister of foreign affairs, fell within the conventions governing immunities. The court's role here was similar to that in the more famous case involving former Chilean dictator Augusto Pinochet.[281] Pinochet was in the United Kingdom for medical treatment when a Spanish judge issued a request for extradition to Spain on charges related to the deaths of

276. *See* Case Concerning the Arrest Warrant of 11 April 2000 (Congo v. Belg.), 2002 I.C.J. 1, 2 (Feb. 14).

277. *Id.* at 1.

278. *Id.*

279. *Id.* at 53-54.

280. *Id.*

281. R. v. Bow St. Metro. Stipendiary Mag., *Ex parte* Pinochet Ugarte (No. 3), [2000] 1 A.C. 61 (H.L. 1998) (Eng.).

Spanish citizens in Chile.[282] The question was whether Pinochet should be able to rely on immunities normally granted to heads of state to be free from criminal prosecution. Pinochet was not in office, and the convention was unclear as to former heads of state alleged to have committed human rights violations while serving as head of state: no court had ever decided the question. Although Chile argued that he should be immune from criminal process as a former head of state, the House of Lords ultimately disagreed.[283]

The courts in these cases were clarifying the scope of the conventions on immunity. They were not signaling particular facts or states of the world: The parties acknowledged that the conventions were unclear. The courts' decisions were based on cheap talk, and yet were effective in helping the parties coordinate their strategies in major and high profile diplomatic disputes.[284]

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282. *Id.*

283. Pinochet was ultimately not extradited because of medical infirmities, and allowed to return to Chile where he was declared unfit to stand trial.

284. Although slightly outside the scope of our focus on interstate dispute resolution, it is worth noting that the ICJ may give advisory opinions on legal questions presented by competent international organizations. These can be efforts by international organizations to influence behavior through cheap talk. Most advisory opinions concern questions about the role, status, and constitutional nature of international organizations on the international plane. An example is the question of whether a special rapporteur for the U.N. Commission on Human Rights is entitled to immunity that would be accorded to the staff of international organizations. *See* Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission on Human Rights, 1998 I.C.J. 423 (Aug. 10). In 1995, a Malaysian who was serving as Special Rapporteur on the Independence of Judges and Lawyers gave an interview to a magazine that led to several civil lawsuits against him for defamation, seeking over $100 million in damages. A 1999 Advisory Opinion by the ICJ, brought by the Economic and Social Council of the United Nations, held that the Special Rapporteur should have immunity from civil suits for comments made in his official capacity. *See* Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission of Human Rights, 1999 I.C.J. 61 (Apr. 29). A year later, a Malaysian appeals court overturned one of the judgments, though whether the ICJ decision generated full compliance is unclear because the court held the Rapporteur liable for legal costs.

In advisory opinions, the function of the court is to use cheap talk to create conventions that enhance the status and effectiveness of the relevant organization and its personnel. One can view the incentives of the affected states as approximating an iterated prisoners' dilemma. Each state would prefer not to grant immunity to the staff of an international organization, yet presumably all states are better off with the presence of effective international organizations. Through cheap talk, the court can create a convention about the precise scope of immunity that allows parties to coordinate their behavior.

4. The Limits of the ICJ: The Use of Force

So far, we have examined cases in which the ICJ generated high levels of compliance with its adjudicative solutions. However, the focal point or signaling function of international adjudication is less likely to work in the area of armed conflict.[285] Armed conflict, one might say, results from a *failure* to coordinate expectations.[286] Therefore, the focal outcome has failed to emerge. Sometimes armed conflict may result because the underlying dispute does not involve a coordination game; one party may prefer conflict to losing the dispute. It is not surprising that the ICJ has not played a major role in resolving such problems. Of twenty-three filed cases involving the use of force, only five binding orders or final decisions have been rendered.[287] Only two of these have led to compliance.[288]

This failure may result from a number of factors. First, the ICJ process is slow and time-consuming, so that prospective power positions at the time of filing are unlikely to remain constant through the proceedings. This means states' initial interest in coordination may be in fact moot by the time the court produces a decision. Second, having never successfully resolved an armed conflict, the ICJ has no reputation for being able to do so, relative, for example, to a powerful third-party state actor. In conflict situations state actors and international organizations can help provide resources to build confidence, develop an agreement, monitor compliance, and police the agreement. The court has none of these resources and is therefore likely to attract filings in cases where, for example, a state seeks publicity in its dispute rather than an actual resolution.

