

EXPLORING INTERNATIONAL ENVIRONMENTAL GOVERNANCE REGIMES: THE ASIAN WAY

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ABSTRACT

Ecological degradation and strategies to combat it have loomed increasingly large on the socio-legal research agenda for the past three decades. The scholarly attention they have garnered has spawned a rich literature on multi-level environmental governance, including on an international, and even global, scale. Social scientists have spearheaded the quest for gaining a deeper insight into the phenomenon, but students of law have also been active participants in the process of knowledge accumulation. Asian inputs have been relatively modest and produced comparatively late in the long journey of scientific, or quasi-scientific, discovery. Yet they enhance the understanding of the issues broadly addressed, even if at times in a critical fashion, despite their selective focus and the paucity of constructively articulated suggestions for remedial action.

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INTRODUCTION

The “internationalization” of economic, political, and social problems is a time-honored and accelerating trend whose origins may be traced as far as the Industrial Revolution. From a historical viewpoint in

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the environmental domain, this is a less deep-rooted pattern. Ecological dislocation has traditionally been perceived as a local issue; the by-product of development with no cross-border ramifications. This has not detracted from the appreciation of its seriousness, but impinged on the framing of the problem in spatial and policy terms.¹ The severity of the ecological damage observed in local milieus such as Love Canal (United States) and Seveso (Italy), against the backdrop of rapid industrialization, has inevitably heightened sensitivity to the substantial negative external spillovers emanating from environmental disasters in narrowly-delineated geographic areas.² This before long led to an acknowledgement of the international dimension and significance of such occurrences.³ As soon as the late 1960s, it became apparent that radioactive fallout from nuclear tests was not the only source of pollution to disregard national boundaries, evidenced by the impact of acidification on Swedish forests and lakes and the presence of dichlorodiphenyltrichloroethane (DDT) in fish in both the Arctic and Antarctic.⁴

Worldwide concerns about the magnitude and harmful ecological consequences of runaway economic expansion markedly intensified when the first space shots were released depicting “the Earth—its soft greens and blues set in whorls of white cloud against the black void of space—as a single, precious and rather vulnerable entity.” In scientific circles, the formulation of the Gaia hypothesis, conceiving the planet as a unitary system governed by homeostasis, has posed troubling questions about whether planetary equilibrium and the benefits it confers on humankind might not endure.⁵

Since the Gaia hypothesis was articulated, environmental problems have proliferated, grown more challenging, and assumed an increasingly international, including often global, character. They manifest themselves across borders, to one degree or another in the form of air, land, water, and noise pollution; climate change; global warming; ozone layer depletion; acid rain; deforestation; ocean acidification; loss of biodiversity; natural and cultural resource shrinkage; hazardous

¹ See DAVID REID, SUSTAINABLE DEVELOPMENT: AN INTRODUCTORY GUIDE 3 (1995).

² See *id.*

³ See *id.*

⁴ See *id.*

⁵ See, e.g., *id.* (“Could the stability achieved over aeons of geological time be destroyed within a few generations, with no guarantee that any new balance would offer our descendants an ecological niche?”).

chemicals and waste disposal; health deterioration; mortality and morbidity; overpopulation; urban sprawl; and genetic engineering.⁶ These threats are believed to constitute the “global ecological crisis” not merely because of their aggregate impact but due to their interconnectedness: “the various global crises . . . are not separate crises. . . . They are all one.”⁷

Recognizing these complex linkages—which are not readily discernible and whose powerful knock-on effects commonly elude analysts—the Club of Rome, a prominent future-oriented think tank, has coined the term “global problematique.” The term refers to an intricate set of problems and the dynamic relationships that tie them closely but not visibly together: “not only are problems linked in complex ways, but they change even as their contexts are changing.”⁸ The corollary is that the system is inherently in a state of flux, undergoing constant transformation, shifting direction, prone to bouts of instability, defying attempts to map it out, and not amenable to simple solutions grounded in mono-causal thinking.

Given the conceptual and practical difficulties in endeavoring to grasp this baffling and daunting configuration, socio-legal scholars focused on the environment began to search for a methodical anchor to inject structure and purpose into ecological theoretical and policy discourse. The process upon which they embarked logically led them to the notion of an “international regime.”⁹ No original discovery was involved because the idea surfaced as early as 1975.¹⁰ It has been subsequently recycled, examined elaborately, refined, subjected to a critical scrutiny, partially abandoned, selectively re-embraced, and in the end fully, albeit with some lingering reservations, integrated into the international law and international relations academic agendas. The definition adopted for the term has varied according to circumstances, but a broad consensus has crystallized suggesting that international regimes may conveniently be identified as:

⁶ See generally GLOBAL ENVIRONMENTAL ISSUES (Frances Harris ed., 2d ed. 2012); see also, JAMES G. SPETH & PETER M. HAAS, GLOBAL ENVIRONMENTAL GOVERNANCE 12–51 (Daniel Esty & Maria Ivanova eds., 2006).

⁷ WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE 4 (1987).

⁸ REID, *supra* note 1, at 12.

⁹ See generally Ernst G. Haas, *Is There a Hole in the Whole? Knowledge, Technology, Interdependence, and the Construction of International Regimes*, 29 INT’L ORG. 827 (1975).

¹⁰ See generally, John G. Ruggie, *International Responses to Technology: Concepts and Trends*, 29 INT’L ORG. 557, 583 (1975).

sets of implicit or explicit principles, norms, rules, and decision making procedures around which actors' expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice.¹¹

This scarcely amounts to a precise characterization. Consequently, it has been argued that regimes may liberally be portrayed as “everything from a patterned set of interaction . . . to any form of multilateral coordination, cooperation, coordination, or collaboration . . . to formal machinery.”¹² The corollary of this portrayal is that these elastic constructs occupy an “ontological space somewhere between the level of formal institutions . . . and systematic factors.”¹³ Paradoxically, this may to a certain degree explain their fundamental appeal as the inherent ambiguity apparently constitutes “a fertile source of discussion simply because people mean different things when they use [them].”¹⁴ It may thus be inferred that, due to an existing opaqueness, generating an operational definition to fruitfully steer empirical inquiry may be an unattainable objective.

Such misgivings are justified, but the significance of these misgivings should not be overplayed. Similar objections may be directed at many socio-legal concepts whose scope cannot be pinpointed with surgical accuracy and are located in disputed/unclaimed intellectual territory. In retrospect, at least some of the reservations expressed during the formative phases of literature on international regimes' evolution seem rather trifling. Neither a measure of obliqueness nor an inadequate sense of identity have prevented scholarly investigations in this realm from expanding at a healthy pace and exhibiting growing sophistication. Reassuringly, there is no concrete evidence to indicate that confronting the operational side of the challenge has turned out to be an insuperable task.

¹¹ Stephen D. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, in *INTERNATIONAL REGIMES* 1, 2 (Stephen D. Krasner ed., 1983).

¹² ROBERT M.A. CRAWFORD, *REGIME THEORY IN THE POST-COLD WORLD: RETHINKING NEOLIBERAL APPROACHES TO INTERNATIONAL RELATIONS* 55 (Dartmouth Publishing, 1996).

¹³ Friedrich Kratochwil & John G. Ruggie, *International Organization: A State of the Art on the Art of the State*, 41 *INT'L ORG.* 4, 753–60 (1986).

¹⁴ See, e.g., Susan Strange, *Cave! Hic Dragones: A Critique of Regime Analysis*, in *INTERNATIONAL REGIMES* 337, 342–343 (Stephen D. Krasner ed., 1983).

Another frequently encountered criticism is that the word “regime” implies an excessive degree of organization and stability.¹⁵ By the same token, its invocation may suggest that the attributes commonly associated with a functioning regime, notably cooperation and maintenance of the status *quo*, possess intrinsic merit. If that is a credible deduction, the facially neutral term may possibly be value-loaded¹⁶ or, stated differently, “[r]egime thinking may . . . be ideology masquerading as a necessary truth.”¹⁷ Moreover, “regimes become a rationalization of current policies, and tend to enshrine and codify prevailing practices.”¹⁸ Often, this manifests itself in a “‘strong ‘value-bias’ toward order (as opposed to justice for example).”¹⁹ The basic issue, according to the detractors, is not whether regimes are viable systems. Rather, “it is the tendency to define regimes as benign, genuinely voluntarist, and legitimate entities . . . and assume that everyone wants them . . . [which] is contestable.”²⁰

In part, this negative appraisal seems to be derived from early impressions or insufficient information. As matters stand, regime theorists comprehensively and persistently grapple with questions such as system adaptation, atrophy, change, chaos, decay, friction, imbalances, malfunctioning, misalignment, transformation, and unraveling (abrupt as well as gradual). It must be acknowledged that these phenomena are accorded closer attention outside the specific sphere of international law/international relations, but merely relatively so, and the asymmetry should not be overemphasized because the exploration of regimes is not confined to this particular field. Social scientists across the entire disciplinary spectrum and students of biological/physical systems have a strong and enduring interest in regimes and their operations.²¹

The ideologically inspired misgivings are more difficult to discard. Regime theory is deeply rooted in neoliberal thought and reflects its values. Nevertheless, a measure of ideological “bias” may be ascribed

¹⁵ See *id.* at 345.

¹⁶ See *id.*

¹⁷ CRAWFORD, *supra* note 12, at 84.

¹⁸ *Id.*

¹⁹ *Id.* at 85. See also Strange, *supra* note 14, at 344–346.

²⁰ CRAWFORD, *supra* note 12, at 85. See also Strange, *supra* note 14, at 345; James F. Keeley, *Toward a Foucauldian Analysis of Regimes*, 41 INT’L ORG. 84 (1990).

²¹ See, e.g., Scott C. Doney & Sevrine F. Sailley, *When an Ecological Regime Shift Is Really Just Stochastic Noise*, 110 PROCEEDINGS OF THE NAT’L ACAD. OF SCIENCES OF THE UNITED STATES OF AMERICA 2438 (2013).

to every paradigm within the international space: realism, neorealism, liberalism (not to be lumped together with its ‘neo’ counterpart), and constructivism (and, clearly, less widely subscribed to schools of thought such as the fairness model, managerialism, and transnational legal process theory/TLPT).²² This also applies to the major social science scientific, or quasi-scientific, perspectives.²³

Biases are not limited to the ideological domain; distinct intellectual traditions evince distinct analytical orientations.²⁴ One should not overlook the underlying values and built-in paradigmatic propensities. It is an acceptable and widespread practice to espouse them consciously or question them unequivocally. The concept of regime may eclectically be examined beyond its supportive neoliberal terrain. There is ample scope for invoking multiple and markedly divergent viewpoints in this context as well as combining regime theory with other complementary or competing frameworks.

There is no denying that the burgeoning literature on international environmental regimes is filled with ambiguities and “normative bias,” given the presumption that ecological degradation has reached, and even surpassed, critical thresholds in several realms, which include climate change, global warming, and the persistent entreaties to take decisive steps to alleviate the problem. The literature is also marked by an inevitable recourse to governance mechanisms in its unwavering pursuit of environmental regimes rather than some enigmatic “invisible

²² See generally THE IMPACT OF INTERNATIONAL LAW ON INTERNATIONAL COOPERATION: THEORETICAL PERSPECTIVES (Eyal Benvenisti & Moshe Hirsch eds., Cambridge University Press 2004); CHRIS BROWN & KIRSTEN AINSLEY, UNDERSTANDING INTERNATIONAL RELATIONS (4th ed. 2009); SCOTT BURCHILL ET AL., THEORIES OF INTERNATIONAL RELATIONS (4th ed. 2009); INTERNATIONAL LAW FOR INTERNATIONAL RELATIONS (Basak Cali ed., 2010); JAMES DAVID ARMSTRONG ET AL., INTERNATIONAL LAW AND INTERNATIONAL RELATIONS (2d ed. 2012); HANDBOOK OF INTERNATIONAL RELATIONS (Walter Carlsnaes et al. eds., 2d ed. 2012); INTERDISCIPLINARY PERSPECTIVES ON INTERNATIONAL LAW AND INTERNATIONAL RELATIONS: THE STATE OF THE ART (Jeffrey L. Dunoff & Mark A. Pollack eds., 2013); TIM DUNNE ET AL., INTERNATIONAL RELATIONS THEORIES: DISCIPLINE AND DIVERSITY (3d ed. 2013); ROBERT JACKSON & GEORG SORESENSEN, INTRODUCTION TO INTERNATIONAL RELATIONS: THEORIES AND APPROACHES (5th ed. 2013); CYNTHIA WEBER, INTERNATIONAL RELATIONS THEORY: A CRITICAL INTRODUCTION (4th ed. 2013).

²³ These perspectives are positivism, critical rationalism, classical hermeneutics, and interpretivism (and, obviously, variants like critical theory, ethnomethodology, social realism, contemporary hermeneutics, structuration theory, and feminism). See NORMAN BLAICKIE, APPROACHES TO SOCIAL INQUIRY: ADVANCING KNOWLEDGE 109–205 (Polity 2d ed. 2007).

²⁴ See generally HILARY PUTNAM, THE COLLAPSE OF THE FACT/VALUE DICHOTOMY AND OTHER ESSAYS (2002).

hand” or its revolutionary nemesis.²⁵ This does not preclude reliance on different means, which are readily available, or resort to complementary or alternative investigative vehicles.²⁶ Significantly, these mild symptoms of imprecision and non-neutrality have failed to prevent the development of a theoretically and practically rich body of academic and policy-centered writings,²⁷ serving as a suitable reminder that “perfect may be the enemy of good.”

²⁵ See, e.g., THE ANTHROPOCENE AND THE GLOBAL ENVIRONMENTAL CRISIS: RETHINKING MODERNITY IN A NEW EPOCH (Clive Hamilton et al eds., 2015).

²⁶ See, e.g., Chukwumerije Okereke & Harriet Bulkeley, *Conceptualizing Climate Change Governance Beyond the International Regime: A Review of Four Theoretical Approaches* (Tyndal Ctr. For Climate Change Research, Working Paper No. 112, 2007), www.tyndall.ac.uk/sites/default/files/wp112.pdf.

²⁷ See generally ORAN R. YOUNG, RESOURCE REGIMES: NATURAL RESOURCES AND SOCIAL INSTITUTIONS (1982); ORAN R. YOUNG, INTERNATIONAL COOPERATION: BUILDING REGIMES FOR NATURAL RESOURCES AND THE ENVIRONMENT (1989); THE INTERNATIONAL POLITICS OF THE ENVIRONMENT: ACTORS, INTERESTS, AND INSTITUTIONS (Andrew Hurrell & Benedict Kingsbury eds., 1992); POLAR POLITICS: CREATING INTERNATIONAL ENVIRONMENTAL REGIMES (Oran R. Young & Gail Osherenko eds., 1993); BERTRAM R. SPECTOR ET AL., NEGOTIATING INTERNATIONAL REGIMES: LESSONS LEARNED FROM THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (Graham and Trotman/Martinus Nijhoff, 1994); ORAN R. YOUNG, INTERNATIONAL GOVERNANCE: PROTECTING THE ENVIRONMENT IN A STATELESS SOCIETY (1994); INSTITUTIONS FOR ENVIRONMENTAL AID: PITFALLS AND PROMISE (Robert O. Keohane & Marc A. Levy eds., 1996); GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE (Oran R. Young et al. eds., 1996); INTERNATIONAL GOVERNANCE ON ENVIRONMENTAL ISSUES (Mats Røien, et al. eds., 1997); GLOBAL GOVERNANCE: DRAWING INSIGHTS FROM THE ENVIRONMENTAL EXPERIENCE (Oran R. Young ed., 1997); ENGAGING COUNTRIES: STRENGTHENING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL ACCORDS (Edith Brown Weiss & Harold K. Jacobson eds., 1998); THE POLITICS OF INTERNATIONAL ENVIRONMENTAL MANAGEMENT (Aril Underdal ed., 1998); THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS: THEORY AND PRACTICE (David G. Victor et al. eds., 1998); ORAN R. YOUNG, CREATING REGIMES: ARCTIC ACCORDS AND INTERNATIONAL GOVERNANCE (1998); JØRGEN WETTESTAD, DESIGNING EFFECTIVE ENVIRONMENTAL REGIMES: THE KEY CONDITIONS (1999); ORAN R. YOUNG, GOVERNANCE IN WORLD AFFAIRS (1999); THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL REGIMES: CAUSAL CONNECTIONS AND BEHAVIORAL MECHANISMS (Oran R. Young ed., 1999); GABRIELA KUTTING, ENVIRONMENT, SOCIETY, AND INTERNATIONAL RELATIONS: TOWARD MORE EFFECTIVE INTERNATIONAL ENVIRONMENTAL AGREEMENTS (2000); JOHN VOGLER, THE GLOBAL COMMONS: ENVIRONMENTAL AND TECHNOLOGICAL GOVERNANCE (2000); EDWARD L. MILES ET AL., ENVIRONMENTAL REGIME EFFECTIVENESS: CONFRONTING THEORY WITH EVIDENCE (2002); ORAN R. YOUNG, THE INSTITUTIONAL DIMENSIONS OF ENVIRONMENTAL CHANGE: FIT, INTERPLAY, AND SCALE (2002); ROBERT DURANT, ENVIRONMENTAL GOVERNANCE RECONSIDERED: CHALLENGES, CHOICES, AND OPPORTUNITIES (2004); REGIME CONSEQUENCES: METHODOLOGICAL CHALLENGES AND RESEARCH STRATEGIES (Arild Underdal & Oran R. Young eds., 2004); DENISE K. DEGARMO, INTERNATIONAL ENVIRONMENTAL TREATIES AND STATE BEHAVIOR: FACTORS INFLUENCING COOPERATION (2005); HELMUT BREITMEIER ET AL., ANALYZING INTERNATIONAL ENVIRONMENTAL REGIMES: FROM CASE STUDY TO DATABASE (2006); ELIZABETH DESOMBRE, GLOBAL ENVIRONMENTAL INSTITUTIONS (2006); ELIZABETH R. DESOMBRE, THE GLOBAL ENVIRONMENT AND WORLD POLITICS (2nd ed, 2007); INSTITUTIONS AND ENVIRONMENTAL CHANGE: PRINCIPAL FINDINGS,

The notion of “governance” has been subjected to similar criticisms,²⁸ which should not be overstated for similar reasons and also have no meaningful impact on the evolution of fundamental and applied research on the subject. Socio-legal scholars concerned with ecological threats in the global arena have productively embraced the basic definition of an international governance regime and its promise, but have slightly fine-tuned it. Specifically, they have substituted “operating procedures” for “decision-making procedures,” asserting that the former may better encapsulate the realities of governance regimes.²⁹ Reinforcing the purposive component, scholars have also stipulated that such systems are “institutions that actors create or accept to regulate and coordinate action in a particular issue area.”³⁰

Besides marginally reconfiguring the definition, socio-legal researchers are more inclined to break the definition into its constituent parts³¹ and examine the individual elements further than is common in parallel endeavors in the field of international law and international

APPLICATIONS, AND RESEARCH FRONTIERS (Oran R. Young et al. eds., 2008); GOVERNANCE FOR THE ENVIRONMENT: NEW PERSPECTIVES (Magali A. Delmas & Oran R. Young eds., 2009); ENVIRONMENTAL GOVERNANCE: POWER AND KNOWLEDGE IN A LOCAL-GLOBAL WORLD (Gabriela Kutting & Ronnie D. Lipschutz eds., 2009); KATA O’NEILL, THE ENVIRONMENT AND INTERNATIONAL RELATIONS (2009); PAMELA CHASEK ET AL., GLOBAL ENVIRONMENTAL POLITICS (5th ed. 2010); ORAN R. YOUNG, INSTITUTIONAL DYNAMICS: EMERGENT PATTERNS IN INTERNATIONAL ENVIRONMENTAL GOVERNANCE (2010); ORAN R. YOUNG, ON ENVIRONMENTAL GOVERNANCE: SUSTAINABILITY, EFFICIENCY, AND EQUITY (2013); ADVANCES IN INTERNATIONAL ENVIRONMENTAL POLITICS (Michelle M. Betsill et al. eds., 2014); TRANSPARENCY IN GLOBAL ENVIRONMENTAL GOVERNANCE (Aarti Gupta & Michael Mason eds., 2014); SIKINA JINNAH, POST-TREATY POLITICS: SECRETARIAT INFLUENCE IN GLOBAL ENVIRONMENTAL GOVERNANCE (2014); RONALD B. MITCHELL, INTERNATIONAL POLITICS AND THE ENVIRONMENT (2010).

²⁸ See, e.g., Lawrence S. Finkelstein, *What Is Global Governance?*, 1 GLOBAL GOV. 367 (1995); STEPHAN HUGHES & RODEN WILKINSON, GLOBAL GOVERNANCE: CRITICAL PERSPECTIVES (2002); CONTENDING PERSPECTIVES ON GLOBAL GOVERNANCE: COHERENCE, CONTESTATION, AND WORLD ORDER (Alice D. Ba & Matthew J. Hoffman eds., 2005); Ulrich Brand, *Order and Regulation: Global Governance as a Hegemonic Discourse of International Politics?*, 12 REV. OF INT’L POL. ECON. 155 (2005); CRITICIZING GLOBAL GOVERNANCE (Markus Lederer & Philipp S. Muller eds., 2005); Klaus Dingwerth & Philipp Pattberg, *Global Governance as a Perspective on World Politics*, 12 GLOBAL GOVERNANCE 185 (2006); JONATHAN S. DAVIES, CHALLENGING GOVERNANCE THEORY: FROM NETWORK TO HEGEMONY (Policy Press 2011); CRITICAL LEGAL PERSPECTIVES ON GLOBAL GOVERNANCE (Grainne de Burca et al. eds., 2013).

²⁹ See CHASEK, DOWNIE, & BROWN, *supra* note 27, at 19 (“[o]perating procedures are prevailing practices for work within [a] regime, including methods for making and implementing collective choice.”).

³⁰ CHASEK, DOWNIE, & BROWN, *supra* note 27, at 19.

³¹ These include principles, norms, rules, decision-making/operating procedures, programs, actors’ expectations, interactions, institutions, regulation, and coordination.

relations.³² They have also highlighted a number of additional distinctions that have attracted less attention elsewhere, with the distinction between “prevailing orders” and “regimes” being perhaps the most noteworthy.³³ The former are considered as “broad, framework arrangements governing the activities of all (or almost all) the members of international society over a wide range of specific issues.”³⁴ The latter are seen as “more specialized agreements that pertain to well-defined activities, resources, or geographic areas and often involve only some subset of international society.”³⁵ Both categories loom large on the international environmental law and politics agenda but, because of the proliferation of symptoms of ecological degradation and a desire to maintain a problem-solving stance in such dire circumstances, the scholarly focus has increasingly moved toward regimes, and away from prevailing orders.³⁶

At both levels, the movement toward regimes is predominantly a Western intellectual and policy project. Asian contributions have been quantitatively modest but qualitatively valuable, on substantive grounds and by virtue of providing a complementary cultural perspective, which is needed in order to minimize “geographic bias.” The aim of this paper is to outline the analytical and practical inputs—their essence, merits, and demerits or, rather, limitations— from that source. This exercise, however, is preceded by two sections: the first, furnishing a survey of the relevant literature on international regimes and governance and the second, repeating the task for international environmental governance regimes. The two sections not directly bound by culture and geography make up the context within which pertinent Asian studies are placed.

I. CONCEPTUAL FOUNDATION

Offering a rudimentary definition of “international regimes,” even in its refined form, is merely the first step in coming to grips with the phenomenon, which requires further elaboration in order to render it into a workable proposition. Socio-legal scholars emphasize that international regimes amount to “more than temporary arrangements that

³² See, e.g., YOUNG, INTERNATIONAL COOPERATION, *supra* note 27, at 15–18.

³³ *Id.* at 13.

