IMPLEMENTING ENVIRONMENTAL LAW IN TRANSITIONAL SETTINGS: THE CHINESE EXPERIENCE

RODA MUSHKAT^{*}

I. INTRODUCTION

Chinese history over the past three millennia has been littered with numerous upheavals. Empires have risen and fallen in a disruptive fashion. The practices of imperial rule have more often than not been characterized by malevolence and thoughtlessness, and have resulted in widespread economic and social dislocation. Warlords have been engaged in interminable conflicts. Fledgling republican institutions have wilted in the face of severe external and internal pressures. Communist transformation, featuring Mao Zedong's calamitous Great Leap Forward and his equally disastrous Cultural Revolution, has wreaked great havoc on the formal organizational façade and informal, grassroots-level community networks.

Policy evolution has followed a cyclical pattern rather than a linear trajectory. Periods marked by devastation normally gave way to ones revolving around reconstruction, albeit not necessarily of the balanced variety. The post-1978 reform era, during which China has significantly opened and liberalized its previously shackled economy, clearly belongs to the more benign category. Standards of living have risen dramatically in the course of the last three decades without undermining sociopolitical stability. While a similar combination of dynamism and cohesion occurred elsewhere in Asia during this takeoff phase of the modernization process, the Chinese reform may legitimately be viewed as a remarkable achievement for such a large country—one saddled with a massive rural hinterland and operating, initially at least, in an institutional vacuum.

Political progress has been distinctly limited in comparison. Mao-style authoritarianism has gradually metamorphosed into a softer, less oppressive version. The latter selectively incorporates pluralist elements (which are not, however, to be equated with democratic ones). Although political life remains under the unchallenged control of a dominant-party or single-party apparatus, and tight restrictions are placed on liberty, civil society is allowed to function apart from the state. The various segments of this expanding social body exercise a certain degree of autonomy and are thus able to reflect diverse interests. An arbitrary rule of man has been

^{*} Professor and Director of the Center for International and Public Law, Brunel Law School, Brunel University; Honorary Professor, Faculty of Law, University of Hong Kong. I wish to thank Miron Mushkat for helping me navigate through economic and policy studies territory.

supplanted by a more orderly rule of law, and China has increasingly been pursuing accommodation, rather than conflict, in the international arena.¹

The relentless quest for economic maximization has not been without adverse consequences. Attaining a satisfactory tradeoff between growth and inflation has proved to be a difficult undertaking. Cyclical fluctuations of output and prices were highly pronounced in the early stages of the reform process, and while, on the face of it, they have moderated somewhat in recent years, due to a more proactive stance adopted by the fiscal and monetary authorities, as well as greater competitive pressures and supplyside flexibility—a product of persistent liberalization—the picture conveyed by the relevant official data may not be entirely accurate. Symptoms of overheating increasingly manifest themselves in forms other than elevated consumer/producer inflation readings (e.g., soaring asset prices).

A more serious problem has been the uneven distribution of the fruits of modernization across the social and physical spaces. Some members of the community—the urban-rural divide being particularly pertinent from this perspective—have meaningfully benefited from far-reaching marketization of the economy, whereas others have not. The "trickledown" effect has not been conspicuously absent, but it has at times percolated through the social structure at a snail's pace. Regional disparities have also materially widened, and provincial laggards have seldom been able to narrow the gap that has opened between the vibrant leaders and themselves. Government responses to social and regional deprivation have generally been muted in nature.³

The most serious repercussions of unbalanced expansion, however, have been witnessed in the ecological domain. The ravages inflicted on the biosphere have been enormous and far-ranging. Acute manifestations of environmental decay can be seen throughout the ecosystem: the air, human physical and psychological well-being, nonhuman species (condition and survival), soil (including forests, grasslands, and wetlands), and water (availability, control, and quality). They may emanate from different sources but often are interconnected. The linkages are causal-same or similar policy configuration-and action-related; that is, the impact is magnified via mutual reinforcement between the individual components, rather than confined to one domain or another.⁴

¹ See NICHOLAS R. LARDY, INTEGRATING CHINA INTO THE GLOBAL ECONOMY (Brookings Inst. Press 2002); RANDALL PEERENBOOM, CHINA MODERNIZES: THREAT TO THE WEST OR MODEL FOR THE REST? (Oxford Univ. Press 2007); Miron Mushkat & Roda Mushkat, Economic Growth, Democracy, the Rule of Law, and China's Future, 29 FORDHAM INT'L L.J. 229, 229–58 (2005). ² See China's Economy: How Fit is the Panda?, THE ECONOMIST, Sep. 27, 2007, available at http://www.economist.com/finance/displaystory.cfm?story_id=9861591. See generally INFLATION AND GROWTH IN CHINA (Manuel Guittán & Robert Mundell eds., Int'l Monetary Fund 1996). ³ See SOCIAL POLICY REFORM IN CHINA: VIEWS FROM UNDER THE CONCEPTENCE (Conceptence).

³ See SOLAL POLICY REFORM IN CHINA: VIEWS FROM HOME AND ABROAD (Catherine Jones Finer ed., Ashgate Publ'g 2003); CHINA'S REGIONAL DEVELOPMENT (David S.G. Goodman ed., Routledge 1989); WANG SHAOGUANG & HU ANGANG, THE POLITICAL ECONOMY OF UNEVEN DEVELOPMENT: THE CASE OF CHINA (M. E. Sharpe, Inc. 1999); YEHUA DENNIS WEI, REGIONAL DEVELOPMENT IN CHINAL STATES COLORAL (ZATION) AND DEPENDENTE WEI REGIONAL DEVELOPMENT IN CHINAL STATES COLORAL (ZATION) AND DEPENDENTE. CHINA: STATES, GLOBALIZATION, AND INEQUALITY (Routledge 2000); SOCIAL CHANGE AND SOCIAL POLICY IN CONTEMPORARY CHINA (Linda Wong & Stewart MacPherson eds., Avebury 1995).

See generally CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT (Kristen A. Day ed., M. E. Sharpe, Inc. 2005); ELIZABETH C. ECONOMY, THE RIVER RUNS BLACK: THE

An uneasy relationship between man and nature has been a constant feature of Chinese history, with the former relentlessly seeking to achieve mastery over the latter in an anthropocentric fashion. Imperial-era excesses, present both during periods of conflict and those of the ensuing reconstruction, have carefully been documented by environmental scholars.⁵ Ecological degradation escalated to unprecedented levels in the course of communist transformation, as Mao embarked time and again on ideologically and personally-inspired campaigns predicated on the assumption that natural constraints can be circumvented by human ingenuity.⁶ Modest variations may be discerned over time, but the post-1978 picture is consistent with the overall traditional pattern.

Indeed, notwithstanding the severe environmental strains that have built up over the last three decades, the reformist leadership may qualify as relatively progressive by historical standards. While firmly focused on the economy—a proxy for a host of other critical factors, including regime stability—it has gone to some lengths in its efforts to restore a modicum of harmony between humankind and nature. Numerous laws have been promulgated, and an elaborate supporting institutional machinery has been erected. This has been a dynamic rather than a static process. The undertaking has gained considerable momentum over time, qualitatively and quantitatively. In terms of inputs and outputs, though not outcomes, the actions pursued may well compare favorably with those observed during the most enlightened periods of reconstruction in the past.

Key policy developments have been described in substantial detail in the burgeoning legal and social science literature on the subject. The authors involved have been motivated by intellectual curiosity, prevailing academic objectives, and managerial-style considerations, whether internally- or externally-oriented. (The external-style orientation is geared toward highlighting large-scale negative spillovers from the domestic arena into its international counterparts.) A recurring theme is the gnawing gap between strategic regime intentions and execution, a frustrating situation that has resulted in little headway being made in reshaping ecological realities. This situation continues to give rise to a deep sense of unease.

