

**International Treaty Enforcement as a Public Good: Institutional Deterrent Sanctions in
International Environmental Agreements**

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Abstract

The problem of compliance with treaty obligations has been an area of active study in international environmental law because of its importance to the effectiveness of environmental treaties. This paper examines the problem of enforcement as an important and distinct component of compliance. First, the paper describes the general nature of the problem and the theoretical approaches that have been put forward as alternatives. Second, the paper then locates a key difficulty of environmental treaty enforcement in its public good characteristics. The paper specifically examines the “public good” functions of enforcement as well as the difficulties of generating this “good.” The paper concludes by suggesting three general approaches to overcoming these difficulties and provides a critique of the recently adopted non-compliance mechanism of the 1997 Kyoto Protocol to the Climate Change Convention.

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by Tseming Yang*

Introduction

The problem of treaty enforcement is as old as the existence of international law itself.¹ For multilateral environmental agreements, however, the need to police treaty commitments has gained greater attention because of the increased importance of the subject matter: pressing global environmental problems as varied as ozone depletion, global climate change, loss of biodiversity, and the international trade in hazardous wastes.

Unfortunately, the problem has remained generally intractable. Some specialized treaty systems, such as the World Trade Organization, have been able to create apparently effective enforcement mechanisms. But no broad solution to the enforcement problem, especially not one readily applicable to multilateral environmental agreements, has presented itself. The contemporary reality remains that the vast majority of treaty violations go unanswered by the international community.

In the environmental field, great attention has been given to the proactive management of treaty compliance and the use of non-coercive mechanisms.² The non-compliance process of the Montreal Protocol on Ozone-Depleting Substances and the citizen submissions process of the North American Agreement on Environmental Cooperation are all manifestations of such efforts.

¹ Professor of Law, Vermont Law School. I am grateful to Richard Brooks, Sanford Gaines, Shi-ling Hsu, Gregory Johnson, Peter Spiro, Pamela Stephens, and Oran Young and the participants of colloquia at Hofstra University Law School and the University Pittsburgh Law School for valuable comments on earlier drafts and presentations of this manuscript. Research assistance was provided by Melissa Armbrister, John Cooke, Jennifer DeLyon, Valerie Diden, David Pocius, Jeremy Hojnicky, and Andrea Silberman.

² For a documentary study of the enforcement problem in international law, see BENJAMIN B. FERENCZ, *ENFORCING INTERNATIONAL LAW – A WAY TO WORLD PEACE: A DOCUMENTARY HISTORY AND ANALYSIS* (1983) (2 volumes). For a survey of sanction devices of the past, see PAYSON S. WILD, JR., *SANCTIONS AND TREATY ENFORCEMENT* 83-195 (1934)(invocation of heavenly punishment, use of hostages, self-help, and third-party guarantees). *See also* ROYAL INSTITUTE OF INTERNATIONAL AFFAIRS, *SANCTIONS: THE CHARACTER OF INTERNATIONAL SANCTIONS AND THEIR APPLICATION* (2d ed. 1935).

³ *See, e.g.*, PETER M. HAAS, ROBERT O. KEOHANE, AND MARC A. LEVY, EDs., *INSTITUTIONS FOR THE EARTH: SOURCES FOR EFFECTIVE INTERNATIONAL ENVIRONMENTAL PROTECTION* 24 (1993); ORAN R. YOUNG, *INTERNATIONAL GOVERNANCE: PROTECTING THE ENVIRONMENT IN A STATELESS SOCIETY* (1994); ABRAM CHAYES AND ANTONIA HANDLER CHAYES, *THE NEW SOVEREIGNTY: COMPLIANCE WITH INTERNATIONAL REGULATORY AGREEMENTS* (1996); JAMES CAMERON, JACOB WERKSMAN & PETER RODERICK, EDs., *IMPROVING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL LAW* (1996); EDITH BROWN WEISS AND HAROLD K. JACOBSON, EDs., *ENGAGING COUNTRIES: STRENGTHENING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL ACCORDS* (1998); DAVID G. VICTOR, KAL RAUSTIALA, AND EUGENE B. SKOLNIKOFF, *THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS: THEORY AND PRACTICE* (1998); ORAN R. YOUNG, ED., *THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL REGIMES: CAUSAL CONNECTIONS AND BEHAVIORAL MECHANISMS* (1999).

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The long-term success of such approaches still remains to be seen.⁴ Two of the most prominent proponents, however, Antonia Handler Chayes and the late Abram Chayes, went as far as to say that “[t]he effort to devise and incorporate [deterrent] sanctions in treaties is largely a waste of time.”⁵ Given the Chayes’ well-known past work and its influence in the area of “compliance management,” such a statement cannot be taken lightly. But what about the implications for the effectiveness of environmental treaties and the institutional nature of enforcement?

This article focuses on these issues through the lens of two general questions. First, what is the function of treaty enforcement and institutional deterrent sanctions? Second, what are the obstacles to the effective deployment of institutional deterrent sanctions in response to noncompliance events? I elaborate on the instrumental purposes of enforcement as well as its independent normative function. Much of the analysis follows the recent stream of works that combines both international law and international relations theory. Their tools offer a rich understanding of the conduct of states and the functioning of international legal regimes.⁶

Part I of the article first provides a brief overview of the problem of treaty enforcement, including traditional sanctions options and alternative approaches: unilateral sanctions, compliance management, and transformation of identity and interests. Part II and III explore the structural complexities of environmental treaty enforcement. I examine its public good attributes in Part II. Part III then considers the associated problems of generating enforcement actions. They can be found primarily in the obstacles to collective action, the distinct nature of deterrent sanctions as *ex post* rather than *ex ante* compliance measures, and the frailty of the normative foundations of treaties.

Part IV considers the implications for improving the effectiveness of enforcement mechanisms and possible avenues for creating the “enforcement good.” Particular options include the alteration of incentives to engage in enforcement as well as changes in its valuation. Less obvious choices are the promotion of entrepreneurial enforcement as well as improved design of treaty regimes. The final part critiques the recently adopted non-compliance mechanism of the Kyoto Protocol to the Framework Convention on Climate Change.

There is no question that institutional deterrent sanctions are difficult to deploy appropriately and effectively. Notwithstanding the prevailing contemporary practice and thinking, however, they are likely to remain important tools for improving the effectiveness of environmental agreements.

I. A Brief Overview of the Problem of Treaty Enforcement

The usage of the term “enforcement” in the international law literature has not been

⁴ For one examination of the effectiveness of the citizen submission process, see Tseming Yang, *The Effectiveness of the NAFTA Environmental Side Agreement's Citizen Submission Process: A Case Study of the Metales y Derivados Matter*, 76 UNIV. COLO. L. REV. 443 (2005).

⁵ ABRAM CHAYES AND ANTONIA HANDLER CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at 2. See also LOUIS HENKIN, *HOW NATIONS BEHAVE: LAW AND FOREIGN POLICY* 47, 49 (2d ed. 1979).

⁶ For an overview of modern international relations theory, see Kenneth W. Abbott, *Modern International Relations Theory: A Prospectus for International Lawyers*, 14 YALE J. INT'L L. 335 (1989).

consistent. It has been used to describe efforts to expose and document failures of compliance,⁷ various bilateral interactions designed to promote compliance,⁸ private boycotts by non-governmental organizations,⁹ and “managerial,” non-punitive efforts designed to persuade and help noncomplying states come back into compliance.¹⁰ The version I focus on here is the most common understanding and most closely related to its use in national legal systems: the use of institutionally authorized deterrent sanctions to effect compliance with the law.¹¹

A. The Difficulty of Coercing States: Traditional Sanctions Options

The root cause of the enforcement problem is the anarchic state of the international system.¹² A popular misconception that arises is that existing sanctions mechanisms are weak, non-existent, or otherwise ineffective.¹³ The perceived solution is to create new or stronger sanctions.

The popular belief misunderstands the condition of anarchy. There are in fact a number of options endorsed by international law for the imposition of sanctions: countermeasures, membership sanctions, and treaty-based mechanisms. They have varying levels of coercive effect.

1. Countermeasures: Retorsion, Reciprocal Action, and Reprisals

Countermeasures are self-help acts that customary international law permits states to take in response to a wrongful act.¹⁴ They are no different in nature from self-help remedies that national legal systems provide under certain conditions to victims of legal wrongs. The right of self-defense is one example. Countermeasures are commonly classified into three groups: retorsions, reciprocal actions, and reprisals.¹⁵

⁷ See Kal Raustiala, *International “Enforcement of Enforcement” under the North American Agreement on Environmental Cooperation*, 36 VA. J. INT. L. 721, 760 (1996); Ibrahim F.I. Shihata, *Implementation, Enforcement, and Compliance with International Environmental Agreements – Practical Suggestions in Light of the World Bank’s Experience*, 9 GEO. INT’L ENVTL. L. REV. 37.

⁸ See Daniel Bodansky, *Customary (and Not So Customary) International Environmental Law*, 3 IND. J. GLOBAL LEGAL STUD. 110, 117-118 (1995).

⁹ See David S. Ardia, *Does the Emperor Have No Clothes? Enforcement of International Laws Protecting the Marine Environment*, 19 MICH. J. INT’L L. 497, 559-563 (1998).

¹⁰ See Gunther Handl, *Compliance Control Mechanisms and International Environmental Obligations*, 5 TUL. J. INT’L & COMP. L. 29 (1997) (“fine-tuning” enforcement). For an even broader usage of the term, see Alfred P. Rubin, *Enforcing the Rules of International Law*, 34 HARV. INT. L. J. 149-161 (1993).

¹¹ See W. Michael Reisman, *The Enforcement of International Judgments*, 63 AM. J. INT. L. 1, 6 (1969).

¹² THOMAS HOBBS, *LEVIATHAN* (Penguin Classics 1987), chap. 13; HEADLEY BULL, *THE ANARCHICAL SOCIETY*.

¹³ See, e.g., Stephen M. Anderson, *Reforming International Institutions to Improve Global Environmental Relations, Agreement, and Treaty Enforcement*, 18 HASTINGS INT’L & COMP. L. REV. 771, 779 (1995); Andrew Watson Samaan, *Enforcement of International Environmental Treaties: An Analysis*, 5 FORDHAM ENVTL. L.J. 261, 273 (1993). See generally HANS J. MORGENTHAU, *POLITICS AMONG NATIONS: THE STRUGGLE FOR POWER AND PEACE* 525-534 (rev. by Kenneth W. Thompson, 6th ed. 1985).

¹⁴ Because they are usually imposed unilaterally, countermeasures can be considered a subset of unilateral sanctions. See *infra* section II(A).

¹⁵ See generally ELISABETH ZOLLER, *PEACETIME UNILATERAL REMEDIES: AN ANALYSIS OF COUNTERMEASURES*

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Retorsions are unfriendly, but lawful acts that would be permitted even absent a treaty breach.¹⁶ In response to a state's violation of its obligations under an international trade agreement, for example, the injured parties could suspend unrelated discretionary economic aid.¹⁷ Reciprocal actions consist, as their name suggests, of acts of reciprocal noncompliance - a reciprocal breach of the treaty obligation.¹⁸ For example, a state that imposes import tariffs on goods in violation of its obligations under an international free trade agreement may face the reciprocal suspension of tariff concessions by other treaty parties.

Finally, reprisals (also termed retaliation) are more serious responses to noncompliance. Such acts are ordinarily not permitted under international law, but they become lawful by virtue of the initial treaty breach. To qualify as reprisals, such acts must be "necessary to terminate the violation[, to] prevent further violation, or to remedy the violation." They must also not be "out of proportion to the violation and the injury suffered."¹⁹ Internationally, states have resorted to the imposition of economic sanctions or the freezing of assets as forms of reprisals.²⁰

In multilateral settings, retorsion and reciprocal action remedies are usually weak forms of sanctions. Since retorsions are legal to use in all settings, their harmful effects are unlikely to be great. Reciprocal actions are usually ineffective when some common good is advanced by treaty compliance. With respect to environmental treaties, reciprocal noncompliance exacerbates the initial treaty breach by leading to more environmental harm. For human rights obligations, reciprocal violations are unthinkable.

Reprisals, in contrast, can have greater coerciveness. As a practical matter, however, they are available and can be used effectively only by powerful nations because of potential retaliation by the target state.

2. Membership Sanctions

Membership sanctions refer to the suspension of membership privileges as a response to noncompliance. Examples would be the right to vote and to participate in governance or the termination of membership.²¹

When membership comes with valuable benefits, such sanctions can be a credible deterrent. For example, expulsion from the World Trade Organization would lead to the loss of valuable trade privileges and other preferential economic treatment.

With respect to many multilateral treaties, including environmental agreements, however,

(1984).

¹⁶ See ZOLLER, PEACETIME UNILATERAL REMEDIES, *supra* note , at 5. Retorsions exclude reciprocal acts.

¹⁷ See, e.g., Rest. (Third) For. Relat. sec. 905, comment a.

¹⁸ They may be accomplished through suspension or termination of the treaty in whole or in part. See Vienna Convention on the Law of Treaties art. 60. See also MOHAMMED M. GOMAA, SUSPENSION OR TERMINATION OF TREATIES ON GROUNDS OF BREACH (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 (1997).

¹⁹ See Rest. (Third) For. Relat. sec. 905(1). See also Case Concerning the Gabcikovo-Nagymaros Project (Hungary/Slovakia), ICJ Reports (1997) at para. 82-87.

²⁰ See Rest. (Third) For. Relat. sec. 905, comment b.

²¹ See, e.g., Oscar Schachter, *United Nations Law*, 88 AM. J. INT. L. 1, 11 (1994); Steve Charnovitz, *Rethinking WTO Trade Sanctions*, 95 AM. J. INT. L. 792, 827 (2001).

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membership termination is an ineffective sanction . Such treaties call on states to take on affirmative, and sometimes onerous obligations, ranging from reducing pollution to protecting human rights. Expulsion releases the target country from the treaty's burdens and harms the treaty system further by exacerbating the initial breach.²²

3. Treaty-based Mechanisms: Bilateral and Collective Sanctions

Treaty-based mechanisms include both bilateral, state-to-state mechanisms and collective sanctioning mechanisms. As with countermeasures, the coerciveness of treaty-based mechanisms varies greatly.

Bilateral enforcement mechanism consists largely of state-to-state dispute settlement.²³ The best known of such processes, that of the GATT/WTO, allows for the imposition of trade sanctions upon a finding of noncompliance.²⁴ Sanctions must be formally approved before they can be imposed.²⁵

Most older environmental treaties lack dispute settlement provisions.²⁶ In contemporary treaty-making practice, however, bilateral dispute settlement provisions are now wide-spread. Nevertheless, they usually lack explicit authority for the imposition of binding consequences.²⁷ Reliance is placed instead on mediation, conciliation, and non-binding arbitration.²⁸

Anecdotal evidence suggests that bilateral mechanisms of many treaties, especially in multilateral environmental agreements, have generally remained unutilized.²⁹ For example, within the 30 year history of the Convention to regulate International Trade in Endangered Species of Wild Fauna and Flora (CITES)³⁰ there have been a number of significant instances of noncompliance with CITES norms.³¹ However, *no* party has ever pursued a dispute through

²² Voluntary withdrawal can be a converse sanction if the institution is heavily dependent on the support of one or a few individual states. *See generally* CHAYES, *THE NEW SOVEREIGNTY*, *supra* note , at 29-108.

²³ For a discussion of supranational adjudication , which resembles bilateral mechanisms because it utilizes an arbitral/judicial format, see Laurence Helfer and Anne Marie Slaughter, *Toward a Theory of Effective Supranational Adjudication*, 107 *YALE L. J.* 273 (1997). *See also* section ___ *infra*.

²⁴ *See, e.g.*, Agreement Establishing the World Trade Organization, Annex 2: Understanding on Rules and Procedures Governing the Settlement of Disputes, art. 22, 33 I.L.M. 1143 (1994); North American Free Trade Agreement, art. 2019. The WTO refers to the suspension of concessions or other obligations rather than explicit "trade sanctions." *See also* North American Agreement on Environmental Cooperation, arts. 34-36 & annexes 34, 36A & 36B.

²⁵ The mechanism has been actively used for over 250 trade cases since its re-inception in 1995. *See* World Trade Organization, Status in Brief of the Disputes, <http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm>, visited Feb. 20, 2003.

²⁶ *See* Birnie & Boyle, *supra* note ___, at 180; General Accounting Office, International Environment: Literature on the Effectiveness of International Environmental Agreements, May 1999, GAO/RCED-99-148, at 22-23.

²⁷ *See, e.g.* DAVID G. VICTOR, *THE COLLAPSE OF THE KYOTO PROTOCOL AND THE STRUGGLE TO SLOW GLOBAL WARMING* 64 (2001).

²⁸ Sanctions remain available through the use of countermeasures, membership sanctions, and reprisals.

²⁹ David Victor asserts that dispute settlement provisions in multilateral environmental agreements have *never* been formally invoked. *See* David Victor, *The Collapse of the Kyoto Protocol*, *supra* note , at 64.

³⁰ Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 (entered into force July 1, 1975)

³¹ *See* ROSALIND REEVE, *POLICING INTERNATIONAL TRADE IN ENDANGERED SPECIES: THE CITES TREATY AND COMPLIANCE* (2002).