An advisory opinion might illustrate the way the court can be used for publicity rather than coordination. In a famous decision in 1996, the court declined to answer a request from the World Health Organization (WHO) that the court declare the use of nuclear weapons to be illegal.[289] Clearly the WHO hoped to influence state

285. *See, e.g.*, Guzman, *supra* note 6, at 1883.

286. *See* Charles Boehmer, *War Is in the Error Term*, 53 INT'L ORG. 567, 571-72 (1999).

287. *See supra* Table 2.

288. *See supra* Table 2.

289. Legality of the Use by a State of Nuclear Weapons in Armed Conflict, 1996 I.C.J. 66 (July 8).

behavior through the desired declaration, but the *legality* or lack thereof of nuclear weaponry is hardly a coordination game. The WHO was not a nuclear party seeking to resolve a dispute. No nuclear state supported the WHO's petition, suggesting that they saw the effort as one of political embarrassment rather than a serious attempt at arms control. State decisions to possess or not possess these weapons were unlikely to be influenced by a judicial decision, and the court ducked the issue.

In short, the ICJ may receive filings in cases that do not involve coordination games. It is unlikely, however, that a court without the power to impose sanctions can sufficiently change the payoffs to the parties so as to be effective in such instances. Coordination games, in contrast, do not require the court to change the payoffs to be effective. Cheap talk and signaling are sufficient in many cases to generate compliance, because the parties have an interest in coordinating around the pronouncement of the court.

The ICJ is, in essence, a mostly consensual forum used by states to resolve problems that involve coordination. It should not surprise us that the problems that it resolves on the merits, including border and diplomatic protection issues, are those in which the stakes of the dispute are relatively low compared with the cost of conflict between two nations. This is the essence of the Hawk/Dove game. As E.H. Carr put it some sixty years ago:

> The majority of international disputes which have in the past been settled by arbitration or by some other legal procedure have been either pecuniary claims or disputes about national frontiers in remote and sparsely inhabited regions. The exclusion ... of disputes affecting "vital interests," "independence" or "national honour" meant the exclusion of precisely those matters on which political agreement could not be attained.[290]

That the disputes resolved by international courts are low stakes relative to larger conflicts does not mean that international law is trivial or irrelevant. Indeed, we have showed that international adjudication is essential to resolve coordination games in some circumstances. On the other hand, one should not expect more than

290. E.H. CARR, THE TWENTY YEARS CRISIS 1919-1939, at 196 (1964).

is plausible from international adjudication. Those theorists who focus on legitimacy may expect that the court can be effective when it cannot be. Reputation theorists may over- or underpredict the effectiveness of the court because they fail to understand how the court can resolve coordination problems even among states with very limited interaction. The ICJ, like other interstate dispute resolvers, helps avert potential conflicts from escalating by providing focal points and signals that can resolve the dispute. In the process, the court also develops rules for future cases that clarify conventions. The essential role of the ICJ is as a coordinating device.

CONCLUSION

This Article pursued Professor Abbott's suggestion to "reason forward from a theoretical understanding of particular issue areas to richer explanations of the meaning and function of international agreements, procedures and institutions."[291] The game theory concept of coordination explains compliance with international tribunals. Even in a state of anarchy, when nations face repeated games of coordination, conventions emerge. The coordinated expectations underlying a convention allow nations to avoid conflict. Ambiguity inevitably prevents the convention from perfectly coordinating expectations, however, and in this situation adjudication can work expressively, without sanctions, by clarifying the convention and the state of the world to which it applies. Adjudication can both construct a focal point and provide a signal that causes national leaders to update their beliefs, both of which can influence their behavior.

International adjudication should therefore be understood for what it is. Rather than serving as a utopian institution that can end all international conflict, international adjudication such as that provided by the ICJ can only provide solutions to parties faced with coordination problems. Compliance with ICJ decisions can occur, even absent centralized enforcement mechanisms, because the decisions make one outcome focal or provide an important signal of the state of the world, either of which facilitates the parties in

291. Abbott, *supra* note 34, at 2.

ordering their own affairs. The law as declared by the ICJ and other international institutions is *merely* expressive, but expressive law often works to resolve or avoid disputes. In arguing that coordination problems deserve more attention in international relations and international legal scholarship, we have used realist/rational choice assumptions of optimizing behavior and self-interest to expand the understanding of the functions law can play. But our approach is clearly institutionalist in character, seeking to understand how institutions can resolve conflicts and what purposes they serve.