The legal literature has primarily been concerned with fact-finding (a complicated and worthwhile task in this particular context), traditionallyorganized selective evaluation, and conceptually equivalent prescription. These are entirely appropriate and important ventures. Indeed, some pioneering work, in rather difficult circumstances, has been done by those lawyers with expertise in Chinese and environmental law. However, some

ENVIRONMENTAL CHALLENGE TO CHINA'S FUTURE 27-57 (Cornell Univ. Press 2004) [hereinafter ECONOMY]; MANAGING THE CHINESE ENVIRONMENT (Richard L. Edmonds ed., Oxford University Press 2000) (1998) [hereinafter EDMONDS, MANAGING]; RICHARD L. EDMONDS, PATTERNS OF CHINA'S LOST HARMONY: A SURVEY OF THE COUNTRY'S ENVIRONMENTAL DEGRADATION AND PROTECTION (Routledge 1994) [hereinafter EDMONDS, PATTERNS].

See MARK ELVIN, THE RETREAT OF THE ELEPHANTS: AN ENVIRONMENTAL HISTORY OF CHINA (Yale Univ. Press 2004) [hereinafter ELVIN, RETREAT]; Mark Elvin, *The Environmental Legacy of Imperial China*, 156 THE CHINA Q. 733, 733–56 (1998) [hereinafter Elvin, *Legacy*]. ⁶ See JUDITH SHAPIRO, MAO'S WAR AGAINST NATURE: POLITICS AND THE ENVIRONMENT IN

REVOLUTIONARY CHINA (Cambridge Univ. Press 2001).

have argued that implementation failures have not been comprehensively and systematically examined, and that the studies undertaken have generally lacked an effective theoretical dimension, without which a viable predictive, let alone prescriptive, framework is not easy to construct. It may not be possible to extrapolate trends, or even engage in structural enhancement, unless a properly conceived model of policy dynamics can be invoked.⁷

The purpose of this paper is to place the legal writings on Chinese ecological governance, including the institutional facets, on firmer footing by grounding them in the rich literature on policy implementation. The conceptual tools employed originate predominantly from the social sciences, although this is an area of academic inquiry where contributions are sporadically made by researchers exploring law and society themes. The method relied upon is a non-technical form of meta-analysis.⁸ This implies that the relevant published works are dissected within a different or new framework in order to extract additional information that might yield potentially valuable theoretical and practical insights. Pertinent ideas from the policy implementation field are presented first, followed by a specifically-tailored review of legal studies focused on the environment in China. Appropriate lessons are then drawn by juxtaposing the latter with the former.

II. MODERN IMPLEMENTATION PERSPECTIVES

The late Yale University law and political science professor Harold Lasswell is widely regarded as the intellectual founder of the policy studies discipline. Among his many seminal contributions to this evolving field was a book in which he portrayed high-level public decision making as a cyclical process extending over a number of distinct phases.⁹ The model has undergone numerous refinements since its introduction, as accumulated empirical findings have led scholars in new directions and theoretical understanding of public sector organizational behavior has deepened. Broadly speaking, however, the model has survived largely intact, weathering criticism from commentators inclined to highlight the fluidity of public decision making, particularly of the strategic variety, and the virtual impossibility of disentangling in practice one phase of the process

⁷ See generally YEHEZKEL DROR, PUBLIC POLICY REEXAMINED (Transaction Books 1983); MICHAEL HILL, THE PUBLIC POLICY PROCESS 20–21 (Pearson Educ. Ltd. 4th ed. 2005); CHRISTOPHER HOOD, EXPLAINING ECONOMIC POLICY REVERSALS (Open Univ. Press 1994); CHRISTOPHER HOOD, HENRY ROTHSTEIN & ROBERT BALDWIN, THE GOVERNMENT OF RISK: UNDERSTANDING RISK REGULATION REGIMES (Oxford Univ. Press 2001); PETER JOHN, ANALYSING PUBLIC POLICY 23–27 (Pinter 1998); GIANDOMENICO MAJONE, EVIDENCE, ARGUMENT AND PERSUASION IN THE POLICY PROCESS (Yale Univ. Press 1989); WAYNE PARSONS, PUBLIC POLICY: AN INTRODUCTION TO THE THEORY AND PRACTICE OF POLICY ANALYSIS 79–81 (Edward Elgar Publ'g 1995).

⁸ See generally MARK W. LIPSEY & DAVID B. WILSON, PRACTICAL META-ANALYSIS (Sage Publ'ns 2001).

⁹ See Harold D. Lasswell, The Decision Process: Seven Categories of Functional Analysis (1956).

from another¹⁰—a rather extreme position and one not according sufficient weight to its heuristic qualities.

It would be unrealistic to posit that complex public decisions move in an orderly fashion through a series of tightly interconnected steps. Forward and backward shifts are common, blurring the distinction between abstractly constructed phases. Yet, inherent differences cannot be altogether overlooked. Model building entails a degree of abstraction, and the final product seldom fully corresponds to the phenomenon that is being observed.¹¹ High-level public decision making can meaningfully be decomposed into separate segments, and it is not productive to compress the various elements into one unless circumstances dictate otherwise. This is the case irrespective of whether the theoretical or practical angle is underlined.

Variants of the multi-phase model have been in abundance. Initially, they were packaged economically, but in later stages of development their form expanded considerably. One model might have included all of the following: deciding to decide, deciding how to decide, issue definition, forecasting, setting objectives and priorities, options analysis, implementation, monitoring, control, evaluation and review, maintenance, succession, and termination.¹² At present, however, a preference for early-days parsimony seems to prevail. A minimalist configuration, for instance, may not extend beyond agenda setting, formation/formulation, implementation, and evaluation. Some models are more or less elaborate than others, but it is worth noting that virtually all include policy implementation as a clearly identifiable key component, albeit one that encompasses activities prominently present at all phases of the decision making process. Perhaps the most widely accepted definition of the term states that:

Implementation is the carrying out of a basic policy decision, usually incorporated in a statute but which can also take the form of important executive orders or court decisions. Ideally, that decision identifies the problem(s) to be addressed, stipulates the objective(s) to be pursued, and, in a variety of ways, "structures" the implementation process. The process normally runs through a number of stages beginning with passage of the basic statute, followed by the policy outputs (decisions) of the implementing agencies, the compliance of target groups with those decisions, the actual impacts—both intended and unintended—of those

¹⁰ See, e.g., Peter deLeon, *The Stages Approach to the Policy Process: What Has It Done? Where Is It Going?*, in THEORIES OF THE POLICY PROCESS 19, 19–32 (Paul A. Sabatier ed., Westview Press 1999); HILL, *supra* note 7; JOHN, *supra* note 7; PARSONS, *supra* note 7; Paul A. Sabatier, *The Need for Better Theories*, in THEORIES OF THE POLICY PROCESS 3, 3–17 (Paul A. Sabatier ed., Westview Press 2d ed. 2007); Hank C. Jenkins-Smith & Paul A. Sabatier, *The Study of Public Policy Processes*, in POLICY CHANGE AND LEARNING: AN ADVOCACY COALITION APPROACH 1, 1–9 (Paul A. Sabatier & Hank C. Jenkins-Smith et al., Westview Press 1993) [hereinafter Jenkins-Smith & Sabatier, *Public Policy*]; Hank C. Jenkins-Smith, *Alternative Theories of the Policy Process: Reflections on Research Strategy for the Study of Nuclear Waste Policy*, 24 POL. SCI. & POL. 157, 157–61 (1991); Robert T. Nakamura, *The Textbook Policy Process and Implementation Research*, 7 POL'Y STUD. REV. 142, 142–54 (1987).