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formal adjudicative processes as provided for under article 18(b) of the agreement.³²

Multilateral mechanisms are even rarer than bilateral mechanisms. The most prominent one, with the most coercive sanctioning powers at its disposal, can be found in the United Nations Security Council.³³ Because of the veto power of each of the five permanent Security Council members, any of them can block the exercise of enforcement powers.³⁴ Not surprisingly, the overall number of Security Council interventions has remained small. From its inception to 1990, it authorized the use of military force only once (in the Korean war in the 1950s) and economic sanctions twice (Rhodesia in 1966 and South Africa in 1977).³⁵ Since 1990, however, the Council's Chapter VII powers have been used more frequently. Economic sanctions and military force have been authorized approximately a little more than a dozen times.³⁶

* * * * *

Even if many of the difficulties of enforcement are attributable to the weak and ineffectual nature of most sanctions options, that is not the most important problem of enforcement. Existing options can have strongly coercive effects. Yet, their utilization in response to noncompliance events is lackluster.³⁷

Anarchy thus does not mean "that international law has no sanctions" at its disposal. Rather, it is that the available "sanctions [are] precarious in their operation"³⁸ because there is no transnational authority to coordinate and direct them.³⁹

B. Alternatives to Institutional Deterrent Sanctions

The intractability of the problem has led to the pursuit of alternative approaches. The three of greatest prominence are: unilateral measures, compliance management, and

³² Violations have always been settled either informally, under article 18(a), or through actions and resolutions by the Conference of the Parties, the governing body of CITES. See WILLEM WIJNSTEKERS, *THE EVOLUTION OF CITES: A REFERENCE TO THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FLORA AND FAUNA* 375 (1998), available at <<http://www.cites.org/eng/resources/publications.shtml>>.

³³ Charter of the United Nations, arts. 39-51, 59 Stat. 1031 (1945). The Security Council may have additional authority under article 94(2) of the U.N. Charter to enforce judgments by the International Court of Justice. See, e.g., Oscar Schachter, *The Enforcement of International Judicial and Arbitral Decisions*, 54 AM. J. INT. L. 1, 17-24 (1960); W.M. REISMAN, *NULLITY AND REVISION: THE REVIEW AND ENFORCEMENT OF INTERNATIONAL JUDGMENTS AND AWARDS* 704-713 (1971). However, this power has never been used by the Council. See BARRY E. CARTER & PHILLIP R. TRIMBLE, *INTERNATIONAL LAW* 305-307 (3rd ed. 1999).

³⁴ U.N. Charter, art. 27.

³⁵ See CHAYES, *THE NEW SOVEREIGNTY*, *supra* note , at 34-67; HENRY J. STEINER & PHILIP ALSTON, *INTERNATIONAL HUMAN RIGHTS IN CONTEXT: LAW, POLITICS, MORALS* 651, 662 (2d ed. 2000).

³⁶ DAVID CARTRIGHT AND GEORGE A. LOPEZ, *THE SANCTIONS DECADE: ASSESSING UN STRATEGIES IN THE 1990S* (2002) at 1-2.

³⁷ See, e.g., Steiner & Alston, *supra* note , at 633-634 (discussing failures of Security Council to act decisively against genocide in Rwanda).

³⁸ Brierly, *supra* note , at 98-99. See generally *infra* _____.

³⁹ See, e.g., L. OPPENHEIM, *INTERNATIONAL LAW: A TREATISE* 7-8 (H. Lauterpacht ed., 8th ed. 1955); J.L. BRIERLY, *THE LAW OF NATIONS: AN INTRODUCTION TO THE INTERNATIONAL LAW OF PEACE* 42 50 (1955).

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transformational processes.⁴⁰ Each is a response based on its view of why states comply with international law. Because some of their theoretical foundations have been articulated well within the international relations field, I make reference to that literature here.

1. Unilateral Sanctions

Unilateral sanctions are primarily tools of self-help. Their appeal derives from their ability to deploy measures with much stronger coercive effects, such as brute military force or trade sanctions.⁴¹ According to realist theories of the international system,⁴² such approaches are necessary because states comply with international legal obligations only when their interests happen to coincide with legal norms or because of coercion by a superior power.⁴³

As prime evidence of their efficacy, supporters of unilateral approaches usually point to the apparent success of the U.S.'s use of unilateral sanctions, especially trade sanctions.⁴⁴ Yet, such effectiveness assertions have not gone unchallenged.⁴⁵

The case of international whaling is instructive. In 1986, the International Whaling Commission (IWC) imposed a moratorium on commercial whaling, which continues until the present.⁴⁶ Since the IWC has no enforcement powers on its own, it relies on individual nations to implement and enforce that moratorium.

With respect to states who have ignored the moratorium, the U.S. has deployed unilateral trade sanctions authorized under the Pelly Amendment. Steve Charnovitz has characterized such activities as “reasonably effective” in curtailing whaling.⁴⁷ Yet, others such as Dean Wilkinson, have vigorously disputed that assertion.⁴⁸ Wilkinson has suggested that the politics of imposing trade sanctions, especially when the targets have been allies of the U.S., has significantly undermined a systematic and effective use of trade sanctions. In fact, the lack of “effectiveness” of the Pelly Amendment sanctions is most obvious with respect to the whaling activities of

⁴⁰ The theoretical overviews given here are intended to be sketches only. For another overview, see Kenneth W. Abbott, *International Relations Theory, International Law, and the Regime Governing Atrocities in Internal Conflicts*, 93 AM. J. INT'L L. 361 (1999).

⁴¹ They are authorized by customary international law if they meet the criteria for permissible countermeasures

⁴² HANS MORGENTHAU, *POLITICS AMONG NATIONS: THE STRUGGLE FOR POWER AND PEACE*, rev. by Kenneth W. Thompson (6th ed. 1985); Nicolo Macchiavelli, *THE PRINCE*.

⁴³ See, e.g., Goldsmith & Posner, *A Theory of Customary International Law*, *supra* note .

⁴⁴ See, e.g., Alan O. Sykes, *Constructive Unilateral Threats in International Commercial Relations: The Limited Case for Section 301*, 23 L. & POL. INTL. BUS. 263 (1992).

⁴⁵ See, e.g., Daniel Drezner, *supra* note , at 98 (“multilateral sanctions that have the support of an international organization are significantly more effective than unilateral efforts”).

⁴⁶ See David Caron, *The International Whaling Commission and the North Atlantic Marine Mammal Commission: the Institutional Risks of Coercion in Consensual Structures*, 89 AM. J. INT'L L. 154, 156 (1995).

⁴⁷ See, e.g., Steve Charnovitz, *Environmental Trade Sanctions and the GATT: an Analysis of the Pelly Amendment on Foreign Environmental Practice*, 9 Am. U. J. Int'l L. & Pol'y 751, 806 (1994).

⁴⁸ Dean M. Wilkinson, *The Use of Domestic Measures to Enforce International Whaling Agreements*, 17 Denv. J. of Int. Law and Policy 271, 281-291 (1989) (detailing the history and success of the U.S. use of trade sanctions with regard to whaling). See also CHAYES, *THE NEW SOVEREIGNTY*, *supra* note at 94-96; Gregory Rose and George Paleokrassis, *Compliance with International Environmental Obligations: A Case Study of the International Whaling Commission*, in CAMERON, ET AL., *IMPROVING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL LAW*, *supra* note , at 169-170.

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Norway and Japan. To this day, both continue to engage in commercial whaling activities, with Japan thinly disguising it and euphemistically calling it scientific research whaling.⁴⁹

There are two additional problems. First, efforts to impose unilateral sanctions may entail significant costs: loss of economic opportunities (in the case of trade sanctions), financial expenditures and the loss of lives if military interventions occur, or simply the general loss of good-will by the target and third-party states. It can also trigger retaliation by the target against the enforcer, including the possibility of “a long echo of alternating retaliations,”⁵⁰ and other adverse collateral consequences.⁵¹ Since such costs can be enormous, unilateral sanctions are available as a practical matter only to the most powerful nations.⁵²

Second, unilateral sanctions are oftentimes seen as illegitimate. There is no authoritative or neutral determination of the illegality of the initial act of breach or the fairness of the response. Sanctions legitimacy is thus largely a function of whether one is at the giving or receiving end of such sanctions. One state’s unilateral retaliatory action may look to the targeted country as unlawful aggression or other breach of international law. Even worse, since only the strong can engage in such forms of coercion, such responses are subject to the “vicissitudes of the distribution of power between the violator of the law and the victim of the violation.”⁵³

2. Compliance Management

Compliance management, a term coined by the writings of Abram and Antonia Handler Chayes,⁵⁴ describes the pro-active engagement of states and international institutions in ensuring compliance with treaty obligations. State compliance behavior is to be actively affected and shaped through continuous oversight, official prodding and brow-beating, and the providing of institutional help and positive incentives for those at risk of breach. It de-emphasizes deterrence and arguably finds punitive sanctions unhelpful.⁵⁵

Compliance management is part of the institutionalist branch of international relations, frequently referred to as regime theory.⁵⁶ While institutionalism accepts that states are rational actors driven by self-interest, it also takes the ability of international institution to independently

⁴⁹ See Andrew C. Revkin, *Japan Says It Will Double Its Annual Whale Harvest in Pacific*, N.Y. TIMES, Feb. 28, 2002, at A14; Walter Gibbs, *World Briefing Europe: Norway: Whalers Allowed A Bigger Catch*, N.Y. Times, Feb. 16, 2002, at A10.

⁵⁰ ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* 37, 183 (1984).

⁵¹ See, e.g., MARGARET P. DOXEY, *INTERNATIONAL SANCTIONS IN CONTEMPORARY PERSPECTIVE* 26-27, 100-102, 106-109 (1987).

⁵² See generally CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at 88-111.

⁵³ MORGENTHAU, *POWER AMONG NATIONS*, *supra* note ___, at 312 (1985). See also Thucydides, *supra* note ___ (“the strong do what they can and the weak suffer what they must”).

⁵⁴ CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at 22.

⁵⁵ See CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at ___.

⁵⁶ See, e.g., ROBERT KEOHANE, *AFTER HEGEMONY: COOPERATION AND DISCORD IN THE WORLD POLITICAL ECONOMY* (1984); Peter M Haas, Robert O. Keohane, and Marc A. Levy, *Improving the Effectiveness of International Environmental Institutions*, in HAAS, ET AL., *INSTITUTIONS FOR THE EARTH*, *supra* note ___, at 399-408. Stephen D. Krasner, ed., *INTERNATIONAL REGIMES* (1983).

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shape and influence state behavior much more seriously.⁵⁷

The Chayes' managerialism emphasizes the power of legal norms. They stress that in addition to material incentives and efficiency considerations,⁵⁸ compliance with treaty norms occurs in large part because "people – whether as a result of socialization or otherwise – accept that they are obligated to obey the law."⁵⁹ To promote compliance then, managerialism seeks not only to adjust the incentives for compliance, for instance by providing economic or technical aid that can make it easier to fulfill treaty obligations, but also engages the sense of obligation to obey international legal norms. This is accomplished through mechanisms that allow for persuasive discourse about treaty obligations and potential breaches.⁶⁰ It also relies on the use of social and diplomatic pressure to remedy such breaches.⁶¹

A number of empirical studies have found compliance management to contribute significantly to treaty effectiveness.⁶² In fact, the Montreal Protocol on Ozone-Depleting Substances, which embodies much of the managerial model, is considered to be one of the most successful multilateral environmental treaties to-date.⁶³ It has been widely credited with dramatically reducing the production and consumption of chemicals that destroy stratospheric ozone layer, which protects humans and the ecological system from the harmful effects of ultraviolet radiation.⁶⁴

But there has also been significant criticism.⁶⁵ George Downs has argued that high levels of compliance attributed to managerial mechanisms are primarily due to pre-existing high levels

⁵⁷ See, e.g., ROBERT O. KEOHANE, *INTERNATIONAL INSTITUTIONS AND STATE POWER: ESSAYS IN INTERNATIONAL RELATIONS THEORY 2* (1989). See also COOPERATION UNDER ANARCHY (Kenneth Oye ed. 1986); Kenneth Abbott, *Modern International Relations Theory*, *supra*.

⁵⁸ Compliance may be efficient because decisions "are not free goods[, and g]overnmental resources for policy analysis and decision making are costly and in short supply." CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, 4-7. Compliance may also be in the interest of a state because ratification and acceptance of treaty obligations presumably show that treaty membership benefits the parties. *Id.*

⁵⁹ CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at 8.

⁶⁰ The Chayes summarize their managerialist prescriptions as 1) ensuring transparency, 2) providing for dispute settlement, 3) capacity building, and 4) promoting the use of persuasion.

⁶¹ CHAYES, *THE NEW SOVEREIGNTY*, *supra* note ___, at 22-26. The detriment can be as amorphous as loss of trust regarding compliance with other agreements, loss of status and reputation, shunning, and public shaming or as concrete as the loss of unrelated benefits, such as international development aid or technical cooperation. For the influence of non-legal sanctions on conduct, see ELLICKSON, *ORDER WITHOUT LAW*, *supra* note ___; David Charny, *Nonlegal Sanctions in Commercial Relationships*, 102 HARV. L. REV. 375, 392-394 (1990).

⁶² See, e.g., HAAS, ET AL., *INSTITUTIONS FOR THE EARTH* *supra* note ___; WEISS AND JACOBSON, *ENGAGING COUNTRIES*, *supra* note ___; YOUNG, *THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL REGIMES*, *supra* note ___; Jonas Tallberg, *Paths to Compliance: Enforcement, Management, and the European Union*, 56 INT. ORG. 609 (2002).

⁶³ See, e.g., Benedick, *supra* note ___; Victor, *The Collapse of the Kyoto Protocol*, *supra* note ___, at x-xi; Kal Raustiala, *Compliance & Effectiveness in International Regulatory Cooperation*, 32 CASE W. RES. J. INT'L L. 387, 319-320 (2000); Glenn Wiser, *supra* note ___, at 28 ("facilitation approach is generally viewed as a success"). See generally O. Yoshida, *Soft Enforcement of Treaties*, *supra* note __.

⁶⁴ See, e.g., Benedick, *supra* note __.

⁶⁵ See David Victor, *The Operation and Effectiveness of the Montreal Protocol's Noncompliance Procedure*, in VICTOR, ET AL., *THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS*, *supra* note ___, at 137.

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of cooperation among the treaty parties.⁶⁶ Compliance is thus not the result of managerial efforts, but rather due to an independent propensity of the parties to comply. States are only doing what they would have done anyway.

There are two further specific concerns about the aversion to punitive sanctions and the possible long-term effects.⁶⁷ First, noncompliance has no significant adverse consequences. Instead, it triggers positive assistance for the violator. Since compliance with most environmental agreements requires expenditure of resources and foregoing economic opportunities, a rationally self-interested actors would ordinarily not be expected to comply other than when convenient. In fact, when large stakes are at issue, including national security concerns, significant economic issues, or other important national interests, can the weak coercive force of public shame, loss of reputation, or a sense of moral duty to obey international law be expected to counter the likelihood of breach.⁶⁸ Is it reasonable to expect much more than the *appearance of a desire* to comply?

Second, aversion to punitive sanctions raises questions about the credibility of the treaty obligations and the parties' commitment to them. The risk is that failure to sanction can be interpreted as indifference to noncompliance. If behavior and responses toward norm violators is largely indistinguishable from behavior toward norm adherents, do the treaty's norms and obligations really mean what they say? Are binding obligations no different from hortatory and aspirational commitments?

A closer examination of the Montreal Protocol's treatment of Russian noncompliance illustrates some of these concerns.⁶⁹ The Noncompliance Procedure has been the primary tool for monitoring the ozone depleting substances (ODS) phase-out obligations. It is based on the premise that repeated interactions and iterative discourse can engage the violator in a cooperative enterprise to end noncompliance.

Under the process, the Protocol's Implementation Committee (IC) investigates allegations of noncompliance and makes recommendations for resolution to the Protocol's member states. The parties have supplied an indicative list of remedies, which include positive assistance to the violator, cautionary messages, and the suspension of specific membership rights and privileges.⁷⁰ The IC's usual response has been to recommend economic aid, technical assistance, or other helpful measures to bring the violator back into compliance.⁷¹ It has never

⁶⁶ Downs et al., *Is the good news about compliance good news about cooperation?*, *supra* note .

⁶⁷ See, e.g., Downs et al., *The Transformational Model of International Regime Design*, *supra* note , at 499-500.

⁶⁸ See, e.g., CHAYES, *THE NEW SOVEREIGNTY*, *supra* note at 142; Andrew Guzman, *A Compliance-based Theory of International Law*, *supra* note .

⁶⁹ Montreal Protocol on Ozone Depleting Substances, art. 8, 26 I.L.M. 1550 (1987); OZONE SECRETARIAT - UNITED NATIONS ENVIRONMENT PROGRAMME, *HANDBOOK FOR THE INTERNATIONAL TREATIES FOR THE PROTECTION OF THE OZONE LAYER* 161-164, 263-267 (5th ed. 2000), available at <<http://www.unep.ch/ozone/publications.shtml>>. See also O. Yoshida, *Soft Enforcement of Treaties: The Montreal Protocol's Noncompliance Procedure and the Functions of Internal International Institutions*, 10 *COLO. J. INT'L ENVTL. L. & POL'Y* 95 (1999).

⁷⁰ Indicative List of Measures That Might be Taken by a Meeting of the Parties in respect of Noncompliance with the Protocol, Annex V of the Report of the Fourth Meeting of the Parties, OZONE SECRETARIAT - UNITED NATIONS ENVIRONMENT PROGRAMME, *HANDBOOK FOR THE INTERNATIONAL TREATIES FOR THE PROTECTION OF THE OZONE LAYER [OZONE SECRETARIAT HANDBOOK]*, *supra* note , at 265.

⁷¹ Noncompliance Procedure (1998), Annex II of the Report of the Tenth Meeting of the Parties, OZONE SECRETARIAT HANDBOOK, *supra* note , at 267 ("measures to assist the Parties' compliance"); Report of the

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recommended formal deterrent sanctions. The IC also continues to monitor the violator's compliance progress through periodic reporting requirements and meetings.