³⁴ *Id.*

³⁵ *Id.*

³⁶ See, e.g., ENVIRONMENTAL POLITICS IN THE INTERNATIONAL ARENA: MOVEMENTS, PARTIES, ORGANIZATIONS, AND POLICY (Sheldon Kamieniecki ed., 1993).

change with every shift in power or interests.”³⁷ They also note that a crucial distinction should be drawn between international regimes and international agreements: “[a]greements are ad hoc, often ‘one-shot,’ arrangements.”³⁸ In practice, however, “[t]he purpose of regimes is to facilitate agreements.”³⁹

By the same token, regime-shaped behavior is unlikely to be solely influenced by short-term perceptions of interest. Because international regimes incorporate principles and norms, “the utility function that is being maximized must embody some sense of general obligation.”⁴⁰ This is held a salient feature of international regimes since “[i]t is the infusion of behavior with principles and norms that distinguishes regime-governed activity in the international system from more conventional activity, guided exclusively by narrow calculations of interest.”⁴¹ One prominent principle is thought to be that of “reciprocity,” reflecting the assumption that, “[w]hen [S]tates accept reciprocity[,] they will sacrifice short-term interest with the expectation that other actors will reciprocate in the future, even if they are not under a specific obligation to do so.”⁴²

The definition of an “international regime” is ineluctably multilayered. Not all the components are deemed equally important, however. Principles and norms determine the essence of the system, which may include a wide array of rules and decision-making/operating procedures derived therefrom.⁴³ Changes in the latter are regarded as changes within an international regime, provided principles and norms remain intact.⁴⁴ By contrast, changes in principles and norms constitute changes of the system itself.⁴⁵ Both types of adjustment, whether endogenously or exogenously induced, do not necessarily undermine the whole architecture, a process that has a more specific meaning. “If the principles, norms, rules, and decision-making/[operating] procedures of a regime become less coherent, or if the actual practice is increasingly

³⁷ Krasner, *supra* note 11, at 2.

³⁸ *Id.* at 2–3.

³⁹ *Id.* at 3.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.* at 4.

inconsistent with principles, norms and procedures, then a regime has weakened.”⁴⁶

Some of the reservations expressed regarding the notion of an “international regime” stem from the view that such a concept is a construct that has no basis in reality and yields no meaningful consequences.⁴⁷ This is the position propounded by traditional structuralists, who claim that the idea lacks theoretical merit.⁴⁸ Furthermore, the structuralists find the idea of an “international regime” gravely misleading because it obfuscates and obscures the interests and power constellations that are the proximate, not merely ultimate, cause of behavior in the global arena⁴⁹ “[A]ll those international arrangements dignified by the label regime are only too easily upset when either the balance of bargaining power or the perception of national interest (or both together) change among the [S]tates who negotiate them.”⁵⁰

The picture painted by structuralists is in many respects analogous to the one conjured up by micro-economists when they present a stylized model of the market: an impersonal channel for the exchange of goods and services between buyers and sellers, and one mechanically governed by the interplay between the forces demand and supply, with price acting as the arbiter of value.⁵¹ Higher-order considerations are not part of the equation; “[s]ocial actions are not determined by orientation to any sort of norm which is held to be valid, nor do they rest on custom, but entirely on the fact that the corresponding type of social action is in the nature of the case best adapted to the normal interests of the actors as they themselves are aware of them.”⁵²

A slightly more accommodative stance is taken by adherents to the modified structuralist blueprint, who do not reject the postulate that the world consists of sovereign States motivated by a desire to maximize their interest and power. International regimes are thus the product of

⁴⁶ *Id.* at 5.

⁴⁷ Strange, *supra* note 14, at 345.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ See, e.g., ARTIFICIAL ECONOMICS AND SELF ORGANIZATION: AGENT-BASED APPROACHES TO ECONOMICS AND SOCIAL SYSTEMS (Stefan Leitner & Friederike Wall eds., 2014).

⁵² MAX WEBER, ECONOMY AND SOCIETY; AN OUTLINE OF INTERPRETATIVE SOCIOLOGY 30 (Univ. of Cal. Press 1977).

voluntary agreements among juridical equal actors.⁵³ Such actors are not other-directed, or inspired by altruistic goals, but are elements of a system which accords with the classic portrayal of “international politics as relations between sovereign entities dedicated to their own self-preservation, ultimately able to depend only on themselves, and prepared to resort to force.”⁵⁴

Nevertheless, such entities recognize the benefits derived from coordination in certain circumstances and forge relationships—regime-type mechanisms—whose function is to coordinate State behavior in order to achieve favorable outcomes in particular issue-areas.⁵⁵ International regimes thus do matter and may even exert substantial influence only when coordinated action may yield superior results to the uncoordinated variant. While this is not a universal pattern, it is by no means a rare occurrence in today’s complex global setting.⁵⁶ Still, international regimes are irrelevant for zero-sum situations (e.g., national security) in which States aim to maximize the difference between their utility and that of other players.⁵⁷

Emblematic of the mainstream writings in this domain, a less ambiguous endorsement of the concept of an “international regime” is provided by socio-legal researchers drawing on Grotian thought,⁵⁸ which sees this type of a system as a ubiquitous phenomenon, often present in circumstances where divergences of interest and quest for domination prevail. “[R]egimes exist in all areas of international relations, even those, such as major power rivalry, that are traditionally looked upon as clear-cut examples of anarchy.”⁵⁹ Moreover, these systems have tangible consequences because “[s]tatesmen nearly always perceive themselves as

⁵³ See generally Arthur Stein, *Coordination and Collaboration: Regimes in an Anarchic World*, in INTERNATIONAL REGIMES 115 (Stephen D. Krasner ed., 1983); Robert O. Keohane, *The Demand for International Regimes*, in INTERNATIONAL REGIMES 141 (Stephen D. Krasner ed., 1983).

⁵⁴ Stein, *supra* note 53, at 116.

⁵⁵ *Id.*; Keohane, *supra* note 53; Ernest B. Haas, *Words Can Hurt You; or, Who Said What to Whom about Regimes*, in INTERNATIONAL REGIMES 23 (Stephen D. Krasner ed., 1983).

⁵⁶ See generally Stein, *supra* note 53, at 116; Keohane, *supra* note 53; Haas, *supra* note 53, at 23.

⁵⁷ See generally Robert Jervis, *Security Regimes*, in INTERNATIONAL REGIMES 173 (Stephen D. Krasner ed., 1983).

⁵⁸ See generally A. Claire Cutler, *The ‘Grotian Tradition’ in International Relations*, 17 REV. OF INT’L STUDIES 41, 42 (1991); John T. Parry, *What Is the Grotian Tradition in International Law?*, 35 U. PA. J. INT’L L. 299, 300 (2014).

⁵⁹ Donald J. Puchala & Raymond F. Hopkins, *International Regimes: Lessons from Inductive Analysis*, in INTERNATIONAL REGIMES 86 (Stephen D. Krasner ed., 1983).

constrained by principles, norms, and rules that prescribe and proscribe varieties of behavior.”⁶⁰

If international regimes crystallize and operate in a manner consistent with the Grotian vision, regularized patterns of interaction between sovereign States emerge, inevitably producing convergent expectations in the process. This coincides with the development of conventionalized behavior, entailing the anticipation of retaliation in response to deviation from ongoing practices.⁶¹ Such behavior, in turn, generates recognized principles, norms, and rules.⁶² To the extent that the participants engage in forms of interrelated and recurring activity, and the connections in the patterns are detected and understood, this attests to the existence and palpable impact of principles, norms, and rules.⁶³

The Grotian perspective is so fundamentally at variance with its structuralist counterparts that it goes as far as rejecting the proposition that the “perfect market” is solely based on self-interest, without any concern for the behavior of other parties.⁶⁴ Rather, it deems this seemingly atomized institution to be a regime, characterized by behavioral continuities that ineluctably become infused with normative significance.⁶⁵ The point is that the market cannot be upheld by considerations of self-interest alone: “it must be . . . embedded in a broader social environment that nurtures and sustains the conditions necessary for its functioning.”⁶⁶ The corollary is that any structural-functional constellation should be acknowledged as such: “[e]ven the balance of power, regarded by conventional structural realist analysts as a purely conflictual situation, can be treated as a regime.”⁶⁷

This does not necessarily imply that principles and norms are the primary factor accounting for international regime formation and persistence. Egoistic self-interest may indeed prove the decisive influence.⁶⁸ Alternatively, it may be the accumulation and exercise of power,⁶⁹ whether in support of the common good⁷⁰ or in support of

⁶⁰ *Id.*

⁶¹ See generally Oran R. Young, *Regime Dynamics: The Rise and Fall of International Regimes*, in INTERNATIONAL REGIMES 93 (Stephen D. Krasner ed., 1983).

⁶² See *id.*

⁶³ See *id.*

⁶⁴ See generally Krasner, *supra* note 11.

⁶⁵ See *id.*

⁶⁶ See *id.* at 9.

⁶⁷ See *id.* at 9.

⁶⁸ See *id.* at 11–12.

⁶⁹ See *id.* at 13.

special interests.⁷¹ Other possibilities include usage (“regular patterns of behavior based on actual practice”),⁷² custom (“long-standing practice”),⁷³ and knowledge (“the sum of technical information and of theories about information which commands sufficient consensus at a given time among interested actors to serve as a guide to public policy designed to achieve some social goal”).⁷⁴ Some of these drivers (egoistic self-interest, power, and diffuse values/principles and norms) are accorded greater weight than others.⁷⁵

While usage and custom are relegated to the second tier by social scientists who spearhead the exploration of international regimes (but not international legal scholars engaged in the enterprise),⁷⁶ their invocation furnishes a valuable reminder that such entities may arise spontaneously. By the same token, the emphasis on the reliance on power in support of the common good and the role, even if not crucial, played by knowledge in the process helps to bring into focus the fact that the origins of international regimes may lie in tough but mutually beneficial negotiations.⁷⁷ Still, power asymmetries may constitute a precursor of externally imposed international regimes. That said, there is no one-to-one relationship between causal factors and regime roots: spontaneous, negotiated, and imposed orders.⁷⁸

The coupling of causal factors and the international regimes to which they lay the foundation for is not straightforward because of the bidirectional—indeed, often multidirectional—nature of the flows that materialize. Notably, the systems that crystallize may impinge, profoundly at times, on the forces responsible for their emergence.⁷⁹ Thus, “[r]egimes may assume a life of their own, a life independent of the basic causal factors that led to their creation in the first place.”⁸⁰ The

⁷⁰ See *id.* at 13–14.

⁷¹ See *id.* at 14–16.

⁷² See *id.* at 18.

⁷³ See *id.*

⁷⁴ Ernst Haas, *Why Collaborate? Issue-Linkage and International Regimes*, 32 *WORLD POLITICS* 357, 367–368 (1980).

⁷⁵ See Krasner, *supra* note 11, at 10–20.

⁷⁶ See generally BRIAN D. LEPARD, *CUSTOMARY INTERNATIONAL LAW: A NEW THEORY WITH PRACTICAL APPLICATIONS* (2010).

⁷⁷ See Young, *supra* note 61, at 98–101.

⁷⁸ See *id.*

⁷⁹ See Stephen D. Krasner, *Regimes and the Limits of Realism: Regimes as Autonomous Variables*, in *INTERNATIONAL REGIMES* 357 (Stephen D. Krasner ed., 1983).

⁸⁰ *Id.*

implication is that there may not be a high degree of correspondence between intrinsic power capabilities, international regimes, behavioral ramifications, and system outcomes; “[u]ltimately [S]tate power and interests condition both regime structures and related behavior, but there may be a wide area of leeway.”⁸¹ This suggests that period characteristics may need to be incorporated into the explanatory framework as a contextual variable to account for the fact that causal relationships may evolve over phases of international regime formation, persistence, and dissipation. At inception, the degree of correspondence between the power structure and international regime features tends to be high, as capability-rich States create systems to serve their interests.⁸² Over time, however, the two may diverge.⁸³ This may manifest itself in a number of ways, but it is noteworthy that international regimes may prove more durable than power constellations and may reshape the latter via feedback loops.⁸⁴

This duality is also observed in the relationship between interests and international regimes. The former is a key determinant of the latter. Yet, that is, at a minimum, a bidirectional configuration because international regime may readjust the calculus of interests by transforming incentives and opportunities.⁸⁵ The underlying interests may remain largely intact, but behavior can undergo considerable modification.⁸⁶ Alternatively, and this is a more telling case, international “regimes may change the interests that led to their creation in the first place by increasing transactions flows, facilitating knowledge and understanding, and creating property rights.”⁸⁷

The interplay between power and international regimes has inevitably attracted the greatest attention because of the far-reaching implications of the proposition that the influence flows in a two-way fashion, with the endogenous variable impacting the exogenous variable. It has been intriguingly demonstrated that international regimes may alter the fundamental capabilities of their members, either enhancing or

⁸¹ *Id.*

⁸² *See id.* at 357–58.

⁸³ *See id.*

⁸⁴ *See id.* at 358 (“[o]nce a regime is actually in place, it may develop a dynamic of its own and can alter not only related behavior and outcomes but also the basic causal variables.”).

⁸⁵ *See id.* at 361–62.

⁸⁶ *See id.*

⁸⁷ *Id.* at 362.

diminishing them.⁸⁸ Particularly interesting is the suggestion that international regimes—or their principles, norms, rules, and decision-making/operating procedures—may be used by actors with modest national capabilities as a means to bolster their power.⁸⁹

The precise nature of the relationship between the causal factors and international regimes and the magnitude of the effects generated by the latter, as well as the proper relevance of a host of contextual variables, is a cluster of issues that continues to be shrouded in uncertainty. This has merely resulted in the notion of an “international regime” losing some of its earlier charm,⁹⁰ but it has not relegated it to the periphery of the international law/international relations analytical agenda. Quite the contrary, the idea and its corollaries remain comfortably ensconced at the epicenter of that multifaceted intellectual structure.⁹¹ Still, basic questions keep on resurfacing because clear-cut answers are not easy to obtain:

What accounts for the emergence of instances of rule-based cooperation in the international system? How do international institutions (such as regimes) affect the behavior of [S]tate and non-[S]tate actors in the issue-areas for which they have been created? Which factors, be they located within or without the institution, determine the success and the stability of international regimes? Is it possible to come up with non-idiosyncratic explanations for the properties of particular arrangements (such as the extent to which they are formalized)?⁹²

The search for a better understanding of these issues, which has been heavily conceptual in its orientation, has extended far beyond the relatively narrow sphere within which it was pursued during its formative phases. The interest-based theories, both realist and neoliberal, continue to portray States as self-driven, goal oriented entities, although painting somewhat different pictures in the process.⁹³ Realists assume that the utility functions of States exhibit a degree of interdependence, inferring that the gains from mutual cooperation State’s partners enjoy may

⁸⁸ Stephen D. Krasner, *Regimes and the Limits of Realism: Regimes as Autonomous Variables*, in INTERNATIONAL REGIMES 365 (Stephen D. Krasner ed., 1983) (“[r]egimes may reinforce or undermine the power capabilities that led to their creation in the first place.”).

⁸⁹ See *id.* at 364–65.

⁹⁰ See Helen Milner, *International Regimes and World Politics: Comments on the Articles by Smouts, de Senarclens, and Jonsson*, 45 INT’L SOC. SCI. J. 494, 495 (1993).

⁹¹ See *id.*

⁹² ANDREAS HASENCLEVER ET AL., THEORIES OF INTERNATIONAL REGIMES 1 (1997).

⁹³ See *id.* at 26–27.

materially curtail its utility, and thus, its willingness to cooperate in the first place.⁹⁴ Neoliberals, on the other hand, posit that States are rational egotists solely preoccupied with their own gains and losses.⁹⁵

This coincides with nuanced but meaningful divergences of opinion regarding the dynamics of international regimes. Realists place greater emphasis on power as a crucial element in the formation of these entities, the (normative) content they acquire, and their ramifications.⁹⁶ By contrast, neoliberals see international regimes as purely interest-shaped phenomena whose formation, persistence, and dissipation is the product of maneuvers of strategically rational but otherwise mutually indifferent players.⁹⁷ Power is not altogether absent from neoliberal accounts, but is overshadowed by amalgams of interests, coupled with corresponding expectations, partly molded by the presence and character of international institutions.⁹⁸

These subtle distinctions, however, no longer do full justice to the rich tapestry currently observed in the interest-based theories' space. The contractualist—or functional—paradigm, with its neoliberal leanings, remains the backbone of the entire façade, espousing the view that States active in any relevant issue-area must share common interests that may be realized only through ongoing cooperation.⁹⁹ Nevertheless, it has been extended by scholars who have opted for a less overarching, more context-sensitive, or situation-structural approach. They argue that international regimes constitute a rational response to an array of collective-action challenges, each requiring a different treatment, both analytically and practically.¹⁰⁰

Another relatively new variant, reflecting a similar recognition of the complexity and fluidity of the international system, is the problem-structural perspective. Its proponents highlight the narrow scope of regimes (merely “partial orders,” according to them) or the fact that they tend to be confined to specific issue-areas (e.g., environment) rather than encompass every aspect of their members' relationships.¹⁰¹ The same group of actors may thus cooperate through collective channels in certain

⁹⁴ ANDREAS HASENCLEVER ET AL., THEORIES OF INTERNATIONAL REGIMES 26–27 (1997).

⁹⁵ *See id.*

⁹⁶ *See id.*

⁹⁷ *See id.*

⁹⁸ *See id.*

⁹⁹ *See id.* at 27–44.

¹⁰⁰ *See id.* at 44–59.

¹⁰¹ *See id.* at 59–68.

domains but proceed independently in others.¹⁰² The corollary ineluctably is that across-the-board generalizations about international cooperation and regimes are not wholly satisfactory.¹⁰³

A more radical departure, because it in some respects ventures beyond neoliberal territory, is the institutional bargaining model. Oran Young, its principal architect places a heavy emphasis on the high degree of uncertainty confronted by actors in the global arena.¹⁰⁴ Given this predicament, such actors lack sufficient information regarding the strategies available to them and their potential consequences. Paradoxically, the veil of uncertainty that prevails has a salutary effect since it prompts actors facing incomplete information to engage in integrative rather than distributive bargaining. “[W]illy-nilly, the first and foremost concern of the parties shifts from ‘the distribution of fixed payoffs’ (which do not exist under the circumstances) to the cooperative ‘production of expanded benefits.’”¹⁰⁵

The extensions of the dominant neoliberal model, whether marginal or substantial, may follow somewhat different pathways. The extensions; however, do not cast aside the fundamental realist precept that States are the most significant actors on the world scene, propelled by self-interest in an anarchic environment. They also share the basic liberal belief that, this uncomfortable mixture of parochialism and disarray notwithstanding, States are able to identify common interests and pursue them through cooperation, relying on international institutions for this purpose.¹⁰⁶ The coupling of realist and liberal tenets, in the form of neorealism, supposedly results in a conceptual framework superior to that offered by realist and liberal schools of thought.¹⁰⁷

Neither proponents of realism¹⁰⁸ nor those of liberalism¹⁰⁹ have resigned themselves to their seemingly inferior status. Realism has created a distinct set of international regime theories that reflect the neoliberal commitment to rationalism and parsimonious specification of

¹⁰² ANDREAS HASENCLEVER ET AL., THEORIES OF INTERNATIONAL REGIMES 59–68 (1997).

¹⁰³ *See id.*

¹⁰⁴ *See id.*

¹⁰⁵ *Id.* at 72.

¹⁰⁶ *Id.* at 83.

¹⁰⁷ *Id.*

¹⁰⁸ *See generally* John J. Mearsheimer, *The False Promise of International Institutions*, 19 INT’L SECURITY 5 (1995).

¹⁰⁹ *See generally*, ANDREW MORAVCSIK, LIBERALISM AND INTERNATIONAL RELATIONS THEORY (Ctr. for Int’l Affairs, Harvard University, 1992); Andrew Moravcsik, *Taking Preferences Seriously: A Liberal Theory of International Politics*, 51 INT’L ORG. 513 (1997).

causal relationships, grounded in a different conception of States' utility function and which revolve more around the notion of "power" (hence "power-centered theories") than that of "self-interest."¹¹⁰ Their unique contribution stems from the proposition that States are concerned about how well their competitors fare.¹¹¹ This is an expression of fear, or anxiety, about one's independence and survival rather than an altruistic sentiment. The corollary is that rule-anchored cooperation is less easily achieved than neoliberal paradigms imply and more likely to erode due to shifts in the distribution of power capabilities or unforeseen distributional regime outcomes.¹¹²

The quintessential example of the genre is "hegemonic stability theory."¹¹³ The theory's origins lie not in regime analytics but in international economics. Rooted in the experience of the Great Depression of the 1920s and 1930s, the hegemonic stability theory has prompted a prominent economic historian, Charles Kindleberger, to suggest that, "for the world economy to be stabilized, there has to be a stabilizer, one stabilizer."¹¹⁴ Kindleberger noted that only the presence of a prominent economic and political power ("hegemon") that is prepared and able to provide coherent and robust strategic direction may transform the loose circle of States who participate in the global economy into a "privileged group" by furnishing and sustaining the infrastructure that allows relatively orderly and productive international exchange to take place.¹¹⁵ At different phases of the post-Industrial Revolution era, Britain and the United States have played this vital role.¹¹⁶ Yet, when the strength of the stabilizer dwindles, as in the case of the United States since the late 1960s, "the danger we face is not too much power, but too little, not an excess of domination, but a super-fluidity of would-be free riders, unwilling to mind the store, and waiting for a storekeeper to appear."¹¹⁷

An illuminating distinction in this space is that between "benevolent" and "coercive" hegemons. The former is a leading State

¹¹⁰ See HASENCLEVER, ET AL., *supra* note 102, at 84.

¹¹¹ *See id.*

¹¹² *See id.*

¹¹³ *See id.*, at 86–104.

¹¹⁴ CHARLES P. KINDLEBERGER, *THE WORLD IN DEPRESSION 1929-1939* 304 (1986).

¹¹⁵ *See* Charles P. Kindleberger, *Dominance and Leadership in the International Economy: Exploitation, Public Goods, and Free Rides*, 25 INT'L STUD. Q. 242 (1981).

¹¹⁶ *See id.*

¹¹⁷ *Id.* at 253.

which provides a collective good (in this context, a viable international regime) entirely by itself, with other members carrying no responsibility for buttressing the system.¹¹⁸ Technically speaking, such a configuration inevitably entails a degree of “exploitation of the great by the small,” but it does not necessarily imply that the hegemon’s advantage (or net gain) pales in comparison to that enjoyed by the “free-riders.”¹¹⁹ Indeed, the opposite is normally true, at times even vis-a-vis the whole group of small players involved.¹²⁰

The coercive hegemon model proceeds from the same point of departure, positing that the dominant State is, for all intents and purposes, required to produce the public good.¹²¹ The hegemon’s overwhelming interest in ensuring supply on an adequate scale and the size disparities within the system motivate it to furnish the public good for itself and the rest of the group.¹²² In this case, however, the dominant State resorts to its superior power to compel the other members to contribute as well, in effect “taxing” them for the collective good provision.¹²³ The corollary is that the ensuing distribution of burdens does not need to be proportional to participants’ gains (or be consistent with any other notion of fairness).¹²⁴

Whether or not they exclusively address hegemony and its ramifications, power-centered theories of international regimes are primarily concerned with the relative capabilities of States and distributional issues accorded arguably insufficient attention in neoliberal accounts of behavioral patterns observed in the global arena. A common thread running through the formulations offered is the dissatisfaction with the apparently over-simple 2x2 Prisoner’s Dilemma representation of the cooperation problem faced by States, with its single solution (whereby each player forgoes her dominant strategy) equally valued by both parties.¹²⁵ The assertion is that it bears little resemblance to the distributional conflicts encountered in real-world situations.¹²⁶

¹¹⁸ See Duncan Snidal, *Coordination versus Prisoners’ Dilemma: Implications for International Cooperation and Regimes*, 79 Am. Pol. Sci. Rev. 923 (1985).

¹¹⁹ *Id.* at 929.

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² See Robert Gilpin, *War and Change in World Politics* (1981).

¹²³ See *id.*

¹²⁴ See *id.*

¹²⁵ See Robert Axelrod & Robert O. Keohane, *Achieving Cooperation under Anarchy: Strategies and Institutions*, 38 World Pol. 226 (1985).

¹²⁶ See Hasenclever et al., *supra* note 92, at 85.