¹² See BRIAN W. HOGWOOD & LEWIS GUNN, POLICY ANALYSIS FOR THE REAL WORLD 4 (Oxford Univ. Press 1984).

outputs, the perceived impacts of agency decisions, and, finally, important revisions (or attempted revisions) in the basic statute.¹³

Though the contrary has been asserted,¹⁴ policy implementation issues have not traditionally been relegated to the outer fringes of the academic research agenda. They have long been an integral part of the study of the law, particularly its constitutional and administrative dimensions. The timehonored Wilsonian dichotomy between politics and administration was rooted in the assumption that policy formation and policy implementation were conceptually and institutionally distinct activities, with the construction of a robust system of checks and balances needed to govern their interaction.¹⁵ An inherent tension between political and administrative authority was also duly reflected in the writings of late nineteenth and early twentieth century legally-minded European intellectuals such as Max Weber.¹⁶ Matters of administrative discretion, in the broad context of the rule of law, have occupied legal scholars for several decades,¹⁷ and similar trends have been witnessed in other academic domains:

While we share ... [the] concern that far too little attention has been paid to the question of policy implementation, . . . [the] criticism of the literature is unnecessarily harsh and short-sighted. Our argument is put simply: there is a rich heritage from the social sciences that is often overlooked by those purporting to discuss the policy implementation process. This literature includes theoretical and empirical work in several disciplines, including sociology, public administration, social psychology, and political science. While most of these studies do not examine specifically the policy implementation process, close inspection reveals that it takes little imagination to comprehend their relevance.¹⁸

However, selective scrutiny and indirect inference do not amount to intensive examination and explicit targeting. The catalyst for a shift from a loose to a structured mode of inquiry was furnished by Jeffrey Pressman and Aaron Wildavsky when they published in 1973 the first edition of their path-breaking tome on ground-level policy execution problems encountered in a medium-size American city: Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes.¹⁹ This landmark

 $^{^{\}rm 13}$ Daniel A. Mazmanian & Paul A. Sabatier, Implementation and Public Policy 20–21 (Scott, Foresman, & Co. 1983) (emphasis omitted).

See, e.g., ERWIN G. HARGROVE, THE MISSING LINK: THE STUDY OF THE IMPLEMENTATION OF SOCIAL POLICY (The Urban Inst. Press 1985) (1975).

See Woodrow Wilson, The Study of Administration, 2 POL. SCI. Q. 197, 197–222 (1887).
 See FROM MAX WEBER: ESSAYS IN SOCIOLOGY (H. H. Gerth & C. Wright Mills trans. & eds., Oxford Univ. Press 1958); MAX WEBER: THE THEORY OF SOCIAL AND ECONOMIC ORGANIZATION (A. M. Henderson trans. & Talcott Parson trans. & ed., The Free Press 1947).

¹⁷ See, e.g., KENNETH CULP DAVIS, DISCRETIONARY JUSTICE: A PRELIMINARY INQUIRY (La. State Univ. Press 1969); A.V. DICEY, LECTURES ON THE RELATION BETWEEN LAW AND PUBLIC OPINION IN Univ. Picss 1909); A.V. DICET, LECTURES ON THE KELATION DETWEEN LAW AND FOULD OF MICHAELAN AND FOULD

IN WASHINGTON ARE DASHED IN OAKLAND; OR, WHY IT'S AMAZING THAT FEDERAL PROGRAMS WORK AT ALL, THIS BEING A SAGA OF THE ECONOMIC DEVELOPMENT ADMINISTRATION AS TOLD BY

treatise provides a sobering account of the substantial divergences between the strategic intentions of players engaged in policy formation and the intentions of players further down the organizational chain engaged in policy implementation.

Pressman and Wildavsky significantly heightened awareness of the missing link between policy blueprints and policy outcomes. This absent element was likened to a black box which had to be illuminated in order to enhance the understanding of the forces that drive outcomes in directions not envisioned in the blueprints. Such illumination has subsequently been generated on an ample scale by scholars who have transformed the study of policy implementation into a truly vast enterprise that is underpinned by far-ranging empirical and theoretical insights. Occasional setbacks have been experienced along the way, as the findings and ideas produced have not accumulated smoothly and have thus not always lent themselves readily to an effective synthesis. Nevertheless, progress has been sustained, most recently by forging closer conceptual ties between policy implementation and governance.²⁰

The two authors of the 1973 influential book opted to explore local government responses to central government strategic guidelines from the perspective of the latter. This was an expression of the prevailing view that administrative authority should flow seamlessly from the political center to the political periphery. It may have also been a manifestation of a sense of disappointment engendered by the perception that the ambitious Great Society vision embodied in government programs of the 1960s was floundering in the face of ground-level parochial pressures across the country. The challenge then was to bring the periphery into closer alignment with the center by inducing greater compliance on the periphery's part. The role of the academic researcher in this context was to shed theoretical light on factors reinforcing or undermining compliance.

Pressman and Wildavsky thus laid a foundation for what has become known as a top-down approach to policy implementation. The characterization is appropriate because the overarching goal is to facilitate top-down administrative control. The dependent variable they chose to focus on was implementation effectiveness. This variable normally cannot be observed directly, and in most empirical top-down studies, proxies of one kind or another are consequently employed. Typical examples include policy outputs (e.g., the number of specific measures taken to combat pollution) or policy outcomes (e.g., the actual reduction in the level of pollution). The principal independent variable or key factor impinging on implementation effectiveness was the length of the organizational chain. The corollary was that the longer the organizational chain, or the more

TWO SYMPATHETIC OBSERVERS WHO SEEK TO BUILD MORALS ON A FOUNDATION OF RUINED HOPES (Univ. of Cal. Press 1973).

²⁰ See, e.g., MICHAEL HILL & PETER HUPE, IMPLEMENTING PUBLIC POLICY: GOVERNANCE IN THEORY AND IN PRACTICE 85–115, 160–96 (Sage Publ'ns 2002).

multilayered the organizational structure, the less likely the periphery is to comply with the directives emanating from the center, and vice versa.²¹

The vertical dimension of administration (i.e., the complexity induced by level/layer proliferation) has continued to loom large on the research agenda in subsequent years. A host of other independent top-down variables, however, have been added to the analytical inventory, and attention has rapidly shifted to the horizontal dimension of administration, or the quality of inter-organizational relationships. Horizontal interaction in administrative settings may assume productive or unproductive forms. A number of permutations are possible in this respect. A variant juxtaposing collaborative forms with those marked by a high degree of conflict appears to be of considerable interest. The collaborative end of the continuum is typically associated with implementation effectiveness while the conflict-intensive end is associated with institutional disarray.²²

Additional independent top-down variables range from ones reflecting influences at the apex of the politico-administrative pyramid (e.g., policy characteristics and patterns of policy formation) to those operating more closely to its middle and bottom segments (e.g., distinctive features of the implementing organizations, behavioral dispositions of their front-line staff who actually deliver the services, responses of groups affected by the programs delivered, and wider opportunities and constraints originating in the social milieu in which the government machinery is embedded). The former are generally easier to control than the latter, but it does not necessarily follow that the latter cannot be manipulated at all as part of a deliberate strategy designed to increase the likelihood of policy success/implementation effectiveness.