In 1995, the Russian Federation notified the Montreal Protocol parties that it would imminently (as of January 1, 1996) be in noncompliance with its production phase-out obligations.⁷² In response, the parties recommended international assistance to address this problem and "imposed" additional information reporting requirements.⁷³

In 1997, the IC found that Russia not only remained in noncompliance but had also engaged in prohibited trade of ODS.⁷⁴ Noncompliance continued in 1998. While the Protocol parties held up the threat of more coercive sanctions, such as suspension of treaty privileges,⁷⁵ they also decided that Russia "should continue to be treated in the same manner as a Party in good standing."⁷⁶ Russia did come into compliance at the end of 2000, when it finally closed all CFC production facilities.⁷⁷

The entire process took more than 5 years from Russia's initial announcement. During that time, monitoring activities, financial assistance, prodding, and numerous meetings occurred.⁷⁸ Sanctions were never imposed.

If the 5-year delay does not seem excessive, consider that Russia originally had asked for a 5-year grace-period.⁷⁹ Worse yet, in 2000, Russia actually *increased* production in order to

Thirteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/OzL.Pro.13/10 Para. 102 (Oct. 26, 2001), available at <<http://www.unep.org/ozone/mop/13mop/13mop-10.e.pdf>> ("that the role of the Implementation Committee [is] to help Parties facing difficulties in compliance by identifying the additional efforts needed and helping in the provision of financial assistance.").

⁷² See Dec. VII/18, para. 1, Report of the Seventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, U.N. Environment Programme, UNEP/OzL.Pro.7/12 (1995). See also Yoshida, *supra* note , at 135.

⁷³ [MoP decision VII/18]

⁷⁴ Report of the Implementation Committee Under the Noncompliance Procedure for the Montreal Protocol on the Work of its Seventeenth Meeting, U.N. Environment Programme, paras 25, U.N. Doc. UNEP/OzL.Pro/ImpCom/17/3 (1997). See also Yoshida, *supra* note , at 138-139.

⁷⁵ *Id.*

⁷⁶ Dec. X/26, para. 3, Report of the Tenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, U.N. Environment Programme, U.N. Doc. UNEP/OzL.Pro.10/9 (1998).

⁷⁷ Report of the Secretariat on Information Provided by the Parties in Accordance with Article 7 of the Montreal Protocol on Substances that Deplete the Ozone Layer, UNEP/OzL.Pro.13/3 para. ____ (Oct. ____, 2001), available at <<http://www.unep.org/ozone/mop/13mop/13mop-3.e.pdf>>.

⁷⁸ See Dec. XIV/35, Compliance with the Montreal Protocol by the Russian Federation, Report of the Fourteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, U.N. Environment Programme, UNEP/OzL.Pro.14/9 (2002), available at <<http://www.unep.ch/ozone/mop/14mop/14mop-9.e.pdf>>.

⁷⁹ Statement by countries with economies in transition that are Parties to the Montreal Protocol – Belarus, Bulgaria, Russian Federation, Ukraine – or intend to become Parties to the Protocol – Armenia, Georgia, Kyrgyzstan – at the twelfth meeting of the Open-ended Working Group of the Parties to the Montreal Protocol, Report of the Implementation Committee Under the Noncompliance Procedure for the Montreal Protocol on the Work of its Eleventh Meeting, U.N. Environment Programme, Annex II, U.N. Doc. UNEP/OzL.Pro/ImpCom/11/1 (1995). See also Letter from Russian Federation , Ministry of Protection of the Environment and Natural Resources to Secretariat Vienna Convention and Montreal Protocol, October 9, 1995, and accompanying report entitled "Technically Feasible and Organizationally Valid Time-Table for Phasing-out Ozone-Depleting Substances (ODS)," on file with author.

stock-pile ODS in anticipation of the expected ODS production phase-out.⁸⁰ Since the Montreal Protocol's design does not limit the actual release of ODS into the atmosphere but rather limits the production of ODS, Russia's increased production and stock-piling efforts effectively exacerbated the delay of its phase-out obligation. In the end, Russia effectively ignored a series of stern admonishments of the IC and returned to compliance on a schedule that it had set for itself.

3. Transformation of Identities, Interests, and Norms

A third alternative to the use of deterrent sanctions has been the use of transformational efforts to encourage compliance. Rather than influencing state conduct through external means, such as deterrent sanctions or compliance management, transformational efforts seek to induce compliance through internal changes – by transforming the international actors themselves.⁸¹ Compliance with treaty norms is to occur because *one believes that one should do so* rather than because one *is forced to*.⁸² Like managerialism, transformational approaches reject the notion that behavior is affected only by considerations of self-interest, material advantage, and the desire for security and power. However, transformational approaches assert more broadly that state behavior is influenced by values, ideas, and identities.⁸³ They seek to harness such non-utilitarian influences much more broadly than just through the duty to obey the law.

As an illustration of such influences, consider five possible motivations for a person's decision to act in an environmentally conscientious manner. An individual can engage in recycling because: a) she is required to do so by municipal ordinance that punishes violations with a \$100 fine and because she wants to avoid the fine; b) she wants to gain social approval for her environmentally conscientious conduct and avoid the social disapproval associated with throwing recyclables into the trash; c) even though she finds it inconvenient and time-consuming to recycle, she values the environment and believes that not to do so would be simply "wrong;" d) she has been taught by her parents the (unprovable) idea that she should engage in recycling because otherwise nobody else will; e) she identifies herself as a fervent environmentalist who is committed to living in an environmentally sustainable fashion.⁸⁴ The recycling behavior

⁸⁰ See Report of the Implementation Committee Under the Noncompliance Procedure for the Montreal Protocol on the Work of its Twenty-seventh Meeting, para 15, U.N. Environment Programme, U.N. Doc. UNEP/OzL.Pro/ImpCom/27/4 (2001) (production of "Annex A and B substances [CFCs] . . . higher . . . to provide reserves to enable a smooth transition").

⁸¹ George W. Downs, *Enforcement and the Evolution of Cooperation*, 19 MICH. J. INT. L. 319, 336 ("preferences and even underlying values of States are changed as they are, in effect, socialized by the regime to the potential benefits of an increasingly ambitious regulatory agenda").

⁸² Harold Koh, *Transnational Legal Process*, *supra* note , at 203-206.

⁸³ See generally Alexander Wendt, *Anarchy is what States Make of it: The Social Construction of Power Politics*, 46 INT. ORG. 391 (1992); Judith Goldstein and Robert O. Keohane, *Ideas and Foreign Policy: An Analytical Framework*, in IDEAS AND FOREIGN POLICY: BELIEFS, INSTITUTIONS AND POLITICAL CHANGE 3, Judith Goldstein and Robert O. Keohane eds. (1993).

⁸⁴ I have tried to set out how motivations for recycling can be based in a) & b) self-interest (in avoiding formal or informal punishment and pleasure seeking), c) norms, d) ideas/beliefs, and e) identity. They are not entirely analytically distinct. For example, values are often times constitutive of identity. My point here is to illustrate the various bases that constructivists have relied upon to justify their theoretical basis.

illustrated in examples a) and b) is most often characterized as the result of formal and informal incentives. It would best correspond to realist and managerialist approaches to compliance. In contrast, in examples c), d), and e), none of the motivations for action can fairly be characterized as arising out of ordinary, utilitarian self-interest considerations.

According to constructivist descriptions of international relations,⁸⁵ Harold Koh's transnational legal process,⁸⁶ and liberal theories about compliance with international law,⁸⁷ transformation is possible because of the socially constructed nature of national identities and interests. Instead of adjusting incentives to achieve compliance, as other institutionalists would, transformational approaches focus on changing the values, ideas, identities, and interests of the state actors. If states are transformed so that they comply of their own accord, enforcement becomes unnecessary.

Koh's transnational legal process theory asserts that international legal norms, values, and beliefs can be internalized through repeated interaction, sustained discourse, and efforts at persuasion of governmental and non-governmental actors.⁸⁸ In essence, Koh proposes that states can be "socialized" into the values and norms of the international legal system just as children are into a society's values and norms through educational and other social processes. Specific channels of action include the work of transnational activists and NGOs, diplomatic interactions and discourse, pronouncements of individuals or entities with authority (such as the International Court of Justice), and the work of epistemic communities.⁸⁹

Epistemic communities have been especially influential with respect to international environmental issues. They are "network[s] of professionals[, such as scientists,] with recognized expertise[,] competence[,] and an authoritative claim to policy-relevant knowledge within [the] issue-area."⁹⁰ Because of the technical and scientific expertise demands of understanding and addressing environmental problems such as stratospheric ozone depletion and global climate change, epistemic communities have been unusually influential in shaping the perception of reality, the framing of issues, and the identification of national interests.⁹¹ For example, the adoption of the ozone treaties and the phase-out of CFCs was driven in large part by the advocacy work of atmospheric scientists and environmentalists.⁹²

⁸⁵ See, e.g., Alexander Wendt, *Collective Identity Formation and the International State*, 88 AM. POL. SC. REV. 384, 388-391 (1994); Kenneth W. Abbott, *International Relations Theory*, *supra* note , at 361.

⁸⁶ See Koh, *Transnational Legal Process*, 75 NEB. L. REV. 181 (1996). Koh's theory is the application of the legal process school to international law. See Henry M. Hart and Albert M. Sacks, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* (1994).

⁸⁷ See Helfer & Slaughter, *supra* note , at 334-335; Fernando R. Teson, *The Kantian Theory of International Law*, 92 COLUM. L. REV. 53 (1992) (liberal states more committed to the rule of law).

⁸⁸ Koh, *Transnational Legal Process*, *supra* note , at 203-205.

⁸⁹ See Harold Hongju Koh, *Bringing International Law Home*, *supra* note , at 642-663 (also called transnational issue networks by Koh); see also YOUNG, *THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL REGIMES*, *supra* note , at 23-25.

⁹⁰ Peter M. Haas, *Introduction: Epistemic Communities and International Policy Coordination*, 46 INT. ORG. 1, 3 (1992).

⁹¹ Emanuel Adler & Peter M. Haas, *Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program*, 46 INT. ORG. 367, 375-377 (1992).

⁹² See, e.g., Peter M. Haas, *Banning Chlorofluorocarbons: Epistemic Community Efforts to Protect Stratospheric Ozone*, 46 INT. ORG. 187 (1992); RICHARD ELLIOT BENEDICK, *OZONE DIPLOMACY: NEW DIRECTIONS IN*

The attraction of constructivist approaches has been their emphasis on cooperative and non-confrontational efforts. Positive measures, such as education, persuasion, and technical assistance, are considered to play on the desire to accept responsibility for one's obligation.⁹³ In contrast, traditional deterrent sanctions are seen not only as unnecessary but also as counter-productive because they evoke resentment, hostility, and resistance.⁹⁴ The justification largely operationalizes the adage that one is more likely to catch flies with honey than with vinegar.

Transformational approaches are the most difficult of the three alternatives to assess with regard to effectiveness. After all, norm internalization and transformation usually do not result in easily visible changes or particular acts. Instead, they seek to induce broad changes in attitudes and behavior. Isolated instances of treaty violations do not in themselves disprove transformational change.

Criticism of transformation is similar to that directed at managerialism. Avoidance of deterrent sanctions raises the question whether compliance is likely to occur when large stakes are at issue. Furthermore, the lack of deterrent responses may be perceived by the violator and other states as a lack of commitment to treaty norms.

Transformational approaches also have been blamed for contributing to "shallow" treaty obligations,⁹⁵ a persistent complaint about environmental treaties. While many espouse lofty ideals about serious global commons problems and grand hortatory language, such agreements are often implemented only with weak norms and obligations. They arguably cater to the least common denominator because of the emphasis on cooperation. The resulting treaty may not demand much in terms of substantive changes in behavior, significant commitments of resources, or other inconvenient or substantial sacrifices.

For example, the 1992 U.N. Framework Convention on Climate Change embodied the aspirations of the industrialized states to cut greenhouse gas emissions levels to 1990 levels by the year 2000.⁹⁶ However, the parties were unable to achieve a consensus on binding emissions reductions targets. Instead, they adopted a "pledge and review" process that created non-binding commitments.⁹⁷ The "pledge and review" commitments failed to achieve the desired results and

SAFEGUARDING THE PLANET (1998). Issue 1 of volume 46 of *International Organizations* (1992) is entirely devoted to epistemic communities relevant to various international regimes.

Another example includes the evolution of the influence and power of the European Court of Justice and European Court of Human Rights to induce widespread adherence to their judgments. See Helfer & Slaughter, *supra* note , at 290-298, 309-310, 353, 371-373

⁹³ See, e.g., Clifford Rechtschaffen, *Deterrence vs. Cooperation And The Evolving Theory of Environmental Enforcement*, 71 S. CAL. L. REV. 1181, 1203-04 (1998).

⁹⁴ See, e.g., Martti Koskenniemi, *New Institutions and Procedures for Implementation Control and Reaction*, in GREENING INTERNATIONAL INSTITUTIONS 236 (Jacob Werksman ed. 1996); William J. Davey, *Dispute Settlement in GATT*, 11 FORDHAM INT. L. J. 51, 67-79 (1987).

⁹⁵ George Downs, et al., *The Transformational Model of International Regime Design*, *supra* note , at 478-79, 502-509; George Downs et al., *Enforcement and the Evolution of Cooperation*, *supra* note , at 332-335; George Downs, *Managing the Evolution of Multilateralism*, 52 INT. ORG. 397 (1998); David G. Victor, *Enforcing International Law: Implications for an Effective Global Warming Regime*, 10 DUKE ENVTL. L. & POL'Y F. 147 (1999).

⁹⁶ UNFCCC, arts. 4(2)(a) & (b).

⁹⁷ Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 YALE J. INT'L L. 451, 512-520 (1993).

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led to the adoption of the Kyoto Protocol targets.⁹⁸

II. Treaty Enforcement as a Public Good

Environmentalists concerned with protecting the environmental commons have long been familiar with the difficulties of generating or conserving public goods.⁹⁹ Coincidentally, treaty enforcement is itself a form of an open access public good.

A. The Nature of Public Goods

A public good is commonly described as any good that, once created, nobody can be excluded from making use of or benefitting from it.¹⁰⁰ Thus, “those who do not purchase or pay for any of the public . . . good cannot be excluded or kept from sharing in the consumption of the good.”¹⁰¹ The most common examples are air, national defense, or even the system of law and order more generally. Enforcement of legal norms is a public good because it generates widespread benefits, ranging from safety and security from violence and anarchy to the affirmative support of the pursuit of individual happiness.

In his seminal work on collective action, Mancur Olson pointed out that even though public goods benefit everybody, divergence between individual and common interests oftentimes undermines efforts to generate them. Since the benefits of public goods are non-excludable once they are created, why help generate them? In fact, since public goods are frequently costly, requiring money, time, or other resources, there is a disincentive to join in their creation.¹⁰² Shirking and other strategic behavior appear to be a rational and inevitable response.¹⁰³

Within national legal systems, the state creates much of the enforcement good through public funding of the judiciary and law enforcement authorities. Unfortunately, in the international legal system there are no general subsidies or coordination of enforcement activities.

⁹⁸ Claire Breidenich, Daniel Magraw, Anne Rowley, James W. Rubin, *The Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 92 AM. J. INT’L L. 315, 318 (1998).

⁹⁹ See, e.g., Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

¹⁰⁰ Strictly speaking, public goods are defined by “jointness of supply” and “impossibility of exclusion.” See Russell Hardin, *Collective Action* 17. Jointness of supply means that “one person’s consumption . . . does not reduce the amount available to anyone else.” *Id.* Impossibility of exclusion means just that – that “it is impossible to prevent relevant people from consuming it.” *Id.* While enforcement satisfies both criteria of public goods, for many environmental goods, and those discussed by Mancur Olson, see Olson, *supra* note ___, at 14-15 n.21, only the characteristic of impossibility of exclusion, as a practical matter, is relevant.

¹⁰¹ Olson, *supra* note ___, at 14-15.

¹⁰² The best known narrative description of such collective action difficulties is the “prisoner’s dilemma.” See, e.g., E. Donald Elliott et al., *Toward a Theory of Statutory Evolution: The Federalization of Environmental Law*, 1 J. L. ECON. & ORG. 313, 324 (1985); WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 39-42 (1994 2d ed.); BAIRD, GERTNER, AND PICKER, GAME THEORY AND THE LAW, *supra* note ___, at 33-34; ROBERT AXELROD, THE EVOLUTION OF COOPERATION 7-8.

¹⁰³ According to Olson, “unless the number of individuals is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, *rational, self-interested individuals will not act to achieve their common or group interest.*” Olson, Jr., *supra* note ___, at 2.

B. The Public Good Characteristics of International Treaty Enforcement

Enforcement by institutional deterrent sanctions is a public good in two distinct modes: First, institutional deterrent sanctions are instrumental means for promoting compliance. Second, they express the parties' commitment to the norms embodied in the treaty and the rule of law.