Yet, there are certain differences in how the criticism is turned into an explanatory scheme. Some scholars claim that State power is harnessed to serve as a means of statecraft,¹²⁷ but others contend that it operates as an end (albeit perhaps not the ultimate one) of foreign policy.¹²⁸ The former also lean toward the proposition that distributional biases in favor of the most powerful actors are conducive to international regime stability,¹²⁹ whereas the latter are inclined to highlight the importance of genuinely balanced distributions, in whose absence regime dissipation is an ineluctable prospect.¹³⁰ Such divergences notwithstanding, both perspectives underscore international regime fragility against the backdrop of problematic and shifting power constellations to a greater extent than competing neoliberal viewpoints.¹³¹

The sense of feebleness conveyed by power-centered paradigms is barely noticeable in the third distinct set of international regime theories—those of the cognitivist variety. Socio-legal researchers who subscribe to the latter maintain that the neoliberal and realist blueprints are inherently flawed because they treat States' identities and interests as exogenously given—that is, originating outside the model and self-evident “initial conditions” in explanations of phenomena such as international regimes.¹³² The “black-boxing” of the processes that provide insight into States' self-conceptions, reflected in the grasp of their identities and the perception of their interests, results in the loss of valuable information and trivialization of international behavioral

¹²⁷ See Stephen D. Krasner, *Global Communications and National Power: Life on the Pareto Frontier*, 43 *World Pol.* 336 (1991); Stephen D. Krasner, *Westphalia and All That*, in *Ideas and Foreign Policy: Beliefs, Institutions, and Political Change* 235 (Judith Goldstein & Robert O. Keohane eds., 1993); Stephen D. Krasner, *Sovereignty, Regimes, and Human Rights*, in *Regime Theory and International Relations* 139 (Volker Rittberger ed., 1995).

¹²⁸ See Joseph M. Grieco, *Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism*, 42 *Int'l Org.* 485 (1988); Joseph M. Grieco, *Cooperation among Nations: Europe, America, and Non-Tariff Barriers to Trade* 40 (1990); Joseph M. Grieco, *Understanding the Problem of International Cooperation: The Limits of Neoliberal Institutionalism and the Future of Realist Theory*, in *Neorealism and Neoliberalism: The Contemporary Debate* 301 (David A. Baldwin ed., 1993).

¹²⁹ See Krasner, *Global Communications and National Power: Life on the Pareto Frontier*, *supra* note 127; Krasner, *Westphalia and All That*, *supra* note 127; Krasner, *Sovereignty, Regimes, and Human Rights*, *supra* note 127.

¹³⁰ See Grieco, *Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism*, *supra* note 128; Grieco, *Cooperation among Nations: Europe, America, and Non-Tariff Barriers to Trade*, *supra* note 128 at 40; Grieco, *Understanding the Problem of International Cooperation: The Limits of Neoliberal Institutionalism and the Future of Realist Theory*, *supra* note 128.

¹³¹ See Andreas Hasenclever et al., *THEORIES OF INTERNATIONAL REGIMES* 85 (2007).

¹³² *Id.* at 136.

patterns.¹³³ Researchers further opine that these processes are influenced by the normative and causal beliefs that decision makers entertain and that cognitive transformations may precipitate changes in policy.¹³⁴ The inference drawn is that rationalist (neoliberal and realist) accounts of international regime evolution are “at best incomplete and need to be supplemented or even supplanted by a mode of analysis which focuses on the way the ‘distribution of knowledge’ . . . constitutes the identities, and shapes the preferences as well as the perceived options, of [S]tate actors.”¹³⁵

Cognitivists fall into two broad categories: “weak” and “strong.” Those who belong to the former see the neoliberalist and realist shortcomings as the product of narrow framing or incompleteness.¹³⁶ Their counterparts who express stronger misgivings question the rationalist model more emphatically, calling for the substitution of *homo sociologicus* for *homo oeconomicus* as a basis for social theorizing, in general and in international regime contexts in particular.¹³⁷ This is a subtle but crucial distinction because “while weak cognitivists focus on the origins and dynamics of rational actors’ understandings of the world, strong cognitivists inquire into the origins and dynamics of social actors’ self-understandings in the world.”¹³⁸

In relation to international regimes, weak cognitivists aver that the demand for such systems hinges on actors’ definition of international problems, which is partly derived from their normative and causal beliefs.¹³⁹ These cognitive structures, in turn, are thought to be to some extent independent of the actors’ material environment (i.e., the distribution of resources and capabilities).¹⁴⁰ The qualifications offered and the scope provided for accommodating additional factors leave room for forging a complementary relationship with neoliberal and realist accounts of State behavior in the global arena.¹⁴¹ The strong variant of this perspective eliminates the possibility of paradigmatic co-existence.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ Hasenclever et al., THEORIES OF INTERNATIONAL REGIMES 136 (2007).

¹³⁶ *Id.* at 136–137.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

Cognitively underpinned knowledge is assumed to be the sole determinant of international action, lying at the root of every decision, including vis-à-vis regimes.¹⁴² Moreover, an international society, upheld by institutions, is presumed to exist; this amounts to a radical departure from the neoliberal and realist worldview.¹⁴³ The institutional mechanisms infusing this transnational community with substance essentially constitute “cognitive entities ([consisting of] mutual expectations, beliefs about appropriate and inappropriate behavior, etc.), although they depend on corresponding practices for their continuity.”¹⁴⁴

State learning looms large in cognitivist explanations of international regime evolution. It may assume a simple or complex form. When a simple path is followed, “learning uses new information merely to adapt the means, without altering any deeper goals in ends-means chain.”¹⁴⁵ By contrast, “[c]omplex learning . . . involves recognition of conflicts among means and goals in causally complicated situations, and leads to new priorities and trade-offs.”¹⁴⁶ Elsewhere, simple learning is equated with “adaptation” and the term “learning” is confined to the complex variant.¹⁴⁷ The latter plays a particularly significant role in weak cognitivist explanatory schemes because it is thought to autonomously shape attitudes toward regimes (by altering State preferences and redefining State interests)¹⁴⁸ and to productively take place within regimes, whereby participation in these systems reinforces, via feedback mechanisms, beliefs congruent with their normative foundations and rule-conforming behavior.¹⁴⁹

Of course, for knowledge to have a meaningful impact on regime evolution it must be widely shared by policy makers. There needs to be a common understanding of both the nature of the problem to be addressed through rule-based cooperation and the appropriate means to pursue the

¹⁴² *Id.* at 137–138.

¹⁴³ *Id.* at 138.

¹⁴⁴ Hasenclever et al., *THEORIES OF INTERNATIONAL REGIMES* 138 (2007).

¹⁴⁵ Joseph S. Nye Jr., *Nuclear Learning and U.S.-Soviet Security Regimes* 41 *Int'l. Org.* 371 (1987).

¹⁴⁶ *Id.* at 380.

¹⁴⁷ See Ernst B. Haas, *When Knowledge Is Power: Three Models of Change* 37–40 (1990).

¹⁴⁸ See Roger K. Smith, *Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory* 41 *Int'l. Org.* 253 (1987); Peter M. Haas, *Introduction: Epistemic Communities and International Policy Coordination* 46 *Int'l. Org.* 1 (1992).

¹⁴⁹ See Nye, *supra* note 145, at 385; Judith Goldstein & Robert O. Keohane, *Ideas and Foreign Policy: An Analytical Framework*, in *IDEAS AND FOREIGN POLICY: BELIEFS, INSTITUTIONS, AND POLITICAL CHANGE* 3, 12 (Judith Goldstein & Robert O. Keohane eds., 1993).

collective goals.¹⁵⁰ Epistemic communities, made up of “network[s] of professionals with recognized expertise and competence in a particular domain and authoritative claim to policy-relevant knowledge within that domain or issue-area,”¹⁵¹ are thought to be instrumental in fostering such an understanding by virtue of serving as crucial “channels through which new ideas circulate from societies to governments as well as from country to country.”¹⁵²

Strong cognitivists venture further on a number of fronts, notably in terms of the emphasis they place on the existence and importance of international society, as well as the enduring and substantial power exerted by legitimacy in international politics. The key proposition is that States heavily rely on the orderly functioning of rule-governed international society and international cooperation is sustained by the correspondence between the specific norms and rules that shape regimes and the broader normative mechanisms underlying the international society. The corollary is that regimes are not stand-alone entities, detached from their milieus, but systems firmly and irrevocably embedded in the latter.¹⁵³

This line of reasoning has led to a rediscovery of Louis Henkin’s famous statement that “it is probably the case that almost all nations observe almost all principles of international law and almost all their obligations almost all the time.”¹⁵⁴ This reassuring assessment stemmed from the perception that States feel compelled to adhere to agreed-upon norms even when they have the capacity and incentive to act otherwise.¹⁵⁵ A “sense of obligation,” prompting States to respect international agreements regardless of the positive inducements or negative sanctions available, may pave the way for norms and rules to exert a “compliance pull of their own,” overwhelming purely rationalist considerations in the process.¹⁵⁶

¹⁵⁰ See Krasner, *supra* note 11 at 186–87.

¹⁵¹ Haas, *supra* note 148, at 3.

¹⁵² *Id.*, at 27.

¹⁵³ See Andrew Huller, *International Society and the Study of Regimes: A Reflective Approach*, in *Regime Theory and International Relations* 49 (Volker Rittberger ed., 1993).

¹⁵⁴ Louis Henkin, *How Nations Behave: Law and Foreign Policy* 47 (1979).

¹⁵⁵ *Id.* at 36.

¹⁵⁶ See Thomas M. Franck, *The Power of Legitimacy Among Nations* 24 (1990).

The “pull” is apparently buttressed by discourse among States¹⁵⁷ and identity transformation that accompanies participation in international regimes.¹⁵⁸ According to this logic, “cooperation among egoists” may be seen during the early phases of regime evolution. Once the evolution progresses to a point whereby rule-governed cooperation becomes entrenched, however, the egoists typically undergo a conversion into altruistically oriented actors.¹⁵⁹ This commonly coincides with the emergence of community-like behavioral patterns entailing the recognition of the legitimate interests of other parties and their incorporation into relevant decisions.¹⁶⁰ The proliferation of regimes cultivates a sense of collective identity which “discourages free-riding by increasing diffuse reciprocity and the willingness to bear costs without selective incentives.”¹⁶¹

The three conceptual strands outlined above diverge in terms of their posture vis-à-vis institutions (i.e., the degree to which they matter; institutionalism), meta-theoretical orientation, and the behavioral postulates they embrace (i.e., the underlying behavioral model).¹⁶² The power-centered and cognitivist paradigms lie at the weak and strong ends of the institutionalist continuum, with the interest-based model somewhere in between but perhaps closer to the former.¹⁶³ Both the interest-based and power-centered perspectives display a rationalist orientation, whereas the cognitivist exhibits a sociological one.¹⁶⁴ The first and second of these three schools of thought part ways with respect to States’ behavioral motives. The pursuit of interest is equated with concern on absolute gains and the quest for power with preoccupation of relative ones.¹⁶⁵ Cognitivists, on the other hand, discard gains altogether in favor of non-materialist role fulfillment/playing by socialized actors in the global arena.¹⁶⁶

¹⁵⁷ See Friedrich V. Kratochwil, *Rules, Norms, and Decisions: On the Conditions of Practical and Legal Reasoning in International Relations and Domestic Affairs* 259 (1989).

¹⁵⁸ See Alexander Wendt, *Collective Identity Formation and the International State* 88 *Am. Pol. Sci. Rev.* 390 (1994).

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.* at 386.

¹⁶² Hasenclever et al., *THEORIES OF INTERNATIONAL REGIMES* 1–7 (2007).

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

Despite the proverbial “embarrassment of riches” and inevitable “loose ends,” these are illuminating insights. There is no dearth of ambiguities and conflicting impulses, but their absence is not a precondition for acquiring a broader and deeper understanding of the evolution and functioning of international regimes. A crucial element of the analytical “puzzle” is sorely missing, however. The refined definition of the notion of an “international regime” is indicative of an explicit and serious focus on regulatory initiatives and coordinating mechanisms or an unambiguous and determined commitment to problem alleviation through policy channels, whether selectively or across a wide spectrum of interlinked issue-areas. Because of this notable gap, it has proved necessary to incorporate the idea of “governance” into the picture and to redefine “international regimes” as “international global governance regimes.”¹⁶⁷

This is an intellectual sphere where the initial impetus for theoretical and practical exploration has originated in the fields of business (corporate governance) and public (the non-for-profit side of management) administration.¹⁶⁸ Scholars in the aforementioned and related disciplines continue to spearhead the efforts to place the study of the subject on a firmer footing.¹⁶⁹ The multifaceted and overflowing public administration agenda may lack the coherence and precision of its business counterpart, but it contains insights that are more pertinent for researchers examining international legal and political issues than found in the literature on profit-seeking entities. Regime architects are more inclined to turn, directly or indirectly, toward that source for inspiration.

Traditionally in public administration, governance has been equated with the business of government, the activities, and their consequences rather than the institutional edifice.¹⁷⁰ This has increasingly coincided with the view that the loss of capacity seemingly witnessed in the public sector has culminated in a state of affairs akin to “governance

¹⁶⁷ See Approaches to Global Governance Theory (Martin Hewson and Timothy J. Sinclair eds., 1999); Contending Perspectives on Global Governance, *supra* note 28; Thomas G. Weiss, Global Governance: Why? What? Whither? (2013).

¹⁶⁸ See Adrian Cadbury, Corporate Governance and Chairmanship: A Personal View (2002); Donald F. Kettl, The Transformation of Governance: Public Administration for Twenty-First Century America 151–172 (2002).

¹⁶⁹ See, e.g., Christine A. Mallin, Handbook on International Corporate Governance, at ix (Christine A. Mallin ed., 2011); Andrew Massey & Karen Johnston, The International Handbook of Public Administration and Governance (2015).

¹⁷⁰ See Jon Pierre & B. Guy Peters, Governing Complex Societies: Trajectories and Solutions 2 (2005).

without government,” the corollary being that institutional ineffectiveness in the public domain has led to a growing reliance on informal networks and self-referential structures.¹⁷¹ This negative construction, however, has been deemed insufficiently accurate and fruitful to serve as a basis for instilling meaning into and delimiting the notion of “governance.”¹⁷²

A more wide-ranging and less rigid attempt has subsequently been made to identify governance with a cluster of processes that may be undertaken both within and without the public sector. They encompass articulating a common set of priorities for society (this could extend to the international community or segments thereof), seeking coherence (i.e., ensuring that the goals adopted are consistent and harmonious), steering (i.e., enacting and fulfilling the policy agenda), and exercising accountability.¹⁷³ This may entail specific steps such as goal selection, decision making, resource mobilization, instrument application/implementation, and feedback provision.¹⁷⁴ In addition to coherence and accountability, the outcomes should be evaluated in terms of inclusiveness and adaptability.¹⁷⁵

The path pursued in engaging in those activities determines the shape of the governance regime. The “*etatist*” configuration features public sector domination of the system.¹⁷⁶ The “liberal-democratic” model involves co-participation, at the government’s discretion, of interest groups and civil society players.¹⁷⁷ The “State-centric” pattern is a more progressive variant of the second type because it is marked by institutionalization of public-private relationships, which generally assumes the shape of corporatism and formalized State-society ties.¹⁷⁸ The “Dutch” model is characterized by further decentralization and diversity, with the government reduced to merely being one among many

¹⁷¹ See R.A.W. RHODES, UNDERSTANDING GOVERNANCE: POLICY NETWORKS, GOVERNANCE, REFLEXIVITY AND ACCOUNTABILITY (Open University Press 1997).

¹⁷² “We understand that the public sector no longer governs society in the conventional command and control’ manner, but yet it remains capable of participating in governance, and there are some components of governance for which government is essential, or even more essential than in the past.” Pierre & Peters, *supra* note 170, at 3.

¹⁷³ Pierre & Peters, *supra* note 170, at 3–5.

¹⁷⁴ *Id.* at 14–16.

¹⁷⁵ *Id.* at 16–17.

¹⁷⁶ *Id.*, at 11.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 12.

actors contributing to societal problem alleviation.¹⁷⁹ Finally, there is the “governance without government” category referred to earlier.

Equating governance with an array of purposeful activities and suggesting concrete yardsticks for assessing associated outcomes has proven to be a productive but not entirely satisfactory endeavor because of a certain lack of focus and excessive diffuseness. It has thus eventually turned out to be necessary to delimit the concept by furnishing a properly delineated definition. The following has emerged as the most acceptable alternative: “Governance is about the rules of collective decision making in settings where there is a plurality of actors or organizations and where no formal control system can dictate the terms of the relationship between these actors and organizations.”¹⁸⁰ This portrayal may be deemed adequate, subject to the qualification that it inappropriately eliminates altogether the possibility of coercive and equivalent regimes.¹⁸¹

Interestingly and refreshingly, this somewhat abstract search for a viable definition has been accompanied by an assertion that “[g]overnance theory is interested not just in offering explanation; it also seeks to provide advice.”¹⁸² Put another way, “[t]he study of governance is focused not just on aiding a better understanding of part of our world, but it also has a concern with how the functioning and operation of that world could be made better.”¹⁸³ While there have been commendable efforts to furnish a “wish-list”¹⁸⁴ of normatively derived governance principles, perhaps a more effective approach centers on a set of empirically validated practices tailored to specific organizational experiences yet grounded in common perceptions of due process (i.e., reflecting a rule rather than an outcome orientation). The preference for a broadly-based and flexible strategy over a technically underpinned and

¹⁷⁹ *Id.*

¹⁸⁰ Vasudha Chhotray & Gerry Stoker, *Governance Theory and Practice: A Cross-Disciplinary Approach* 3 (2009).

¹⁸¹ “Authority and coercion are resources available to some in governance but never in sufficient quantity and quality to mean that they can control the decision making process. . . [t]he characteristic forms of social interaction in governance rely on negotiation, signals, communication, and hegemonic influence rather than direct oversight and supervision.” *Id.* at 4.

¹⁸² *Id.*

¹⁸³ *Id.* at 5.

¹⁸⁴ See generally Goran Hyden, Julius Court, & Kenneth Mease, *Making Sense of Governance: Empirical Evidence from 16 Developing Countries* 204-205 (Lynne Rienner, 2004); Daniel Kaufmann & Aart Kraay, *Government Indicators: Where Are We, Where Should We Be Going?* 23 World Bank Res. Observer 1 (2008).

narrowly targeted one stems from the fact “governance is not a science with clear causal pathways to be identified . . . [governance] is a practice.”¹⁸⁵

The academic preoccupation with governance has ineluctably evolved into a multilevel affair, manifesting itself not merely in the increasingly decentralized and regionally configured domestic realm but also in the international/global sphere. The upward shift has reflected the proliferation of cross-border problems, heightened consciousness of their prevalence, increasing interdependence, accelerating and increasingly multidimensional globalization, regional integration, the spread and intensifying influence of non-State actors without firm territorial attachment, and yearnings for effective global governance—but no longer world government.¹⁸⁶

The origins have impinged on how the phenomenon has come to be perceived and addressed. Notably, there is a strong emphasis on intergovernmental and transnational mechanisms for deliberately managing challenges to humankind and the environment in which it is embedded.¹⁸⁷ World politics is thus regarded as a “series of new or expanded issues . . . that need to be dealt with or managed on a more global scale, and global governance is the set of tools or activities that exist or need to be designed.”¹⁸⁸ Problem alleviation may be pursued through a chain of individual international institutions, a coherent institutional amalgam, or strategies intended to enhance institutional performance.¹⁸⁹

Some socio-legal scholars contemplate more ambitious blueprints. For them, global governance serves as a vehicle for the promulgation of a liberal world order, with its corresponding norms and rules.¹⁹⁰ They belong to the “cosmopolitans and world polity” school,¹⁹¹ but their values and ideas encounter resistance from diametrically opposed researchers who express unease about the operations of global-governance institutions that are inherently oppressive and perpetuate an

¹⁸⁵ Chhotray & Stoker, *supra* note 180, at 6. *See also* Jacques Lenoble & Marc Maesschalk, *Toward a Theory of Governance: The Action of Norms* (2003).

¹⁸⁶ *See* WEISS, *supra* note 167, at 8–26.

¹⁸⁷ *See* Matthew J. Hoffmann & Alice D. Ba, *Introduction: Coherence and Contestation in Contending Perspectives on Global Governance: Coherence Contestation and World Order* 3–4 (Matthew J. Hoffmann & Alice D. Ba eds., 2005).

¹⁸⁸ *Id.*

¹⁸⁹ *Id.* at 4.

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

unjust world order.¹⁹² For them, “[g]lobal governance is more a site, one of many sites, in which struggles over wealth, power, and knowledge are taking place . . . contemporary global governance remains a predictable institutional response . . . to the overall logic of industrial capitalism.”¹⁹³

Such misgivings notwithstanding, global governance studies have continued to expand at a rapid pace and crystallize as a distinct field of scientific inquiry, shedding ample light on the rules and systems that constrain State behavior in the global arena and ways to refine and buttress them.¹⁹⁴ Several gaps of a theoretical and practical nature remain and act as impediments to gaining better understanding and implementing more impactful problem-alleviation strategies.¹⁹⁵ They include a variety of knowledge, normative, policy, institutional, and compliance gaps.¹⁹⁶ Nevertheless, given the intricacy of the issues confronted and the fragility of the existing channels for collective decision-making, partially filling the long-empty proverbial glass is no mean achievement.

II. ENVIRONMENTAL DIMENSION

Collective responses to ecological degradation and entailing international governance regime formation possess features observed in other domains and, at the same time, have certain distinct characteristics. Socio-legal scholars who have dissected these activities have been keen participants in the process of building the broad body of knowledge outlined in the previous section. While there are some substantive and structural divergences within that large analytical space, this is the common foundation upon which the individual pillars rest and effectively delineates the current boundaries of the sweeping joint investigative agenda.

Like the general literature that endeavors to pinpoint attributes seen across the entire issue-area spectrum, there is an explicit acknowledgement that international governance regimes—whether

¹⁹² Craig N. Murphy, *Global Governance: Poorly Done and Poorly Understood* 76 Int’l Aff. 799 (2000).

¹⁹³ *Id.*

¹⁹⁴ *Id.* at 4–6. Martin Hewson & Timothy J. Sinclair, *The Emergence of Global Governance Theory*, in *Approaches to Global Governance Theory* 3 (Martin Hewson & Timothy J. Sinclair eds., 1999).

¹⁹⁵ See WEISS, *supra* note 167, at 45–61.

¹⁹⁶ *Id.* at 62–168.

strong, weak, or displaying moderate sturdiness—constitute assemblages of principles, norms, rules, and decision-making/operating procedures and that, as such, they may be found in many realms of cross-border activity, including at the regional and global level.¹⁹⁷ There is also direct recognition that such assemblages, or institutions, should be differentiated from organizations—“construed as material entities that typically have personnel, offices, equipment, financial resources, and often legal personality.”¹⁹⁸

This distinction, again, is not overstated. It is true that regimes/institutions may function without any supporting organizational machinery. Such a configuration is often witnessed in traditional (“primitive”) social milieus, but it is by no means a rare occurrence in modern ones.¹⁹⁹ Free-enterprise systems are perhaps the most conspicuous example.²⁰⁰ In addition, “social institutions governing language, styles of dress, intergenerational relations, and so forth commonly serve to structure behavior effectively with little need for any administrative apparatus.”²⁰¹ Still, both international environmental governance regimes and their non-environmental counterparts normally have salient organizational underpinnings.²⁰²

Another point of convergence is the explanatory sphere, where interest-based, power-centered, and cognitivist paradigms are invoked to account for State behavior in international environmental contexts. The convergence is partial and this is where the differences, albeit not necessarily fundamental in nature, become more readily apparent. The reason lies in the fact that socio-legal researchers focused on international environmental governance regimes exhibit a definite preference for interest-based models and merely modest enthusiasm for the competing power-centered and cognitivist schemes—particularly the latter, because interest is at times portrayed as inseparable from power.²⁰³

This preference has resulted in some conceptually and empirically illuminating studies. A telling illustration, with both notable

¹⁹⁷ See Oran R. Young, *Institutions and Environmental Change: The Scientific Legacy of a Decade of IDGEC Research*, in *Institution and Environmental Change: Principal Findings, Applications, and Research Frontiers* 1, 13 (Oran R. Young et al. eds., 2008).

¹⁹⁸ *Id.*

¹⁹⁹ See ORAN R. YOUNG, *Resource Regimes: Natural Resources and Social Institutions* 58 (1982).

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² *Id.* at 58–61.