Policy characteristics merit careful consideration, because implementation failures often are the product of ill-thought, inadequate, and even inappropriate government initiatives rather than impediments encountered during the execution stage.²³ Some strategic measures are also

 ²¹ See Larry L. Kiser & Elinor Ostrom, The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches, in STRATEGIES OF POLITICAL INQUIRY 179, 179–222 (Elinor Ostrom ed., Sage Publ'ns 1982); Markus Jachtenfuchs, Theoretical Perspectives on European Governance, 1 EUR. L.J. 115, 115–33 (1995); Christoph Knill & Andrea Lenschow, Coping with Europe: The Impact of British and German Administrations on the Implementation of EU Environmental Policy, 5 J. EUR. PUB. POL'Y 595, 595–614 (1998); Risto Lampinen & Petri Uusikylä, Implementation Deficit—Why Member States Do Not Comply with EU Directives?, 21 SCANDINAVIAN POL. STUD. 231, 231–51 (1998); Fritz W. Scharpf, Introduction: The Problem-Solving Capacity of Multi-Level Governance, 4 J. EUR. PUB. POL'Y 520, 520–38 (1997); Andy Smith, Comparative and International Administration: Studying Multi-Level Governance. Examples from French Translations of the Structural Funds, 75 PUB. ADMIN. 711, 711–29 (1997).
 ²² See, e.g., Kurt D. Cline, Defining the Implementation Problem: Organizational Management Versus

²² See, e.g., Kurt D. Cline, Defining the Implementation Problem: Organizational Management Versus Cooperation, 10 J. PUB. ADMIN. RES. & THEORY 551, 551–71 (2000); Laurence J. O'Toole, Jr. & Robert S. Montjoy, Interorganizational Policy Implementation: A Theoretical Perspective, 44 PUB. ADMIN. REV. 491, 491–503 (1984); Laurence J. O'Toole, Jr., Alternative Mechanisms for Multiorganizational Implementation: The Case of Wastewater Management, 21 ADMIN. & SoC'Y 313, 313–39 (1989); Laurence J. O'Toole, Jr., Interorganizational Policy Studies: Lessons Drawn from Implementation Research, 3 J. PUB. ADMIN. RES. & THEORY 232, 232–51 (1993); Laurence J. O'Toole, Jr., Policy Recommendations for Multi-Actor Implementation: An Assessment of the Field, 6 J. PUB. POL'Y 181, 181–210 (1986); Laurence J. O'Toole, Jr., Strategies for Intergovernmental Management: Implementing Programs in Interorganizational Networks, 11 INT'L J. PUB. ADMIN. 417, 417–41 (1988).
²³ See HOGWOOD & GUNN, supra note 12, at 196–218; Paul A. Sabatier & Daniel A. Mazmanian, The Implementation of Public Policy: A Framework of Analysis, in EFFECTIVE POLICY IMPLEMENTATION 3,

inherently more implementable than others, highlighting the relevance of policy formation as a factor which needs to be thoroughly assessed at the earliest possible juncture, for it makes little sense to embrace initiatives which are theoretically appealing but cannot be readily executed. In this context several other issues arise that impinge on the quality of high-level and, ultimately, policy success/implementation making decision effectiveness: the coherence of the decision making process, its comprehensiveness, its openness, its resourcefulness, its transparency, and its degree of integration with other phases of the multi-step strategic undertaking.⁴

Characteristics of implementing organizations vary considerably across countries, subnational units, sectors, and pockets of institutional activity. A combination of organization-specific features may also have substantial implications for policy execution. For instance, some organizations have elaborate control mechanisms, whereas others rely on looser systems.²⁵ By the same token, some resort to coercive-style tactics to secure compliance, while others prefer to offer material or, alternatively, normative inducements.²⁶ The concrete dispositions of front-line staff engaged in service delivery may influence implementation effectiveness in a number of ways. The attitudinal factors deemed relevant in this context include cognition (i.e., comprehension or understanding of policy), response type (e.g., acceptance of policy, neutral posture, rejection), and response intensity (e.g., unqualified acceptance versus ambiguous acceptance).

Such factors should be examined in tandem rather than in isolation. A poignant illustration of the interactions involved is the apparently strong relationship unearthed between female representation in police forces—a characteristic of the implementing organization—and professional reaction to domestic violence-the disposition of front-line staff engaged in service delivery-in both emotional and practical terms²⁸ The relevance of responses on the part of groups affected by the programs delivered was slow to be acknowledged by researchers, but the subject is now prominently addressed in the academic literature. Again, the attitudes and actions range from positive-full cooperation-to negative-unmitigated resistance. Service recipients and other functionally proximate groups also may gain sufficient power to become de facto partners of the implementing

^{3-35 (}Daniel A. Mazmanian & Paul A. Sabatier eds., D.C. Heath & Co. 1981); Richard E. Matland, Souther A. Mazhanian & Paul A. Sabalel eds., D.C. Healt & Co. 1961), Relate E. Matland, Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation, 5 J. PUB. ADMIN. RES. & THEORY 145, 145–74 (1995); Van Meter & Van Horn, supra note 18.
 See, e.g., HOGWOOD & GUNN, supra note 12, at 196–218; MALCOLM L. GOGGIN ET AL., IMPLEMENTATION THEORY AND PRACTICE: TOWARD A THIRD GENERATION (HarperCollins Publishers)

 ²⁵ Gloria Harbin et al., *Factors Influencing State Progress in the Implementation of Public Law 99-457*, *Part H*, 25 PoL'Y SCI. 103, 103–15 (1992); Van Meter & Van Horn, *supra* note 18.
 ²⁶ See, e.g., AMITAI ETZIONI, A COMPARATIVE ANALYSIS OF COMPLEX ORGANIZATIONS: ON POWER, And State Progress in the Implementation of Public Law 99-457.

INVOLVEMENT, AND THEIR CORRELATES (The Free Press 1961).

See, e.g., Van Meter & Van Horn, supra note 18.

 ²⁸ See, e.g., Carole K. Chaney & Grace H. Saltzstein, Democratic Control and Bureaucratic Responsiveness: The Police and Domestic Violence, 42 AM. J. POL. SCI. 745, 745–68 (1998).

organization.²⁹ In certain circumstances, this power may be so substantial that they may be able to capture or come to dominate the latter.³⁰

The social milieu in which the government machinery is embedded is the root of perhaps the most formidable challenges in managing policy implementation. The influences that originate from this source often are beyond the control of government planners and administrators, at least in the short term. They may include domestic factors that are difficult to manipulate (e.g., deep-rooted cultural dispositions) and external ones over which individual countries or subnational entities exercise little control. Yet, there is a propensity to overstate the problems policymakers face on this front and excessively shrink the time horizon in conceptualizing the issue. Another tendency worth highlighting is the bias toward focusing on the social milieu as a severely constraining element in the strategic equation rather than an element offering tangible opportunities.³¹

An alternative perspective on policy implementation underlines the bottom-up, rather than top-down, nature of the process. From that angle, it is regarded as a vibrant street-level phenomenon, far removed from the strategic heights and its occupants who are commonly perceived as the undisputed power holders within the public sector. The term "vibrant" should not be construed narrowly in this context. The underlying assumption is that front-line bureaucrats do not deliver services mechanically but turn policy implementation into a vehicle for shaping administrative and social realities. They manage programs in light of changing circumstances, effectively defining their content. In practice, this amounts to playing an active role in policy formation, in addition to exerting a substantial influence over its execution.³³

Such unconventional conceptualizations of policy implementation have inspired the development of specific methodologies to dissect the working of bottom-up institutional forces. Backward-mapping captures the essence of the position particularly well. It is a technique for tracing stimuli transmitted from street-level bureaucrats (and potentially service recipients) to the strategic guidelines that are supposed to drive them, rather than the other way around. Backward mapping proceeds "from the individual and organizational choices that are the hub of the problem to which policy is addressed, to the rules, procedures and structures that have the closest

²⁹ See, e.g., Kenneth Hanf, Enforcing Environmental Laws: The Social Regulation of Co-Production, in NEW AGENDAS IN THE STUDY OF THE POLICY PROCESS 88, 88-109 (Michael Hill ed., Harvester Wheatsheaf 1993); Larry L. Kiser, Toward an Institutional Theory of Citizen Coproduction, 19 URB. AFF. Q. 485, 485–510 (1984); Roger B. Parks et al., Consumers as Coproducers of Public Services: Some Economic and Institutional Considerations, 9 POL'Y STUD, J. 1001, 1001–11 (1981); Gordon P. Whitaker, Coproduction: Citizen Participation in Service Delivery, 40 PUB. ADMIN. REV. 240, 240–46 (1980).