1. Instrumentally Assuring Treaty Compliance: Ensuring Treaty Effectiveness and Preserving the Benefit of the Bargain

Institutional deterrent sanctions are primarily viewed as an instrumental means for promoting compliance. They contribute to treaty effectiveness by preventing parties from shirking their commitments and ensuring that parties receive the benefit of their bargain. Benefits of international agreements will be reciprocal in practice rather than only on paper, and states can make deeper commitments.¹⁰⁴

However, treaty effectiveness and preservation of the bargain serves all parties regardless of their contribution to enforcement efforts. In environmental treaties protecting open access commons, the benefits also extend to non-parties. For example, strict adherence to the phase-out schedule of ozone depleting substances under the Montreal Protocol contributes to the protection of the stratospheric ozone layer. Since the ozone layer is a part of the non-excludable atmospheric commons, all inhabitants of earth, including states outside of the Montreal Protocol treaty system, are benefitted.¹⁰⁵

2. Maintaining Treaty Norms: Expressive Functions of Treaty Enforcement

Compliance is not the sole criterion for the usefulness of traditional enforcement mechanisms.¹⁰⁶ Even in domestic legal systems, the use of deterrent sanctions does not achieve perfect compliance. A complete understanding of treaty enforcement must also consider its expressive function and its role in maintaining the normative aspects of the law.

As constructivist approaches have suggested, treaties are not just utilitarian instruments for accomplishment of some ulterior goal, a common task, or the exchange benefits. Their purpose may also be non-instrumental in character. They can recognize or establish shared values, interests, or identities.

For example, many treaty norms guaranteeing human rights,¹⁰⁷ and increasingly those embodied in environmental treaties, are to be obeyed for their own sake. For example, treating

¹⁰⁴ See DOUGLAS BAIRD, ROBERT H. GERTNER, AND RANDAL C. PICKER, *GAME THEORY AND THE LAW* 56-57 (1994).

¹⁰⁵ See generally RICHARD ELLIOT BENEDICK, *OZONE DIPLOMACY: NEW DIRECTIONS IN SAFEGUARDING THE PLANET* (1998).

¹⁰⁶ See, e.g., W. MICHAEL REISMAN, *NULLITY AND REVISION*, *supra* note , at 648-49. *But see* Payson S. Wild, *supra* note , at 8.

¹⁰⁷ See, e.g., Steiner & Alston, *supra* note , at 104-105.

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endangered species humanely while they are in international transit¹⁰⁸ is appropriate because it is the morally and ethically right act. Like Kant's categorical imperatives, obedience to such norms is inherently appropriate regardless of their utilitarian effects. Adherence to such norms is not merely a tool for the achievement of other objectives, it also affirms the significance of morality and ethics in shaping human conduct.¹⁰⁹

Similarly, the framework conventions on climate change and ozone depletion identify a common interest in avoiding the adverse impacts on the global ecological system and humanity of anthropogenic modification of the atmospheric commons and the stratospheric ozone layer, respectively. The United Nations Charter can be seen as an affirmation of the parties' identity as peaceful members of the community of nations,¹¹⁰ with all the attendant expectations about future behavior and actions. As an expression of shared interests and identities, such treaty norms delineate a community to which the treaty members subscribe to.

If a treaty can be seen as an expression of a consensus about moral norms, interests, and identity, noncompliance damages that consensus.¹¹¹ In essence, to paraphrase Robert Cover, the violator's noncompliance actions put forth an alternative normative universe.¹¹² Enforcement actions are necessary to affirm the existence and primacy of a common normative community to which all treaty parties belong to, including the violator.

Unlike a morally neutral disincentive, such as a tax,¹¹³ sanctions signal disapproval and denounce the wrongful act.¹¹⁴ They express the significance of the institution's concern with the

¹⁰⁸ See Convention to Regulate International Trade in Endangered Species of Flora and Fauna, art. III(2)(c), 12.I.L.M. 1085 (1973) (norm requiring the humane in-transit treatment of endangered species).

¹⁰⁹ See, e.g., H.L.A. Hart, *supra* note ___, at 199-200 (1961). Cf. Peter Huang, *International Environmental Law and Emotional Rational Choice*, 31 J. LEG. STUD. S237 (2002) (emotional or psychological attachment to particular norms).

¹¹⁰ Charter of the United Nations, art. 2 & chap. 6, 59 Stat. 1031.

¹¹¹ For an example of the perils of a lack of norm consensus, see David Caron, *The International Whaling Commission*, *supra* note ___. Cf. Laurence J. Helfer, *Overlegalizing Human Rights: International Relations Theory and the Commonwealth Caribbean Backlash Against Human Rights Regimes*, 102 COLUM. L. REV. 1832 (2002) (disagreement about substantive content and obligations of human rights treaties resulting in denunciation of treaties by some parties).

¹¹² See Robert M. Cover, *Nomos and Narrative*, 97 HARV. L. REV. 4, 54-60.

¹¹³ See, e.g., A. PIGOU, *THE ECONOMICS OF WELFARE* 256-62 (2d ed. 1924).

¹¹⁴ For example, the act of recalling of diplomatic personnel or severing diplomatic relations is unlikely to have significant coercive effect on another state. It is a common sanctions tool, however, because of its symbolism in showing disapproval. See, e.g., ROYAL INSTITUTE OF INTERNATIONAL AFFAIRS, *SANCTIONS*, *supra* note ___, at 24-25 (2d ed. 1935); Charter of United Nations, art. 41. See generally Ronald T. Rychlak, *Society's Moral Right to Punish: A Further Exploration of the Denunciation Theory of Punishment*, 65 Tul. L. Rev. 299, 331-339 (1990); Jaime Melawad-Goti, *Transitional Governments in the Breach: Why Punish State Criminals*, 12 Hum. Rt. Q. 1, 11-12 (1990). Cf. See INTERNATIONAL LAW COMMISSION, *DRAFT ARTICLES ON RESPONSIBILITY OF STATES FOR INTERNATIONALLY WRONGFUL ACTS*, Report of the International Law Commission on the Work of its Fifty-third Session, Official Records of the General Assembly, Fifty-sixth session, Supplement No. 10, A/56/10, chp. IV.E.1 (2001), art. 38 cmt. 3, at 264 ("Satisfaction . . . is the remedy for those injuries, not financially assessable, which amount to an affront to the State. These injuries are frequently of a symbolic character, arising from the very fact of the breach of the obligation, irrespective of its material consequences for the State concerned.") .

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norm violation¹¹⁵ and that the other parties actually “care” about the treaty’s norms and their breach. As Elizabeth Anderson and Richard Pildes have put it: “There are some things we can express only with deeds, because words alone cannot adequately convey our attitudes.”¹¹⁶ Enforcement affirms that commitment.¹¹⁷

In this form, enforcement is a public good because it protects the continued existence of the community for the benefit of all. If norm enforcement is also viewed as an independent Kantian duty, then it also benefits everybody else by fulfilling that duty on behalf of non-participating community members.

Most practically though, protecting and preserving normative communities can have long-term transformational benefits. If norms, interests and identities of community members are preserved or more closely aligned with overall treaty goals and purposes, voluntary compliance will improve and punitive corrective actions may be less necessary.

3. Strengthening Conformance with the Rule of Law

In addition to strengthening particular substantive norms, enforcement also promotes a more general norm: the rule of law.¹¹⁸ Because of its significance as a norm that is not only present in all treaties, but also exists as an independent norm in international law, it is treated separately here.

Governance under law “is vital for the security and well-being of the complex international community of the present day [by ensuring] the ordered progress of relations between its members.”¹¹⁹ The rule of law requires that those governed by law act according to what is legally right or wrong rather than what is convenient or within their self-interest. It protects against anarchy, assures predictability and advances knowledge about the application of legal rules, and guarantees impartial justice.¹²⁰ Its operation allows for the existence of an international community of nations as opposed to a true Hobbesian state of anarchy and constant war. Institutional deterrent sanctions are public goods because they preserve and protect a community delineated by the rule of law against “law-lessness” and anarchy.

The power of the rule of law is most apparent in the influence of the International Court of Justice and the United Nations system. Even though the ICJ lacks easily utilized enforcement mechanisms, respect for law is arguably an important source of the Court’s authority and persuasive influence. Likewise, Jose Alvarez has noted that “much of the effectiveness of the

¹¹⁵ See MARGARET P. DOXEY, *INTERNATIONAL SANCTIONS IN CONTEMPORARY PERSPECTIVE* 57-65 (1996) (symbolic function of sanctions); see also Michael W. Macy, *Backward-Looking Social Control*, 58 AM. SOC. REV. 819, 820 (1993).

¹¹⁶ Anderson & Pildes, *Expressive Theories of Law*, *supra* note , at 1567-68. See also REISMAN, *NULLITY AND REVISION*, *supra* note , at 649; Thomas Franck, *Legitimacy in the International System*, 82 AM. J. INT. L. 705, 725-26 (1988) (reinforce relationship of rights and duties); George H. Dession, *The Technique of Public Order: Evolving Concepts of Criminal Law*, 5 BUFF. L. REV. 22, 25-26 (1955) (“the actions of the community are likely to speak louder than its words”).

¹¹⁷ Robert M. Cover, *Nomos and Narrative*, *supra* note .

¹¹⁸ See, e.g., *Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 163 (1803).

¹¹⁹ United States Diplomatic and Consular Staff in Tehran, I.C.J. Reports 1980, p. 3, at p. 43, para. 92.

¹²⁰ See Richard Fallon, “*The Rule of Law*” as a Concept in Constitutional Discourse, 97 COLUM. L. REV. 1, 7-8 (1997).

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UN collective security system is due . . . to the idea that when international subjects act, they do so under the rule of law.”¹²¹

Institutional deterrent sanctions strengthen the rule of law in two particular manners: 1) they ensure that the response to a treaty violation is impartial and governed by law, and thus legitimate and fair; and 2) they reinforce the best known manifestation of the rule of law in all treaties -- *pacta sunt servanda*, the duty to comply with treaty obligations undertaken.¹²²

a. Ensuring the Legitimacy of Sanctions Responses

The institutional nature of enforcement ensures that sanctions responses are legitimate. Without institutional control and endorsement, the appropriate use of coercive sanctions would oftentimes be indistinguishable from its inappropriate use. The institutional nature of enforcement mechanisms provide a non-arbitrary and impartial method for resolving questions about the appropriateness and severity of sanctions. The threat of legally unjustified and disproportionate uses of deterrent sanctions is reduced. All treaty parties benefit by being assured that they will not arbitrarily become sanctions target.

The institutional character of enforcement can also reduce the cost of sanctioning efforts and increase sanctions effectiveness.¹²³ Sanctions legitimacy reduces opposition and resistance but and thereby the likelihood of retaliation. In fact, the larger the number of states participating in an enforcement action, the greater the sanctions target’s cost of resentment and retaliation. Conversely, if sanctions illegitimacy is severe, resistance may be great and overall effectiveness of the entire treaty system may be undermined and all treaty parties harmed.¹²⁴

b. *Pacta Sunt Servanda* and the Obligation to Obey the Law

The rule of law also requires that state conduct conform with the duty to obey legal obligations – the “super-norm” *pacta sunt servanda*.¹²⁵ *Pacta sunt servanda* is not like other treaty norms.¹²⁶ Its existence is necessary to all treaties, and all treaty commitments presuppose it.¹²⁷ It also carries into reality the nature of law as a set of rules that must be obeyed rather than only looked to for guidance.

¹²¹ Jose Alvarez, *Judging the Security Council*, 90 AM. J. INT. L. 1, 31 (1996). See also Schachter, *supra* note , at 8.

¹²² The rule that “agreements . . . must be observed.” Black’s Law Dictionary (5th ed. 1979); Vienna Convention on the Law of Treaties, art. 26.

¹²³ See, e.g., R. FISHER, IMPROVING COMPLIANCE WITH INTERNATIONAL LAW, *supra* note , at 59-62; Daniel W. Drezner, *Bargaining, Enforcement and Multilateral Sanctions: When Is Cooperation Counterproductive?*, 54 Int. Org. 73, 76-77 (2000). Even the effectiveness of military intervention as a unilateral sanction presupposes neutrality of third-party countries in the military conflict.

¹²⁴ See, FISHER, IMPROVING COMPLIANCE WITH INTERNATIONAL LAW, *supra* note , at 99.

¹²⁵ See also Helfer & Slaughter, *supra* note , at J. 273, 332 n. 259 (*pacta sunt servanda* as a “meta-norm”); H.L.A. Hart, *supra* note ____, at 228 (1961) (“basic norm” of international law).

¹²⁶ See, e.g., KELSEN, GENERAL THEORY OF LAW AND STATE *supra* note , at 369-70; Roger Fisher, *Bringing Law to Bear on Governments*, *supra* note , at 1138-39. In fact, it has been suggested that *pacta sunt servanda* is a preemptory norm of international law. See MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW 65-66 (3rd ed.).

¹²⁷ See, Jonathan I. Charney, *Universal International Law*, 87 AM. J. INT. L. 529, 534 (1993).

Enforcement of *pacta sunt servanda* has an important expressive function. Enforcement signals the expectation that legal norms are to be obeyed for their own sake, even if doing so is inconvenient or against immediate material self-interest – simply because they are law. It contributes to the “international legalization” of *pacta sunt servanda*.¹²⁸ Thus, compliance is not just an act of moral excellence, but rather the fulfillment of a minimal duty.

The long-term benefits may be a greater degree of voluntary compliance, reduced need for future enforcement actions, and correspondingly lower future enforcement costs.¹²⁹ It might also increase the willingness of states to commit to broader and deeper obligations in future international agreements. Parties would be able to address a broader set of global environmental and other issues in a more aggressive manner, having greater confidence that the mutually-agreed commitments would be kept. Lack of enforcement can de-moralize other complying members, leading them to question the overall fairness of the treaty regime and undermining the parties’ commitment to it.¹³⁰

III. The Problem of Generating the “Enforcement Good”

If treaty enforcement is conceptualized as a public good, the collective action and strategic behavior difficulties become readily apparent.¹³¹ But there are also two other closely related problems that are significant: the second order nature of the collective action problem and the normative foundations of compliance. They are all structural obstacles to the creation of the “enforcement good” and lead to less enforcement than ideally desirable.

A. Strategic Behavior in Treaty Enforcement

As a public good, treaty enforcement must overcome collective action difficulties in contribution toward the cost of enforcement:¹³² loss of human life and financial costs in military interventions, damage to the sanctioner’s own economic well-being through economic sanctions, and generally the possibility of resentment and retaliation by the target. In fact, economic

¹²⁸ Kenneth W. Abbott and Duncan Snidal, *Values and Interests: International Legalization in the Fight Against Corruption*, 31 J. LEG. STUD. S141 (2002).

¹²⁹ A safer world with fewer conflicts for those already following the rule of law should be the result. *See, e.g.*, Samuel Huntington, *American Ideals Versus American Institutions*, in AMERICAN FOREIGN POLICY, 237 (1989), G.I. Kenberry, ed. (promotion and enforcement of American values ultimately provides greater security for the U.S.).

¹³⁰ *See* Drezner, *Bargaining, Enforcement and Multilateral Sanctions*, *supra* note __, at 83-85 (backsliding of cooperation); LISA MARTIN, COERCIVE COOPERATION, *supra* note __, at 40-43 (bandwagon effect). The problem would be especially serious if it continued after an authoritative determination of noncompliance. *See* FISHER, IMPROVING COMPLIANCE WITH INTERNATIONAL LAW, *supra* note __, at 28-29.

¹³¹ *See, e.g.*, Joanne Gowa, *Rational Hegemons, Excludable Goods, and Small Groups: An Epitaph for Hegemonic Stability Theory?*, 41 WORLD POL. 307, 319-322 (1989); LISA L. MARTIN, COERCIVE COOPERATION: EXPLAINING MULTILATERAL ECONOMIC SANCTIONS (1992); J. Fearon, *Bargaining, Enforcement, and International Cooperation*, 52 INT. ORG. 269 (1998); Daniel Drezner, *Bargaining, Enforcement and Multilateral Sanctions*, 54 INT. ORG. 73 (2000).

¹³² *See, e.g.*, Margaret P. Doxey, *supra* note __, at 106-109. The problem does not usually arise in bilateral treaties since the cost of breach is concentrated on the other party.

sanctions create a positive incentive to shirk participation.¹³³

When at least one party has a particularly large stake in ensuring compliance, such as a special harm, the individual benefits can outweigh the costs, and enforcement may still occur.¹³⁴ However, that is not likely to be the case for most environmental agreements.¹³⁵ Not only is the harm to the environmental commons spread out over many states. It may even be externalized to states that are not even party to the environmental agreement, and who thus have no formal standing within the treaty itself.

Many environmental problems, such as ozone depletion and global climate change, are the cumulative result of years, decades, and sometimes even centuries of pollution and environmental degradation. The marginal harm from any particular treaty breach may appear small compared to the overall problem. If the agreement is designed to promote intangible or incommensurable values, such as human rights or biological diversity, there is *no* directly perceptible or quantifiable harm.

The result is fewer resources devoted to encouraging compliance than might be desirable or economically efficient.¹³⁶ If the costs are very high compared to the detriment of noncompliance, as may frequently be the case with unilateral sanctions, *no* single state may find it worth its while to pursue sanctions. That may be true even if the treaty breach is substantial and serious, and enforcement could create an overall benefit to the treaty system and other parties.

Arguably, there are limits to the influence of this dynamic. Iterative processes and long-term interactions alleviate free-rider difficulties. Lengthening the time horizon and the availability of repeated interactions create opportunities for parties to reward cooperators or sanction defectors, thus increasing the level of cooperation in enforcement actions.¹³⁷ Social structures and norms can be influential as well.¹³⁸

However, the problem remains significant. For example, even though participation in United Nations peace-keeping activities may involve a surprisingly large number of nations,¹³⁹

¹³³ See, e.g., Margaret P. Doxey, *supra* note ____, at 27-31.

¹³⁴ For example, within the World Trade Organization, tariffs that are applied in a non-discriminatory fashion on all imports of a particular good usually still have discriminatory effects on particular countries. Countries tend to specialize in particular export goods, and not all are engaged in trade of the same items. Violations of previously negotiated tariffs oftentimes have special impacts on particular states. Such states will have a special incentive to bring enforcement actions.