²⁰³ See, e.g., Detlef Sprinz & Tapani Vahtoranta, *The Interest-Based Explanation of International Environmental Policy*, 48 *Int'l Org.* 77, 78–81 (1994).

social science and legal (treaty/treaty-like) components, is a framework derived from the assumption that abatement cost and ecological vulnerability determine State attitudes toward international environmental governance regimes.²⁰⁴ Countries are thus classified into four categories: “bystanders” (low abatement cost/low ecological vulnerability), “pushers” (low abatement cost/high ecological vulnerability), “draggers” (high abatement cost/low ecological vulnerability), and “intermediates” (high abatement cost/high ecological vulnerability).²⁰⁵ The framework is applied in a number of complex international institutional settings (a form of “theory testing”) and is shown to possess considerable explanatory power.²⁰⁶

A noteworthy and valuable aspect of the intensive focus on interest as a motivating force is the consideration of the influence of domestic factors—primarily interests—as determinants of international environmental policy.²⁰⁷ This entails a jettisoning of the “unitary actor hypothesis” that continues to loom large in the international law and international relations literature.²⁰⁸ Instead, a more viable picture emerges of the State as a multilayered player whose actions are the product of pressures emanating from an array of domestic sources, with limited room to maneuver.²⁰⁹ The domestic side of the equation could be highlighted more prominently, but it has been placed on the scholarly agenda relating to international (environmental) governance regimes.²¹⁰

The international elements of the mainstream segment of this agenda are also distinct in some respects. A particular strand of the neoliberal, interest-oriented writings on international governance regimes is given much greater weight than others.²¹¹ The special emphasis on international regime formation as a conscious response to uncertainty pervades virtually the whole voluminous output of Oran Young, the most

²⁰⁴ *Id.* at 78.

²⁰⁵ *Id.* at 80.

²⁰⁶ *Id.*

²⁰⁷ Detlef Sprinz, *Domestic Politics and European Acid Rain Regulation*, in 4 *THE POLITICS OF INTERNATIONAL ENVIRONMENTAL MANAGEMENT* 41 (Aril Underdal ed., 1995); Kenneth Hanf & Aril Underdal, *Domestic International Commitments: Linking National and International Decision Making*, in 4 *The Politics of International Environmental Management* 149 (Aril Underdal ed., 1995).

²⁰⁸ *See, e.g.* Jack L. Goldsmith & Eric A. Posner, 25 *The Limits of International Law* 25 (2005).

²⁰⁹ *See* YOUNG, *supra* note 199.

²¹⁰ *See id.*

²¹¹ *See, e.g.* ORAN Young, *International Governance: Protecting the Environment in a Stateless Society* (1994).

creative and prolific researcher in this field.²¹² It is coupled with ample stress on inter-State negotiations and the making of negotiated international orders, far exceeding in vigor that placed on this facet of international institution building by other authors pursuing broadly similar concerns.²¹³

International environmental negotiations are deemed to be so central to the process of regime formation and preservation (characterized as “[n]egotiation, more negotiation, and strengthening”)²¹⁴ that entire books are devoted to them.²¹⁵ In one of them, the structural features (typically multilateral constellation, cross-sectoral linkages, coalition-building, consensus decision-making, role alternation between leaders and followers) which focus on rule-making—diachronic and synchronic—rather than the distribution of tangible goods, are meticulously and systematically explored.²¹⁶ Scrupulous and methodical examination is also undertaken of actors’ behavioral patterns (“drivers,” “conductors,” “defenders,” “brakers,” and “cruisers”), identities, and internal organization, as well as the iterative steps (issue reframing, evolution of consensual knowledge, interest clarification, and modification of perception) observed in the quest for an agreement.²¹⁷

Additionally, and importantly, the various factors shaping negotiation outcomes are carefully pinpointed. They include: the role of crises and awareness; leadership and leverage; rules of the game; domestic politics (as noted earlier); North-South politics (often adversarial) and environmental cooperation; availability of workable channels for private actor access to the international environmental policy process; activist and non-governmental organization (NGO) participation in international environmental negotiations; corporate participation in international environmental negotiations; science-politics interaction in international environmental policy process; and the impact of transnational epistemic communities.²¹⁸

²¹² *Id.*

²¹³ *Id.*

²¹⁴ Kate O’Neill, *The Environment and International Relations* 78 (2009).

²¹⁵ See, e.g. NEGOTIATING INTERNATIONAL REGIMES: LESSONS LEARNED FROM THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) (Bertam I. Spector et al. eds., 1994).

²¹⁶ *Id.* at 6–16.

²¹⁷ *Id.*

²¹⁸ See O’Neill, *supra* note 214, at 81–101.

Such influences are seldom examined as elaborately and methodically in the general or other specialized literature on international governance regimes. For instance, it cannot be overlooked that leaders (individual States, group of States, international organizations, or even strategically positioned individuals within the negotiating process) may favorably or adversely affect negotiation outcomes. The positive dimension, whereby direct or indirect pressure is exerted on States to venture further than they might be inclined otherwise, is often highlighted, but the negative side, manifesting itself when “veto coalitions” of States manage to derail treaties or water down their provisions, is also given sufficient prominence.²¹⁹

Nor is the attention confined to negotiation outcomes, successful or otherwise. Strategies pursued in the process of endeavoring to generate solutions are dissected as well.²²⁰ A common distinction drawn in this context is that between power-based and entrepreneurial leadership.²²¹ The former relies on sources of power or leverage (e.g., economic means may be utilized to offer side-payments or threaten sanctions; substantial control over the resource at issue may also be resorted to for this purpose) to achieve desired goals and to propel recalcitrant players in that direction.²²² Entrepreneurial leadership, on the other hand, stems from the ability to devise innovative responses to ecological problems and to soften resistance, even in the absence of significant material capabilities or reluctance to bring them into play.²²³

The environmental component of the international governance regime literature provides the most coherent and detailed perspective on how such systems are formed and the potential dynamics they exhibit. Regime formation is thus portrayed as a three-stage process. First, the participants engage in agenda setting, defining and framing the issue faced, as well as determining its parameters and rationale for collective action.²²⁴ Second, multiparty interchanges take place, which may assume the shape of formal negotiations. Third, the actors involved adopt measures to buttress the regime; this may entail steps to implement the original agreement and adjust/fortify its provisions.²²⁵ When treaty

²¹⁹ See *id.* at 84.

²²⁰ See *id.* at 84.

²²¹ See *id.*

²²² See *id.*

²²³ See *id.*

²²⁴ See *id.* at 78–79.

²²⁵ See *id.*

making is the goal, the convention-protocol method is typically followed.²²⁶ A framework agreement thus establishes the nature, scope, and cause of the problem; a roadmap for future negotiations, and modest obligations on States such as reporting requirements. In subsequent phases, the parties negotiate more specific protocols or amendments, which furnish concrete objectives and targets that are binding on signatory States.²²⁷

Inquiries into international regime dynamics by scholars concerned with ecological threats have grown into a multifaceted and sophisticated enterprise. Five patterns—"progressive development," "punctuated equilibrium," "arrested development," "diversion," and "collapse" have painstakingly been scrutinized.²²⁸ The first configuration represents a system that is properly delineated but begins on a relatively small scale, and then gradually and smoothly advances without experiencing significant challenges and setbacks.²²⁹ This allows it to augment its capacity to address the problems it was created to alleviate (e.g., the principles, norms, and rules expressed in the provisions of the United Nations Convention on the Law of the Sea/UNCLOS).²³⁰

Punctuated equilibrium constitutes a more uneven developmental path. In this case, the international environmental governance regime is subject to periodic stresses that diminish its capacity to adjust while also generating regime-building episodes.²³¹ The sources of disruptive influences may be ecological (e.g., climate change), economic (e.g., harmful corporate initiatives), or political (e.g., lobbying for admission by non-members).²³² The responses to the stress-inducing agents may extend from recourse to existing management procedures and willingness to accept additional parties, negotiating new protocols, or devising parallel arrangements to deal with contingencies (e.g., the Antarctic Treaty System/ATS).²³³

²²⁶ *See id.*

²²⁷ *See* Lawrence E. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Environmental Agreements* 30–37 (1994). *See also* JAMES G. Speth & Peter Haas, *GLOBAL ENVIRONMENTAL GOVERNANCE* 82–106 (2009).

²²⁸ *See* ORAN R. YOUNG, *Institutional Dynamics: Emergent Patterns in International Environmental Governance* (2010).

²²⁹ *Id.* at 9–10, 23–52.

²³⁰ *Id.*

²³¹ *Id.* at 10, 53–82.

²³² *Id.*

²³³ *Id.*

As the term implies, arrested development is a more problematic pattern because in such circumstances the regime starts to unfold auspiciously only to encounter headwinds that obstruct further development.²³⁴ This feature is the hallmark of framework conventions that fail to fulfill their initial promise by not paving the way for the development of substantive protocols or the fine-tuning of existing ones in order to take account of changes in the nature of the problem or its management (e.g., climate regime).²³⁵ Of course, one should be alert to the fact that “[r]egimes that appear to be stuck in a political logjam can break through to a new era of progressive development . . . [and] regimes that appear to be success stories can run into unexpected obstacles that arrest or severely hamper continued development.”²³⁶

Diversion is by no means an uncommon institutional constellation, but rather one marked by “goal displacement.” Diversion involves the formation of an international environmental governance regime to serve an objective that recedes into the background and is replaced by another (e.g., regime for whales and whaling).²³⁷ The substitution may be the product of the acquisition of additional knowledge about ecological phenomena and corresponding steering mechanisms.²³⁸ Alternatively, it may be the result of shifts in the normative perspectives or value systems of key actors.²³⁹ Whichever of the two factors triggers the transformation, a new agenda typically emerges.²⁴⁰ Goal displacement, however, may culminate in a stalemate, with the system persistently displaying a lack of clear direction.²⁴¹ Nor should it be inferred that the successor regime would necessarily prove more effective than its predecessor.²⁴²

Collapse, hardly a rare exception to the rule, is the most disruptive path along which institutional dynamics may unfold. It may entail either formal termination or degeneration into a state of atrophy, albeit without official closure (e.g., regime for northern fur seals).²⁴³ This

²³⁴ *Id.* at 10–11, 83–116.

²³⁵ ORAN R. YOUNG, *Institutional Dynamics: Emergent Patterns in International Environmental Governance* 10–11, 83–116 (2010).

²³⁶ *Id.* at 11.

²³⁷ *Id.* at 11–12, 117–145.

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² *Id.*

²⁴³ *Id.* at 12–13, 147–170.

case does not encompass the stillborn system variant, but merely regimes which have been functioning satisfactorily for a period of time and have succumbed either to endogenous shocks or exogenous ones, engendering the unraveling of the whole institutional façade. Collapse may materialize at any stage of the evolutionary process, even at a relatively early juncture and may befall long successful regimes that suffer a loss of effectiveness.²⁴⁴

An elaborate and empirically grounded theoretical framework has been proposed to account for these patterns and the accompanying dynamics, predicated on the assumption that international environmental system change is the product of the interaction between endogenous or regime-specific influences and exogenous ones.²⁴⁵ These exogenous influences consist of forces emanating from the bio-physical and socio-economic milieus in which the regime is embedded (the “endogenous-exogenous alignment thesis”).²⁴⁶ The former may include a locus on the hard-soft law continuum; decision rules; flexibility in the face of changing circumstances; monitoring, reporting, and verification procedures; administrative capacity; resources/funding mechanisms; and amendment procedures.²⁴⁷ The exogenous category may encompass attributes of the problem, political (dis)continuity, economic (in)stability, technological innovations, emergence of new actors in the issue area, shifting paradigms of discourses, state changes in relevant biophysical systems, and exogenous shocks (e.g., the ozone hole).²⁴⁸

Perhaps uniquely among socio-legal researchers concerned with international governance regimes, socio-legal scholars focused on ecological threats and strategies to alleviate them go to great lengths to grapple with the issues of policy instruments and system effectiveness. This is the ineluctable outcome of incorporating organization (as distinct from institution, a broader concept) into the equation, particularly in relation to policy instruments.²⁴⁹ “As soon as some administrative apparatus is in place, it becomes possible to think about devising techniques of social control through which to guide the behavior of those

²⁴⁴ ORAN R. YOUNG, *Institutional Dynamics: Emergent Patterns in International Environmental Governance* 12–13, 147–170 (2010).

²⁴⁵ *Id.* at 13–16, 171–194.

²⁴⁶ *Id.*

²⁴⁷ *Id.*

²⁴⁸ *Id.*

²⁴⁹ *See* ORAN R. YOUNG, *Resource Regimes: Natural Resources and Social Institutions* 61 (1982).

subject to a regime toward certain desired ends.”²⁵⁰ Traditionally, emphasis has been placed on two categories: command-and-control type of instruments (somewhat erroneously equated with all regulatory responses) and incentive-based mechanisms.²⁵¹ The former are “directives promulgated by administrative agencies which specify conditions under which those subject to a regime are to operate on a day-to-day basis.”²⁵² Their customary function is “to translate rights and rules formulated in general terms into working managerial arrangements applicable to the complexities of the real-world situations.”²⁵³ Put another way, they are “commands which may be obeyed or disobeyed by those subjects to them, and there is every reason to expect disobedience to occur with some regularity even in connection with regulations that are widely accepted as authoritative.”²⁵⁴

Incentive-based mechanisms, on the other hand, are “devices designed to alter behavior in desired ways by manipulating the benefits and costs actors associate with various options.”²⁵⁵ They do not involve “the issuance of directives telling subjects what to do or what not to do; they merely change the benefits and costs associated with various courses of action.”²⁵⁶ Two sub-categories of instruments in this context can be distinguished: those designed (via taxes, fees, charges, royalties, entry permits, and the like) to increase the cost of certain economic pursuits or to compel agents to pay for the use of common property resources, and those intended (via subsidies, in-kind transfers, tax breaks, and the like) to lower the cost of certain economic pursuits.²⁵⁷

Reliance on incentive-based mechanisms necessitates the presence of some organizational machinery enjoying the authority and power to adopt measures to motivate agents to modify their behavior. The possession and exercise of such authority and power, however, need not translate into system effectiveness.²⁵⁸ Moreover, resort to incentives may not constitute an inexpensive regulatory strategy because of the

²⁵⁰ *Id.*

²⁵¹ *Id.* at 61–67.

²⁵² See ORAN R. YOUNG, *Resource Regimes: Natural Resources and Social Institutions* 61 (1982).

²⁵³ *Id.* at 61–62.

²⁵⁴ *Id.* at 62.

²⁵⁵ *Id.* at 63.

²⁵⁶ *Id.*

²⁵⁷ *Id.*

²⁵⁸ *Id.*

often heavy transaction costs incurred.²⁵⁹ These costs may include “both decision costs (that is, the costs of reaching agreement on the nature of specific incentive systems) and implementation costs (that is, the costs of administering and enforcing the terms of such systems).”²⁶⁰ Consequently, “it is always relevant to ask whether the (social) benefits of a proposed incentive system can be expected to exceed the social costs.”²⁶¹

In recent years, the appeal of direct command-and-control instruments has diminished and policy attention has shifted to market-harnessing regulatory measures, notably tradeable permits and transparency-oriented governance as complements to incentive-based mechanisms.²⁶² The attraction of tradeable permits lies in their flexibility, although some of the expressed qualifications regarding incentives apply here as well. Unlike taxes and similar regulatory vehicles, tradeable permits are quantity-centered, rather than price-focused, ecological policy tools.²⁶³ A quantitative limit is imposed either as a maximum ceiling for “cap-and-trade” schemes, or as a minimum performance commitment for “baseline-and-credit” ones.²⁶⁴ The targets may be expressed either in absolute or relative terms. The permits may be represented either in terms of “bads” (i.e., pollution emission) or “goods” (i.e., natural resources).²⁶⁵ While the underlying logic bears certain similarity to that of incentives, they do not render the latter obsolete.²⁶⁶

Although less amenable to precise articulation, let alone quantification and engineering-style methodical application, transparency, aided and abetted by the expeditious and widespread diffusion of information-communication technologies (ICTs), has gained even more prominence as a would-be normatively and practically valuable policy instrument.²⁶⁷ “Whether to enhance global security, secure human rights, discipline borderless business, or hold to account

²⁵⁹ *Id.* at 63–64.

²⁶⁰ *Id.*

²⁶¹ *Id.* at 64.

²⁶² See Org. for Economic Co-operation and Development, *Tradeable Permits: Policy Evaluation, Design, and Reform* 9 (2004).

²⁶³ *Id.*

²⁶⁴ *Id.*

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ See Aarti Gupta & Michael Mason, *A Transparency Turn in Global Environmental Governance*, in 3 *Transparency in Global Environmental Governance* 3 (Aarti Gupta & Michael Mason eds., 2014).

faceless bureaucrats, transparency is increasingly seen as part of the solution to a complex and diverse array of economic, political, and ethical challenges in our increasingly interconnected world.”²⁶⁸

Transparency is commonly associated with an institutional pattern featuring government disclosure of information to interested publics.²⁶⁹ As such, it is marked by “openness, communication, the opposite of secrecy, and [free] information flows.”²⁷⁰ In the international environmental regime context, transparency has appropriately become imbued with a broader meaning, stretching beyond domestic publics and even other States.²⁷¹ Thus, the scope currently extends over “multiple instigators, architects, and recipients of transparency in global governance, going beyond [S]tates to include corporations, civil society groups, international organizations, consumers, and citizens.”²⁷² Both the demand and supply side of transparency are now highly differentiated and genuinely multidirectional.²⁷³

Transparency is not merely a normative issue but one with a salient practical dimension, stemming from its coupling with governance, particularly that of the environmental variety. This is reflected in the approach of socio-legal scholars focused on worldwide ecological threats and strategies to alleviate them, who merge the two terms by directing their investigations at “governance by disclosure,” which consists of public and private governance initiatives that employ targeted disclosure of information as a way to evaluate and/or steer the behavior of selected actors.²⁷⁴ The proliferation of such initiatives in the global environmental domain may reassuringly be seen as “reflective of a transparency turn in this realm.”²⁷⁵

Governance by disclosure still faces quantitative and qualitative impediments in this sphere. Especially close attention has been accorded to corporate confidentiality concerns, propriety ownership of ecologically sensitive information, scientific uncertainties, and unknown

²⁶⁸ *Id.* at 3.

²⁶⁹ *Id.* at 4.

²⁷⁰ *Id.* at 5.

²⁷¹ *Id.*

²⁷² See Aarti Gupta & Michael Mason, *A Transparency Turn in Global Environmental Governance*, in 3 *Transparency in Global Environmental Governance* 5 (Aarti Gupta & Michael Mason eds., 2014).

²⁷³ *Id.*

²⁷⁴ *Id.* at 6.

²⁷⁵ *Id.*

managing complex (transboundary) problems.²⁷⁶ The materiality of environmental resources whose physical properties and location in the wider circuits of production and consumption may impinge on the scope of disclosure achievable in any given circumstances, accessibility, comprehensiveness, comparability, accuracy, relevance, and standardization or lack thereof have also been given careful consideration.²⁷⁷ Such impediments may render governance by disclosure more or less actionable, that is, “usable by recipients to further their desired ends.”²⁷⁸ Interestingly, action potential may also be adversely affected by information overload or excessive “noise” in the incoming messages.²⁷⁹ A phenomenon referred to as “drowning in disclosure” may thus manifest itself “when too much (or ‘irrelevant’) information is provided.”²⁸⁰ The corollary is that governance by disclosure may not always assume the shape of a relentless drive but may need at times to be characterized by a degree of selectivity and evince the hallmarks of a balancing act.²⁸¹

The institutionalization of environmental disclosure via intermediaries or infrastructures, whose function is to enhance the utility of the information furnished for specific stakeholders, is a notable emerging trend. The category includes auditors and verifiers of disclosed items, as well as civil society groups aiming to increase the user-friendly quality of the output.²⁸² The rise of such transparency “powerbrokers” possesses ramifications for the structure of international environmental governance regimes, decentering State-led regulation and opening up the regulatory space to new actors.²⁸³

A significant facet of transparency highlighted in the literature on international environmental governance regimes is its consequences, which may be classified as normative, procedural, and substantive.²⁸⁴ The first category reflects the normative belief that those exposed to potential harm have the right to be informed about the ecological hazards posed by

²⁷⁶ *Id.* at 16.

²⁷⁷ *Id.* at 9.

²⁷⁸ *Id.* at 16.

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ See Aarti Gupta & Michael Mason, *A Transparency Turn in Global Environmental Governance*, in 3 *Transparency in Global Environmental Governance* 16 (Aarti Gupta & Michael Mason eds., 2014).

²⁸² *Id.* at 16–17.

²⁸³ *Id.* at 16.

²⁸⁴ *Id.* at 19.

relevant actions and products.²⁸⁵ The procedural cluster is broadly linked to empowerment, viewed as a process leading to greater opportunities for participatory, accountable, and legitimated governance.²⁸⁶ The substantive type refers to the impact of transparency-enhancing initiatives on the environmental quality of life²⁸⁷ in the widest sense of the term (i.e., not being narrowly confined to human life-forms).²⁸⁸

Again, there is no guarantee, of course, that transparency will be embraced in accordance with the principles encapsulated above, be in harmony with the goals and practices of both disclosers and recipients, and properly fulfill its objectives. Given the dominance of the liberal vision in international environmental governance, the potentially inverse relationship with adequate market functioning needs to also be pointed out. For this reason, some socio-legal researchers contend that, where appropriate, due sensitivity should be shown to the trade-off involved by ensuring that the pursuit of transparency is not to the detriment of market integrity.²⁸⁹

Regime effectiveness is perhaps the area where the literature on international environmental governance is the source of insights that surpass the value added generated by parallel scholarly endeavors in terms of their breadth and depth by the most substantial margin. Initially, researchers in the field primarily limited themselves to invoking criteria of evaluation borrowed from other academic disciplines, particularly economics and policy studies.²⁹⁰ The starting point in their performance assessments was, and often remains, a comprehensive screening designed to ascertain the institutional system's allocative efficiency; "to ask whether a regime promotes efficiency is to inquire about the extent to which it leads to that allocation of available factors which will permit a specified group to enjoy the maximum feasible quantities of goods and services, regardless of its distributive consequences."²⁹¹

Precisely applying this yardstick in concrete situations proved rather problematic because of the somewhat different meanings attached to the extraction of maximum value from resources. The attainment of

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 19–20.

²⁸⁷ *Id.* at 20–21.

²⁸⁸ See Org. for Economic Co-operation and Development, *Toward Green Growth: Monitoring Progress* 20 (2011).

²⁸⁹ See Gupta & Mason, *supra* note 269, at 21.

²⁹⁰ See ORAN R. YOUNG, *Resource Regimes: Natural Resources and Social Institutions* 118 (1982).

²⁹¹ *Id.*

allocative efficiency has thus been equated with the realization of Pareto optimality, the maximization of social welfare, a shift toward a production possibility frontier, and the maximization of gross domestic product/gross national product (GDP/GNP).²⁹² The first two of these notions of “allocative efficiency” are closely linked to the concept of “utility”; the third and fourth are directly related to the production of measurable goods and services.²⁹³ The four variants of the term are not analytically interchangeable and there is no simple way to fully synthesize them.²⁹⁴

The challenge of operationalizing the different components of the definitional set was also considered daunting in the early phases of the evolution of the scientific and policy-oriented work on international environmental governance regimes. Only the GDP/GNP-maximizing formulation was deemed amenable to empirical treatment and hence of practical value.²⁹⁵ Yet, even in this case, doubts prevailed about the merits of the market prices for private goods and services, and especially the shadow prices or other monetary surrogates for non-market phenomena relied upon for that purpose.²⁹⁶ This was not perceived as merely a matter of data availability and distortions stemming from departures from perfect competition, but as the inadequate quality of the improvisations resorted to in the face of empirical gaps and the motives of those engaged in the task as well. “It is always possible to produce numerical estimates ‘by hook and by crook,’ and such estimates undoubtedly give the superficial impression of precision once they are cast in numerical form.”²⁹⁷ Be that as it may, “the results frequently have little intrinsic significance, and they are routinely manipulable by parties interested in justifying preconceived conclusions or policy recommendations.”²⁹⁸

Over time, the handling of allocative efficiency, in ecological contexts in particular, has materially grown in sophistication.²⁹⁹ The

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ *Id.* at 118–119.

²⁹⁵ *Id.* at 119–120.

²⁹⁶ *Id.*

²⁹⁷ *Id.* at 119.