 ⁽¹⁾ See, e.g., STEVEN LUKES, POWER: A RADICAL VIEW (Macmillan Press Ltd. 1974).
 ³¹ See DROR, supra note 7. See also CARL V. PATTON & DAVID S. SAWICKI, BASIC METHODS OF POLICY ANALYSIS AND PLANNING (Prentice-Hall 1986); WILLIAM N. DUNN, PUBLIC POLICY ANALYSIS: AN INTRODUCTION (Prentice-Hall 1981). 32 See, e.g., MICHAEL LIPSKY, STREET-LEVEL BUREAUCRACY: DILEMMAS OF THE INDIVIDUAL IN

PUBLIC SERVICES (Russell Sage Found. 1980); Michael Lipsky, Street-Level Bureaucracy and the Analysis of Urban Reform, 6 URB. AFF. Q. 391, 391–409 (1971).

proximity to those choices, to the policy instruments available to affect those things, and hence to feasible policy objectives.",33

Proponents of the bottom-up perspective imply-indeed, at times explicitly argue—that the road to effective policy implementation lies in the empowerment of street-level bureaucrais, the foci of administrative action. This claim has considerable appeal, provided it is not stretched to problematic extremes. Maximizing bottom-up feedback and facilitating responses of front-line staff exposed to programs at points of service delivery is an eminently sensible organizational strategy. At the same time, governance ultimately involves reliance on legitimate authority rather than complex multidirectional bargaining. Excessive delegation may amount to an abdication of responsibility. Rather than acknowledge defeat by presenting the apparent capture of policy implementation by their bottom counterparts as a virtue, top administrative echelons should go to great lengths to design viable policies. This position is more consistent with democratic principles of accountability.

Like the multiphase model of decision making, the top-down and bottom-up perspectives deliberately offer a selective representation of administrative reality. All three conceptual frameworks contain normative as well as descriptive elements. Proponents of the top-down model adopt an instrumental view of policy implementation, regarding it as an institutional mechanism for carrying out the directives of higher authority. They ascribe execution failures to dysfunctional behavior along the organizational chain. Those who advocate the bottom-up approach to implementation highlight its cooperative policy features (the "accommodation model") and the fact that the diffusion of authority, as distinct from its concentration, is essential to learning, which is essential to policy success and implementation effectiveness. They attribute execution difficulties to administrative rigidity.³⁵

In practice, implementation regimes often display both top-down and bottom-up characteristics, though usually favoring one type over the other. Regimes—the balance between instrumental and cooperative orientations and organizational systems-also tend to evolve over time. In other words, regimes are usually dynamic rather than static. A regime is an institutional configuration embodying political values that strongly influence public decision making (the normative dimension). In addition, it constitutes a set of specific organizational arrangements that help to crystallize and underpin the political values inherent in it (the descriptive dimension).

 ³³ HILL & HUPE, supra note 20, at 58. See also Richard F. Elmore, Backward Mapping: Implementation Research and Policy Decisions, 94 POL. SCI. Q. 601, 601–16 (1980); Richard F. Elmore Forward and Backward Mapping: Reversible Logic in the Analysis of Public Policy, in POLICY IMPLEMENTATION IN FEDERAL AND UNITARY SYSTEMS: QUESTIONS OF ANALYSIS AND DESIGN 33, 33–70 (Kenneth Hanf & Theo A.J. Toonen eds., Martinus Nijhoff Publishers 1985).
 ³⁴ See generally Matland, supra note 23; Stephen H. Linder & B. Guy Peters, A Design Perspective on Policy Implementation: The Fallacies of Misplaced Prescription, 6 POL'Y STUD. REV. 459, 459–75 (1987); Peter deLeon, The Missing Link Revisited: Contemporary Implementation Research, 16 POL'Y STUD. REV. 311, 311–32 (1999).
 ³⁵ See Robert P. Stoker, A Regime Framework for Implementation Analysis: Cooperation and Reconciliation of Federalist Imperatives, 9 POL'Y STUD. REV. 29, 29–49 (1989).

Reconciliation of Federalist Imperatives, 9 POL'Y STUD. REv. 29, 29-49 (1989).

Implementation regimes are thus shaped by normative and structural forces of this nature.³⁶ To illustrate:

[W]hen implemented by quasi-market mechanisms, policy may be said to promote such values as 'consumer sovereignty' or 'efficiency.' But, a quasi-market regime is more than a statement of desiderata; organizational arrangements must exist to create a context in which the values of the regime are likely to be realized. Consumption decisions registered with education vouchers cannot serve consumer sovereignty or efficiency if they are taken in ignorance of product quality or alternative consumption options. In this context, the distribution of vouchers alone does not constitute a quasi-market regime; organizational arrangements must join the values of the process with its practices.³⁷

As indicated, implementation regimes are not immune to change—an observation that applies to other enduring institutional configurations. Pressman and Wildavsky acknowledged this truism in the 1984 edition of their classic, which includes a chapter coauthored with a prominent Italian scholar thoroughly familiar with fluid (by more rigid Anglo-Saxon standards) mainland European organizational structures.³⁸ At the same time, however, implementation regimes display considerable stability. Departures from the status quo, when they materialize, need not be substantial. If they are the product of endogenous influences, or autonomous adjustment, rather than exogenous pressures, it may be useful to distinguish between two forms of policy learning: the limited instrumental learning of lesson drawing and the deeper social learning that involves a fundamental rethinking of the entire strategic architecture.³⁹

The corollary is that institutional dynamism is not necessarily a phenomenon characterized by great discontinuities. There is ample evidence to suggest that, in many circumstances, policies implemented by governments qualify as an extension of past programs. Even initiatives promoted as new often reflect previous undertakings.⁴⁰ The normal pattern of regime evolution thus features selective tinkering rather than radical reengineering. This is the case because several factors generally combine to reinforce the organizational status quo: agenda denial, closed interpersonal networks at times verging on institutional monopolies, exogenous constraints, negative decisions, non-learning, resource scarcity, and so forth.⁴¹

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³⁶ See id.; Stephen L. Elkin, *Regulation and Regime: A Comparative Analysis*, 6 J. PUB. POL'Y 49, 49– 71 (1986).

³⁷ Stoker, *supra* note 35, at 30.

³⁸ See PRESSMAN & WILDAVSKY supra note 19, at 163–80 (Univ. of Cal. Press 3d. ed. 1984).

³⁹ See MICHAEL HOWLETT & M. RAMESH, STUDYING PUBLIC POLICY: POLICY CYCLES AND POLICY SUBSYSTEMS 234–41 (Oxford Univ. Press 2d ed. 2003).