¹³⁵ Bilateral treaties constitute a special case since breaches by one party can localize the harm wholly on the other party. Mancur Olson, *The Logic of Collective Action* 43, 45.

¹³⁶ See, e.g., Abram Chayes, Antonia Handler Chayes and Ronald B. Mitchell, *Managing Compliance: A Comparative Perspective*, in WEISS AND JACOBSON, *ENGAGING COUNTRIES*, *supra* note ____, at 53, *See generally* section IV(C).

¹³⁷ See, e.g., ROBERT AXELROD, *THE EVOLUTION OF COOPERATION*, *supra* note ____, Baird et al., *supra* note ____, at 159-187; LISA MARTIN, *COERCIVE COOPERATION*, *supra* note ____. Martin also points to strong leadership and “bandwagoning” effects as means for overcoming free-rider problems. Lisa Martin, *supra*. However, as with unilateral sanctions, that seems only likely to occur effectively with powerful states such as the United States.

¹³⁸ See ELLICKSON, *ORDER WITHOUT LAW*, *supra* note ____, ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990).

¹³⁹ There were 165 UN peacekeeping missions during 1993-2002. In 2002 alone, 39,652 persons from 89 countries contributed to peacekeeping operations. The United Nations Department of Peacekeeping Operations, *The United*

participation is far from consistent and universal. Moreover, the low rate of utilization of bilateral and multilateral dispute settlement mechanisms, especially in environmental agreements, indicates that strategic behavior remains a considerable problem.

B. The Second Order Collective Action Problem: Carrots, Sticks, and the Distinction of *Ex Post* from *Ex Ante* Approaches to Compliance

The difficulties of structuring incentives have been studied generally in the design of international environmental treaty regimes.¹⁴⁰ Enforcement collective action problems are, however, complicated by their second order nature. The distinction of deterrent sanctions from positive compliance incentives is illustrative.

The most common metaphor used to describe the difference between deterrent sanctions and positive incentives is the carrot and stick image. It is said to be the key characteristic distinguishing managerial and transformational approaches from deterrence-based approaches. Managerial and transformational compliance models rely primarily on positive incentives to induce compliance, while institutional and unilateral sanctions mechanisms are commonly thought to rely primarily on negative disincentives such as punitive sanctions – hence the image of carrots and sticks.

However, the carrots and sticks metaphor is deceptive. Even though it seeks to contrast cooperative from punitive approaches, it also suggests a fundamental equivalence. Since punitive sanctions are negative forms of incentives, they are arguably the converse to positive incentive mechanisms. Both of their overall influence on the regulated entities is seen as fundamentally the same – manipulation of incentives and disincentives for particular behavior.

If they are equivalent, however, supporters of cooperative approaches would suggest that positive incentives are superior to deterrence. Carrots avoid resentment and are much less likely to antagonize parties than punitive sanctions sticks. Goodwill and voluntary compliance would arguably be a significant advantage in making a treaty more effective.

Unfortunately, the metaphor masks two significant qualitative differences.¹⁴¹ First, institutional deterrent sanctions differ not merely in their reliance on negative incentives.¹⁴²

Nations Monthly Summary of Military and Civilian Police Contribution to United Nations Operations. (Dec. 2002), available at: <<http://www.un.org/Depts/dpko/dpko/contributors/December2002Summary.pdf>>.

¹⁴⁰ See, e.g., Ronald Mitchell, *Compliance Theory: An Overview*, in CAMERON, ET AL., IMPROVING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL LAW, *supra* note , at 16-19; Jonathan Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 YALE L. J. 677 (1999); HUNTER ET AL., INTERVENTIONAL ENVIRONMENTAL LAW AND POLICY, *supra* note , at 471-475.

¹⁴¹ While beyond the scope of the discussion here, Daniel Drezner has pointed to the reputational effects that use of and response to positive incentive and negative incentive has on their effectiveness. See D. DREZNER, THE SANCTIONS PARADOX: ECONOMIC STATE CRAFT AND INTERNATIONAL RELATIONS 1-6 (1999); see also Daniel Drezner, *The Trouble with Carrots: Transaction Costs, Conflict Expectations, and Economic Inducements*, in POWER AND THE PURSE: ECONOMIC STATE CRAFT, INDEPENDENCE, AND NATIONAL SECURITY (Jean-Marc Blanchard et. al. eds.) (2000).

¹⁴² See Karin Mickelson, *Carrots, Sticks or Stepping Stones: Differing Perspectives on Compliance with International Law*, in TRILATERAL PERSPECTIVES ON INTERNATIONAL LEGAL ISSUES: FROM THEORY TO PRACTICE 35, 36 (Thomas J. Schoenbaum et al. eds. 1998); Pamela Oliver, *Rewards and Punishments as Selective Incentives for Collective Action: Theoretical Investigations*, 86 AM. J. SOC. 1356, 1361 (1980).

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They also act in very different time-frames. Cooperative approaches and positive incentives are *ex ante* approaches that seek to prevent noncompliance events from occurring in the first place. In contrast, deterrent sanctions are *ex post* approaches to norm compliance that are not triggered until after a treaty breach has occurred or as it is about to unfold. The problem of enforcement does not arise until after a party has decided that all of the institutional incentives, dis-incentives, and *ex-ante* breach constraints are insufficient to induce it to comply.¹⁴³ Enforcement mechanisms, by their nature, are not triggered *until all ex ante efforts at achieving compliance have failed*.

Second, the suggestion of equivalence also obscures differences in the difficulties of generating such incentives. Unlike money, the quintessential positive incentive, there is no easy way to “store” or otherwise produce the effect of most punitive sanctions in advance of their need. Instead, they must be invoked after a treaty breach has occurred. For example, economic embargoes are the result of a refusal to trade goods. Such negative actions cannot be taken in advance of or independent of the punitive effect.

At the same time, states have been loathe to cede control over the tools that can produce the effects of deterrent sanctions, the very reason for the difficulty of creating a centralized enforcement authority. Making deterrence resources, such as military troops, available in sufficient numbers so as to constitute a serious deterrent force would cede sources of national power and security to others. Similarly, giving regulatory control over commerce and banking activities to a treaty institution in advance of breach, so that it may impose punitive import tariffs or freeze assets in response to noncompliance, would seriously diminish a state’s sovereign control and autonomy over the activities within its own borders. Thus, providing treaty institutions with the tools of generating the effects of deterrent sanctions faces even greater hurdles.

Given that the production of institutional deterrent sanctions must occur after noncompliance has happened, enforcement presents a collective action problem that does not arise until after a breach has occurred.¹⁴⁴ It raises distinct second order collective action problems that must be dealt with differently from the underlying problems addressed by the treaty.¹⁴⁵ In essence, these difficulties indicate that the need for *ex post* norm enforcement

¹⁴³ The types of breaches that I am focusing on here are those that are not inadvertent or accidental.

¹⁴⁴ Recognition of this problems has led to descriptions of international legal norm implementation as two-phased: 1) the bargaining phase, and 2) the enforcement phase. See J. Fearon, *Bargaining, Enforcement, and International Cooperation*, 52 INT. ORG. 269 (1998). The bargaining phase represents the stage of international action when the treaty’s norms are initially negotiated. It deals directly with the primary collective action problem requiring international cooperation, such as global climate change or economic protectionism. The enforcement phase represents the post-treaty adoption stage when implementation and compliance with the agreed-to treaty norms and obligations becomes crucial and defections from commitments must be addressed.

¹⁴⁵ See, e.g., Richard McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH L. REV. 338 (1997); CHAYES, *THE NEW SOVEREIGNTY*, *supra* note , at 64; Payson S. Wild, *supra* note , at 204. In fact, there is an infinite regression of collective action problems that enforcement raises. Failure by non-breaching parties to participate in enforcement actions should itself be the subject of an enforcement action (i.e., enforcing participation in an enforcement action), and so on. For one proposed solution to this infinite regression problem, see Paul G. Mahoney and Chris. W. Sanchirico, *Norms, Repeated Games, and the Role of Law*, University of Virginia School of Law 2002 Law and Economics Research Papers Series, Working Paper No. 02-3 (May 2002), available at <http://ssrn.com/abstract_id=311879>.

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cannot be completely eliminated or supplanted by *ex ante* positive incentives.

C. The Normative Foundations of Compliance and Enforcement

A third difficulty in triggering enforcement responses to noncompliance can be attributed to the frailty of the normative foundations of compliance and enforcement. Within international diplomatic practice and the self-interested and national security driven decision-making processes of states, instrumental views of treaties and of enforcement predominate. The normative foundations of treaties, compliance, and enforcement have largely taken a backseat. Two problems arise for the proper enforcement of treaty norms. First is the proper valuation of the normative benefits of enforcement. Second is the role of the authoritative and autonomous nature of treaty norms.

1. The Dual Nature of Treaties and the Predominance of Instrumental Perspectives

Contemporary discourse about environmental enforcement and compliance has focused primarily on its instrumental functions – ensuring treaty effectiveness and preserving the benefit of the bargain.¹⁴⁶ As previously noted, environmental treaties also advance normative goals, including promoting the normative framework created by an agreement and the rule of law.

These competing views arise out of the dual nature of treaties: environmental agreements are at once both contract and legislation. That duality reflects their origins in the acts of sovereigns that are legally autonomous and independent of each other. Like contracts, treaties impose only obligations to the extent that the sovereigns have consented to them. Like an act of legislation, they also restrict a state's freedom of action through the newly-created legal norm, and hence cedes some amount of sovereignty to the treaty regime.

As contracts, treaties are designed to achieve the utilitarian purposes of the parties by “creating legal rights and obligations between” them.¹⁴⁷ Similar to contracts between private individuals, treaties are voluntary and reciprocal commitments based on mutual consent. The rules governing treaty application and interpretation incorporate many principles governing the creation, interpretation, and conclusion of contracts.¹⁴⁸ For example, the creation of a treaty

¹⁴⁶ See, e.g., *supra* note 2. See also INTERNATIONAL LAW COMMISSION, *supra* note ____, art. 49 cmt. 3, at 326.

¹⁴⁷ H. LAUTERPACHT, INTERNATIONAL LAW: A TREATISE, VOL. 1, 877 (1955). See also Restatement (Third) of the Foreign Relations Law of the United States, pt. III, introductory note, p. 147 (treaty law “resembles domestic contract law, as international agreements often resemble contracts”); SHABTAI ROSENNE, DEVELOPMENTS IN THE LAW OF TREATIES 1945-1986, at 186 & n. 8. See also *Geofroy v. Riggs*, 133 U.S. 258, 271 (1890); *Foster v. Neilson*, 27 U.S. (2 Pet.) 253, 314 (1829).

¹⁴⁸ Brierly, *supra* note , at 243 (“[i]n most respects the general principles applicable to private contracts apply”). See also Vienna Convention on the Law of Treaties, 1155 U.N.T.S. 331 (1969). Of course, “analogies from the contract law of any particular country are to be used with caution.” Rest. 3rd Foreign Relat. Law pt. III, introductory note, p. 147 (1987). For example, requirements such as consideration have no applicability. Brierly, *supra* note , at 244; Rest. 3rd Foreign Relations Law, pt. III, introductory note, p. 147. Nor does a statute of frauds exist for treaties. *Id.*

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requires both capacity and consent of the parties,¹⁴⁹ and it may be invalidated for mistake, fraud, and coercion.¹⁵⁰

The General Agreement on Tariffs and Trade is a well-known example of a contract-type treaty.¹⁵¹ Designed to promote free trade within the international community, the GATT's primary mission was, for a long time, the reduction of tariffs and trade barrier. Most characteristic of the contractual understanding of the GATT was how most of the tariff negotiation rounds occurred: by the exchange of various tariff concessions. In each of the GATT trade rounds, the contracting parties to the GATT sought to come to a mutually agreed-upon and carefully considered bargain in which each provided some tariff concessions and received others in return.¹⁵²

As legislative acts, treaties set out legal frameworks that elaborate commonly agreed-upon norms and create "general rules of conduct among a considerable number of States"¹⁵³ They are institutional mechanisms designed to advance some larger communal good or benefit.¹⁵⁴ Oftentimes, they may advance ideals and conceptions of community that do not directly inure to the benefit of any particular party, but indivisibly advance the welfare of everybody, including those not party to the treaty system. Their legislative nature is reflected in the characterization of international agreements as international *law*¹⁵⁵ as well as by their relationship to customary international law.¹⁵⁶ International treaties that the United States Senate has approved by 2/3 majority are also part of the law of the United States.¹⁵⁷

The legislation conception is most strongly expressed in "[m]ultilateral agreements open to all states."¹⁵⁸ The international human rights law system is one of the most prominent examples. Especially when they are prepared within the United Nations system, multilateral human rights instruments are designed to attract the widest participation possible and to become

¹⁴⁹ See Vienna Convention on the Law of Treaties, arts. 7-8, 11-15; see also Brierly, *supra*, note , at 243; H. LAUTERPACHT, INTERNATIONAL LAW, VOL. 1, 890. Cf. Rest. 3rd, Rest. Foreign Relations § 313, note 1 ("permissible reservation is in effect a "counter-offer").

¹⁵⁰ See Vienna Convention on the Law of Treaties, arts. 48-52.

¹⁵¹ 55 U.N.T.S. 194 (1947). While the GATT has been superseded by the WTO, most of its substantive principles and provisions continue to exist largely unaltered in the World Trade Organization.

¹⁵² See JACKSON, DAVEY, & SYKES, *supra* note , at 372-384.

¹⁵³ Lauterpacht, Oppenheim's International Law 878-79; Rosenne, *supra* note , at 124. Brierly noted that "they do in fact perform the function which a legislature performs in a state, though they do so only imperfectly." Brierly, *supra* note , at 59-60.

¹⁵⁴ See, e.g., PAUL REUTER, INTRODUCTION TO THE LAW OF TREATIES 2-3 (Jose Mico and Peter Haggemacher trans. Kegan Paul Int. 2d ed. 1995) (1972). See also Reservations to the Genocide Convention, 1951 I.C.J. Reports 15.

¹⁵⁵ See Restatement (Third) of Foreign Relations Law, pt. I, introductory note, p. 17.

¹⁵⁶ Treaties are, at a minimum, co-equal as a source of international law to customary international law. See Restatement (Third) of Foreign Relations Law § 102; Statute of the International Court of Justice, art. 38(1). Cf. Rosenne, *supra* note , at 129 (suggesting that the International Law Commission's approach to the drafting of part V (invalidity, termination, and suspension of treaties) of the Vienna Convention on the Law of Treaties reflected an understanding that was contrary to traditional principles of contract doctrines). They may also crystallize or supersede customary law. Vienna Convention art. 38; Restatement (Third) of Foreign Relations Law § 102, cmt. j. See also Shabtai Rosenne, *supra* note , 1926-1986, pp. 123-124.

¹⁵⁷ U.S. Const. art. VI, cl. 2. Restatement (Third) of Foreign Relations Law § 111.

¹⁵⁸ Restatement (Third) of Foreign Relations Law, § 102, ct. f.

universally applicable.¹⁵⁹ Multilateral environmental agreements dealing with global environmental issues also exhibit many characteristics of universality,

The contractual and legislative natures of treaties are not exclusive of each other. Many treaties exhibit characteristics of both.¹⁶⁰ Nevertheless, law-based perspectives of treaties, and international relations more generally, remain weak. Discourse about national self-interest and power, and thus the utilitarian character of treaty instruments, remain the bedrock of international politics and the foreign policy of many nations, especially the United States. In fact, the wide-spread perception and the oft-repeated slogan that “international law is not really law” is one manifestation.

2. The Problem of Valuing the Benefits of Enforcement

The contractual, utilitarian model of treaties and the remedies it affords may be appropriate for some treaties, such as international trade agreements.¹⁶¹ Unfortunately, this is likely to be the exception rather than the rule. Not all of the functions served by treaties, including the public expression and shaping of norms, values, and state identities can readily be fit into a contract model. That is especially true for multilateral agreements involving the environment and human rights. Ordinarily, contract remedies, such as compensation or reciprocal non-compliance,¹⁶² will be inadequate as an enforcement response or run counter to overall treaty objectives.

For example, compensation remedies will ordinarily run into measurement difficulties. Even when environmental harms, such as pollution, are readily visible, appropriately quantifying them and showing causation has proven to be extremely difficult. Consider responsibility for ozone depletion. Accurate valuation of the environmental and public health injuries would only be part of the challenge. Quantification would also require determining the relative contributions to ozone depletion of current and past activities of other states, taking into account the atmosphere’s natural ability to re-generate itself over long periods of time. Superimposed on these difficulties would be proof of causation problems as to what types of ecological harms and human diseases could be attributed to increased solar UV-radiation as opposed to other environmental influences.

There are also the criticisms of market-based valuation methodologies which are notorious for failing to properly account for services and other vital functions of ecological systems.¹⁶³ For many environmental goods such as clean air, no applicable markets exist. Yet, there can be no question that such services and functions are no less valuable and important to

¹⁵⁹ Restatement (Third) of Foreign Relations Law, § 313, note 1.

¹⁶⁰ See, e.g., Edwin Smith, *Understanding Dynamic Obligations: Arms Control Agreements*, 64 S. CAL. L. REV. 1549 (1991).

¹⁶¹ In the GATT and the WTO, compensation for breaches is obtained via suspension of tariff concessions – reciprocal non-compliance or a form of trade sanction. Agreement Establishing the World Trade Organization, Annex 2: Understanding on Rules and Procedures Governing the Settlement of Disputes, art. 22, 33 I.L.M. 1143 (1994). See also Jackson et al., *Legal Problems of International Economic Relations*, at 340-344; Steve Charnovitz, *Rethinking WTO Trade Sanctions*, *supra* note , at 802, 822; Joost Pauwelyn, *supra* note , at 338-341.