²⁹⁸ *Id.*

²⁹⁹ See PER-OLAV JOHANSSON, *COST-BENEFIT ANALYSIS OF ENVIRONMENTAL CHANGE* (1993); THE GLOBALIZATION OF COST-BENEFIT ANALYSIS IN ENVIRONMENTAL POLICY (Michael A. Livermore & Richard C. Revesz eds., 2013).

uncertainty surrounding the concept and its operationalization has diminished to a certain degree, but has not receded altogether.³⁰⁰ At the macro regime-wide level, it has continued to be especially difficult to identify outcomes that combine optimal production with cost-minimizing institutional arrangements.³⁰¹ Textbook-like, distortion-free competitive markets may be capable of simultaneously achieving both objectives. International environmental governance regimes, however, substantially deviate from that stylized model or any real-life structural-functional configuration approximating it.³⁰²

Persistent dissatisfaction with the narrow ambit of the criterion of the fledging versions of “allocative efficiency” prompted socio-legal scholars focused on strategies to alleviate ecological threats in the global arena to highlight the criterion’s limitations as an overarching yardstick for assessing the performance of multifaceted institutional systems. For instance, they argued that “the achievement of allocative efficiency (as ordinarily construed) is perfectly compatible with disturbing developments like the extermination of living species, the inhumane treatment of animals, extensive air and water pollution, and the disruption of large ecosystems.”³⁰³ If that is the case, “the pursuit of efficiency fails to sensitize us to numerous phenomena we may reasonably value and wish to consider seriously but which are not simply questions of equity or distributive justice.”³⁰⁴

This gloomy diagnosis triggered a search for non-economic criteria for evaluating the effectiveness of international environmental governance regimes. Attention shifted to indicators embodying values that are not expressed in terms of any recognizable conception of human welfare, reflected in the position of those “who assert that whales have a right to life, caribou have a right to migrate undisturbed over the North Slope of Alaska, and trees have a right to legal standing.”³⁰⁵ This stance echoes eco-centric views that, in approaching the humankind-nature relationship, place the emphasis on the stewardship role and obligation to maintain ecological balances, rather than follow an anthropocentric

³⁰⁰ See Frank Ackerman & Lisa Heinzerling, *Priceless: On Knowing the Price of Everything and the Value of Nothing* (2004).

³⁰¹ *Id.*

³⁰² See YOUNG, *supra* note 290, at 120–121.

³⁰³ See *id.*, at 121.

³⁰⁴ See YOUNG, *supra* note 290. *But see* ALEXANDER GILLEPSIE, *INTERNATIONAL ENVIRONMENTAL LAW, POLICY, AND ETHICS* 27 (2d ed. 2014).

³⁰⁵ See YOUNG, *supra* note 290, at 121.

agenda predicated on the exploitation of the environment for the exclusive benefit of humans.³⁰⁶

The quest for augmenting the pool of indicators extended beyond the eco-centric value space. The need to incorporate considerations of human welfare not readily amenable to articulation in utilitarian terms necessary for estimating allocative efficiency was thus accorded high priority. “[T]he preservation of basic human rights and freedoms is certainly a value, but how are we to compute benefits and costs relating to this value?”³⁰⁷ As with respect to other pertinent factors, including those of the purely economic variety, this issue possesses a salient time dimension because the welfare of future generations, encompassing their rights and freedoms, cannot be overlooked.³⁰⁸

Other shortcomings of cost-benefit analysis undertaken to determine the allocative efficiency of international environmental governance regimes—again, at least the early-day formulations—were brought into focus and corresponding remedies were tentatively offered. The subject of “market failure” and the problem of properly accounting for consequences of action not duly mirrored in market prices featured prominently in the analytical discourse.³⁰⁹ The social costs of externalities (e.g., air and water pollution, depletion of fish stocks, erosion of soil, and the destructive impact of strip mining on natural systems)³¹⁰ were identified as a key area of concern as these negative spillovers “regularly show up in benefit/cost calculations in the form of ‘crude and disputable’ estimates since social costs are not reflected in market prices and are often difficult to capture in monetized surrogates.”³¹¹ This observation was deemed valid in regard to collective or public goods (and bads), another manifestation of market failure commonly encountered in the ecological domain.³¹² While it might be possible to develop empirical indicators for such phenomena and combine them with other quantitative elements of GDP/GNP calculations based on market prices, this would not constitute a practical option,

³⁰⁶ See *id.* at 121–122.

³⁰⁷ See *id.* at 122.

³⁰⁸ See *id.*

³⁰⁹ See *id.* at 122–23.

³¹⁰ See *id.*

³¹¹ See *id.* at 123.

³¹² For example, non-capture of value of preserving genetic stocks, aesthetic satisfaction derived from attractive scenery, contributions of forest lands to large-scale watershed management, and value to humankind stemming from the existence of healthy populations of great whales. See *id.*

given the technical and behavioral challenges confronted.³¹³ The latter difficulties, which arise from strategic incentives for agents to distort their preferences, are particularly serious.³¹⁴

Another aspect of institutional system performance not readily subsumed under the notion of “allocative efficiency” is the embracement of an array of “political” goals by a governance regime, ecologically inspired or otherwise, and a wide range of intangible factors impinging on the quality of life. Examples abound and those relating to the protection of fish and expression of aesthetic preferences have been vividly invoked to highlight the preeminence of non-material standards. Thus, “[a]lthough hard mineral independence or the protection of an outmoded fishing fleet may not be justifiable in terms of ordinary conceptions of efficiency, this hardly licenses the conclusion that such values are trivial or that they should be automatically subordinated to the pursuit of allocative efficiency.”³¹⁵ Similarly, no misdirection of resources necessarily occurs when “a society . . . exhibits a certain reverence for nature or . . . places a high priority on aesthetic considerations.”³¹⁶ Such preferences, which typically elude quantification, defy simple delineation and lack firm empirical underpinnings. Still, “what basis do we have for concluding that these values are unimportant or that a . . . regime oriented toward preserving natural environments is inferior to a regime oriented strictly toward [GDP]/GNP maximization in the ordinary sense?”³¹⁷

Additional questions were raised by socio-legal researchers regarding the seemingly uncomfortable relationship between allocative efficiency, as traditionally conceived, and equity, with the latter seen as pertaining to “the distribution of values among the members of a social group and, more specifically, to the conformity of this distribution to some normative standard concerning what is fair or just.”³¹⁸ The sense of unease conveyed in this context stemmed from the perception that the quest for allocative efficiency entails the adoption of an implicit standard of equity, even when it is not coupled with an explicit yardstick for equity.³¹⁹ This standard may conveniently be portrayed as the

³¹³ See *id.* at 122–23.

³¹⁴ See *id.*

³¹⁵ See *id.*, at 124.

³¹⁶ See *id.*

³¹⁷ See *id.*

³¹⁸ See ORAN R. YOUNG, *Resource Regimes: Natural Resources and Social Institutions* 125 (1982).

³¹⁹ See *id.*

embodiment of the principle of “to each according to the contribution of the resources in his possession.”³²⁰ Put another way, a mechanism geared toward GDP/GNP maximization is likely, in the absence of conscious redistributive rebalancing, to allocate values in accordance with agents’ contributions to the production of goods and services.³²¹ The corollary is that those blessed with significant initial endowments are bound to receive substantial shares of the regime’s output and vice versa.³²² While this pattern is not universally relegated to the normative periphery because of the belief that it is inconsistent with desirable standards of equity, it is generally deemed problematic, notably in circumstances where “initial resource endowments reflect serious past injustices or are otherwise hard to justify.”³²³

Assessing the effectiveness of international environmental governance regimes within a conventional-style allocative efficiency framework is thought to engender additional problems. These include further potential equity-related distortions attributable to the process of seeking efficiency first and subsequently shifting attention to equity, by placing the compensation of “losers” or other equivalent strategies on the policy agenda.³²⁴ This is not a mechanical, context-free undertaking but one inextricably linked to the distribution of initial resource endowments. As the latter is adjusted, the composition of the set of efficient outcomes undergoes an adjustment as well.³²⁵ The implication is that allocative efficiency and equity are not entirely independent as criteria for the appraisal of regime performance. In other words, it matters “whether equity is treated as a topmost value to be given first priority in considering the relative merits of alternative regimes or merely as a consideration to be attended to after allocative efficiency is secured.”³²⁶

Such concerns prompted socio-legal scholars to suggest a broader approach regarding the empirical and normative aspects of the equity side on the assessment of the effectiveness of international environmental governance regimes.³²⁷ The empirical component of the equation calls for a more thorough and versatile determination of the

³²⁰ *Id.*

³²¹ *Id.*

³²² *Id.*

³²³ *Id.*

³²⁴ *See id.* at 125–126.

³²⁵ *See id.*

³²⁶ *Id.* at 126.

³²⁷ *See id.*

actual operation of the system on the distribution of values, embracing the distinction between initial and ultimate conditions observed in the process of resource utilization and management.³²⁸ “[A] regime that initially allows private enterprises to capture the bulk of the returns from exploiting a given natural resource . . . may thus shift the ultimate distribution of proceeds through the introduction of a corporate income tax.”³²⁹ However, “even when a regime permits the public sector to capture a large share of the returns from the use of a natural resource, this tells us little about the ultimate distributive impact of the regime [because] [a]ny such conclusions must rest on an analysis of the distributive consequences of subsequent government expenditures.”³³⁰

The normative side of the distributive picture consists of two elements. First, the question of internal equity, or the extent to which and what form the system accommodates the distributive claims of actors who qualify as “insiders” by virtue of being members of the beneficiary group attached to it.³³¹ An important consideration in this context is whether the regime incorporates a standard of distributive justice, with John Rawls’ difference principle constituting a prominent example,³³² which is inherently likely to conflict with a traditional-style quest for allocative efficiency.³³³

Second, the issue of external equity needs to be properly grappled with. This subject merits close consideration because the system may not fully or even partially accommodate the distributive claims of actors who do not belong to the initial beneficiary group or are not adequately represented by this entity.³³⁴ The problem may manifest itself across space and across time, since the “outsiders” may be contemporaries who have no relationship with the regime but are affected by its shape and operations, as well as future generations whose welfare may also be influenced by its nature and activities.³³⁵

Two further evaluative yardsticks, one borrowed from microeconomics and the other from policy studies, were added to the

³²⁸ *See id.*

³²⁹ *Id.*

³³⁰ *Id.* at 126–127.

³³¹ *See id.* at 127.

³³² *See* JOHN RAWLS, A THEORY OF JUSTICE (1972).

³³³ This is most commonly evidenced by the narrow pursuit of GDP/GNP maximization. *See* ORAN R. YOUNG, Resource Regimes: Natural Resources and Social Institutions 127 (1982).

³³⁴ *See id.*

³³⁵ *See id.* at 127–128.

analytical toolkit during the early phases of its expansion. Transaction costs incurred in forming and preserving the system were quick to be recognized and duly distinguished from those involved in producing estimates of allocative efficiency.³³⁶ Several categories are observed in assessing the effectiveness of international environmental governance regimes, but some stand out in terms of their weight and frequency. These include negotiation costs, decision costs, information costs, and compliance costs.³³⁷ While the minimization of transaction costs is viewed as a lower-level goal than allocative efficiency and equity, it is nevertheless deemed an important factor in the appraisal of system performance.³³⁸

Feasibility, a complementary criterion and time-honored policy concept, was brought into the picture because of the realization that an international environmental governance regime may appear compelling in terms of fundamental yardsticks, such as allocative efficiency and equity, but may have insufficient appeal to key stakeholders and hence fail the test of acceptability.³³⁹ This is a multifaceted screening which raises questions about the initial response of relevant parties, subsequent compliance, and system stability or the capacity of the regime to absorb pressures over time without undergoing meaningful transformations.³⁴⁰ Stability may not ineluctably lead to efficient and equitable outcomes, yet it is considered a necessary condition for the attainment of other goals.³⁴¹ Such rich tapestry of assessment criteria enhances the quantity and quality of the information relied upon in endeavoring to come to grips with the effectiveness of international environmental governance regimes. At the same time, however, it lacks the coherence and parsimony of unidimensional evaluation schemes revolving around allocative efficiency. As implied above, faced with this ambiguous configuration, socio-legal researchers concerned with ecological threats in the global arena and strategies to alleviate them unequivocally opted for disaggregation rather than aggregation.³⁴² This choice has subsequently been affirmed by scholars and practitioners in the fast-

³³⁶ *Id.* at 128–130.

³³⁷ *Id.*

³³⁸ *Id.* at 130.

³³⁹ *Id.* at 130–132.

³⁴⁰ *Id.* at 131–132.

³⁴¹ *Id.* at 132.

³⁴² *Id.* at 133–137.

expanding and heavily empirical field of environmental impact assessment (EIA).³⁴³

Of course, the consequent abundance of stand-alone evaluative yardsticks is a source of considerable practical difficulties because it renders the comparison of alternative regimes a challenging task. Nevertheless, this does not constitute an insurmountable problem, as decision/policy scientists have developed an array of methods for circumventing it, even though they typically contain a subjective element.³⁴⁴ For instance, it may be possible to identify a system that “dominates” all others in all respects.³⁴⁵ Or, more realistically speaking, the pertinent criteria may be accorded weights reflecting their relative importance (i.e., subjected to lexicographic ordering), somewhat simplifying the inherently intricate process of regime appraisal.³⁴⁶ This question and those preceding it are no longer the sole items on the agenda of scholars wrestling with the issue of the effectiveness of international environmental governance regimes.³⁴⁷ Moreover, in the ongoing process of progressively broadening their horizons, scholars have not confined themselves to borrowing ideas from other sources and refining the “imports” by juxtaposing them with intricate ecological realities.³⁴⁸ Rather, they have proceeded to build on this foundation by venturing in new directions, or at least ones sparingly explored, making notable and even original contributions to knowledge, enriching the study of large-scale institutional systems and their performance.

The at times ill-defined relationship between effectiveness and two key related concepts, strength and robustness, has thus been duly clarified. Assessing regime effectiveness is a task that entails the comparison of its observed or predicted performance with a pertinent standard of “success.”³⁴⁹ Regime strength, on the other hand, reflects the extent to which the regime circumscribes legitimate choices available to

³⁴³ See Bram Noble, *Environmental Impact Assessment: A Guide to Principles and Practice* (2d ed. 2010); John Glasson et al., *Introduction to Environmental Impact Assessment* (4th ed. 2012); Stephen Tromans, *Environmental Impact Assessment* (2d ed. 2012).

³⁴⁴ See MURAT KÖKSALAN ET AL., *MULTIPLE CRITERIA DECISION MAKING: FROM EARLY HISTORY TO THE 21ST CENTURY* (2011).

³⁴⁵ See YOUNG, *supra* note 333, at 134.

³⁴⁶ See *id.*, at 134–135.

³⁴⁷ See, e.g., YOUNG, *supra* note 211; Arild Underdal, *Methodological Challenges in the Study of Regime Effectiveness*, in *Regime Consequences* 27 (Arild Underdal & Oran Young eds., 2004).

³⁴⁸ See YOUNG, *supra* note 211. See also Underdal, *supra* note 347.

³⁴⁹ Underdal, *supra* note 347, at 31.

its members.³⁵⁰ As such, it possesses both substantive and procedural aspects.³⁵¹ Looked at from the former angle, a “strong regime is one whose substantive norms, rules, and decision-making/operating procedures ‘significantly constrain the range of behavior that qualifies as legal or appropriate.’”³⁵² Put another way, “[t]he closer a regime comes to saying ‘anything goes,’ the weaker it is, in this particular sense.”³⁵³ From a procedural perspective, a regime is deemed strong if it “subjects a system of activity to collective governance rather than individual decision making.”³⁵⁴

The notions of “effectiveness” and “strength” are closely intertwined. The two concepts are distinct, however, because one primarily centers on regime consequences while the other focuses on its properties.³⁵⁵ Even so, they cannot be considered in isolation, as strength is a crucial determinant of effectiveness.³⁵⁶ After all, “a certain minimum of strength is a necessary condition for effectiveness . . . [since][t]o be effective a regime must influence behavior, and it cannot do so unless it limits the set of options or provides guidelines for the choice among these options.”³⁵⁷ Nevertheless, strength *per se* is not a sufficient condition for effectiveness. This stems from the fact that “[s]tringent rules enhance effectiveness only to the extent that they prescribe or encourage behavior that alleviates the problem (or proscribe or discourage behavior that causes or aggravates the problem), and are complied with.”³⁵⁸

Robustness is an altogether different and yet intimately associated concept, referring to a regime’s ability “to cope with challenges and survive stress with its functioning capacity intact.”³⁵⁹ Robustness should not be equated with the capacity to withstand change in all forms. The opposite is true because the ability of an institution to survive hinges on the extent to which it is capable of adapting to shifts in

³⁵⁰ *Id.*, at 28.

³⁵¹ Arild Underdal, *Methodological Challenges in the Study of Regime Effectiveness*, in *Regime Consequences* 27, 28 (Arild Underdal & Oran Young eds., 2004).

³⁵² *Id.* at 28.

³⁵³ *Id.*

³⁵⁴ *Id.*

³⁵⁵ *Id.*

³⁵⁶ *Id.*

³⁵⁷ *Id.*

³⁵⁸ *Id.*

³⁵⁹ *Id.* at 30.

its (task) environment.³⁶⁰ The corollary is that robustness does not involve stubborn resistance to change, but rather its sound management. The latter may be portrayed as “constructive adaptation” in order to distinguish it from institutional rigidity, which often begets maladaptation.³⁶¹

Effectiveness and robustness are tightly connected. Although the latter is the product of manifold forces, notably legitimacy, “a certain amount of effectiveness comes close to being a necessary condition for survival.”³⁶² By the same token, if the direction of causality is reversed, it is apparent that “[t]o be effective an institution must be able to survive encounters with the kind(s) of problems it has been established to solve or to alleviate.”³⁶³ This observation is universally valid but applies particularly in circumstances where generating the desired effects is a matter of persistent influence.³⁶⁴ It inevitably follows that effectiveness virtually always requires robustness and that the former may be materially enhanced “by the ability to adapt quickly and constructively to new challenges and changing environments.”³⁶⁵

The journey through augmented definitional territory, populated with distinct but inseparable notions, has resulted in a deeper understanding of international environmental governance regime effectiveness and its multifaceted manifestations. Effectiveness has thus been conceptualized in terms of problem solving, goal attainment, behavior modification, process promotion, constitutive activity, and evaluative tasks.³⁶⁶ Effectiveness as problem solving aims to determine whether a regime has contributed to the solution or alleviation of the problems that have prompted members to form it.³⁶⁷ Effectiveness as goal attainment overlaps to some degree with the foregoing specification but is concerned with the realization of the regime’s both stated and unstated

³⁶⁰ *Id.*

³⁶¹ Arild Underdal, *Methodological Challenges in the Study of Regime Effectiveness*, in *Regime Consequences* 27, 30 (Arild Underdal & Oran Young eds., 2004).

³⁶² *Id.*

³⁶³ *Id.*

³⁶⁴ *Id.*

³⁶⁵ *Id.*

³⁶⁶ See YOUNG, *supra* note 347, at 143–152; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in *GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE* 8–16 (Oran Young et al. eds., 1996).

³⁶⁷ See YOUNG, *supra* note 347, at 143–44; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in *GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE* 8–9 (Oran Young et al. eds., 1996).

objectives over time.³⁶⁸ Behavioral effectiveness, in effect a measure of strength, entails an examination of whether the operation of a regime induces members to modify their behavior, either in the sense of acting in a manner they would not otherwise have acted, or in the sense of discontinuing or redirecting previous patterns of behavior.³⁶⁹ Process effectiveness, also a measure of strength, is a function of the extent to which the provisions of the regime become embedded in the legal and political systems of members and the compliance they elicit.³⁷⁰ Constitutive effectiveness addresses the issue of whether regime creation leads to social practice “involving the expenditure of time, energy, and resources on the part of members.”³⁷¹ Evaluative effectiveness, as traditionally conceived, hinges on the extent to which a regime generates outcomes consistent with relevant performance yardsticks.³⁷²

The question of compliance, which looms large in the field of international environmental law, has also been subjected to careful scrutiny. Three different categories of rule conformity have been highlighted: procedural, substantive, and that reflecting adherence to the spirit of a regime.³⁷³ The three variants focus on whether members fulfill their obligations to a regime’s process (e.g., by producing national reports), carry out its substantive requirements (e.g., meet emissions reduction targets), and operate in accordance with its normative underpinnings/spirit³⁷⁴ (in the case of a treaty, this is often indicated in its preamble; e.g., undertaking a commitment to place biodiversity

³⁶⁸ See YOUNG, *supra* note 347, at 144–45; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE 9–10 (Oran Young et al. eds., 1996).

³⁶⁹ See YOUNG, *supra* note 347, at 145–46; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE 10–11 (Oran Young et al. eds., 1996).

³⁷⁰ See YOUNG, *supra* note 347, at 146–49; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE 11–12 (Oran Young et al. eds., 1996).

³⁷¹ Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE 13 (Oran Young et al. eds., 1996).

³⁷² YOUNG, *supra* note 347, at 149–52; Oran R. Young, *Introduction: The Effectiveness of International Governance Systems*, in GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE 14–16 (Oran Young et al. eds., 1996). See also Arild Underdal, *One Question, Two Answers*, in *Environmental Regime Effectiveness: Confronting Theory with Evidence* 3 (Edward L. Miles et al. eds., 2002).

³⁷³ See Harold K. Jacobson & Edith Brown Weiss, *A Framework for Analysis*, in *Engaging Countries: Strengthening Compliance with International Accords* 5 (Edith Brown Weiss & Harold K. Jacobson eds., 1998).

³⁷⁴ *Id.*

protection in the broad context of pursuing sustainable development).³⁷⁵ Rule conformity may manifest itself to different degrees in any of these spheres, although it would be uncommon to witness significant divergences because of the underlying linkages.³⁷⁶

An interesting and somewhat controversial development having a bearing on compliance involves the notion of “fit.”³⁷⁷ Prior to its articulation, adherence to the letter (procedural and substantive) and spirit of an ecologically inspired regime was thought to primarily depend on its perceived legitimacy, precision and scope of its obligations, availability of sanctions and other enforcement mechanisms, transparency and reputation, and provision of positive incentives (endogenously and/or exogenously furnished; e.g., capacity-building support, environmental aid, and global environmental facility).³⁷⁸

The idea of “fit” is both simple and novel. It encapsulates the view that an ecologically driven international governance regime should not impose obligations that amount to a radical departure from prevailing practices, regulatory strategies, and technological capabilities.³⁷⁹ Moreover, its fundamental attributes should be “compatible with the biogeographical systems with which [it] interact[s].”³⁸⁰ As noted, this scarcely qualifies as a revolutionary proposition, yet it may be construed as an entirely fresh perspective on institutional effectiveness and is therefore a valuable addition to the theoretical and managerial-style discourse on sustainability and ecological modernization. The controversial aspects stem from the fact that the weakness of international environmental governance regimes may be attributed to their minimalist nature/excessive fit.³⁸¹

The pivotal concept of “evaluative effectiveness” has been extended as well. The narrowly delineated early-day formulations of the concept tended to center on the performance standard, or the “[n]ormative point to which observed outcomes can be compared to

³⁷⁵ See O’Neill, *supra* note 214, at 107.

³⁷⁶ See JACOBSON & BROWN WEISS, *supra* note 373.

³⁷⁷ See ORAN R. YOUNG, *The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale* (2002).

³⁷⁸ See JACOBSON & BROWN WEISS, *supra* note 373; O’Neill, *supra* note 214, at 115–123.

³⁷⁹ See YOUNG, *supra* note 377.

³⁸⁰ See *id.*, at 55.

³⁸¹ See JAMES G. SPETH, *RED SKY AT MORNING: AMERICA AND THE CRISIS OF THE GLOBAL ENVIRONMENT* 96 (2004).

assess the magnitude of institutional influence.”³⁸² Current versions include a performance dimension (“[a] specific aspect of an institution under evaluation”),³⁸³ a performance scale (“[s]ystem of measurement for a given performance dimension”),³⁸⁴ a performance reference point (“[c]ounterfactual point to which observed outcomes can be compared to identify institutional influence”),³⁸⁵ and a performance score (“[t]he numeric or nonnumeric value assigned an institutional outcome on a given scale”).³⁸⁶

Methodologically rigorous attempts have made to precisely capture the essence of this wide analytical canvas. For instance, one authoritative but relatively parsimonious source suggests a formula for quantitatively estimating international environmental regime effectiveness (E) whose elements consist of the actual performance obtained under the system (AP), the best result that could be achieved in the circumstances, the collective “optimum” (CO), and the outcome that would have materialized in the absence of the regime—the “counterfactual scenario.”³⁸⁷ E is measured by subtracting NR from AP (AP-NR) and from CO (CO-NR) and dividing the former term by the latter ($E = [AP - NR] / [CO - NR]$).³⁸⁸

This trend has not affected qualitative exploration in a detrimental way. A growing emphasis has thus been laid in recent years on the phenomenon of regime interdependence, reflecting in the increasing realization that complex institutional systems do not function in isolation and that effectiveness may not fruitfully be evaluated without assessing the positive and negative consequences of interconnectedness.³⁸⁹ These intricacies confronted in this context have

³⁸² Ronald B. Mitchell, *Evaluating the Performance of Environmental Institutions: What to Evaluate and How to Evaluate*, in INSTITUTIONS AND ENVIRONMENTAL CHANGE: PRINCIPAL FINDINGS, APPLICATIONS, AND RESEARCH 79, 81 (Oran R. Young et al. eds., 2008).