⁴⁰ See, e.g., CHARLES E. LINDBLOM, BARGAINING: THE HIDDEN HAND IN GOVERNMENT (Rand Corp. 1955); DAVID BRAYBROOKE & CHARLES E. LINDBLOM, A STRATEGY OF DECISION: POLICY EVALUATION AS A SOCIAL PROCESS (The Free Press 1970) (1963) [hereinafter BRAYBROOKE & LINDBLOM, STRATEGY OF DECISION]; NELSON W. POLSBY, POLICY INNOVATION IN AMERICA: THE POLITICS OF POLICY INTIATION (Yale Univ. Press 1984); MICHAEL T. HAYES, INCREMENTALISM AND PUBLIC POLICY (Univ. Press of Am. 2006); MICHAEL T. HAYES, THE LIMITS OF POLICY CHANGE: INCREMENTALISM, WORLDVIEW, AND THE RULE OF LAW (Georgetown Univ. Press 2001).
⁴¹ See HOWLETT & RAMESH, *supra* note 39, at 119–226.

Gradual regime adaptation is the rule, not the exception, but quantum leaps are not altogether uncommon. Atypical, or significant, change may take place as a result of notable shifts in the external milieu, far-reaching internal power realignments, policy problem escalation, administrative capability enhancement-or reduction-and a variety of situational, at times ad hoc, factors. It is not unusual for key decision makers to conclude that regime underpinnings-both values and organizational foundationsare no longer consistent with prevailing goals and/or interests and opt for an overhaul. More often the process is characterized by a degree of spontaneity—as distinct from administrative rationality—and dominated by the so-called policy entrepreneurs, or actors who are driven by the perception that the established problem-solving paradigm has become obsolete or who see an opportunity to maximize advantage, whether for themselves or the group that they represent.42

Normal and atypical regime changes constitute fundamentally different evolutionary patterns, but they can effectively be combined within a single analytical framework to capture the essence of a mode of system adaptation akin to a punctuated equilibrium. Such processes are observed in the natural world and feature relatively long periods of regime stability which are occasionally, for better or for worse, disrupted by events of such magnitude that the forces of inertia cannot contain them.⁴³ A relevant and poignant illustration is the shift that occurred in the nineteenth century from a policy configuration that was geared toward untempered resource exploitation to one reflecting a preference for conservation. A similar development took place in the twentieth century when conservation was supplanted by sustainable development as the predominant goal.⁴⁴

It is common to assume that regimes are inherently stable and that change, particularly of the atypical variety, tends to be the product of exogenous pressures or shocks. This perception is rooted in systems theory whose proponents highlight the propensity of physical and social entities to display homeostatic properties and return to a state of equilibrium following temporary disturbances.⁴⁵ In this vein, students of policy implementation have accorded considerable attention to external stimuli, typically crises of one kind or another, that might engender shifts in key regime parameters.

Change-inducing external stimuli have been categorized into two principal subsets: systemic perterburations and policy spillovers. The

⁴² See id. at 234–41.

⁴³ See STEPHEN JAY GOULD, THE STRUCTURE OF EVOLUTIONARY THEORY (Harvard Univ. Press 2002); James L. True, Bryan D. Jones & Frank R. Baumgartner, Punctuated-Equilibrium Theory: Explaining James L. True, Bryan D. Jones & Frank R. Baumgartner, *Punctuated-Equilibrum Theory: Explaining Stability and Change in Public Policymaking, in* THEORIES OF THE POLICY PROCESS 155, 155–87 (Paul A. Sabatier ed., Westview Press 2d ed. 2007); Stephen Jay Gould & Niles Eldredge, *Punctuated Equilibria: The Tempo and Mode of Evolution Reconsidered,* 3 PALEOBIOLOGY 115, 115–51 (1977); Connie J. G. Gersick, *Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium Paradigm,* 16 ACAD. OF MGMT. REV. 10, 10–36 (1991). ⁴⁴ See SAMUEL P. HAYS, CONSERVATION AND THE GOSPEL OF EFFICIENCY: THE PROGRESSIVE CONSERVATION MOVEMENT 1890–1920 (Univ. of Pittsburgh Press 1999) (1959); SAMUEL P. HAYS, BEAUTY HEALTH AND PREMANENCE: ENVIRONMENTAL POLITICS IN THE UNITED STATES 1955–1985

BEAUTY, HEALTH, AND PERMANENCE: ENVIRONMENTAL POLITICS IN THE UNITED STATES 1955-1985 (Cambridge Univ. Press 1987). ⁴⁵ See ORGANIZED SOCIAL COMPLEXITY: CHALLENGE TO POLITICS AND POLICY (Todd R. La Porte ed.,

Princeton Univ. Press 1975).

former term refers to crises of exogenous origin, such as natural disasters. Wars, however, are the favorite example and preferred subject of academic exploration.⁴⁶ Policy spillovers are associated with external influences emanating from one segment of a complex system and significantly affecting the operations, performance, and/or structure of other segments.⁴⁷ The reshaping of long-established natural resource strategies in response to intensifying Aboriginal land claims is a case in point. A more vivid illustration is the impact of the Internet on existing telecommunications regimes.⁴⁸

In recent years, scholarly preoccupation with external shocks has somewhat diminished, and students of implementation have started gravitating toward the internal policy arena. The incorporation of endogenous factors into the regime adaptation equation has been a twodimensional process focused on venue change and policy learning. The former consists of discernible shifts in strategies embraced by pivotal actors in pursuing their interests. The parties involved may be part of a network dominating the policy agenda or new players who have successfully entered this network. Their maneuvers often culminate in a redefinition of the issue that has given rise to a programmatic response and in a corresponding regime adjustment.⁴⁹ An example is the metamorphosis of waste disposal from an essentially technical regulatory problem into one reflecting public health and property rights concerns.⁵⁰

Policy learning is also now viewed, and belatedly so, as a largely internal process of regime modification. It is increasingly acknowledged that the lessons directly and indirectly gained by program planners and managers in the course of policy implementation are absorbed over time in one form or another and may result in enduring regime changes. The shifts may be limited in scope or far-reaching. The learning too need not follow a uniform pattern, as it may be a gradual phenomenon or an abrupt one.⁵¹ In

 ⁴⁶ See Jenkins-Smith & Sabatier, Public Policy, supra note 10; Paul A. Sabatier, Knowledge, Policy-Oriented Learning, and Policy Change: An Advocacy Coalition Framework, 8 SCI. COMM. 649, 649–92 (1987); Paul A. Sabatier, An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning Therein, 21 POL'Y SCI. 129, 129–68 (1988); Alan D. Meyer, Adapting to Environmental Jolts, 27 ADMIN. SCI. Q. 515, 515–37 (1982); Alan D. Meyer, Geoffrey R. Brooks & James B. Goes, Environmental Jolts and Industry Revolutions: Organizational Responses to Discontinuous Change, 11 STRATEGIC MGMT. J. 93, 93–110 (1990).
 ⁴⁷ See David Dery, Policy by the Way: When Policy Is Incidental to Making Other Policies, 18 J. PUB.