APPENDIX: CONTENTIOUS CASES BEFORE THE ICJ (by docket number)

Key for type of case: B = Borders/Maritime Delimitation; D = Diplomatic or consular relations; F = Use of Force; A = Aerial Incidents
P = Property Rights, including espousal of claims; T = issues related to Trusteeship/Decolonization; O = others

Jurisdiction may be asserted in three different ways: (1) by Special Agreement (SA); (2) by treaty (T); or (3) under the Optional Clause (OC) of Article 36(2) of the ICJ Statute. Note that alternative pleadings are possible as between T and OC. This column also notes if there was Tacit Consent (TC), meaning that a party made no preliminary objection.

Preliminary Objections are coded as upheld only where *all* objections are upheld so that the Court does not have jurisdiction.
Note that Merits Decision includes orders for provisional measures which are capable of generating compliance.

Sources: ICJ yearbooks; Shigeru Oda, *The Compulsory Jurisdiction of the International Court of Justice: A Myth?*, 49 INTL & COMP. L.Q. 251 (2000); www.icj-cij.org.

No.	Title	Registration Year	Applicant (or parties to Special Agreement)	Respondent	Basis of Jurisdiction	Prelim Objections	Type of Case	Merits Decision?	Compliance?
1	Corfu Channel, Merits	1947	United Kingdom	Albania	T	Rejected	F	Yes	No (long delay)
5	Fisheries	1949	United Kingdom	Norway	T (TC)		B	Yes	Yes
6	Protection of French Nationals and Protected Persons in Egypt	1949	France	Egypt	T		P	No, case withdrawn	N/A
7	Asylum	1949	Colombia/Peru		SA		D	Yes	No
11	Rights of Nationals of the U.S. in Morocco	1950	France	United States	T, OC (TC)		D/P	Yes	Yes

No.	Title	Registration Year	Applicant (or parties to Special Agreement)	Respondent	Basis of Jurisdiction	Prelim Objections	Type of Case	Merits Decision?	Compliance?
13	Request for Interpretation of the Judgment of 11/20/50 in the Asylum Case	1950	Colombia	Peru	T	Upheld	D	No	No
14	Haya de la Torre	1950	Colombia	Peru	OC/TC		D	Yes	Yes
15	Ambatielos	1951	Greece	United Kingdom	T	Rejected	P	Yes	Yes
16	Anglo-Iranian Oil Co.	1951	United Kingdom	Iran	T	Upheld	P	No	N/A
17	Minquiers and Ecrehos	1951	France/UK		SA		B	Yes	Yes
18	Nottebohm	1951	Liechtenstein	Guatemala	OC	Rejected	P	No	N/A
19	Monetary Gold Removed from Rome in 1943	1953	Italy	France, UK, US	T	Upheld	P	No	N/A
20	Electricite de Beyrouth Company	1953	France	Lebanon	T		P	No, case settled	No
22	Treatment in Hungary of Aircraft and Crew of U.S.	1954	United States	Hungary	None asserted-*forum prorogatum*		A	No	N/A
23	Treatment in Hungary of Aircraft and Crew of U.S.	1954	United States	USSR	"		A	No	N/A
25	Aerial Incident of 3/10/53	1955	United States	Czechoslovakia	"		A	No	N/A
26	Antarctica	1955	United Kingdom	Argentina	"		B	No	N/A
27	Antarctica	1955	United Kingdom	Chile	"		B	No	N/A
28	Aerial Incident of 7/7/52	1955	United States	USSR	"		A	No	N/A

No.	Title	Registration Year	Applicant (or parties to Special Agreement)	Respondent	Basis of Jurisdiction	Prelim Objections	Type of Case	Merits Decision?	Compliance?
29	Certain Norwegian Loans	1955	France	Norway	T	Upheld	P	No	N/A
32	Right of Passage over Indian Territory	1955	Portugal	India	T	Rejected	O	Yes	Yes
33	Application of the Convention of 1902 Governing the Guardianship of Infants	1957	Netherlands	Sweden	T(TC)		O	Yes	Yes
34	Interhandel	1957	Switzerland	United States	T	Upheld	P	No	N/A
35	Aerial Incident of 7/25/55	1957	Israel	Bulgaria	OC	Upheld	A	No	N/A
36	Aerial Incident of 7/25/55	1957	United States	Bulgaria	None asserted-*forum prorogatum*		A	No	N/A
37	Aerial Incident of 7/25/55	1957	United Kingdom	Bulgaria	"		A	No	N/A
38	Sovereignty over Certain Frontier Land	1957	Belgium/Netherlands		SA		B	Yes	Yes
39	Arbitral Award Made by the King of Spain on 9/4/54	1958	Honduras	Nicaragua	T, OC (TC)		B	Yes	Yes
40	Aerial Incident of 9/4/54	1958	United States	USSR	None asserted		A	No	N/A
41	Barcelona Traction, Light & Power Company, Ltd.	1958	Belgium	Spain	OC	Rejected	P	No	N/A
42	Compagnie du Port, des Quais et des Entrepots de Beyrouth and Societe Radio-Orient	1959	France	Lebanon	T		P	No, case settled	N/A
44	Aerial Incident 11/7/54	1959	United States	USSR	None asserted		A	No	N/A