³⁸³ *Id.*

³⁸⁴ *Id.*

³⁸⁵ *Id.*

³⁸⁶ *Id.* See also Arild Underdal, *Methods of Analysis*, in ENVIRONMENTAL REGIME EFFECTIVENESS: CONFRONTING THEORY WITH EVIDENCE 47, 48 (Edward L. Miles et al. eds., 2002).

³⁸⁷ See Speth & Haas, *supra* note 227, at 100.

³⁸⁸ See *id.* See also Ronald B. Mitchell, *A Quantitative Approach to Evaluating International Environmental Regimes*, in REGIME CONSEQUENCES: METHODOLOGICAL CHALLENGES AND RESEARCH STRATEGIES 121 (Arild Underdal & Oran R. Young eds., 2004); Detlef F. Sprinz & Carsten Helm, *The Effect of Global Environmental Regimes: A Measurement Concept* 20 Int'l. Pol. Sci. Rev. 359 (1999); Carsten Helm & Detlef F. Sprinz, *Measuring the Effectiveness of International Environmental Regimes* 44 J. Conflict Resol. 630 (2000).

³⁸⁹ See YOUNG, *supra* note 377.

fallen under the rubric of “regime linkage, overlap, and interplay,”³⁹⁰ with both synergistic and conflictual impacts highlighted.³⁹¹ The patterns of interdependence have been portrayed as horizontal (extending over the same level), vertical (hierarchically configured),³⁹² hybrid-like,³⁹³ purposeful, and accidental.³⁹⁴

Another vital issue addressed qualitatively yet methodically, in relation to international environmental governance regime effectiveness, has been that of institutional learning. After all, the process of solving complex problems solving entails incremental adaptation, implying that “it would be wrong to assume that regime participants ‘get it right’ at the outset.”³⁹⁵ This dynamic feature is built into most international institutional systems, which “provide mechanisms to assess . . . progress, incorporate new information, learn from experience, and adjust policies, practices, and goals accordingly.”³⁹⁶ Indeed, “[t]he ability to incorporate new information or learn from experience is a crucial component of [international environmental governance regimes] if they are to be effective [or, to be precise, robust] over the long term.”³⁹⁷

The cognitively underpinned developmental process is not strictly confined to the space within the boundaries of a specific institutional system. In addition to “intra-regime” learning, international environmental governance regimes may promote “extra-regime” learning, inducing attitudinal and behavioral shifts in domains not falling within the narrow ambit of a particular institutional system.³⁹⁸ This may result in a widespread diffusion of principles, norms, rules, decision-making/operating procedures, knowledge, and so forth³⁹⁹—although there

³⁹⁰ See *id.*

³⁹¹ See generally Kristin G. Rosendal, *Overlapping International Regimes: The Case of the Intergovernmental Forum on Forests (IFF) Between Climate Change and Biodiversity* 1 Int’l. Env’tl. Agreements 447 (2001).

³⁹² See YOUNG, *supra* note 377, at 23.

³⁹³ See Kal Raustalia & David G. Victor, *The Regime Complex for Plant Genetic Resources* 58 Int’l Org. 277, 278 (2004).

³⁹⁴ See O’Neill, *supra* note 214, at 124.

³⁹⁵ *Id.* at 126.

³⁹⁶ *Id.*

³⁹⁷ *Id.*

³⁹⁸ See Peter M. Haas & David McCabe, *Amplifiers or Dampeners: International Institutions and Social Learning, in the Management of Global Environmental Risks in 1 Learning to Manage Global Environmental Risks* 323 (Social Learning Group ed., 2001).

³⁹⁹ *Id.*

is no guarantee that learning would proceed smoothly, or take place at all, as the impediments to forward movement may be formidable.⁴⁰⁰

A distinction also needs to be drawn between surface and deep learning. The former is “fundamentally a matter of devising new means through which to pursue unchanging objectives.”⁴⁰¹ The latter, on the other hand, constitutes “a more far-reaching form of social learning . . . [which] occurs in cases where the operation of a regime leads to major changes in how the problem a regime addresses is understood, and as a result, ideas about how to cope with it.”⁴⁰² Moreover, learning may follow different paths, entailing, for instance, the input and processing of new technological information, the adoption of new concepts and ideas, and the reinvigoration of relationships among members.⁴⁰³ The prevalence of multipath blockages may culminate in regime ossification.⁴⁰⁴

The question of international environmental governance regime effectiveness is no longer exclusively couched in terms of consequences, or even strength and robustness. Close attention is also accorded to the determinants of effectiveness.⁴⁰⁵ Often, this is in the form of an inquiry directed toward identifying barriers to the creation of viable institutional structures for curtailing ecological threats in the global arena.⁴⁰⁶ The authors of a leading textbook single out systematic obstacles (e.g., anarchical structure of the international political system), the absence of necessary conditions (e.g., inadequate concern), procedural obstacles (e.g., slow-boat problem: time lags in regime development and implementation), characteristics of global environmental issues (e.g.,

⁴⁰⁰ See Sheila Jasanoff, *Contingent Knowledge: Implications for Implementation and Compliance, in Engaging Countries: Strengthening Compliance with International Environmental Accords* 63 (Edith Brown Weiss & Harold K. Jacobson eds., 1998); Marybeth Long Martello & Alastair Iles, *Making Climate Change Impacts Meaningful: Framing, Methods, and Process in Coastal Zone and Agricultural Assessments, in Assessments of Regional and Global Environmental Risks: Designing for Effective Use of Science in Decision Making* 101 (Alexander E. Farrell & Jill Jager eds., 2006).

⁴⁰¹ Oran R. Young, *Regime Effectiveness: Taking Stock, in The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms: Causal Connections and Behavioral Mechanism* 249, 262 (Oran R. Young ed., 1999).

⁴⁰² *Id.*

⁴⁰³ See Joanna Depledge, *The Opposite of Learning: Ossification in the Climate Change Regime* 6 *Global Env'tl. Pol.* 2 (2006).

⁴⁰⁴ *Id.*

⁴⁰⁵ See PAMELA S. Chasek et al., *Global Environmental Politics* 277 (2010). See also GABRIELA Kütting, *ENVIRONMENT, SOCIETY AND INTERNATIONAL RELATIONS: TOWARDS MORE EFFECTIVE INTERNATIONAL ENVIRONMENTAL AGREEMENTS* 38–58 (2000).

⁴⁰⁶ See Chasek et al., *supra* note 405, at 277. See also Kütting, *supra* note 405, at 38–58.

links to important economic and social activity and interests), interconnections between environmental issues (e.g., solutions can require addressing multiple issues), and regime design (e.g., other political and economic influence regime design) as significant barriers.⁴⁰⁷

Not all the serious hindrances to constructive action necessarily possess international origins. Domestic forces play a prominent role in this respect as well, either independently or in conjunction with more pervasive/global headwinds.⁴⁰⁸ Strong adverse influence is believed to be exerted by inadequate translation of regime rules into domestic law without proper coordination, including: insufficient capacity to implement, administer, or enforce legislation; inability to monitor compliance and report implementation; lack of respect for the rule of law; cost of compliance; misperception of relevant costs and benefits; inadequate financial and technical assistance; poorly designed regimes; and proliferation of regimes.⁴⁰⁹

In addition to pinpointing factors hampering the effectiveness of international environmental governance regimes, socio-legal researchers conducting investigations in this area have endeavored to furnish a broader framework for approaching this issue by distinguishing between performance drivers on an analytical basis.⁴¹⁰ The principal categories generated by the researchers include endogenous (pertaining to the attributes of the regime itself), exogenous (emanating from the external milieu in which the system is embedded), and linkage (reflecting the correspondence/fit between the institutional system and the setting where it is expected to function or actually operates) variables.⁴¹¹ Such a scheme is thought to have a heuristic value stemming from its potential to fruitfully guide scholars toward influences that may productively be accommodated within a causal model.⁴¹²

The extensive, even if incomplete, knowledge gained in grappling with the intricacies of assessing effectiveness has been utilized in contemplating the practical challenge of designing international environmental governance regimes and formulating strategies to bolster their performance. For instance, an elaborate survey devoted to design activities offers several suggestions as to how to optimize system

⁴⁰⁷ See Chasek et al., *supra* note 405, at 277. See also Kütting, *supra* note 405, at 38–58.

⁴⁰⁸ See Chasek et al., *supra* note 405, at 277.

⁴⁰⁹ See *id.*

⁴¹⁰ YOUNG, *supra* note 371, at 16–23; YOUNG, *supra* note 347, at 152–160.

⁴¹¹ Young, *supra* note 371, at 16–23; YOUNG, *supra* note 347, at 152–160.

⁴¹² Young, *supra* note 371, at 16–23; YOUNG, *supra* note 347, at 152–160.

structure and functioning in terms of: scope (global, regional, or bilateral), access for and participation of outsiders; level of State representation (political/ministerial versus administrative/bureaucratic); decision rules (strong versus weak procedures, with the latter being based on the “law of the least ambitious program,” which states that “where international management can be established only through agreement among all significant parties involved, and where such a regulation is considered only on its own merits, collective action will be limited to those measures acceptable to the least enthusiastic party”),⁴¹³ formal versus informal rules; role of the supporting organizational unit/secretariat (assistant versus player); agenda patterns (comprehensive versus flexible); scientific-political balance (scientific integrity versus decision-making involvement); and verification and compliance tactics (non-intrusive versus intrusive; “carrots” versus “sticks”).⁴¹⁴

Similarly, in a wide-ranging review and synthesis of the literature, another author highlights strategies for bringing about behavior modification conducive to proper alignment with regime principles, norms, rules, and decision-making/operating procedures.⁴¹⁵ Particular emphasis is placed on consequence-altering (remunerative versus punitive; “carrots” versus “sticks”), opportunity-altering (those which are preclusive “remove existing opportunities to engage in proscribed behaviors and [those which are] generative create new opportunities to engage in proscribed behaviors”⁴¹⁶), and perception-altering (cognitively oriented steps which “give [S]tates new information about the consequences of their available choices to alter their calculation of which choices will best promote their interests”⁴¹⁷) measures.⁴¹⁸ The incisive forays into practical territory are indicative of the progress made in the quest for a sound understanding of the characteristics and dynamics of international environmental governance regimes.

⁴¹³ JOREGEN WETTESTAD, DESIGNING EFFECTIVE ENVIRONMENTAL REGIMES: THE KEY CONDITIONS 25 (1999).

⁴¹⁴ *Id.* at 18–37.

⁴¹⁵ RONALD B. MITCHELL, INTERNATIONAL POLITICS AND THE ENVIRONMENT (2010).

⁴¹⁶ *See id.* at 169.

⁴¹⁷ *See id.* at 170–171.

⁴¹⁸ *See id.* at 166–172.

III. ASIAN INPUT

The rich analytical tapestry delineated in the previous two sections rests on a surprisingly narrow geographic and historic foundation. Western scholars inspired by Western experience accumulated in Western economic-legal-political-and-social milieus have primarily shaped its contours. While their background, conditioning, outlook, and values legitimately place them at the epicenter of the study of international law/international relations and its burgeoning environmental segment, they may not possess sufficient geographic and historic breadth to offer generalizations that can be said to enjoy universal validity. The omission of populous, materially robust, increasingly assertive and, in crucial respects, decidedly different Asia is especially problematic. Arguably, no thorough framework, let alone an all-embracing one, may be erected without paying close heed to this region. Admittedly, the writings of Western researchers rooted in Western realities and responses thereto dwarf those focused on Asia, whether produced within the region or elsewhere. The latter resemble the proverbial ‘trickle’ rather than a “wave.” Nevertheless, there is no compelling reason to adopt a “wait-and-see” attitude and refrain from taking account of the insights provided until a scale akin to critical mass is reached. The output generated is of sufficient quantity and quality for the ideas and findings available at this juncture to be considered not merely in their geographic and historic context, which in itself constitutes a valuable undertaking, but also in terms of the implications for the dissection and management of international environmental governance regimes.

A notable contribution of studies has been to at least partially restore the balance between interest-based and power-centered theories and their cognitivist counterpart, which in recent years may have swung too far in favor of the latter. Indeed, some socio-legal scholars have for all intents and purposes relegated the former two to the analytical periphery.⁴¹⁹ A prominent example is the elaborate, but falling somewhat short of qualifying as genuinely multifactorial, inquiry into the operation of the tropical timber, whaling, and Antarctic minerals governance

⁴¹⁹ See generally PETER M. HAAS, *EPISTEMIC COMMUNITIES, CONSTRUCTIVISM, AND INTERNATIONAL ENVIRONMENTAL POLITICS* (2016).

regimes.⁴²⁰ The author addresses the tension between the forces of exploitation and preservation, with a heavy emphasis being laid on the normative evolution of the three systems.⁴²¹ This is a conceptually engaging and empirically significant exploration of three major international environmental governance regimes, possessing nuanced observations and sensitivity to variations in system-specific circumstances.⁴²² Some norms thus prove more resilient than others; their vigor is a function of a number of endogenous and exogenous variables rather than of their intrinsic appeal alone.⁴²³ This notwithstanding, the survey possesses a decidedly cognitivist/constructivist orientation that is not entirely warranted given its theoretically less than exhaustive nature, scope for alternative interpretations, potential for raising residual questions, and (most importantly) small sample size.⁴²⁴ With this in mind, it would be inappropriate to draw any firm inferences regarding the relative merits of cognitivism vis-à-vis competing analytical paradigms (particularly neoliberalist models with which the scheme is directly juxtaposed).

The Asian space is replete with manifestations of self-interest and power that impinge on responses to ecological threats both within and across borders, serving as an antidote to absolutist versions of cognitivism. China is a case in point because of its long tradition of acting in accordance with principles derived from a strategic culture, or a “body of attitudes and beliefs that guides and circumscribes thought on strategic questions, influences the way strategic issues are formulated, and sets the vocabulary and the parameters of strategic debate.”⁴²⁵ Historically, perceptions of national interest and power have featured conspicuously in this context,⁴²⁶ albeit often in a subtle and not readily discernible fashion.⁴²⁷ These two pivotal factors not merely play a

⁴²⁰ See generally GERRY NAGTZAAM, *THE MAKING OF INTERNATIONAL ENVIRONMENTAL TREATIES: NEOLIBERAL AND CONSTRUCTIVIST ANALYSES OF NORMATIVE EVOLUTION* (2009).

⁴²¹ See *id.*

⁴²² See *id.*

⁴²³ See *id.*

⁴²⁴ See *id.*

⁴²⁵ Jack Snyder, *The Soviet Strategic Culture: Implications for Strategic Options* 9 (1977). See also Alastair I. Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (1995); Michael D. Swaine & Ashley J. Tellis, *Interpreting China's Grand Strategy: Past, Present, and Future* 3 (2000).

⁴²⁶ See GERALD CHAN, *CHINESE PERSPECTIVES ON INTERNATIONAL RELATIONS: A FRAMEWORK FOR ANALYSIS* 28–46 (1999).

⁴²⁷ See generally JOHNSTON, *supra* note 425.

prominent role in shaping behavior in the global arena, including on the ecological front, but are also closely intertwined, in a manner rendering it difficult to clearly demarcate a boundary, along the lines indicated in the general/Western literature on international environmental governance regimes. The paramountcy of power and its symbiotic relationship with interest, national and subnational (extending to the individual level), cannot be overlooked. After all, “[p]ower is the cornerstone of Chinese politics.”⁴²⁸ The country’s “politicians and diplomats are [consequently] often recognized as masters of power politics, having inherited a well-spring of experience of power play over the millenniums.”⁴²⁹

Mao Zedong’s assertion that “political power grows out of the barrel of a gun”⁴³⁰ is frequently and suitably invoked to illustrate the extremes to which the pursuit of the maximization of power, in its raw and reductionist manifestations, may be carried. Mao explicitly portrayed himself as the modern equivalent of an emperor in the dynastic era.⁴³¹ For Mao, gaining and maintaining power was the ultimate goal, trumping ethical and similar considerations.⁴³² Indeed, his actions may have been more inspired by “the kind of intricate power play that existed in Chinese imperial courts than by Marxism and Leninism.”⁴³³ Mao’s successors may have softened the tone and the tactics, but they have not discarded the underlying philosophy and its practice.⁴³⁴

Power is no longer solely equated with the exercise of brute force (e.g., gunboat diplomacy). Rather, it has evolved into a broader notion encompassing national capability and external influence.⁴³⁵ Yet, it remains deeply rooted in a quintessentially State-centric vision that may not readily be reconciled with cognitivist blueprints possessing internationalist underpinnings.⁴³⁶ The concept of “national comprehensive power” (NCP) is at the heart of that vision,⁴³⁷ a multifaceted idea somewhat imprecisely formulated and subject to mildly divergent interpretations. Nevertheless, NCP is an overarching strategic

⁴²⁸ CHAN, *supra* note 426, at 28.

⁴²⁹ *Id.*

⁴³⁰ *Id.* at 29.

⁴³¹ *Id.*

⁴³² *Id.*

⁴³³ *Id.*

⁴³⁴ See generally WILLY W.L. LAM, THE ERA OF JIANG ZEMIN (1999); WILLY W.L. LAM, CHINESE POLITICS IN THE ERA OF XI JINPING: RENAISSANCE, REFORM, OR RETROGRESSION (2015).

⁴³⁵ CHAN, *supra* note 426, at 29.

⁴³⁶ *Id.* at 29–30.

⁴³⁷ *Id.* at 29–33.

goal seeking the realization of national interest construed in predominantly material (as well as military) terms.⁴³⁸

The term “GDPism” was coined⁴³⁹ to give concrete expression to the preoccupation with economic expansion (“[g]rowth is the hard truth...*fashan shi yingdaoli*”),⁴⁴⁰ or power. This moniker is claimed as a salient feature of the post-1978 reform era.⁴⁴¹ In fact, perhaps with the exception of occasional pauses, “GDPism” may be viewed as a centuries-long behavioral pattern.⁴⁴² A vivid illustration is afforded by events during the 248 years of the Warring States period, when 590 intense armed conflicts took place, reflecting an enduring quest for economic and military power by the State or the elites/rulers controlling or aiming to control it.⁴⁴³ The endless destructive confrontations and the massive physical reconstruction efforts that ensued had a devastating impact on human population and the natural habitat.⁴⁴⁴

The 2003 Severe Acute Respiratory Syndrome (SARS) crisis is supposed to have brought the demise of the “GDPism” paradigm in contemporary China by alerting the country’s leaders to the imperative need of striking a balance between economic expansion and social development.⁴⁴⁵ The new model, which may be regarded as a cognitive map encapsulating strategic-level perceptions and preferences, is unambiguously ecologically progressive. The model incorporates a commitment to “building a harmonious and environmentally-friendly society,” one dedicated to “energy-saving,” and embracing “sustainable development” in the process.⁴⁴⁶ The policy orientation may be depicted as liberal, with extensive reliance on decentralized regulatory procedures, citizen participation, consensus management, responsive governance, State-society partnership, scientific validity, transparency, and accountability.⁴⁴⁷

⁴³⁸ *Id.* at 29–33, 80–84.

⁴³⁹ See Kinglun Ngok, *Redefining Development in China: Toward a New Paradigm for the New Century?*, in *Changing Governance and Public Policy in China* 55 (Ka-ho Mok & Ray Forrest eds. 2009).

⁴⁴⁰ *Id.* at 54.

⁴⁴¹ *Id.* at 54–56.

⁴⁴² See generally Roda Mushkat, *Contextualizing Environmental Human Rights: A Realist Perspective* 26 *Pace Env'tl. L. Rev.* 119 (2009).

⁴⁴³ See *id.* at 147–148.

⁴⁴⁴ *Id.*

⁴⁴⁵ See Ngok, *supra* note 439, at 59–63.

⁴⁴⁶ See *id.* at 62.

⁴⁴⁷ See *id.*

Unfortunately, little progress has been recorded on any of these fronts in the following decade, and it remains to be seen whether the far-reaching 2014 adjustments to the Environmental Protection Law constitute a genuine turning point in this respect.⁴⁴⁸ Even if they do, the lengthy decision and implementation gaps suggest that the balancing act is complicated by the prevalence of forces that offset or mitigate the influence of the recognition of the dire ecological straits the country is in and the adverse consequences of inadequate policy responses. Unbridled “GDPism” may have morphed into a constrained variant, but the environmental (or, for that matter, social) benefits have been negligible.⁴⁴⁹ This serves as a poignant reminder that attitudinal complexes have three components— affective, behavioral, and cognitive (the ABC tripartite structure)⁴⁵⁰ — and that acknowledging a problem may be a necessary but scarcely sufficient condition for behavior modification/resorting to remedial action.

Seeking to maximize NCP is also a constrained endeavor not unyieldingly pursued in a zero-sum-game fashion.⁴⁵¹ China’s conduct of its external relations for the past three decades or so has been marked by “strategic pragmatism,” apparently reflecting a sober appreciation of the limits a single-minded quest for power in today’s interconnected global arena. Embracing “economic modernization as their top national objective, pragmatic Chinese leaders have paid special attention to China’s economic relations, particularly its trade relations, with other countries.”⁴⁵² The corollary is that “Chinese leaders’ expectations from international economic interactions in general and trade in particular set a major constraint on China’s foreign policy behavior.”⁴⁵³

This is not merely an informally obtained and loosely structured observation: it has been methodically formulated and placed within a

⁴⁴⁸ See generally Roda Mushkat, *Reconfiguring China’s Environmental Governance Regime: A Highly Complicated and Decidedly Uneven Journey* 2 J. Int’l & Comp. L. 29, 36 (2015).

⁴⁴⁹ See generally Roda Mushkat, *Economic Development, Environmental Preservation, and International Policy Learning in China: Venturing beyond Transnational Legal Process Theory*, in *Rethinking Law and Development: The Chinese Experience* 187 (Guanghua Yu ed. 2013).

⁴⁵⁰ See generally Milton J. Rosenberg & Carl I. Hovland, *Cognitive, Affective, and Behavioral Components of Attitudes*, in *Attitude Organization and Change: An Analysis of Consistency among Attitude Components* 1 (Milton J. Rosenberg et al. eds., 1960).

⁴⁵¹ See generally Pauline Kerr, *Introduction: Debating China’s Role in World Politics in China’s New Diplomacy: Tactical or Fundamental Change* 1 (Pauline Kerr et al., eds., 2008).

⁴⁵² Suisheng Zhao, *Chinese Foreign Policy: Pragmatism and Strategic Behavior*, in *Chinese Foreign Policy: Pragmatism and Strategic Behavior* 3, 5 (Suisheng Zhao ed., 2004).

⁴⁵³ *Id.*

coherent theoretical framework. The framework is derived from the trade expectations hypothesis, which stipulates that the higher the interdependence between trading nations and the more favorable the expectations regarding the direction of the two-way flow of goods and services, the more cooperative and smoother the bilateral relationship is likely to be.⁴⁵⁴ It has been demonstrated that there is support for this proposition in the Chinese context, particularly in so far as the pattern of Sino-American exchanges is concerned.⁴⁵⁵ Therefore, the inference may be drawn that a cognitive apparatus attuned to the limitations of power politics in an interconnected world may predispose policy makers toward collaboration, including in the ecological realm.

In addition, some comfort may be drawn from the fact that China's approach to sovereignty (as well as intervention) has grown less rigid and, from an international perspective, the country is doing "more than just saying no."⁴⁵⁶ Perhaps the most constructive manifestation of this reassuring posture is the partial acceptance of the "new international order"⁴⁵⁷ and multilateralism. This is viewed as a significant development because "for a long time [the country had] clung to bilateralism or unilateralism in its handling of regional disputes and managing its foreign relations."⁴⁵⁸

⁴⁵⁴ See Rex Li, *Security Challenge of an Ascendant China: Great Power Emergence and International Stability*, in *Chinese Foreign Policy: Pragmatism and Strategic Behavior* 23, 35–44 (Suisheng Zhao ed., 2004).