 ⁴⁷ See David Dery, Policy by the Way: When Policy Is Incidental to Making Other Policies, 18 J. PUB.
 POL'Y 163, 163–76 (1999).
 ⁴⁸ See Wyn Grant & Anne MacNamara, When Policy Communities Intersect: The Case of Agriculture

⁴⁵ See Wyn Grant & Anne MacNamara, When Policy Communities Intersect: The Case of Agriculture and Banking, 43 POL. STUD. 509, 509–15 (1995); George Hoberg & Edward Morawski, Policy Change Through Sector Intersection: Forest and Aboriginal Policy in Clayoquot Sound, 40 CANADIAN PUB. ADMIN. 387, 387–414 (1997); Jeremy Rayner et al., Privileging the Sub-Sector: Critical Sub-Sectors and Sectoral Relationships in Forest Policy-Making, 2 FOREST POL'Y & ECON. 319, 319–32 (2001). ⁴⁹ See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁰ See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁰ See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴¹ See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴² See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴³ See FORMY, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁴ See FORM, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁵ See FORM, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁵ See FORM, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDERY, D. AMERICAN, ⁴⁵ See FORM, B. BALMCHERE, SAND, SAND, SAND, SAND, SAND, SAND, ⁴⁵ See FORM, B. BALMCHERE, B. RAME, D. FONES, ACENDARG, AND INSTANDER, D. FONES, ⁴⁵ See FORM, B. RAME, SAND, SAN

⁴⁹ See FRANK R. BAUMGARTNER & BRYAN D. JONES, AGENDAS AND INSTABILITY IN AMERICAN POLITICS (The Univ. of Chi. Press 1993).

 ⁵⁰ See Jeremy Richardson, Interest Groups, Multi-Arena Politics and Policy Change, in THE POLICY PROCESS 65, 65–99 (Stuart S. Nagel ed., Nova Sci. Publishers, Inc. 1999).
 ⁵¹ See Jenkins-Smith & Sabatier, Public Policy, supra note 10; Frank Stokes Berry & William D. Berry,

³¹ See Jenkins-Smith & Sabatier, Public Policy, supra note 10; Frank Stokes Berry & William D. Berry, Innovation and Diffusion Models in Policy Research, in THEORIES OF THE POLICY PROCESS 223, 223– 60 (Paul A. Sabatier ed., Westview Press 2d ed. 2007); HUGH HECLO, MODERN SOCIAL POLITICS IN BRITAIN AND SWEDEN: FROM RELIEF TO INCOME MAINTENANCE (Yale Univ. Press 1974); Colin J. Bennett & Michael Howlett, The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change, 25 POL'Y SCI. 275, 275–94 (1992); Peter J. May, Policy Learning and Failure, 12 J.

the latter case, conceptual and practical discrepancies may long persist between the regime and the reality it endeavors to regulate. The consequent tension eventually reaches a critical threshold, precipitating accelerated policy learning and a rapid policy response.⁵² Such theoretical and empirical insights may arguably shed light on the evolution and functioning of the Chinese state apparatus in controlling ecological challenges through the law and supporting institutions.

III. TRADITIONAL LEGAL PERSPECTIVES

As suggested earlier, China, from a broad historical standpoint, can be said to have essentially adopted an instrumental and myopic approach toward nature. Progressive stirrings were periodically observed in intellectual and spiritual circles, and policies were occasionally fine-tuned in order to minimize harm to the biosphere. The protracted imperial era had inevitably witnessed considerable variations in cultural dispositions and government practices. Some rulers and those serving them were more inclined than others to display concern about the environment and translate their sense of unease into concrete steps to alleviate the burden placed by humankind upon it. The Qing Dynasty is often singled out as a constructive example lending credence to the assertion that strict generalization over three millennia may lead to oversimplification.⁵³

While acknowledging exceptions to the norm, historians nevertheless deem the overall pattern sketched here as fundamentally valid. There is ample evidence to support the claim that throughout Chinese history the ecosystem was consistently relegated to the administrative periphery and that bureaucratic response to large-scale environmental degradation was seldom commensurate with the severity of the problem. During this entire period, virtually no serious attempt was made to construct a viable institutional façade to underpin efforts to shield nature from human excesses. Rather, the country's rulers traditionally exhibited a strong preference for relying on moral suasion or personal authority. Ecological regulations were promulgated in a systematic fashion, and there were no initiatives to codify environmental laws. Ecological management mostly took the form of ad hoc campaigns, featuring mass mobilization to promote vast infrastructure projects, which wreaked havoc on the biosphere.⁵⁴

In this fluid setting, the responsibility for managing the complex relationship between humankind and nature had been vested in a loose

PUB. POL'Y 331, 331–54 (1992); Peter Knoepfel & Ingrid Kissling-Näf, Social Learning in Policy Networks, 26 POL'Y. & POL. 343, 343–67 (1998).

 ¹⁰ See The BREAKDOWN OF DEMOCRATIC REGIMES (Juan J. Linz & Alfred Stepan eds., The John Hopkins Univ. Press 1978); STEPHEN HAGGARD & ROBERT R. KAUFMAN, THE POLITICAL ECONOMY OF DEMOCRATIC TRANSITIONS (Princeton Univ. Press 1995).
 ⁵³ See generally CIVIL LAW IN QING AND REPUBLICAN CHINA (Kathryn Bernhardt & Philip C. C. Huang China (Kathryn Bernhardt & Philip

²⁵ See generally CIVIL LAW IN QING AND REPUBLICAN CHINA (Kathryn Bernhardt & Philip C. C. Huang eds., Stanford Univ. Press 1994); Helen Dunstan, *Official Thinking on Environmental Issues and the State's Environmental Roles in Eighteenth-Century China, in* SEDIMENTS OF TIME: ENVIRONMENT AND SOCIETY IN CHINESE HISTORY 585, 585–614 (Mark Elvin & Liu Ts'ui-jung eds., Cambridge Univ. Press 1998).

⁴⁴ See generally Elvin, Legacy, supra note 5; Dunstan, supra note 53; ECONOMY, supra note 4, at 27– 57; ELVIN, RETREAT, supra note 5.

network of individual officials consisting primarily of the emperor, or equivalent, and a coterie of regional administrators. Environmental protection thus heavily depended on personal leanings of a handful of strategically-placed and practically unconstrained players. In the judicial domain, a mixture of Confucian ideals and Legalist principles had undergirded the authority of local magistrates to balance competing interests on a case-by-case basis without reference to a set of codified laws. This, in turn, enhanced the scope for discretionary action by the emperor, or an emperor-like figure, and field-level bureaucrats, for whom ecological preservation had generally been a low-priority item. Rampant corruption significantly undermined the operational efficiency of this fragile institutional setup.⁵⁵

The Communist transformation rendered this highly personalistic and contingent system of environmental protection totally unworkable. In his formative years as revolutionary leader, Mao expressed mild admiration for the Legalist tradition of the Qin Dynasty, loosely asserting that laws and regulations were worthy vehicles for "procuring happiness."⁵⁶ This enlightened attitude, however, quickly gave way to a deeply agnostic one, setting the stage for a continuous cycle of campaigns and mass mobilization drives which completely shattered the feeble ecological management machinery inherited from previous regimes. As he sought to consolidate his unshakeable grip on power and impose his uncompromising sociopolitical blueprint, nature came to be viewed as "an enemy, against which man must fight an unending war, with more conviction and fervor and with a brighter vision of the ultimate results than even the Darwinian-Spencerian West held."5

Yet, in China, the interplay between action and reaction, in a yin-yang fashion, sooner or later tends to emerge as an element in the evolving picture. Even before the dust settled on Mao's grandiose schemes to catapult the country overnight into a position of world leadership and to ideologically purify it, countervailing forces gingerly endeavored to blunt the sharp edge of these gross misadventures. Consistent with the historical pattern, the immediate catalyst for embarking on a tentative search for corrective measures was a series of unmitigated man-made environmental disasters. They prompted Premier Zhou Enlai, Mao's conservative alterego, to establish a small working group of leading provincial and municipal officials to address some of the critical problems that surfaced in the ecological domain. The focus was primarily on water resources.⁵

These domestic developments roughly coincided with the 1972 United Nations Conference on the Human Environment ("UNCHE"), the first global diplomatic gathering devoted to the subject.⁵⁹ The timing was

⁵⁵ See generally sources cited supra note 54.