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45	Temple of Preah Vihear	1959	Cambodia	Thailand	T	Rejected	B	Yes	Yes
46	South West Africa	1960	Ethiopia	South Africa	OC	Upheld	T	No	N/A
47	South West Africa	1960	Liberia	South Africa	OC	Upheld	T	No	N/A
48	Northern Cameroons	1961	Cameroon	United Kingdom	OC	Upheld	T	No	N/A
50	Barcelona Traction, Light & Power Company, Ltd.	1962	Belgium	Spain	OC	Rejected	P	No	N/A
51	North Sea Continental Shelf	1967	FR Germany/Denmark		SA		B	Yes	Yes
52	North Sea Continental Shelf	1967	FR Germany/Netherlands		SA		B	Yes	Yes
54	Appeal Relating to the Jurisdiction of the ICAO Council	1971	India	Pakistan	OC	Rejected	A	Yes	Yes
55	Fisheries Jurisdiction	1972	United Kingdom	Iceland	OC	Rejected	B	Yes	No
56	Fisheries Jurisdiction	1972	FR Germany	Iceland	OC	Rejected	B	Yes	No
58	Nuclear Tests	1973	Australia	France	T, OC	Rejected	O	Yes	No (France withdraws)
59	Nuclear Tests	1973	New Zealand	France	T, OC	Rejected	O	Yes	No (France withdraws)
60	Trial of Pakistani Prisoners of War	1973	Pakistan	India	T		F	No	N/A

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62	Aegean Sea Continental Shelf	1976	Greece	Turkey	OC	Upheld	B	No	N/A
63	Continental Shelf	1978/1979	Tunisia/Libya		SA		B	Yes	Yes
64	United States Diplomatic and Consular Staff in Tehran	1979	United States	Iran	OC	Rejected	D	Yes	No
67	Delimitation of the Maritime Boundary in the Gulf of Maine Area (chamber)	1981	Canada/United States		SA		B	Yes	Yes
68	Continental Shelf	1982	Libya/Malta		SA		B	Yes	Yes
69	Frontier Dispute [chamber]	1983	Burkina Faso/Mali		SA		B	Yes	Yes
70	Military and Paramilitary Activities in and against Nicaragua	1984	Nicaragua	United States	T, OC	Rejected	F	Yes	No (US withdraws)
71	Application for Revision and Interpretation of the Judgment of 2/24/82 in Continental Shelf #63	1984	Tunisia/Libya	Libya	T, OC	Rejected	B	Yes	Yes
73	Border and Transborder Armed Actions	1986	Nicaragua	Costa Rica	T, OC		F	No, case settled	N/A
74	Border and Transborder Armed Actions	1986	Nicaragua	Honduras	T, OC	Rejected	F	No, case settled	N/A
75	Land, Island and Maritime Frontier Dispute [chamber]	1986	El Salvador/Honduras		SA		B	Yes	Yes
76	Elettronica Sicula S.p.A. (ELSI) [chamber]	1987	United States	Italy	T (TC)		P	Yes	Yes
78	Maritime Delimitation in the Area between Greenland and JanMayen	1988	Denmark	Norway	T (TC)		B	Yes	Yes

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79	Aerial Incident of 7/3/88	1989	Iran	United States	T		A	No, case settled	N/A
80	Certain Phosphate Lands in Nauru	1989	Nauru	Australia	T	Rejected	O	No, case settled	N/A
82	Arbitral Award of 31 July 1989	1989	Guinea-Bissau	Senegal	T (TC)		B	Yes	Yes
83	Territorial Dispute	1990	Libya/Chad		SA		B	Yes	Yes
84	East Timor	1991	Portugal	Australia	T	Upheld	T	No	N/A
85	Maritime Delimitation between Guinea-Bissau and Senegal	1991	Guinea-Bissau	Senegal	OC		B	No	N/A
86	Passage through the Great Belt	1991	Finland	Denmark	OC, T		O	No, case settled	N/A
87	Maritime Delimitation and Territorial Questions between Qatar and Bahrain	1991	Qatar	Bahrain	T/SA	Rejected	B	Yes	Yes
88	Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie	1992	Libya	United Kingdom	T	Rejected	A	No, case settled	N/A
89	Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie	1992	Libya	United States	T	Rejected	A	No, case settled	N/A
90	Oil Platforms	1992	Iran	United States	T	Rejected	F	Yes	Yes
91	Application of the Convention on the Prevention and Punishment of the Crime of Genocide	1993	Bosnia Herzegovina	Yugoslavia	T (TC)	Rejected	F	Pending	N