⁴⁵⁵ *Id.* See also Nicholas R. Lardy, *China in the Global Economy* (1994); Thomas G. Moore & Dixia Yang, *Empowered and Restrained: Chinese Foreign Policy in the Age of Economic Interdependence*, in *The Making of Chinese Foreign and Security Policy in the Era of Reform, 1978–2000* 191 (David M. Lampton ed., 2001); NICHOLAS R. LARDY, *INTEGRATING CHINA INTO THE GLOBAL ECONOMY* (2002); Chenghong Li, *Increasing Interdependence between China and the U.S. and its Implications for China's Foreign Policy*, in *New Dimensions of Chinese Foreign Policy* 203 (Sujian Guo & Shiping Hua eds., 2007); Wei Li, *China-U.S. Economic Relations and the Trade Balance Issue*, in *China-U.S. Relations Transformed: Perspectives and Strategic Interactions* 103 (Suisheng Zhao ed., 2008).

⁴⁵⁶ See Allen Carson, *More than Just Saying No: China's Evolving Approach to Sovereignty and Intervention since Tiananmen*, in *New Directions in the Study of China's Foreign Policy* 217 (Alastair I. Johnston & Robert S. Ross eds., 2006).

⁴⁵⁷ This is a rather vague term but invokes images of productive cooperation: "the growing concern about world affairs reflects a popular conception that there should be an international order . . . despite the [prevalence of] interstate and civil conflicts . . . it is generally felt that an international order is emerging, Wang Gungwu, *Introduction*, in *China and the New International Order* (Wang Gungwu & Zheng Yongnian eds., 2008).

⁴⁵⁸ Guoguang Wu & Helen Lansdowne, *International Multilateralism with Chinese Characteristics: Attitude Change, Policy Imperatives, and Regional Impacts*, in *China Turns to Multilateralism: Foreign Policy and Regional Security* 3 (Guoguang Wu & Helen Lansdowne eds., 2008). See also GERALD CHAN ET AL., *CHINA'S ENGAGES GLOBAL GOVERNANCE: A NEW WORLD ORDER IN THE MAKING?* (2012).

The broad-based external engagement has evolved along a two-track pathway: declaratory and operational.⁴⁵⁹ The former may have overshadowed the latter, but not to a point of rendering it immaterial.⁴⁶⁰ In both incarnations, the propensity to collaborate in order to realize mutual gains has been most pronounced in the economic sphere, with investment as well as trade.⁴⁶¹ Collaboration has also notably advanced the challenging military strategy field, where a progressively greater willingness has been observed to embark on and sustain “active participation in multilaterally oriented regional security regimes.”⁴⁶² Before losing some of its luster in the wake of aggressive muscle flexing in the South China Sea,⁴⁶³ the “good neighbor” policy was widely regarded as the tip of the Chinese multilateral iceberg in traditionally conflict-ridden Asia.⁴⁶⁴

These symbolic and behavioral transformations are worth highlighting on analytical grounds and merit attention from a practical standpoint, but they do not fundamentally detract from the persistent relevance of the interest-based and power-centered paradigms—whether considered independently or, better still, in tandem. Assertions to the contrary, constrained “GDPism” continues to accord priority, even if less unambiguously than its unconstrained predecessor, to output expansion and does not signal a decisive shift from unbalanced to balanced development.⁴⁶⁵ In the environmental realm, the goal pursued is ecological modernization rather than sustainability,⁴⁶⁶ which requires a more radical reordering of strategic preferences and deeper structural adjustment entailing heavier economic sacrifices.⁴⁶⁷ This argument is valid with respect to constrained NCP as well. There is no compelling reason why it could not be reconciled with—or, indeed, incorporate—a

⁴⁵⁹ See WU & LANSLOWNE, *supra* note 458.

⁴⁶⁰ See *id.*

⁴⁶¹ See *id.*

⁴⁶² See *id.*

⁴⁶³ See generally BILL HAYTON, *THE SOUTH CHINA SEA: THE STRUGGLE FOR POWER IN ASIA* (2014).

⁴⁶⁴ See generally CHIEN-PENG CHUNG, *CHINA’S MULTILATERAL COOPERATION IN ASIA AND THE PACIFIC: INSTITUTIONALIZING BEIJING’S GOOD NEIGHBOR POLICY* (2010).

⁴⁶⁵ See generally Mushkat, *supra* note 337.

⁴⁶⁶ See generally Lei Zhang et al., *The Interpretation of Ecological Modernization in China* 16 *Env’tl. Pol.* 659 (2007). See also Arthur P.J. Mol & Neil T. Carter, *China’s Environmental Governance in Transition*, in *Environmental Governance in China 1* (Neil T. Carter & Arthur P.J. Mol eds., 2007).

⁴⁶⁷ See generally *ECOLOGICAL MODERNIZATION AROUND THE WORLD: PERSPECTIVES AND CRITICAL DEBATES* (Arthur P.J. Mol & David A. Sonnenfeld eds., 2000).

deliberate commitment, inspired by considerations of national interest and power, to environmental preservation. It remains to be seen whether the vision of ecological modernization may be converted into a conceptually viable and properly implementable blueprint. If it proves generally feasible and mostly efficacious, which would be a notable achievement, the Chinese journey toward the fulfillment of NCP should not be impeded. Quite the contrary, it ought to render China's rise a more readily attainable objective than would otherwise be the case. After all, indicating a departure from reductionist practices seemingly witnessed in the past, NCP plainly embodies expansive, even if not finely balanced, aspirations.

The sanguine views expressed regarding strategic pragmatism and multilateralism, while not without substance, also should not be embraced in an unqualified fashion. The need for caution does not merely stem from the time inconsistency displayed by the Chinese leadership, as evidenced by the recent frictions against the harmonious world⁴⁶⁸ and good neighbor⁴⁶⁹ policies. In fact, it has long been claimed, eclectically but convincingly, that strategic pragmatism is neither unequivocally open-ended nor wholly elastic.⁴⁷⁰ Rather, it is fairly circumscribed and just partially movable because of its distinctly assertive nature. Thus, "assertive pragmatism" may be a more appropriate depiction than the strategic variant.⁴⁷¹

China's multilateral pursuits are similarly shrouded in ambiguity and exhibit uniquely Chinese characteristics. Specifically, they are limited in scope and firmly underpinned by a NCP-type decision calculus resting on utilitarian pillars such as "multilateralism as a strategy of development in the era of globalization," "multilateralism as a convenient balance against the hegemonic power [i.e., the United States]," "multilateralism as an image-improving measure in international society," and "multilateralism as an effective venue to

⁴⁶⁸ See generally Sujian Guo & Jean-Marc F. Blanchard, *Introduction*, in *Harmonious World and China's New Foreign Policy 1* (Sujian Guo & Jean-Marc F. Blanchard eds., 2008); *Discord*, THE ECONOMIST (Jan. 13, 2011), www.economist.com/node/17902953.

⁴⁶⁹ See generally HAYTON, *supra* note 463.

⁴⁷⁰ See generally Robert Farley, *China Might Just Be an Assertive Status Quo Power*, THE DIPLOMAT (Aug. 29, 2014), <http://thediplomat.com/2014/08/china-might-just-be-an-assertive-status-quo-power/>; MINXIN PEI, *ASSERTIVE PRAGMATISM: CHINA'S ECONOMIC RISE AND ITS IMPACT ON CHINESE FOREIGN POLICY* (2006), https://www.ifri.org/sites/default/files/atoms/files/Prolif_Paper_Minxin_Pei.pdf.

⁴⁷¹ See generally Farley, *supra* note 470; PEI, *supra* note 470.

address security issues, particularly regional.”⁴⁷² Interestingly, ecological modernization, let alone sustainability, does not feature prominently in the equation, lending support to the contention that Chinese penchant for participation in international governance regimes is not uniformly strong but hinges on their mission, with economics and security overshadowing all else.⁴⁷³ There is an abundance of empirical illustrations consistent with this line of reasoning. A well-documented example involves the chain of events pertaining to the United Nations Framework Convention on Climate Change (FCCC 1992), one of several international environmental agreements negotiated since the 1972 Conference on Human Development.⁴⁷⁴ China’s contribution to the endeavor was distinctly uneven, more favorable from a declaratory rather than operational perspective.⁴⁷⁵ By the same token, the positive tone was less readily discerned in the crucial advanced phases than the early formative ones.⁴⁷⁶ On balance, the attitude displayed was decidedly lukewarm and the tactical maneuvers resorted to were by no means conducive to facilitating progress on that front.⁴⁷⁷

Notably, the Chinese side was painfully slow at times to produce protocols during the Intergovernmental Negotiating Committee (INC-XI) meeting, paving the way for the first Conference of Parties after the FCCC moved beyond the bargaining stage and invoking colorful analogies in the process: “the Convention is like a big pie, and if you try to swallow the whole pie in one gulp, you will choke.”⁴⁷⁸ The Chinese also vigorously objected to some vital components of the FCCC blueprint.⁴⁷⁹ To make matters worse, China’s representatives steadfastly expressed skepticism about the scientific merits of the precautionary measures advocated by the Intergovernmental Panel on Climate Change (IPCC) and urged the participants to refrain from proceeding hastily in light of the sizeable gaps in technological knowledge.⁴⁸⁰ This lack of

⁴⁷² WU & LANSLOWNE, *supra* note 458, at 9–11.

⁴⁷³ See generally Elizabeth Economy, *The Impact of International Regimes on Chinese Foreign Policy-Making: Broadening Perspectives and Policies but Only to a Point*, in *The Making of Chinese Foreign and Security Policy in the Era of Reform* 230 (David Lampton ed., 2001).

⁴⁷⁴ See Roda Mushkat, *The Development of Environmental Governance Regimes: A Chinese-Inspired Reconstruction* 2 Wash. & Lee J. Energy Climate & Env’t 1, 39–45 (2011).

⁴⁷⁵ See *id.* at 42–43.

⁴⁷⁶ See *id.*

⁴⁷⁷ See *id.*

⁴⁷⁸ See *id.* at 42.

⁴⁷⁹ See *id.*

⁴⁸⁰ See *id.* at 42–43.

enthusiasm and obstructive tactics arguably had their roots in a priority set heavily skewed toward economic growth (“GDPism”) and a strategic culture steeped in a cost-benefit logic imbued with a sense of national interest and power.⁴⁸¹

Another fundamentally similar episode relates to the Montreal Protocol on Substances that Deplete the Ozone Layer, an instrument whose origins may be linked to the Vienna Convention for the Protection of the Ozone Layer and which was ratified by twenty-one countries in 1985 (and, ultimately, as the FCCC, to the 1972 United Nations Conference on Human Environment in Stockholm, in the aftermath of which several multilateral environmental agreements/MEAs were negotiated).⁴⁸² Chinese ratification materialized in 1991, a year after the London Amendments created an interim Multilateral Fund, which subsequently gained a permanent status in 1992 in order to assist developing “Article 5” countries to meet their obligations under the Montreal Protocol.⁴⁸³

China’s adherence to the letter and spirit of this instrument never matched its declaratory or strictly procedural commitment.⁴⁸⁴ This was doubtless a challenging undertaking for a country seeking accelerated modernization. The costs to be incurred by some domestic industries were considerable, triggering counter-pressures from industry representatives and senior government officials overseeing them.⁴⁸⁵ Nevertheless, the burden for the country as a whole was deemed tolerable.⁴⁸⁶ There were advantages to be derived in the shape of a better international image and concessions extracted in other areas in return for a moderately collaborative stance.⁴⁸⁷ In the end, the availability of

⁴⁸¹ “Maximize material capabilities above all;” “[a]void high cost commitments;” “[i]f avoidance incurs image costs, then try to avoid high cost commitments but join low cost, high profile activities;” “[i]f the opportunities to pursue material gains unilaterally are closed off, and [the country] has little choice but to join multilateral negotiations, then it should try to build coalitions to weaken commitments;” “[i]f unilateral opportunities to maximize relative capabilities are closed off, and coalition building unsuccessful, then [it] should choose the least constraining options; try to prevent the toughening of any commitments that can be avoided.” Alastair I. Johnston, *China and International Environmental Institutions: A Decision Rule Analysis*, in *ENERGIZING CHINA: RECONCILING ENVIRONMENTAL PROTECTION AND ECONOMIC GROWTH* 555, 565 (Michael B. McElroy et al. eds., 1998).

⁴⁸² See Mushkat, *supra* note 474, at 45–48.

⁴⁸³ See *id.* at 46.

⁴⁸⁴ See *id.* at 46–47.

⁴⁸⁵ See *id.* at 47.

⁴⁸⁶ See *id.*

⁴⁸⁷ See *id.*

financial support (a utilitarian-style side payment) proved the decisive factor in propelling China toward ratifying the Protocol and gradually coming to terms with it in a manner compatible with its national interest and ambitions as a rising power.⁴⁸⁸

That is not to say that cognitivist models possess no relevance in the Chinese ecological internal or external context. The exploration of their applicability in milieus that transcend national boundaries has followed two parallel pathways. First, the evolution of China's identity from that of a revisionist power to a status *quo*-oriented one, even if not entirely satisfied and aiming at least selectively to reshape the prevailing international order,⁴⁸⁹ has been documented.⁴⁹⁰ This process has apparently culminated in the emergence of a perceptual structure or self-image, reflecting the rise to a position of regional, and perhaps even global, power.⁴⁹¹ That power, in turn, has inevitably led to a more responsible behavior in multiple spheres of international activity, including in the form of greater environmental cooperation.⁴⁹² Second, the implications of Chinese involvement in a wide range of regimes—those focused on ecological degradation and others—over time have been assessed in terms of its cognitive impact.⁴⁹³ The substantial evidence garnered, while highly qualitative in nature and subject to conflicting interpretations, demonstrates that such participation has resulted in learning which, importantly, has not been devoid of normative (as distinct from merely instrumental)⁴⁹⁴ elements.⁴⁹⁵ Heavy emphasis, and

⁴⁸⁸ See *id.*

⁴⁸⁹ See Alastair I. Johnston, *Beijing's Security Behavior in Asia-Pacific: Is China a Dissatisfied Power?*, in *RETHINKING SECURITY IN EAST ASIA: IDENTITY, POWER, AND EFFICIENCY* 34 (J.J. Suh et al. eds., 2008).

⁴⁹⁰ See Alastair I. Johnston, *Is China a Status Quo Power?*, *INT'L SECURITY*, Spring 2003, at 5; Feng Huiyun, *Is China a Revisionist Power?*, 2 *CHINESE J. INT'L POL.* 313 (2009); Barry Buzan, *China in International Society: Is "Peaceful Rise" Possible?* 3 *CHINESE J. INT'L POL.* 5 (2010).

⁴⁹¹ See Gerald Chan, *CHINA'S COMPLIANCE IN GLOBAL AFFAIRS: TRADE, ARMS CONTROL, ENVIRONMENTAL PROTECTION, HUMAN RIGHTS* (2006).

⁴⁹² See *id.*

⁴⁹³ See ANN E. KENT, *CHINA, THE UNITED NATIONS, AND HUMAN RIGHTS: THE LIMITS OF COMPLIANCE* (1999); ANN E. KENT, *BEYOND COMPLIANCE: CHINA, INTERNATIONAL ORGANIZATIONS, AND GLOBAL SECURITY* (2007).

⁴⁹⁴ "Learning occurs at different levels. Cognitive/normative learning, or the internalization of norms, is here differentiated from instrumental or adaptive learning, but forms represent learning. The question is whether a change of behavior and outcomes, as a result of [S]tate's participation in the international political process, feeds back into the domestic policy-making process to alter fundamental beliefs, strategic policy, or only tactical preferences. The first level of change represents cognitive learning, whereas the latter two represent instrumental or adaptive learning." ANN E. KENT, *CHINA, THE UNITED NATIONS, AND HUMAN RIGHTS: THE LIMITS OF COMPLIANCE* 8 (1999).

somewhat controversially so,⁴⁹⁶ has understandably been laid on the exogenously induced acquisition of values in the greatly sensitive human rights domain,⁴⁹⁷ but not the exclusion of the environmental dimension.

Lending support to cognitivist schemes by illustrating their relevance in non-Western settings is not without significance because it indicates that they are not entirely culture-bound. The importance of the Asian input in this respect, the second noteworthy contribution to the academic discourse on international environmental governance regimes, extends well beyond mechanical replication. First, it has been shown that a country like China may possess multiple identities, rather than a single one (such as stemming from its regional or global power status), and that these identities may pull it in different directions.⁴⁹⁸ Compromises, or trade-offs, may be struck, highlighting the instrumental (as distinct from normative) underpinnings of State identities.⁴⁹⁹ Second, it has been pointed out that learning should not be conceptualized in overly simplistic binary terms (whereby it either takes place or does not).⁵⁰⁰ Instead—given the Chinese penchant for experiential validation, incremental progression, long pauses, paths of least resistance, risk-minimizing strategies, time-honored decision heuristics/rules of thumb, and wait-and-see tactics—learning ought to be addressed as a many-sided phenomenon which may assume several shapes (e.g.,

⁴⁹⁵ See *id.* See also ANN E. KENT, BEYOND COMPLIANCE: CHINA, INTERNATIONAL ORGANIZATIONS, AND GLOBAL SECURITY (2007).

⁴⁹⁶ See Roda Mushkat, *Non-Democratic State Learning of Universal Human Rights: Reconfiguring Chinese Patterns*, 27 TEMP. INT'L & COMP. L.J. 63 (2013) [hereinafter Mushkat, *Non-Democratic State Learning*]; Roda Mushkat, *The Anatomy of China's Human Rights Regime: A Behaviorally Underpinned Analytical and Evaluative Account*, 8 VIENNA J. INT'L CONST. L. 131 (2014).

⁴⁹⁷ See KENT, CHINA, THE UNITED NATIONS, AND HUMAN RIGHTS: THE LIMITS OF COMPLIANCE, *supra* note 494; KENT, BEYOND COMPLIANCE: CHINA, INTERNATIONAL ORGANIZATIONS, AND GLOBAL SECURITY, *supra* note 493; Chen Dingding, *China's Participation in the International Human Rights Regime: A State Identity Perspective*, 2 CHINESE J. INT'L POL. 399 (2009).

⁴⁹⁸ See generally Yong Deng, *Escaping the Periphery: China's National Identity in World Politics*, in CHINA'S INTERNATIONAL RELATIONS IN THE 21ST CENTURY 41 (Weixing Hu et al. eds., 2000); Tiejun Zhang, *Self Identity Construction of the Present China*, 23 COMP. STRATEGY 281 (2004); David Shambaugh, CHINA GOES GLOBAL: THE PARTIAL POWER, 13–44 (2013); Roda Mushkat, *Conceptions of Sovereignty and Identity Economics: A Chinese-Based Exploration*, 4 INT'L. J. INT'L. L. & POL'Y 245 (2014).

⁴⁹⁹ See Mushkat, *supra* note 498.

⁵⁰⁰ See generally Mushkat, *supra* note 474; Mushkat, *Non-Democratic State Learning*, *supra* note 496; Mushkat, *Reconfiguring China's Environmental Governance Regime*, *supra* note 448; Miron Mushkat & Roda Mushkat, *Regime Transformation and Environmental Policy Innovation in China*, 12 INTERDISC. ENVTL. REV. 349 (2011); PITMAN B. POTTER, ASSESSING TREATY PERFORMANCE IN CHINA: TRADE AND HUMAN RIGHTS (2014).

comprehensive versus selective, fast versus slow, forward-looking versus backward-looking, goal-driven versus haphazard, inward-oriented versus outward-oriented, linear versus non-linear, and so forth).⁵⁰¹ Third, attention has been methodically drawn to the fact that, contrary to overly paternalistic Western assertions, learning may be a two-way process—featuring flows from the global periphery to its center, rather than exclusively the other way around.⁵⁰² Fourth, in light of the evidence that none of the mono-causal theories adequately accounts for international environmental governance regime formation, persistence, and dissipation, it has been noted that they should not be viewed as competing, but complementary, and be eclectically employed in conjunction with each other.⁵⁰³

Mono-causal paradigms, consisting of an exogenous/independent and endogenous/dependent variable, locked in a unidirectional relationship, cannot adequately capture the intricacies of elaborate ecological systems. Feedback loops and mediating and contextual variables need to be incorporated into the equation.⁵⁰⁴ In China, the interplay between national interest, power, the combination of the two (NCP), and cognitivist influences is a source of examples where complex mediation comes into effect. By the same token, the force of history, encapsulated in the notion of “strategic culture,” highlights the crucial importance of context. None of these factors can be overlooked without undermining the whole explanatory façade.

The prevalence of feedback mechanisms may be seen in dissecting the dynamics of the dysfunctional Hong Kong-Mainland/Southern China transboundary pollution governance regime.⁵⁰⁵

⁵⁰¹ See Roda Mushkat, *supra* note 474; Mushkat, *Non-Democratic State Learning*, *supra* note 496; Mushkat, *Reconfiguring China's Environmental Governance Regime*, *supra* note 448; Mushkat & Mushkat, *supra* note 500; POTTER, *supra* note 500.

⁵⁰² See generally Pu Xiaoyu, *Socialization as a Two-Way Process: Emerging Powers and the Diffusion of International Norms*, 5 CHINESE J. INT'L. POL. 341 (2012).

⁵⁰³ See generally Mushkat, *supra* note 474; Roda Mushkat, *Compliance with International Environmental Regimes: Chinese Lessons*, 34 WM & MARY ENVTL. L. & POL'Y. REV. 493 (2010).

⁵⁰⁴ See generally David W. Britt, A CONCEPTUAL INTRODUCTION TO MODELING: QUALITATIVE AND QUANTITATIVE PERSPECTIVES (1997).

⁵⁰⁵ See generally Miron Mushkat & Roda Mushkat, *The Political Economy of Hong Kong's Transboundary Pollution: The Challenge of Effective Governance*, 9 INT'L. TRADE L. & POL'Y 175 (2010) [Hereinafter Mushkat & Mushkat, *Political Economy*]; Miron Mushkat & Roda Mushkat, *Endemic Institutional Fragility in the Face of Dynamic Economic Integration in Asia: The Case of Transboundary Pollution in Hong Kong*, in EAST ASIAN INTEGRATION: L., TRADE, AND FIN. 49 (Ross P. Buckley et al. eds., 2011) [hereinafter Mushkat & Mushkat, *Institutional Fragility*].

The opening up of the Chinese economy in 1978 has provided the capitalist enclave with an opportunity to transfer—literally overnight, with characteristic vigor—its environmentally problematic manufacturing sector across the border⁵⁰⁶ and transform itself into a vibrant international financial/service center, or a “global metropolis.”⁵⁰⁷ Unfortunately, from a Hong Kong perspective, nature has conspired to thwart its “designs” by driving, via feedback loops (mostly courtesy of northerly winds), the pollutants back into the territory.⁵⁰⁸

A variable that is not altogether missing from Western-style accounts, but accorded surprisingly modest weight, is the impact of domestic forces on ecological outcomes at home and abroad. The third significant contribution of China-related inquiries brings the impact of domestic forces into sharp perspective. Several dimensions of the Chinese domestic arena are relevant in this respect.⁵⁰⁹ One that merits close attention is “local corporationism.”⁵¹⁰ This is a structural pattern whose principal feature is the functioning of key officials at the sub-national level as both government administrators and dedicated entrepreneurs, amplifying the bias in favor of “GDPism”:

The officials-cum-entrepreneurs share the objectives of their commercial counterparts, which can best be realized through robust economic growth. To the extent that divergences occasionally materialize, realignment is easy to attain because the two sides are part of the same tight social network (*guanxi*). The ensuing local corporationism, reinforced by overlapping social networks, impedes the effective implementation of an enlightened ecological agenda, because officials-cum-entrepreneurs have different priorities, are highly susceptible to pressures emanating from commercial sources, and exert considerable leverage over regulators.⁵¹¹

The previously highlighted 2014 adjustments to the Environmental Protection Law are part of a broad-based strategy to

⁵⁰⁶ Mushkat & Mushkat, *Political Economy*, *supra* note 505; Mushkat & Mushkat, *Institutional Fragility*, *supra* note 505.

⁵⁰⁷ See generally David R. Meyer, *Hong Kong as a Global Metropolis*, 10 SAN DIEGO INT’L L.J. 381 (2000); STEPHEN W.K. CHIU & TAI-LOK LUI, HONG KONG: BECOMING A CHINESE GLOBAL CITY (2009).