¹⁶² See Rest. (Third) For. Relat. sec. 901.

¹⁶³ See, e.g., *Ohio v. Department of Interior*, 880 F.2d 432 (D.C. Cir. 1989).

human life than goods available in the market place.

Even harder to assess for compensation purposes are non-economic and non-instrumental values of nature. Aesthetic and existence values are the best known and most widely accepted ones. But they also include non-economic values assigned by perspectives advocating animal rights, environmental ethics, or cultural values in the environment. Methodologies, such as contingent valuation, are helpful in this regard. The controversy surrounding their use in the U.S., however, has shown that there is little consensus about the types of environmental values that should be included and the criteria for measuring them. There is no reason to believe that such valuation difficulties are any easier to deal with internationally.

What about the diffuse and long-term benefits of strong and respected treaty norms including the rule of law: greater levels of compliance, lower enforcement costs, and more order in the international system? Or the consequences of unchecked breaches: demoralization of other complying treaty parties and the adverse precedential effect of inviting future breaches.¹⁶⁴ Quantitative valuation would seem just as difficult or impossible.

Of course, compensation is not the only remedy for breach. But any perspective driven primarily by considerations of self-interested and national security concerns would rely in the first instance on a utilitarian analysis of enforcement - the methodology underlying contract perspectives of treaties. Given difficulties of valuation, enforcement will occur at less than an optimal and desirable level.

3. The Authoritative Nature of Treaty Norms

A second problem that arises out of the predominance of instrumental attitudes is neglect of the authoritative and autonomous nature of treaty norms. First, as components of a system of public law, international treaties give rise to norms that are *legal* and thus authoritative. They command obedience regardless of inconvenience or immediate self-interest, unless excused by other legal doctrines, such as necessity, consent, and the operation of conflicting preemptory norms.¹⁶⁵ As a source of compliance, legal norms operate independently from instrumental considerations.¹⁶⁶

Second, as a legal institution, the treaty is an entity that possesses an identity and legal existence separate from that of the states that created and are parties to it.¹⁶⁷ The resulting treaty

¹⁶⁴ Cf. Yoshida, *supra* note , at 137 (noting concern by developing countries about consequences of illegal Russian ODS exports on their markets. See generally Frank Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation,"* Law, 80 HARV. L. REV. 1165, 1214-1218 (1967).

¹⁶⁵ See, e.g., INTERNATIONAL LAW COMMISSION, *supra* ____, at arts. 20-26.

¹⁶⁶ That is not to say that social welfare considerations are not be relevant. See, e.g., *United States v. Carroll Towing*, 159 F.2d 169 (2d Cir. 1947) (cost-benefit balancing in negligence analysis); see generally RICHARD POSNER, *ECONOMIC ANALYSIS OF LAW*. However, law as a basis for compliance and enforcement is not co-extensive with and necessarily dependent upon its social welfare costs and benefits. Legal norms compel obedience because conforming one's behavior to the norm is the appropriate course of action.

¹⁶⁷ See, e.g., *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 I.C.J. 174, 178-79 (1949) (allowing United Nations to recover damages on behalf of its employees against a non-member state); Rest. (Third) For. Relat. sec. 233. See also MARK W. JANIS, *AN INTRODUCTION TO INTERNATIONAL LAW*, *supra* note , at 197-99; Kenneth Abbott and Duncan Snidal, *Why States Act Through Formal Organizations*, 42 J. CONFL. RES. 3, 24-26 (1998).

norms are thus autonomous of the interests of the parties.¹⁶⁸ Norm compliance is an institutional interest that transcends the parties directly affected by a breach.¹⁶⁹

Instrumentalist approaches challenge that authoritative and autonomous character. For states that subscribe primarily to a foreign policy based on rational self-interest and power politics, norms can play no significant role in their decision-making processes. Unless social welfare analysis can provide a persuasive reason for action in response to a breach of treaty norms, such states are unlikely to take enforcement measures. If compliance occurs only and solely as a matter of immediate self-interest and convenience, it can be expected that compliance will cease when self-interest and convenience no longer provide the motivation to comply.

Worse yet, instrumentalist perspectives can lead to the subversion of appropriate enforcement responses when breach responses are deliberately manipulated. For example, a violator may bribe certain key parties, maybe the most powerful party states, in order to make inaction the rationally preferred course of action. The result might not only be failure to mobilize institutional support for sanctions but also subversion of the normative and legal character of international law more generally.

Over the years, the rule of law has arguably grown stronger within international relations. One measure may be the increased number of instances in which enforcement actions appear to be “altruistic,” and thus independent of national self-interest. U.N. Security Council intervention in a number of humanitarian crises, including in Somalia, the former Yugoslavia, and other countries in the 1990s are some examples.¹⁷⁰ Such instances remain rare, however. They remain unheard of with respect to breaches of environmental agreements, suggesting that the rule of law continues to be weak.

IV. Generating the “Enforcement Good”

Given the structural complexities of triggering enforcement actions, how can one increase enforcement responses to non-compliance? At least three general approaches suggest themselves: 1) changing the enforcement calculus, 2) promoting entrepreneurial enforcement, and 3) treaty design.

A. Changing the Enforcement Calculus

If collective inaction and strategic behavior are a result of individual self-interest misaligned with communal good, one solution is to alter the costs and benefits to promote enforcement actions. This may be accomplished either by creating incentives for behavioral changes or changing the valuation of enforcement and compliance. The result is to modify the

¹⁶⁸ See, e.g., TERRY NARDIN, *LAW, MORALITY, AND THE RELATIONS OF STATES* 3-19 (1983); Kal Raustiala & Anne-Marie Slaughter, *International Law, International Relations and Compliance*, in *HANDBOOK OF INTERNATIONAL RELATIONS* 538-558, 543 (Carlsnaes et al., eds.) (2002).

¹⁶⁹ See also IMMANUEL KANT, *THE METAPHYSICAL ELEMENTS OF JUSTICE* 100 (Bobbs-Merrill 1965) (independent categorical imperative to punish breaches of law); NAOMI ROHT-ARRIAZA, *IMPUNITY AND HUMAN RIGHTS IN INTERNATIONAL LAW AND PRACTICE* 17-18, 24-56 (1995) (independent duty to punish or enforce the law present in many religions and philosophical writings and emergency of legal duty to enforce against individual law violators).

¹⁷⁰ See, e.g., Fernando R. Teson, *Collective Humanitarian Intervention*, 17 *MICH. J. INT'L L.* 323 (1996).

structure of the collective action problem and the likelihood of enforcement.

1. Adjusting the Incentives to Engage in Enforcement

Enforcement activities can be stimulated by increasing the positive benefits flowing from a successful outcome or reducing the cost of initiation or participation. Alternatively, the negative detriment of inaction can be increased.

The most direct method of increasing benefits is through financial incentives. Enforcement can be subsidized through a common fund, for example created through financial contributions from treaty parties. Even though such a fund would raise separate collective action problems, there is ample precedent for the feasibility of this option.¹⁷¹ Alternatively, a successful party might be allowed to recover the cost of enforcement action from the losing party, similar to the attorney fees concept in many national legal systems. Benefits from a successful enforcement outcome could also be increased by creating a bounty, for example as it is provided for under U.S. law in *qui tam* actions.¹⁷²

The effect of such financial incentives should not be overestimated, however. For industrialized countries, and even many large developing nations, the administrative costs of pursuing an enforcement action is likely to be insignificant. Even a bounty in the millions of dollars is arguably a pittance considering that the national budgets of many states is measured in the billions and those of industrialized countries in the hundreds of billions of dollars. Other considerations and costs, including the potential for retaliatory actions, damage to long-term relationships and mutually beneficial arrangements, and the cost of human lives if military intervention is pondered, are likely to be much more significant.¹⁷³

Promoting enforcement through positive financial incentives also entails institutional costs. Not every violation merits sanctions. Even if an enforcement action is well-grounded in fact and in good faith, it might not deserve the expenditure of institutional resources for vindication.¹⁷⁴ If positive incentives for enforcement are sufficiently great, they might encourage the abuse or over-application of sanctions, for example to *de minimis* breaches.

¹⁷¹ See [Montreal Protocol Multilateral Fund]; [Global Environmental Facility]

¹⁷² As discussed above, compensation remedies will usually be inadequate incentive for enforcement actions because of valuation and proof of causation difficulties. Furthermore, damage claims with regard to environmental noncompliance will oftentimes accrue to individuals or businesses rather than states. As a result, analogous problems of mis-aligned incentives arise for states to initiate enforcement actions. Unless the claims involve significant national interests or of a particular high profile, "the state to whom [the national] belongs may be unwilling to take up his case for reasons which have nothing to do with its merits." Brierly, *supra* note , at 218. *But see, e.g.*, Trail Smelter Case (United States v. Canada), Arbitral Tribunal, 1941, 3 UN Rep. Int'l Arb. Awards (1941); *see also* J. Read, The Trail Smelter Dispute, The Canadian Yearbook of Int'l Law 213-17 (1963).

¹⁷³ Imposition of import tariffs as a trade sanctions can create more significant financial rewards to the enforcer. *See, e.g.*, Warren F. Schwartz & Alan O. Sykes, The Economic Structure of Renegotiation and Dispute Resolution in the World Trade Organization, 31 J. Leg. Stud. 179, 199 (2002). But they exact also economic costs from the enforcer's economy.

¹⁷⁴ It is also not clear how easily such incentives and disincentives could be calibrated to provide an appropriate set of incentives for enforcers. Neal Katyal has also pointed out in the criminal law context that increased deterrent efforts can lead to undesirable substitution effects. Neal Kuma Katyal, *Deterrence's Difficulty*, 95 MICH. L. REV. 2385 (1997).

A less direct means of increasing enforcement benefits is to improve the effectiveness of sanctions. If enforcement failures are attributable to expectations that sanctions are ineffective or are unlikely to achieve compliance, appropriate sanctions choice and design can increase the benefit of sanctions efforts.

The alternative to positive inducement is to increase the detriment of inaction.¹⁷⁵ Negative incentives may be most useful in changing the behavior of states that would otherwise stand on the side-lines and ignore a treaty violation. In concept, such a negative approach is little different from the use of punitive sanctions to encourage compliance in the first instance – the use of sticks rather than carrots. One might even view such efforts as the “enforcement” of sanctions obligations. Participation in multilateral sanctioning activity, such as a trade embargo, would become a sanctionable duty. Failure to participate would trigger punitive sanctions itself.¹⁷⁶

One version of this has been studied by Lisa Martin in her work on coerced cooperation in sanctioning activity.¹⁷⁷ Her work concluded that within recent decades, multilateral cooperation in the maintenance of trade sanctions occurred in a number of instances because the cost of non-cooperation was a significant motivating factor. Failure to participate would have brought serious adverse consequences for the defecting party. For example, the European Community imposed trade sanctions in the 1980s against Argentina because of the Falklands war with Britain. Even though “the Irish government developed a strong distaste for supporting the British through economic measures . . . , it maintained sanctions through their original term because the EC would not agree to lifting them. Afraid of jeopardizing other EC benefits, such as farm subsidies, Ireland reluctantly abided by its obligations.”¹⁷⁸ The potential for negative reactions from the European Community led Ireland to cooperate in maintaining the trade sanctions.¹⁷⁹

2. Changing the Valuation of Enforcement and the Rule of Law

The decision calculus can also be altered more indirectly by changing the valuation of enforcement. One might modify national attitudes about the desirability of enforcement, for example by promoting the incorporation of treaty norms and the rule of law into national law and culture.¹⁸⁰

However, effecting changes in norms, values, and identity encounters the same difficulties that transformational approaches to compliance must face. It requires internalization

¹⁷⁵ While the idea of increasing the detriment for failure to initiate enforcement actions might seem ludicrous, the idea of coercing or committing oneself in advance to respond to security threats is not. It was the basis of mutually assured destruction strategies during the nuclear arms race of the Cold War era.

¹⁷⁶ See Paul G. Mahoney and Chris. W. Sanchirico, *Norms, Repeated Games, and the Role of Law*, *supra* note ____.

¹⁷⁷ Lisa Martin, *supra* note .

¹⁷⁸ *Id* at 245.

¹⁷⁹ The example also demonstrates that withdrawal of benefits may serve as a sufficient deterrent to induce sanctions participation if there is sufficient reliance on them. See Baird, Gertner, *supra* note , at 184-185.

¹⁸⁰ In the context of the prisoner’s dilemma, *supra* note ____, one might view this approach as changing the pay-off matrix through means internal to the prisoners – maybe, the prisoners have been led to see the wrongfulness of their ways with regard to “snitching” and betraying each other. They have been taught “honor among thieves.”

of treaty norms, including alteration of governmental perceptions of the national self-interest. Its success as a source of enforcement is arguably no greater than the ability of transnational legal processes to promote compliance in the first instance.

The practical reality, however, may be less daunting. Normal treaty implementation processes purposefully incorporate treaty norms into national law. Furthermore, treaty norms are often already deeply-held and intensely valued by many states.¹⁸¹ For example, many of the human rights norms embodied in the International Covenant on Civil and Political Rights reflect principles embedded in the legal systems of the United States, Western Europe, and other democratic nations. With respect to the environment, treaties are more the expression of existing agreement about the importance of environmental protection and sustainable development than the creation of new values and norms.

Instead, the difficulty arises in the systematic engagement of treaty norms so that they may serve as a consistent source of enforcement responses rather than as a pretext for other foreign policy objectives. The problem is, in other words, a rule of law issue.

Liberal theories have argued that adherence to the rule of law in the international system depends in part on whether a state adheres to the rule of law within its internal governance system.¹⁸² Promotion of democratic structures and political systems based on the rule of law thus seem to be one answer. Anne Marie Slaughter and Laurence Helfer have also suggested that linkage of international institutions to national institutions committed to the rule of law, such as domestic court systems, can contribute to that goal substantially.¹⁸³ In effect, engaging those parts of a nation's government committed to the preservation and implementation of legal norms can strengthen the country's commitment to international law.

3. Is More Enforcement Always Better?: Limits on the Use of Coercive Sanctions

Prescriptions that promote more frequent and consistent enforcement responses to noncompliance, however, must also consider the question whether more enforcement is always better. There are at least three types of considerations: 1) the legality of the imposed sanctions, 2) legitimate but non-legal reasons for non-enforcement, such as concerns about enforcement resources, fairness, and justice, and 3) the problem of treaty effectiveness.

First sanctions responses to noncompliance may be limited by the very instrument that authorizes them in the first instance.¹⁸⁴ However, environmental treaty agreements have generally failed to articulate such mechanisms. In the absence of specific limitations imposed by treaty, other limitations apply. Threats or actual uses of force remain subject to the prohibitions of the United Nations Charter.¹⁸⁵ Sanctions must also be directed at the responsible state and not third-parties.¹⁸⁶ They must be temporary in nature,¹⁸⁷ proportionate to the violation,¹⁸⁸ be

¹⁸¹ Chayes, *The New Sovereignty*, *supra* note _____. *But see* Oona Hathaway, _____, ____ Yale L.J. ____

¹⁸² *See, e.g.*, Fernando Teson, *The Kantian Theory of International Law*, *supra* note ____.

¹⁸³ Helfer and Slaughter, *supra* note _____, at 331.

¹⁸⁴ INTERNATIONAL LAW COMMISSION, *supra* _____, chapter 2 cmt. 9, at 328.

¹⁸⁵ Rest. (Third) For. Relat. sec. 905(2). *See also* INTERNATIONAL LAW COMMISSION, *supra* _____, at art. 50(1)(a).

¹⁸⁶ *See also* INTERNATIONAL LAW COMMISSION, *supra* _____, at art. 49(1) & (2).

¹⁸⁷ *Id.* at arts. 49(2) & (3), 53.

preceded by notice of the intent to impose sanctions and an offer to negotiate,¹⁸⁹ and not violate certain basic obligations, including peremptory norms of international law.¹⁹⁰

In the absence of a formal institutional enforcement mechanism, the legality of sanctions activities by states who are not directly and materially harmed by the breach is unclear. Articles 48 & 54 of the International Law Commission's draft Articles on State Responsibility acknowledge the interest of such states in the breach. However, the Commission did not take a position on the permissibility of individual enforcement actions purely to vindicate a collective interest in treaty compliance.¹⁹¹ Nevertheless, states in the past have done so when there were gross violations of international human rights laws, even without claiming a special injury.¹⁹²

Beyond illegality, there are other legitimate reasons why sanctions imposition may be inappropriate for each and every noncompliance event. Just as enforcement decisions within national legal systems requires the considered exercise of prosecutorial discretion,¹⁹³ so does the enforcement of environmental treaties. Limited resources require prioritizing the most pressing non-compliance events. Some breaches may be *de minimis* or inadvertent and the imposition of sanctions may be of little institutional benefit. Other breaches may be persistent and willful, and even if small may call for sanctions because of the substantial symbolic significance and deterrent effect.

Fairness and justice considerations might also justify rejection of enforcement proceedings. If there is significant uncertainty or lack of proof, considerations of justice arguably require that enforcement be declined.¹⁹⁴ That is especially appropriate given that the need to defend against an enforcement action can be a burden in itself.

Another consideration might be unintended collateral effects on "innocent" populations,¹⁹⁵ what one might call "punishment externalities." In fact, the strongest sanctioning mechanisms, such as trade embargos and military interventions, usually affect the civilian population much more seriously than any of the governmental actors targeted by them. Because

¹⁸⁸ *Id.* at art. 51.

¹⁸⁹ *Id.* at art. 52.