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92	Gabcikovo-Nagymaros Project	1993	Hungary/Slovakia		SA		O	Yes	No
94	Land and Maritime Boundary between Cameroon and Nigeria	1994	Cameroon	Nigeria	OC	Rejected	B	Yes	No
96	Fisheries Jurisdiction	1995	Spain	Canada	T	Upheld	O	No	N/A
97	Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the *Nuclear Tests* (New Zealand v. France) Case	1995	New Zealand	France	T	Upheld	O	No	N/A
98	Case Concerning Kasikili/Sedudu Island	1996	Botswana/Namibia		SA		B	Yes	Yes
99	Vienna Convention on Consular Relations	1998	Paraguay	United States	T		D	Yes	No
~	Request for an additional Judgment in the case concerning Gabcikovo-Nagymaros Project	1998	Slovakia	Hungary	T		O	Pending	
101	Request for Interpretation of the Judgment of 11 June 1998 in the case concerning the *Land and Maritime Boundary between Cameroon and Nigeria*	1998	Nigeria	Cameroon	T	Upheld	B	No	N/A
102	Sovereignty over Pulau Ligitan and Pulau Sipadan	1998	Indonesia/Malaysia		SA	Rejected	B	Yes	Yes
103	Ahmadou Sadio Diallo	1998	Guinea	Congo	OC	Rejected	P	Pending	
104	LaGrand	1999	Germany	United States	T (TC)	Rejected	D	Yes	No

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105	Legality of Use of Force	1999	Yugoslavia	Belgium	T, OC	pending	F		
106	Legality of Use of Force	1999	Yugoslavia	Canada	T, OC	pending	F		
107	Legality of Use of Force	1999	Yugoslavia	France	T, OC	pending	F		
108	Legality of Use of Force	1999	Yugoslavia	Germany	T, OC	pending	F		
109	Legality of Use of Force	1999	Yugoslavia	Italy	T, OC	pending	F		
110	Legality of Use of Force	1999	Yugoslavia	Netherlands	T, OC	pending	F		
111	Legality of Use of Force	1999	Yugoslavia	Portugal	T, OC	pending	F		
112	Legality of Use of Force	1999	Yugoslavia	Spain	T, OC	Upheld	F	No	N/A
113	Legality of Use of Force	1999	Yugoslavia	United Kingdom	T, OC	pending	F		
114	Legality of Use of Force	1999	Yugoslavia	United States	T, OC	Upheld	F	No	N/A
115	Armed activities on the territory of the Congo	1999	Congo	Burundi	T		F	No, case settled	N/A
116	Armed activities on the territory of the Congo	1999	Congo	Uganda	T		F	pending	N/A
117	Armed activities on the territory of the Congo	1999	Congo	Rwanda	T		F	No, case settled	N/A
118	Application of the Convention on the Prevention and Punishment of the Crime of Genocide	1999	Congo	Yugoslavia	T	Rejected	F	Yes	N/A

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119	Aerial Incident of 10 August 1999	1999	Pakistan	India	T, OC	Upheld	A	No	N/A
120	Maritime Delimitation between Nicaragua & Honduras in the Caribbean Sea	1999	Nicaragua	Honduras	T, OC		B	pending	
121	Arrest Warrant of 4/11/00	2000	Congo	Belgium	T	Rejected	D	Yes	Yes
122	Application for Revision of the Judgment of 7/11/96 in Case #91	2001	Yugoslavia	Bosnia Herzegovina	T, OC	Upheld	F	No	N/A
123	Certain Property	2001	Liechtenstein	Germany	TC	pending	P		
124	Territorial and Maritime Dispute	2001	Nicaragua	Colombia	T	pending	B		
125	Frontier Dispute	2002	Benin/Niger		SA		B	pending	
126	Armed activities on the territory of the Congo (new application)	2002	Congo	Rwanda	T	pending	F		
127	Avena and Other Mexican Nationals	2003	Mexico	United States	T	pending	D		
128	Certain Criminal Proceedings	2003	Congo	France	T	pending	T		
129	Sovereignty over Pedra Branca	2003	Malaysia/Singapore		SA		B	pending	