⁵⁰⁸ See generally Mushkat & Mushkat, *Political Economy*, *supra* note 505; Mushkat & Mushkat, *Institutional Fragility*, *supra* note 505.

⁵⁰⁹ See Roda Mushkat, *Implementing Environmental Law in Transitional Settings: The Chinese Experience*, 18 S. CAL. INTERDISC. L.J. 45, 74–90 (2008).

⁵¹⁰ See *id.* at 81.

⁵¹¹ See *id.* at 81.

address such barriers to progress toward ecological modernization.⁵¹² Again, however, the “proof of the proverbial pudding will be in the eating.”⁵¹³ Pending the delivery of concrete evidence, it is notable a view has been put forward that any headway on this complex front will primarily depend on domestic trends rather than external influences.⁵¹⁴ The potential impact of progressive depoliticization, the gradual transfer of decision rights from line ministries and local governments to enterprises, price liberalization, consumer demand (motivated by environmental and health considerations) channeled toward green products, or the emergence of green industries capable of shaping policy may prove particularly crucial in this delicate context.⁵¹⁵

The fourth contribution of investigations directed at China’s ecological woes and their wider ramifications that is worth singling out is the restoration of the balance between international environmental governance regime formation and actual performance, an area often lacking in the Western-style literature despite the analytical concern exhibited about system effectiveness. Substantial space in Western social science writings is devoted to the intricate negotiations culminating in an international agreement or a stalemate. The equivalent legal work seldom extends beyond the conversion of the output of that process into domestic instruments. The conduct of a comprehensive *postmortem* over a lengthy period of time is the exception to the prevailing norm.

By contrast, in the Chinese milieu, the quality of implementation is deemed to be of paramount importance. For instance, a detailed examination of the frailties of the pre-2014 environmental governance regime has revealed, *inter alia*, the following symptoms of fragility: (1) opaqueness of the entire structure and its fluidity; (2) institutional incoherence and disarray; (3) maladaptation and organizational obsolescence; (4) absence of authoritative and consistent statutory interpretation; (5) puny and misplaced incentives; (6) widespread politicization; (7) compromised judiciary; (8) vertical and horizontal fragmentation; (9) toothless regulatory apparatus; (10) regulatory cartelization and capture; (11) outmoded governance models; (12) counterproductive decentralization; (13) timidity of “street-level bureaucrats”; (14) ambivalent grassroots sentiment; (15) fledgling and

⁵¹² See Mushkat, *Reconfiguring China’s Environmental Governance Regime*, *supra* note 448.

⁵¹³ See Mushkat, *supra* note 449, at 204–205.

⁵¹⁴ See *id.*

⁵¹⁵ See *id.*

insecure civil society (including environmental movement); (16) elite factionalism; (17) abrupt policy swings; (18) path dependence; and (19) excessive reliance on initiatives undertaken by individual “policy entrepreneurs.”⁵¹⁶ The abundance of such obstacles and their magnitude ineluctably render smooth and efficacious strategy execution a formidable challenge.⁵¹⁷

The fifth salient contribution in this realm relates to system effectiveness, with special reference to the idea of “fit.” The Western quest for a correspondence between an international environmental governance regime and the setting in which it is embedded could have unintended consequences, but it may scarcely be faulted. Nevertheless, the heavy emphasis on the fit with bio-physical attributes is a product of an excessively narrow framing of the issue. China-focused explorations clearly indicate the desirability of a meaningful concept extension into the economic-political-and-social sphere, given the glaring mismatch observed in the country between its ecologically oriented governance regime and the elaborate institutional façade underpinning it.⁵¹⁸

The experience of the Association of Southeast Asian Nations (ASEAN) anti-haze regime, another dysfunctional inter-jurisdictional governance system, offers many similar lessons. Four of these lessons are pinpointed here because they compellingly underscore the inescapable relevance of historical backdrop, domestic dynamics, implementation side of the picture, multi-causal accounts, and “paradox of fit.”⁵¹⁹ The proverbial Asian—and, by implication, ASEAN—historical “glass” may be portrayed as not unambiguously “empty” in terms of regional cooperation. One may loosely invoke notions of “pan-Asianism” stretching back to ancient/classical Greece and more reassuringly to the less distant era of European imperialism.⁵²⁰

Moreover, economic forces of a recent vintage are propelling countries in the region toward each other. Asian dynamism, undergoing diffusion in accordance with the “flying-geese” configuration, bottom-up

⁵¹⁶ See *id.*, at 191–96.

⁵¹⁷ See *id.*, at 195–96.

⁵¹⁸ See generally Miron Mushkat & Roda Mushkat, *Assessing the Effectiveness of Environmental Governance Regimes: Remaining Gaps*, 2 INTERDISC. ENVTL. REV. 166 (2011).

⁵¹⁹ See generally Roda Mushkat, *Creating Regional Environmental Governance Regimes: Implications of Southeast Asian Responses to Transboundary Haze Pollution*, 4 WASH. & LEE J. ENERGY CLIMATE & ENV'T 103 (2013).

⁵²⁰ See David Camroux, “Asia, Whose Asia” *Evolving Conceptions of an Asia Community from the 1920s till Today*, in THE EVOLUTION OF REGIONALISM IN ASIA: ECONOMIC AND SECURITY ISSUES 12–14 (Heribert Dieter ed., 2007).

market pressures, top-down outward-looking developmental strategies, and regional institution-building have paved the way for closer integration.⁵²¹ ASEAN has been at the epicenter of this ongoing process, progressively lowering the barriers to the movement of goods, services, and factors of production.⁵²² The long-term objective is to embrace a European Union (EU)-type deep regional cooperation blueprint. While fulfilling this aspiration in the foreseeable future may prove to be an elusive task, economic collaboration (as well as that on the security front)⁵²³ and interdependence are at a level that does not preclude the eventual attainment of this ambitious goal.⁵²⁴

That said, European and Asian historical backgrounds are markedly divergent, and seeking close parallels between the EU and ASEAN experiences is not a fruitful pursuit. European regionalism may be regarded as a response to nationalist excesses and a conscious desire to suppress them.⁵²⁵ By contrast, its Asian counterpart may be viewed as a phenomenon that has slowly and unevenly crystallized in a geographic setting where imperialist domination has engendered a yearning for nationalist autonomy.⁵²⁶ Asia is also a domain that witnessed intense inter-State conflicts well beyond the cessation of World War II hostilities, the memories of which have not fully receded.⁵²⁷ Indeed, some continue to simmer.⁵²⁸ The corollary is that Asia constitutes a less fertile ground for regional schemes than Europe.⁵²⁹

The inevitable consequent institutional looseness has been accorded considerable attention in the social-legal literature. Scholars intrigued by the headway made on the trade and investment fronts,

⁵²¹ See SEIJI F. NAYA, *THE ASIAN DEVELOPMENT EXPERIENCE: OVERCOMING CRISES AND ADJUSTING TO CHANGE* 95–118 (2002); Soogil Young, *Economic Integration and Asia's Role in the Global Economy*, in *ASIA'S NEW REGIONALISM AND GLOBAL ROLE: AGENDA FOR THE EAST ASIA SUMMIT 11, 12–15* (Nagesh Kumar et al. eds., 2008); ASIAN DEV. BANK, *EMERGING ASIAN REGIONALISM: A PARTNERSHIP FOR SHARED PROSPERITY* 25–56 (2008).

⁵²² See NAYA, *supra* note 521; Young, *supra* note 521; ASIAN DEV. BANK, *supra* note 521.

⁵²³ See generally AMITAV ACHARYA, *CONSTRUCTING A SECURITY COMMUNITY IN SOUTHEAST ASIA: ASEAN AND THE PROBLEM OF REGIONAL ORDER* (2009).

⁵²⁴ See generally SIOW-YUE CHIA & MICHAEL G. PLUMMER, *ASEAN COOPERATION AND INTEGRATION: PROGRESS, CHALLENGES, AND FUTURE DIRECTIONS* (2015).

⁵²⁵ See generally PHILOMENA MURRAY, *EUROPE AND ASIA: REGIONS IN FLUX* (2008); LOUIS BRENNAN & PHILOMENA MURRAY, *DRIVERS OF INTEGRATION IN EUROPE AND ASIA: COMPARATIVE PERSPECTIVES* (2015).

⁵²⁶ See generally MURRAY, *supra* note 525; See also BRENNAN & MURRAY, *supra* note 525.

⁵²⁷ See generally EDWARD ASPINALL ET AL., *DIMINISHING CONFLICTS IN ASIA-PACIFIC: WHY SOME SUBSIDE AND OTHERS DON'T* (2012).

⁵²⁸ See generally *id.*

⁵²⁹ See generally MURRAY, *supra* note 525; BRENNAN & MURRAY, *supra* note 525.

notwithstanding the embryonic institutional architecture, have drawn a distinction between *de facto* substantial economic integration and shallow *de jure* coalescence otherwise.⁵³⁰ Those wishing to underscore the historically induced differences between Europe and Asia have characterized their contrasting patterns of regional organization by juxtaposing the latter's fragmented "networked regionalism" with the former's more cohesive "institutional" variant.⁵³¹

The crucial importance of domestic constraints undermining the effectiveness of the fight against haze pollution is also an inescapable reality of the ASEAN predicament. The problem is decades-old and is primarily attributable to practices of large palm oil and timber Indonesian corporations clearing land by fire instead of resorting to cheaper and less ecologically harmful alternatives.⁵³² The tendency of small-scale farmers in the country to rely on traditional slash-and-burn methods, compounded by extensive land development projects and weather-related disruptions such as *El Nino*, have magnified the difficulties,⁵³³ whose decidedly adverse bio-physical and economic consequences have manifested themselves throughout Southeast Asia and beyond.⁵³⁴

Indonesian unwillingness and/or inability to come to grips with the problem may largely be ascribed to the patrimonial or patron-client model that had long been a salient feature of its domestic politics, allowing powerful timer concessionaries to persistently engage in environmentally deleterious activities by virtue of their close ties with the president's family and the military elite.⁵³⁵ This form of patrimonialism, or neopatrimonialism,⁵³⁶ has partly given way to a more open and transparent public administration machinery.⁵³⁷ Yet, regulatory cartelization of the policy process, skewing it in favor of strategically

⁵³⁰ See generally Daisuke Hiratsuka & Fukunari Kimura, *From De Facto to De Jure Economic Integration in East Asia: Past, Present, and Future*, in EAST ASIA'S ECONOMIC INTEGRATION: PROGRESS AND BENEFIT 1 (Daisuke Hiratsuka & Fukunari Kimura eds., 2008).

⁵³¹ See generally Lay-hwee Yeo, *Institutional Regionalism versus Networked Regionalism: Europe and Asia Compared*, 47 INT'L POL. 324 (2010).

⁵³² See Mushkat, *supra* note 519, at 141.

⁵³³ See *id.* at 141.

⁵³⁴ See *id.* at 141–142.

⁵³⁵ See *id.*, at 150.

⁵³⁶ See generally SHMUEL N. EISENSTADT, *TRADITIONAL PATRIMONIALISM AND MODERN NEOPATRIMONIALISM* (1973).

⁵³⁷ See Mushkat, *supra* note 519, at 151.

positioned private interests, and regulatory capture by such parties,⁵³⁸ has by no means become a thing of the past.⁵³⁹

Despite foot-dragging and lack of concrete productive action on the part of Indonesia and some other ASEAN members, the region's anti-haze regime has gained substantial institutional breadth since the early 1970s, when ecological threats began to loom large on the ASEAN agenda in the aftermath of the 1972 Stockholm United Nations Conference on the Environment. From that juncture onward, members States have proceeded, individually and collectively—albeit not at a uniform pace and not to the same extent—in an incremental yet steady fashion. They gradually enacted an array of laws pertaining to environmental preservation and natural resource management, to bolster organizational capabilities required to sustain balanced development, and to ratify relevant international conventions.⁵⁴⁰ Anti-haze initiatives have been an integral part of this effort.⁵⁴¹

When dissecting such trends in policy spheres such as security, socio-legal researchers claim that ASEAN has evolved into a full-fledged regional community.⁵⁴² They resort to sociological reasoning and empirical instruments to demonstrate that the organization's elaborate and increasingly sophisticated operations have transformed it into a cohesive entity which, in cognitivist terms, exhibits a strong regional identity.⁵⁴³ From an international governance regime perspective, it is contended that ASEAN shares common norms, rules, and decision-making/operating procedures, an attitudinal constellation rooted in a bond of belonging or a sense of “we feeling” which firmly holds the members together.⁵⁴⁴ The collective goals and affinities override individual interests and identities.⁵⁴⁵

⁵³⁸ See Miron Mushkat & Roda Mushkat, *The Political Economy of Hong Kong's “Open Skies” Regime: An Empirical and Theoretical Exploration*, 10 SAN DIEGO INT'L L. J. 413–414 (2009).

⁵³⁹ See Mushkat, *supra* note 519, at 151. Similar influences emanating from the Malaysian domestic political arena are an aggravating factor. See generally EDMUND T. GOMEZ & JOMO K.S., MALAYSIA POLITICAL ECONOMY: POLITICS, PATRONAGE, AND PROFITS (1997); JOMO K.S. ET AL., DEFORESTING MALAYSIA: THE POLITICAL ECONOMY AND SOCIAL ECOLOGY OF AGRICULTURAL EXPANSION AND COMMERCIAL LOGGING (2004).

⁵⁴⁰ See Mushkat, *supra* note 519, at 138–146.

⁵⁴¹ See *id.* at 138–146.

⁵⁴² See generally ACHARYA, *supra* note 523.

⁵⁴³ See *id.*

⁵⁴⁴ See *id.*

⁵⁴⁵ See *id.*

The anti-haze regime has been subjected to a meticulous scrutiny in order to ascertain whether it possesses such attributes.⁵⁴⁶ The verdict rendered has been a tentative “yes.”⁵⁴⁷ Given, the lengthy process of institution-building, the progressive deepening of the organizational façade, its growing interconnectedness, and the seemingly strengthening member commitment to the underlying objectives of the system (even Indonesia has ratified the ASEAN Agreement on Transboundary Haze Pollution/AATHP after dragging its feet for twelve years),⁵⁴⁸ there apparently has been reason to infer that “an environmental regime for the transboundary haze pollution has emerged in Southeast Asia.”⁵⁴⁹ Specifically, “[f]ulfilling the four regime elements (principles, norms, rules, and decision-making procedures), the ASEAN haze regime is constituted by the ASEAN Agreement on Transboundary Haze Pollution.”⁵⁵⁰

Be that as it may, this is merely one side of a complex picture. The AATHP scarcely qualifies as a robust legal instrument. Rather, it can be said to possess attributes that reflect a lingering unwillingness on the part of ASEAN members to assume obligations that would markedly curtail their individual room for maneuver.⁵⁵¹ These include, *inter alia*, “concessions to State sovereignty, insufficient terminological precision, non-binding elements, and weakness of provisions relating to deterrence and enforcement (including dispute resolution.”⁵⁵² Indeed, operational enforcement, as well as compliance, remains a serious challenge. Moreover, the regime has made little impact in terms of alleviating the pernicious problem of haze pollution and decisively dealing with its consequences.⁵⁵³

This ineluctably raises the issue of implementation. The ASEAN anti-haze regime satisfies some of the criteria of process effectiveness

⁵⁴⁶ See PARUEDEE NGUITRAGOOL, ENVIRONMENTAL COOPERATION IN SOUTHEAST ASIA: ASEAN’S REGIME FOR TRANSBOUNDARY HAZE POLLUTION (2011).

⁵⁴⁷ See *id.*

⁵⁴⁸ See ASEAN Agreement on Transboundary Haze Pollution, June 10, 2002, <http://environment.asean.org/wp-content/uploads/2015/06/ASEANAgreementonTransboundaryHazePollution.pdf> (Indonesia depositing a ratifying instrument).

⁵⁴⁹ NGUITRAGOOL, *supra* note 546, at 145.

⁵⁵⁰ *Id.*

⁵⁵¹ See Mushkat, *supra* note 519, at 146.

⁵⁵² *Id.*

⁵⁵³ *Id.* See also NGUITRAGOOL, *supra* note 546, at 123–144; Kanis Dursin, *ASEAN Agreement on Haze? As Clear as Smoke*, INT’L PRESS SERV. (Oct. 10, 2015), www.ipsnews.net/2015/10/asean-agreement-on-haze-as-clear-as-smoke/.

but hardly any others. Extensive institution-building and ongoing multiparty engagement may be a necessary condition for establishing a viable international environmental governance regime, but the quality of the organizational architecture matters as well. Whether this crucial goal is realized hinges not merely on the effectiveness of policy formulation and the supporting institutional infrastructure, but also the soundness of policy implementation, which is an essential but often overlooked phase of the iterative policy cycle. Negotiating an international agreement is a highly intricate undertaking that deserves ample scholarly attention, yet it is an interim, not final, stage in creating an elaborate institutional system for earnestly confronting a deep-seated international problem.⁵⁵⁴

Mono-causal accounts of the evolution of the ASEAN anti-haze regime have yielded limited insights. The ambitious cognitivist-inspired survey has generated reams of valuable information within a well-thought-out analytical framework.⁵⁵⁵ The survey, however, has not compellingly demonstrated that this paradigm possesses significant explanatory efficacy.⁵⁵⁶ Interest-based formulations—yet not necessarily power-centered ones, provided they encompass sub-national elements—appear to have the greatest intuitive and empirical appeal in this geographic context.⁵⁵⁷ However, they alone may not shed sufficient light on ecological policy outcomes in all circumstances and over time.⁵⁵⁸ Faced with system complexity of such magnitude, it may be appropriate to deduce, like in the Chinese case, that eclectic blending of complementary approaches commonly portrayed as mutually exclusive is the most fruitful course of action.⁵⁵⁹

The “paradox of fit” is perhaps the most interesting reflection of some exceptional patterns that may be discerned in the ASEAN anti-haze regime space. Western researchers are adamant that a high degree of correspondence between international environmental governance regime attributes and the system in which it is embedded is a necessary condition for achieving a satisfactory level of effectiveness. As noted, the

⁵⁵⁴ See generally THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS: THEORY AND PRACTICE (David Victor et al. eds., 1998); Anthony G. Heyes, *Making Things Stick: Enforcement and Compliance*, 14 OXFORD REV. ECON. POL., Winter 1998, at 50.

⁵⁵⁵ See generally NGUITRAGOOL, *supra* note 546.

⁵⁵⁶ See generally Roda Mushkat, *Constructivist Constructions of International Environmental Governance Regimes—The Southeast Asian Context*, 15 MELBOURNE J. INT’L L. 252 (2014).

⁵⁵⁷ See Mushkat, *supra* note 519, at 146–159.

⁵⁵⁸ See *id.* at 146–159.

⁵⁵⁹ See *id.*

ecological woes experienced by China, partly stemming from regime design that is substantially out of sync with its context, lend support to this eminently sensible proposition. The frustratingly slow and uneven Southeast Asian journey toward a palatable haze pollution scenario, however, suggests that this may not invariably be true.

The structural looseness of the ASEAN anti-haze regime, and thus its ineffectiveness, is due in no small measure to the lengths to which its architects have gone to ensure consonance with the “ASEAN Way.”⁵⁶⁰ Derived from the Malay cultural norms of *mushawarah* and *mufukat*, this procedural roadmap extols the virtues of consultation and consensus in group decision-making.⁵⁶¹ Evocative symbols are conjured up and adroit, indirect tactics are employed in an effort to foster a stable intramural milieu.⁵⁶² Thorny issues are addressed later, rather than sooner, in order to avoid internal friction.⁵⁶³ Extensive interaction among members of national elites is promoted with a view to instilling a sense of collective identity, general comfort, mutual obligation, and shared vision.⁵⁶⁴ This is a commendable procedural framework for managing conflicts in a historically tension-filled region where trust has traditionally been a scarce commodity but, in the absence of sturdy offsetting mechanisms to facilitate unflinching problem-solving and steadfast implementation, it is a recipe for organizational paralysis and stagnation.

The limitations of such findings and lessons should not be overlooked. First, they are based on a handful of surveys, even if intensive and longitudinal in nature. Cases are painstakingly dissected, but the case study method is seldom relied upon in the technical sense of the term and potentially useful quantitative indicators are conspicuous by their absence.⁵⁶⁵ Second, the breadth of the inquiries undertaken is modest by lofty Western standards, with merely a smattering of issues addressed in depth. This is obviously the product of the small number of cases available, but the inadequate attention the inherently

⁵⁶⁰ See *id.* at 114.

⁵⁶¹ See MICHAEL ANTOLIK, ASEAN AND THE DIPLOMACY OF ACCOMMODATION 99 (1990).

⁵⁶² See *id.* at 102–103.

⁵⁶³ See *id.* at 100.

⁵⁶⁴ See *id.* at 90.

⁵⁶⁵ See Roda Mushkat, *China's Compliance with International Law: What Has Been Learned and the Gaps Remaining*, 20 PAC. RIM L. & POL. J. 41(2011); Roda Mushkat, *Killing the Proverbial Two Birds with One Stone: New Ways to Expand the Comparative Law Repertoire and Enhance the Effectiveness of Inter-Jurisdictional Environmental Governance Regimes* 6 TRADE, L. & DEV. 229 (2014).

interdisciplinary subject matter has attracted may have been a contributing factor. Third, regime design is accorded scant heed. The research output thus far produced is heavily dominated by description, diagnosis, and assessment, but the final step, elaborate prognosis and systematic recommendations, is typically missing. There are some exceptions to the rule⁵⁶⁶ and certain topics, notably emissions trading,⁵⁶⁷ have been extensively and methodically dealt with. This is a realm, however, where substantial gaps prevail and where there is considerable scope for additional and innovative investigations. None of that materially detracts from the value of the small-scale studies that have been conducted to date, but this is a diverse, heterogeneous, and historical region whose experience may further enhance knowledge regarding the evolution and management of complex institutional systems fashioned to collectively confront widespread environmental dislocation.

CONCLUSION

The proliferation of ecological threats in the global arena, the formidable challenges they pose, and the muted responses thereto have helped to spawn a voluminous, theoretically rich, and practically relevant literature on international environmental governance regimes. This body of academic work has not emerged in an intellectual vacuum. Rather, it has heavily drawn on insights—pertaining to both regime structural-functional attributes and governance patterns—generated by students of international law and international relations, particularly the latter, regarding institutionalized cooperation among States across the entire spectrum of issue-areas, without a special focus on ecological degradation and strategies to combat the problem.

Building on this solid foundation, socio-legal scholars concerned with symptoms of environmental dislocation that manifest themselves beyond national boundaries have proceeded to methodically address the etiology, organization, dynamics, vigor, flaws, and prospects of governance regimes designed to alleviate such manifestations, as well as

⁵⁶⁶ See e.g. TUN LIN AND TIMOTHY M. SWANSON, *ECONOMIC GROWTH AND ENVIRONMENTAL REGULATION: THE PEOPLE'S REPUBLIC OF CHINA PATH TO A BRIGHTER FUTURE* (2010).

⁵⁶⁷ See e.g., TINGSONG JIANG, *ECONOMIC INSTRUMENTS OF POLLUTION CONTROL IN AN IMPERFECT WORLD: THEORY AND IMPLICATIONS FOR CARBON DIOXIDE EMISSIONS CONTROL IN CHINA* (2003); BO MIAO, *EMISSIONS, POLLUTANTS, AND ENVIRONMENTAL POLICY IN CHINA: DESIGNING A NATIONAL EMISSIONS SYSTEM* (2013).

mechanisms to enhance their performance. Some of the inquiries undertaken have fruitfully followed the paths delineated elsewhere but, in virtually all these respects, the researchers otherwise involved can be said to have expanded the scope and improved the quality of the scientific, or quasi-scientific, enterprise geared toward tackling ecological hazards through various forms of inter-State cooperation.

This remains, however, an ongoing project without a predetermined final destination. It is far from being complete and, by its very nature, will continue to expand in multiple directions, including unknown ones. Gaps are bound to surface in such circumstances. Moreover, this is an essentially Western-driven program, which renders the venture culture-bound, making the development and persistence of gaps more likely. The incorporation of mostly overlooked but relevant findings and lessons originating in Asia may help to partially remedy the situation. They do not compare in scale with those emanating from the Western side, and are burdened with conceptual and methodological gaps of their own—reflecting typical manifestations of an ‘early-stage selective-attention syndrome’ and equally common insufficient policy orientation—but even at this preliminary juncture have the potential to enrich the theory and practice in the burgeoning field of international environmental governance regimes.