¹⁹⁰ *Id.* at art. 50(1). See generally INTERNATIONAL LAW COMMISSION, *supra* ____, chapter 2 cmt. 6, at 327.

¹⁹¹ See INTERNATIONAL LAW COMMISSION, *supra* note ____, at art. 54, cmts. 1-6, at 349-355. See also Robert Rosenstock & Margo Kaplan, *The Fifty-third Session of the International Law Commission*, 96 Am. J. Int. L. 412, 413(2002).

¹⁹² See INTERNATIONAL LAW COMMISSION, *supra* note ____, at 350-353.

¹⁹³ See generally Principles of Federal Prosecution, U.S. Attorneys' Manual 9-27.100 to 9-27.320, U.S. Department of Justice (setting out criteria and considerations for initiating and declining federal criminal prosecutions). Prosecutors may consider in particular law enforcement priorities, nature and seriousness of offense, deterrent effect of prosecution, person's culpability, person's criminal history, person's willingness to cooperate, person's personal circumstances, and probably sentence or consequences. *Id.* at 9-27.230. Impermissible considerations include the defendant's race, sex, religion, and political beliefs, personal animus, or professional or personal advantage. *Id.* at 9-27.260. For a general evaluation of prosecutorial discretion, see James Vorenberg, *Decent Restraint of Prosecutorial Power*, 94 HARV. L. REV. 1521 (1981).

¹⁹⁴ See, e.g., U.S. Attorneys' Manual 9-27.220(B) ("as a matter of fundamental fairness and in the interest of the efficient administration of justice, no prosecution should be initiated against any person unless the government believes that the person probably will be found guilty by an unbiased trier of fact").

¹⁹⁵ See, e.g., Elias Davidson, *The Debate on Economic Sanctions: A Story of Blind Spots and Obfuscations*, unpublished manuscript on file with author.

the hardships imposed on the target nation's people can amount to collective punishment,¹⁹⁶ a decision to proceed with sanctions in such instances can undermine important values, including those associated with not punishing the innocent.

The extra-legal, discretionary considerations noted here are not exhaustive. Even though they are not formally endorsed by law, they are nevertheless legitimate decision-making criteria. Such discretion, however, presents a converse risk. Discretion may be abused, held hostage by norm violators, or otherwise be used as pretext for illegitimate reasons for non-enforcement.

The response to the problem of abuse of enforcement discretion is similar to that of the problem of sanctions abuse itself – institutionalization. Efforts to institutionalize parts of the enforcement process are evident in the Montreal Protocol and the Convention on the Regulation of International Trade in Endangered Species (CITES). Both have shifted determinations of noncompliance as well as determinations about the appropriateness and severity of sanctions responses to collective decision-making bodies.¹⁹⁷ In the Montreal Protocol, that function has been fulfilled by the Implementation Committee.¹⁹⁸ Within CITES, that has been its secretariat and prior to 1989 also its Standing Committee.¹⁹⁹ Alternatively, sanctions determination could be entrusted to individuals who serve in independent, quasi-judicial capacities, subject to the review of the treaty parties.

Finally, deterrence responses to noncompliance usually do not operate in a self-contained system. The ultimate option of exit – treaty denunciation – is usually available. In other words, imposition of deterrent sanctions might evoke not avoidance of sanctions through norm compliance or the acceptance of such sanctions, but instead exit from the treaty system.²⁰⁰ Thus, overly strict and severe application of sanctions could reduce overall treaty effectiveness by leading to the abrogation of the treaty by the offending party.²⁰¹ In fact, this was likely one concern that led the Montreal Protocol parties to forego harsher responses to Russia's persistent noncompliance.²⁰² Given Russia's significant capacity to produce and potentially use ozone depleting substances, its withdrawal from the treaty could be seen as much more counterproductive to the specific goal of protecting the stratospheric ozone layer than tolerating its noncompliance.

The threat of exit is a particularly difficult challenge. While the threat may be real, so is the potential for abuse as a means of defending against enforcement actions. As a matter of legal principle, such considerations arguably are not appropriate grounds for non-enforcement. Yet,

¹⁹⁶ FISHER, IMPROVING COMPLIANCE, *supra* note , at 48-51, 69; Payson S. Wild, *supra* note , at 213-216, 218-219.

¹⁹⁷ See, e.g., Rosalind Reeve, *supra* note , at 91-132.

¹⁹⁸ See *supra* section ____.

¹⁹⁹ Since 1989, the Standing Committee has been responsible for “deciding on measures against non-compliant countries, including trade sanctions on the basis of Secretariat recommendations.” Rosalind Reeve, *supra* note , at 266. Institutionalization has not been complete, however. The individual members are representatives of their states and do not act in an independent capacity. Questions of impartiality and objectivity are thus not surprising. Rosalind Reeve has suggested that party members of the CITES' Standing Committee have on occasion acted and voted blatantly on the basis of their own national self-interest rather than as representatives of other states or even of the international community. See Rosalind Reeve, *supra* note , at 267; section II(D)(3)(b).

²⁰⁰ See Vienna Convention on Law of Treaties, arts. 54, 56. See also Baird, Gertner & Picker, *supra* note , at 195.

²⁰¹ See, e.g., Laurence J. Helfer, *Overlegalizing Human Rights: International Relations Theory and the Commonwealth Caribbean Backlash Against Human Rights Regimes*, 102 COLUM. L. REV. 1832 (2002).

²⁰² See discussion *supra* section ____.

practical politicians and the reality of the international system may demand it. General avoidance of such conflicts, whether by pro-active management of compliance or by appropriate tailoring of the sanction, would serve the treaty system better. Otherwise, the adverse precedent of non-enforcement could significantly undermine the long-term viability of the treaty and the credibility of the treaty norms as a whole.

B. Promoting Entrepreneurial Enforcement

Another option is entrepreneurial enforcement. Entrepreneurial enforcement means that non-governmental entities and private citizens can trigger or participate in enforcement action. The approach gives others the ability to take supplementary enforcement actions, similar to the authorization of citizen suits under the federal environmental statutes²⁰³ or *qui tam* actions.

There are at least three reasons to take private or entrepreneurial enforcement seriously. First, entrepreneurial enforcement would allow the shifting of some of the cost of enforcement from a limited number of states to a much greater number of interested individuals and non-governmental organizations. Those willing and able to bear the cost of enforcement, other than states, could participate in the process. Like in the U.S. environmental regulatory system, enforcement entrepreneurs could step into an enforcement vacuum.²⁰⁴

Second, decentralization of enforcement recognizes the increased importance of transnational actors. Entities such as environmental NGOs or human rights groups oftentimes have more of a stake in the enforcement of treaty norms than states.

Third, the converse benefit of decentralization is its ability to prevent the capture of the enforcement machinery by particular interest groups or to be held hostage by political considerations. By allowing those interested in enforcement to seek the vindication of treaty norms themselves, the state is disaggregated from its monolithic and unitary identity.²⁰⁵ Constituent parts interested in the furtherance of international values and norms can transcend other constituent parts more oriented toward national self-interest or, worse, focused only on private self-serving gains.²⁰⁶

Private enforcement of international treaty norms has contributed significantly to the authority and effectiveness of the rulings of the European Court of Justice (ECJ) and the European Court of Human Rights (ECHR).²⁰⁷ Within environmental agreements, the citizen submission process of the North American Agreement on Environmental Cooperation (NAAEC) reflects an entrepreneurial approach to non-compliance.²⁰⁸

²⁰³ See, e.g., Clean Water Act (CWA), 33 U.S.C. §1365; Clean Air Act(CAA), 42 U.S.C. §7604; RCRA, 42 U.S.C. §6972.

²⁰⁴ For a discussion of the challenges of private enforcement of treaty obligations in U.S. law, see Carlos Manuel Vázquez, *Treaty-Based Rights and Remedies of Individuals*, 92 COLUM. L. REV. 1082 (1992).

²⁰⁵ Helfer & Slaughter, *supra* note ____, at 335.

²⁰⁶ But see R. Fisher, *Improving Compliance*, *supra* note ____, at 173-183.

²⁰⁷ Helfer & Slaughter, *supra* note ____, 288, 293, 296-97.

²⁰⁸ While it is not a true enforcement mechanism, however, the multitude of submissions since the process has come into existence suggests that entrepreneurial involvement of private individuals and non-governmental organizations can significantly increase the frequency of responses to non-compliance events. See generally John Knox, *A New*

C. Treaty Design and the Structure of Regulation

A third approach is to consider treaty design and the structure of regulation more broadly. Like efforts to encourage compliance,²⁰⁹ treaty design can encourage enforcement by altering the structure (or “architecture”) of regulation. One such opportunity focuses on the nature of environmental degradation and the structure of indirect regulation by most multilateral environmental agreements.²¹⁰

The vast majority of environmental treaties impose obligations primarily on national governments.²¹¹ Since most environmental degradation, however, is caused by private individual or business activity, treaty commitments usually embody either explicit or implicit mandates for party states to regulate such activities. In effect, environmental treaties endeavor to “regulate” the regulatory activities of states. Noncompliance of party states arises frequently because of a failure to implement the mandate to regulate.

As a result, the entities responsible for treaty compliance and targets of enforcement actions (states) are not the same entities that ultimately must change their behavior to achieve the treaty objective (individuals and businesses). Non-compliance sanctions will have little direct effect on them even though they are actually responsible for the failure to achieve substantive treaty objectives. The historical experience of federal environmental regulation illustrates the resulting challenge for achieving environmental goals.²¹²

Prior to the vast expansion of the federal government’s power with regard to the environment in the 1960s and 70s, environmental regulation was the primary responsibility of the individual states. When the failure of state and local governments to manage rising levels of pollution and environmental degradation became a national concern, the federal government initially intervened with financial aid and research assistance.²¹³ These programs failed to achieve the desired pollution abatements. Congress then began to require states to adopt various environmental standards.²¹⁴ These efforts failed as well. Significant improvements came only about when the federal government asserted primary regulatory authority in the 1970s. Those legislative changes vested a newly-created EPA with permit issuance, standard-setting, and

Approach to Compliance with International Environmental Law: The Submission Procedure of the NAFTA Environmental Commission, 28 *ECOLOGICAL L. Q.* 1 (2001); Tseming Yang, *supra* note ____.

²⁰⁹ See *supra* sections I(B)(2)&(3).

²¹⁰ See, e.g., Lawrence Lessig, *The New Chicago School*, 27 *J. Leg. Stud.* 661 (1998) (change in “architecture”). To use the prisoner’s dilemma metaphor, the prosecutor might seek an entirely different way of obtaining conviction. Rather than encouraging confession, incriminating evidence could also be obtained in other ways, for example by looking for other evidence or eyewitnesses.

²¹¹ See Lauterpacht, *OPPENHEIM’S INTERNATIONAL LAW* 636-639 (1955). See also Carlos Vazquez, *Treaty-Based Rights and Remedies of Individuals*, 92 *COLUM. L. REV.* 1082, 1088-1093 (1992).

²¹² Fisher, *Improving Compliance*, *supra* note ____, at 42-46 (“imposing sanctions on the component states of the U.S.”)

²¹³ See Robert Percival, *Environmental Federalism*, *supra* note ____, at 1155-1157; William Futrell, *The History of Environmental Law*, *supra* note ____, at 30-31.

²¹⁴ William Futrell, *The History of Environmental Law*, *supra* note ____, at 31. Such steps included requiring states to adopt water quality standards in 1965 and raising federal involvement in air pollution issues by creating an ambitious framework to improve air quality in 1967. *Id.*

criminal, civil, and administrative enforcement authority.²¹⁵

The expansion of federal regulatory authority drastically change its role. Rather than promoting state regulation and “regulating the regulators,” the federal government asserted direct oversight over environmental matters. The effect was to circumvent the states.

Contemporary multilateral environmental agreements have largely followed in the footsteps of the pre-1970s U.S. regulatory efforts: committing member governments to focus domestic regulatory attention on environmental issues, providing for information exchange and communication between the treaty parties, and assisting in various capacity building efforts. The historical experience of the U.S. suggests that treaty norms should also focus on individual conduct,²¹⁶ in addition to enlisting the help of national governments.

The result would forge a tighter connection between treaty objectives and the norms designed to achieve them. First, it would separate the interests of the enforcer (the state) from those of the target (the polluter). Party states would not face the dilemma of a coercive sanctions mechanism that could be used against itself in the future. It would also avoid the potential damage and alienation that punitive sanctions can cause to the cooperative relationship between the treaty institution and the member states. Strong enforcement mechanisms could thus become more palatable to the most powerful states, whose power would otherwise be challenged.

Second, focusing on individual conduct strengthens the effectiveness of sanctions. Sanctions can directly affect the incentive to pollute.²¹⁷ When sanctions are imposed on governments, responsible officials oftentimes lack significant personal stake in compliance and must consider competing government priorities and national interests. Resistance is much likelier. Finally, making norms and the associated sanctions applicable to particular individual conduct strengthens the message of moral condemnation.

Another approach to facilitating sanctions processes is to privatize both compliance and enforcement. Ronald Mitchell’s study of oil pollution prevention efforts under the International Convention for the Prevention of Pollution from Ships (MARPOL) is illustrative.²¹⁸ Mitchell found that MARPOL decisions directly imposing equipment standards on oil tanker design were a far superior strategy in achieving oil pollution prevention goals than direct limits on the discharge of pollutants that had to be enforced by party states.²¹⁹ The equipment standards were largely irreversible once put into place. In contrast, discharge limits required intense monitoring efforts in order to be effective. Moreover, the standards also took advantage of existing government enforcement mechanisms and shifted the focus from party states to the entities

²¹⁵ See William Futrell, *The History of Environmental Law*, *supra* note ___, at ___.

²¹⁶ See, e.g., Jordan Paust, *The Other Side of Right: Private Duties under Human Rights Law*, 5 HARV. HUM. RTS. J. 51 (1992); Steven Ratner, *Corporations and Human Rights: A Theory of Legal Responsibility*, 111 YALE L. J. 443, 475-489; Payson Wild, *supra* note ___, at 180-195, 222; R. Fisher, *Improving Compliance*, *supra* note ___, at 73.

²¹⁷ See David Wippman, *Atrocities, Deterrence, and the Limits of International Justice*, 23 FORDHAM INT. L. J. 473 (1999)

²¹⁸ 12 I.L.M. 1319 (1973), entered into force Oct. 2, 1983.

²¹⁹ Regulatory approaches that required government enforcement, such as monitoring, investigation, and prosecution of discharge prohibitions, were enforced at very low frequency. In contrast, approaches that could be enforced by private parties led to virtually 100% compliance. See RONALD B. MITCHELL, *INTERNATIONAL OIL POLLUTION AT SEA: ENVIRONMENTAL POLICY AND TREATY COMPLIANCE* 123-188, 221-292 (1994).

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engaged in the conduct that could result in oil pollution.²²⁰

Finally, the equipment standards also recruited the classification societies and insurers of vessels as norm enforcers. These entities have taken on significant roles in ensuring that new vessel construction conforms with MARPOL standards.²²¹ The overall result was to shift enforcement responsibility to private entities and allow international legal norms to apply directly within, or to penetrate into, a domestic legal system, thereby engaging their transformative function more effectively.²²²

V. An Examination of the 1997 Kyoto Protocol's Non-Compliance Mechanism

The newest member of the family of enforcement instruments is the non-compliance mechanism of the 1997 Kyoto Protocol. The mechanism introduces new ideas to treaty enforcement and holds much promise. However, it also faces significant challenges to its effectiveness. This section will examine the mechanism in light of the foregoing discussion.

The Kyoto Protocol to the U.N. Framework Convention on Climate Change establishes binding greenhouse gas (GHG) emissions limits for industrialized countries.²²³ Beginning in 2008, these parties will on average have to cap their GHG emissions at 5% below 1990 levels. Country-specific emissions caps are set out in Annex B to the Protocol. The Kyoto Protocol also includes 4 market-based mechanisms, the EU Bubble, the Clean Development Mechanism, Joint Implementation, and emissions trading. Their function is to create flexibility and ease compliance with the emissions caps.²²⁴ Compliance with the caps is to be policed primarily through a non-compliance mechanism, as authorized by article 18.²²⁵

With the ratification of Russia, the Protocol entered into force on February 16, 2005. The mechanism was adopted at the first meeting of the parties in December 2005.

A. An Overview of the Non-Compliance Mechanism

The non-compliance mechanism will be administered by a 20-member Compliance Committee. Its subcomponents are an enforcement branch, a facilitative branch, a bureau, and a plenary.²²⁶ One half of the members each serve in the enforcement branch and the facilitative

²²⁰ *Id.* at 263-265.

²²¹ The primary sanction available to classification societies is non-issuance of classifications. The effect of the sanction is to make the ship ineligible to obtain insurance coverage, making it effectively impossible to operate.

²²² See Ann Marie Burley & Walter Mattli, *Europe Before the Court: A Political Theory of Legal Integration*, 47 *Int'l Org.* 41, 74 (1993).

²²³ 37 I.L.M. 22 (1998), entered into force Feb. 16, 2005; available at <http://unfccc.int/essential_background/kyoto_protocol/items/1678.php>.

²²⁴ *Id.* at arts. 4, 6, 12, & 17. See generally Claire Breidenich et al., *supra* note ____, at 323-325.

²²⁵ Procedures and Mechanisms Relating to Compliance Under the Kyoto Protocol, Decision 24/CP.7, Annex II, FCCC/CP/2001/13/Add.3, at 65 (Nov. 10, 2001), hereinafter Decision 24/CP.7. Two additional means of addressing non-compliance are the multilateral consultative process of the Framework Convention and the dispute settlement provisions. Kyoto Protocol, arts. 16, 19. These two processes are to operate unaffected by the non-compliance process. Procedures and Mechanisms Relating to Compliance Under the Kyoto Protocol, Decision 24/CP.7, Annex II, FCCC/CP/2001/13/Add.3, at 65, section XVI.

²²⁶ Decision 24/CP.7, section II.

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branch. Members for each branch are selected to reflect geographical regions and Annex I/non-Annex I party status, including small island nations. They all serve in their individual capacities, however.²²⁷ The bureau is made up of the respective chairs and vice-chairs of each branch. Its primary responsibility is to allocate “questions of implementation,” i.e. potential non-compliance issues, between the two branches.²²⁸ The plenary is made up of all 20 members and handles all administrative and reporting matters.²²⁹

The facilitative branch, analogous to the Compliance Committee of the Montreal Protocol, is “responsible for providing advice and facilitation to Parties in implementing the Protocol, and for promoting compliance by Parties with their commitments under the Protocol.”²³⁰

In contrast, the enforcement branch is to address specific instances of non-compliance with the Annex B emissions caps, the methodological and reporting requirements, and the eligibility requirements of the Clean Development mechanism (article 6), Joint Implementation (article 12), and emissions trading (article 17).²³¹ It is also responsible for applying the “consequences” of non-compliance. The branch’s decisions are to be adopted by consensus. If consensus cannot be reached, the decision must be supported by a three-fourths majority, including simple majorities each of Annex I and of non-Annex I countries.²³²

Questions of implementation may be brought to the attention of the Compliance Committee by reports of the expert review teams, a party with respect to itself, and other parties when supported by corroborating evidence.²³³ After allocation of a question of implementation to the responsible branch, the branch engages in a preliminary examination of the matter to ensure that it is “supported by sufficient information,” is “not de minimis or ill-founded,” and is “based on the requirements of the Protocol.”²³⁴

If a decision to proceed is made, each branch may base its decisions on a broad range of relevant information, including expert advice.²³⁵ In an enforcement branch proceeding, the party whose implementation is at issue may request a hearing.²³⁶ Before a final decision is made, the branch must issue a preliminary finding or decision not to proceed. The party concerned may provide additional written comments to any preliminary finding.²³⁷ Both the preliminary and final decisions must be supported by conclusions and reasons therefor and are to be provided to the other parties and the public.²³⁸ With respect to eligibility requirements under the articles 6, 12, and 17 Kyoto mechanisms, an expedited procedure is applied by the enforcement branch.²³⁹

²²⁷ Decision 24/CP.7, section II(6), IV(1), & V(1).

²²⁸ Decision 24/CP.7, section VII(1).

²²⁹ Decision 24/CP.7, section III.

²³⁰ Decision 24/CP.7, section IV(4).

²³¹ Decision 24/CP.7, section V(4).

²³² Decision 24/CP.7, section II(9). Annex I to the UN Framework Convention includes the industrialized countries included in the Kyoto Protocol’s Annex B plus Turkey.

²³³ Decision 24/CP.7, section VI(1); Kyoto Protocol, art. 8(3).

²³⁴ Decision 24/CP.7, section VII(2).

²³⁵ Decision 24/CP.7, section VIII(3)-(5).

²³⁶ Decision 24/CP.7, section IX(2).

²³⁷ Decision 24/CP.7, section IX(4)-(10).

²³⁸ Decision 24/CP.7, section IX(5),(6), & (9).

²³⁹ Decision 24/CP.7, section X.

Enforcement branch decisions relating to compliance with a party's Annex B emissions caps may be appealed by a party to the full set of Kyoto Protocol parties if the party "believes it has been denied due process."²⁴⁰ If no appeal is taken, the enforcement branch's decision becomes "definitive" after 45 days.

The consequences of non-compliance are "aimed at the restoration of compliance to ensure environmental integrity, and . . . to provide for an incentive to comply."²⁴¹ Remedies applied by the facilitative branch will provide assistance and aid to bring the party concerned back into compliance.²⁴² In contrast, the consequences applied by the enforcement branch are designed to be more coercive and are automatically applicable.²⁴³ With respect to methodological and reporting requirements, the enforcement branch is to issue a non-compliance declaration and develop a plan for remedying the problem.²⁴⁴ When eligibility for the article 6, 12, and 17 Kyoto mechanisms is at issue, suspension of eligibility is the consequence.²⁴⁵ With respect to non-compliance with Annex B emissions limits, the consequence is

- (a) Deduction from the Party's assigned amount for the second commitment period of a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions;
- (b) Development of a compliance action plan . . . ; and
- (c) Suspension of the eligibility to make transfers under Article 17 [emissions trading] . . . until the Party is reinstated in accordance with section X.²⁴⁶

The non-compliance mechanism explicitly provides that for subsequent commitment periods, the rate of deduction for excess emissions is to be determined by amendment.²⁴⁷

B. A Critique

Even in advance of its official approval and prior to its actual application, the non-compliance mechanism has already been hailed as "the most robust"²⁴⁸ and "the most innovative and elaborate non-compliance procedure for any existing multilateral environmental agreement."²⁴⁹ Many of its features are unquestionably novel and innovative for an

²⁴⁰ Decision 24/CP.7, section XI(1).

²⁴¹ Decision 24/CP.7, section V(6).

²⁴² Decision 24/CP.7, section XIV.

²⁴³ Decision 24/CP.7, section XV.

²⁴⁴ Decision 24/CP.7, section XV(1)-(3).

²⁴⁵ Decision 24/CP.7, section XV(4).

²⁴⁶ Decision 24/CP.7, section XV(5). Emissions trading eligibility can be reinstated if the compliance plan demonstrates that the party concerned will be able to meet its emissions limit in the next commitment period. *Id.* section X(3), (4).

²⁴⁷ Decision 24/CP.7, section XV(8).

²⁴⁸ Glenn Wiser, *Analysis & Perspective: Kyoto Protocol Packs Powerful Compliance Punch*, Int. Env. Reporter Current Report, vol 25, no. 2, pg. 91 (Jan. 16, 2002). See also Matthew Vespa, *Annual Review of Environment and Natural Resources Law: Climate Change 2001: Kyoto at Bonn and Marrakech*, 29 *ECOLOGY L.Q.* 395, 413 (2002).

²⁴⁹ 12 Earth Negotiations Bulletin 189, at 15 (2001), available at <http://www.iisd.ca/linkages/download/pdf/enb12189e.pdf>.

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environmental treaty. They make unique contributions toward the goals of the Kyoto Protocol. Yet, questions about the non-compliance mechanism's overall effectiveness remain.

1. Strategic Behavior

One of the most important accomplishments is to institutionalize the process of enforcement in a neutral and independent body. The creation of an enforcement branch reduces the cost to any individual party of initiating an enforcement action. Even though individual parties or an expert review team will need to trigger the process, the enforcement branch will bear the cost of pursuing these issues.

Furthermore, the structure of the branch will reduce the likelihood that political manipulation and expediency will be a significant factor in its decisions. Members of the branch will serve in an independent capacity. The membership of the enforcement branch explicitly anticipates inclusion of an individual from the small island nations, a set of nations whose stakes in the effective operation of the Protocol is greatest. Non-compliance penalties are applied automatically and are mostly pre-determined. NGOs may provide input into the process. And information that is submitted and the branch's determination are made available to the public, thus increasing transparency.²⁵⁰ One commentator has gone as far as to describe it as functioning "much like a court."²⁵¹ In short, the incentive to forego enforcement for the sake of political expediency will be small.

The significant and fixed size of the Annex B non-compliance sanction, 30% of excess emissions, will also give the process a significant punitive and coercive element.²⁵² It will create a greater incentive to trigger enforcement actions since the sanction will be more certain and coercive, and hence more effective. Compliance will hopefully be the preferred response.

The biggest question that remains, however, is whether the penalties will be sufficient to alter the incentives for strategic behavior so that enforcement initiation becomes attractive enough. Financial penalties, though proposed, were not incorporated. Reinstatement of emission trading eligibility appears relatively easy. Even the 30% excess emissions penalty is likely to have only limited effect since Article 18 stipulates that any procedures entailing binding consequences are subject to adoption by the amendment process. Refusal to ratify such an amendment or even to participate in the subsequent commitment period could open a back-door escape from penalties.

Delay of penalty application until the following commitment period poses two additional problems. First, since each party's greenhouse gas emissions reductions for the subsequent commitment period have not been determined, the severity of the penalties can be blunted by manipulation of the assigned amounts. Second, given the 5-year length of the commitment period, delay may also blunt political accountability of government officials responsible for non-

²⁵⁰ Decision 24/CP.7, section VIII(4) & (6).

²⁵¹ Glenn Wiser, *Analysis & Perspective: Kyoto Protocol Packs Powerful Compliance Punch*, *supra* note ___ at 86. A more appropriate characterization may be an administrative tribunal since the enforcement officer and the adjudicator are ultimately controlled, albeit only to a limited extent, by the same superior officials, the Meeting of the Parties.

²⁵² In addition to simple deterrence, the penalty may be viewed as a type of liquidated damage that addresses difficult-to-measure costs of non-compliance.

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compliance. Willful ignorance or acceptance of non-compliance may be a possibility.

The most significant threat to systematic application of the enforcement process, however, remains manipulation via implicit or explicit threats of treaty denunciation. If denunciation by a party is perceived as potentially causing significant disruptions, even the independence of the enforcement branch might not protect against a determination that non-enforcement would ultimately be in the best interest of the institution.

2. The Second Order Collective Action

The form of the sanctions help to overcome some of the second order collective action problem. Suspension of the right to engage in emissions trading and the 30% penalty take advantage of processes that exist already within the Kyoto Protocol's administrative structure. There will be little need to marshal new cooperative efforts or resources of other parties for implementation. Instead, emissions accounting and trading processes are adjusted to reflect additional emissions reduction obligations or ineligibility to trade.

Unfortunately again, the sanctions themselves do not become binding until the Kyoto Protocol is amended and ratified and will not apply until the subsequent commitment period. The trading suspension appears to be easily reversible. The longer the parties wait to proceed with the amendment and ratification process, the more likely it is that some parties will know in advance the cost of compliance. Such parties may come to see opposition to amendment of the Protocol as within their best interest.

3. Norms and the Rule of Law

The non-compliance mechanism incorporates a number of features to promote treaty norms and the rule of law. The explicit requirement that any implementation question be supported by sufficient evidence, "not . . . ill-founded," and "based on the requirements of the Protocol,"²⁵³ will ensure that the enforcement mechanism adhere closely to the treaty's substantive goals and values. Removal of *de minimis* violations by the preliminary examination also eliminates nuisance actions and abuses of the enforcement process for harassment purposes. Misuse of the non-compliance mechanism is thus minimized.

The duty to comply is reinforced by the automatic application of punitive consequences upon a non-compliance finding and by limiting appeals to due process issues. At the same time, legitimacy and fairness of the enforcement action are promoted by explicit reference to due process²⁵⁴ and the requirement that decisions be supported by conclusions and reasons.²⁵⁵ The overall effect is to increase the transparency of the enforcement process and reduce the risk of arbitrary or politically motivated decisions.

However, implementation of treaty norms is also potentially undermined by opportunities to manipulate or avoid their application. Sanctions do not become binding until the Kyoto Protocol is amended. Sanctions are also delayed in their application until the following

²⁵³ Decision 24/CP.7, section VIII(7)(2).

²⁵⁴ Decision 24/CP.7, section XI(1).

²⁵⁵ Decision 24/CP.7, section IX(5) & (9).

commitment period.

There also has been no elaboration of the meaning of the *de minimis* threshold or the content of the due process requirement. Does *de minimis* designate an absolute quantity or a percentage fraction? If a percentage basis is chosen, is the comparison standard the party's total assigned amount emissions or only the emissions reductions (or increases) inscribed in Annex B? The answer to these questions could have significant consequences on whether overall emissions targets are met and the credibility of treaty norms. Even if developing countries are put aside for the time being, the greenhouse gas emissions even between individual Annex B members, such as the U.S. and Monaco, can vary by several orders of magnitude. A fixed amount threshold that is reasonable for Monaco will be meaningless to the U.S., because of its likely minuscule nature. On the other hand, a fixed amount threshold that is meaningful for the U.S. may swallow up all of Monaco's assigned amount.

The lack of elaboration of the due process requirement poses even greater problems. Due process can mean not only fair procedures but also substantive legal rights and defenses. That may include substantive principles of state responsibility, especially excuses such as impossibility. Given their previous lack of elaboration, however, full application is likely to upset expectations about the actual strictness of Protocol requirements and the true likely consequences of non-compliance. There has also been no guidance on how threats of denunciation are to be dealt with in a principled and equitable fashion.

Finally, there has been no elaboration of how special circumstances or other conditions, for example when the violation is minor but not *de minimis*, could justify a variance from the pre-specified 30% sanctions. The mandatory nature of the penalty provisions seem to deny that possibility. Simply abolition of discretion in the penalty assessment process, however, does not eliminate its operation in the process. As the federal experience with criminal sentencing guidelines indicates, it simply moves elsewhere. The question is not *whether* the legal process will accommodate the need for fairness in the imposition of sanctions but rather *how*. The appropriate application of enforcement discretion as a way of accommodating concerns about fairness, justice, or effective use of enforcement resources remains an unresolved problem.

Ultimately, the non-compliance process has not adequately articulated how non-enforcement may be the legitimate and proper result of discretionary judgments and legal excuse doctrines. Even though strengthening of sanctions processes is much needed, fairness considerations cannot be ignored. As legal norms, treaty provisions are not only authoritative within their respective scope but also limited by other doctrines and equitable considerations in their actual application.

There is at least one other significant issue. Only the enforcement target is granted the right to appeal an adverse decision of the Compliance Committee.²⁵⁶ The result is to make it impossible to correct misapplications of treaty norms if they result in non-enforcement. While the use of a criminal due process model is favorable to the enforcement target, its appropriateness here seems dubious.

C. The Underlying Problem of Treaty Design

²⁵⁶ Decision 24/CP.7, section XI(1).

The Kyoto Protocol's non-compliance mechanism represents a great step forward. There are, however, further underlying problems of treaty design that will impede the effectiveness of the sanctions process and the actual accomplishment of Protocol goals.

The climate change treaties have been modeled on the framework convention-protocol design of the ozone treaties.²⁵⁷ Like the Montreal Protocol, the Kyoto Protocol's primary regulatory approach is to limit the atmospheric emissions by binding numerical targets, the Annex B assigned amounts.²⁵⁸ In doing so, however, the Kyoto Protocol chose to ignore critical differences.

Traditionally, ozone depleting substances production was dominated by a concentrated industry with only a handful of significant manufacturers. The Montreal Protocol phase-out schedules for the production of ozone depleting substances²⁵⁹ was transparent and unambiguous in its signals to the industry: phase out production! Little was required to operationalize its requirements.

Unfortunately, even though the Protocol's Annex B limitations seem as deceptively simple and clear as the Montreal Protocol phase-out targets, the nature of the Annex B limitations is different. Unlike true emissions limitations of the type applied to particular industrial polluters,²⁶⁰ regulation of greenhouse gas emissions is in essence an attempt to control the many-fold uses of fossil fuel. That means power plants, the gamut of industrial users of oil products, individuals using personal vehicles or heating their homes, as well as the entire public transportation industry – in short, the activities of a country's entire economy. The emissions limits thus require parties to restrict energy use, change transportation policies, and address land use changes. It will require large scale changes of national economies and life-styles and force governments to make complex choices and decisions about implementation.²⁶¹ Like many other environmental agreements, the Kyoto Protocol creates a mandate to regulate, with all its attendant difficulties.

To facilitate enforcement, the regulatory regime will need to focus more specifically on industries or particular activities that contribute to GHG emissions. Continued insistence on whole-sale and generic regulatory mandates will continue to present difficulties to their enforcement.

Conclusion

²⁵⁷ See, e.g., RICHARD BENEDICK, OZONE DIPLOMACY 320-330; DAVID G. VICTOR, THE COLLAPSE OF THE KYOTO PROTOCOL AND THE STRUGGLE TO SLOW GLOBAL WARMING x-xi (2001); Developments in the Law: International Environmental Law, 104 Harv. L. Rev. 1484, 1542 (1991). See also Birnie & Boyle, *supra* note ____, at 10.

²⁵⁸ See Kyoto Protocol art. 3(1) & (7), Annex B.

²⁵⁹ The Montreal Protocol limits both production and consumption of ozone depleting substances (ODS). However, consumption is calculated by adding production plus imports minus exports. Consumption of ODS is thus directly correlated to production of ODS. See Montreal Protocol art. 3.

²⁶⁰ The problem of the Kyoto Protocol closely resembles the problem of regulatory implementation of the hazardous air pollutants provisions of the Clean Air Act in the 1970s and 1980s. See generally John Dwyer, *The Pathology of Symbolic Legislation*, 17 ECOLOGY L. Q. 233 (1990).

²⁶¹ See generally DAVID G. VICTOR, THE COLLAPSE OF THE KYOTO PROTOCOL AND THE STRUGGLE TO SLOW GLOBAL WARMING (2001).

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The systematic triggering of institutional deterrent sanctions in response to environmental treaty breaches remains a difficult problem. The turn to alternatives in contemporary international law practice has circumvented some of the difficulties. But these approaches have their own draw-backs. And each by itself is unable to duplicate the instrumental and normative functions of enforcement.

Understanding the public good characteristics of enforcement explains many of the difficulties of enforcement. More importantly, it also suggests constructive approaches to improving the enforcement of environmental agreements. None of the possible avenues is likely to be easy to follow. But they offer options that do not require one to give up on institutional deterrent sanctions. For those committed to a strong rule of law, these options also present the possibility that enforcement can make a greater contribution toward the development and maturation of international environmental law.