⁵⁶ Mao Zedong, *Essay on How Shang Yang Established Confidence by the Moving of the Pole, in* 1 MAO'S ROAD TO POWER: REVOLUTIONARY WRITINGS 1912–1949 5, 5 (Stuart R. Schram ed., M.E. Sharpe, Inc. 1992).

Rhoads Murphey, Man and Nature in China, 1 MODERN ASIAN STUD. 313, 319 (1967).

⁵⁸ See ECONOMY, supra note 4, at 93.

⁵⁹ See CIESIN Thematic Guides, United Nations Conference on Environment and Development,

opportune because the Chinese leadership decided to selectively broaden economic and political contacts with the rest of the world during the preceding period, which paved the way for the assumption of a United Nations ("UN") seat by China in the same year. Premier Zhou dispatched a delegation to the UNCHE in Stockholm, effectively laying a foundation for an ongoing, albeit uneven, dialogue between the country and the international community, via appropriate institutional channels, regarding the ecological challenges confronting humankind and the possible strategies to contain them.⁶

Following its return to Beijing, the delegation produced a report which galvanized Premier Zhou into taking further steps to prevent severe harm to the biosphere. In June 1973, Zhou organized the country's first National Conference on Environmental Protection ("NEPA"). The momentum that it generated led the State Council to set up under its auspices a top-level interministerial environmental protection group to explore pressing ecological management issues. Similar initiatives were cautiously pursued in provincial and municipal contexts. These well-intentioned efforts eventually fizzled out due to the turbulence engendered by the Cultural Revolution. The seeds of formal state action geared toward ecological preservation were nevertheless sown during this tumultuous period, although they failed to germinate.⁶¹

In stumbling away from the social and physical devastation wrought by their predecessor, Mao's successors were almost exclusively preoccupied with economic reconstruction and political stability. An ambitious liberalization program was implemented through a mixture of incremental adjustments and wholesale reforms. In the process, the market emerged as a pivotal resource allocation mechanism, crowding out the state. Increasingly, it is the former, rather than the latter, that drives forward a largely open and decentralized economy.⁶² Greater restraint characterized the approach toward political restructuring, but a modest fine-tuning ushered in a long period of relative calm,⁶³ even though some astute observers argue that the picture is more complex than surface appearances suggest.⁶⁴

http://www.ciesin.columbia.edu/TG/PI/TREATY/unced.html (notes that UNCED took place on the 20th anniversary of UNCHE). ⁶⁰ See ECONOMY, supra note 4, at 93–94.

 ⁶¹ See id. at 95. For a general survey of pre-reform and early reform-era trends, see MANAGING THE ENVIRONMENT IN CHINA (Qu Geping & Woyen Lee ed., Tycooly Int'l Publ'g Ltd. 1984).
 ⁶² See generally JUSTIN YIFU LIN ET AL., THE CHINA MIRACLE: DEVELOPMENT STRATEGY AND ECONOMIC REFORM (The Chinese Univ. Press 1996); JINGLIAN WU, UNDERSTANDING AND INTERPRETING CHINESE ECONOMIC REFORM (Texere 2005).

See generally SUSAN L. SHIRK, THE POLITICAL LOGIC OF ECONOMIC REFORM IN CHINA (Univ. of Cal. Press 1993) [hereinafter SHIRK, POLITICAL LOGIC]; SUSAN L. SHIRK, HOW CHINA OPENED ITS DOOR; THE POLITICAL SUCCESS OF THE PRC'S FOREIGN TRADE AND INVESTMENT REFORMS (The ⁶⁴ See MINXIN PEI, CHINA'S TRAPPED TRANSITION: THE LIMITS OF DEVELOPMENTAL AUTOCRACY

⁽Harvard Univ. Press 2006); JOHN LEE, WILL CHINA FAIL? THE LIMITS AND CONTRADICTIONS OF MARKET SOCIALISM (The Ctr. for Indep. Stud. 2007); JAMES MANN, THE CHINA FANTASY: HOW OUR LEADERS EXPLAIN AWAY CHINESE REPRESSION (Viking 2007); SUSAN L. SHIRK, CHINA: FRAGILE SUPERPOWER (Oxford Univ. Press 2007) [hereinafter SHIRK, FRAGILE SUPERPOWER].

Initially, the environment was a peripheral component of the strategic agenda. In line with the historical pattern, the needs of humankind, narrowly construed, dominated those of nature, and the latter were embraced in a reactive fashion. As the inherent tension between economic and ecological imperatives intensified, often against the backdrop of a spectacular man-made disaster of one kind or another, the politicobureaucratic environmental response function began to assume a concrete form. The rudimentary framework established by Zhou and his associates was brought into focus and expanded. Over the years, this has evolved into a large-scale formal institutional undertaking, albeit one retaining traditional-style ad hoc and personalistic features and never matching the pace and vibrancy witnessed on the economic side.66

Legal scholars and academically-minded practitioners have been closely monitoring developments on this front. In the early stages, their effort was primarily directed toward basic fact-finding and subsequent dissemination. Access to relevant statutory, regulatory, judicial, and administrative sources was sought, and documents obtained were translated into other languages, primarily English. Selective generalizations were then offered regarding this embryonic reform-era system of ecological preservation. For example, in their extensive collection-the product of thorough research across a wide range of areas—Lester Ross and Mitchel Silk provided valuable empirically-derived observations about the interplay between law and policy, property and procedural rights, problems meriting attention, conflict resolution, and future prospects.⁶

The need for translation of materials extracted from primary and secondary sources has diminished over time as relevant information has become readily available in convenient forms, and specialized channels, including academic-style journals, have emerged for regularly converting Chinese publications into internationally usable products. The Ross-Silk documentary survey has thus not been repeated on such a scale by the two authors or other legal practitioners or scholars. Yet, the emphasis in the academic work conducted in the past two decades has still largely remained on fact-finding and description. However, given the accessibility to information and the reduction in resources being devoted to the dissemination of basic findings, the descriptive element has turned increasingly systematic, and juridically-anchored evaluation-including of the critical variety—has gained prominence.

Detailed descriptive accounts of the ecological governance system in China at key junctures and its evolution since the late pre-reform period inevitably constitute the core of the body of writings that has accumulated in this field. The logical starting point is Zhou's broad strategic initiative of the early/mid-1970s and the concrete policy moves that followed shortly thereafter, particularly post-1972 steps such as the publication in 1973 of the provisional draft of the Rules on the Protection and Improvement of the

 ⁶⁵ See generally EDMONDS, PATTERNS, supra note 4; EDMONDS, MANAGING, supra note 4; CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT, supra note 4.
 ⁶⁶ See LESTER ROSS & MITCHELL A. SILK, ENVIRONMENTAL LAW AND POLICY IN THE PEOPLE'S DOCUMENT, SUPRA NOT POLICY P

REPUBLIC OF CHINA (Quorum Books 1987).

Environment and the promulgation by the State Council in 1974 of the Provisional Rules on Coastal Marine Pollution, the first regulatory measure adopted in the country with the specific aim of curbing ecological hazards in the coastal sector.⁶⁷

As indicated, these rudimentary efforts could not be sustained in the face of powerful political headwinds. The momentum nevertheless reaccelerated as soon as the strategic balance swung in favor of economic liberalization. In 1979, the first legislative action addressing threats to the biosphere in a comprehensive fashion culminated in the adoption of the Environmental Protection Law. This legislative vehicle was amended and put into force a decade later in 1989.⁶⁸ While of considerable symbolic significance, it was merely the tip of a large lawmaking iceberg. The initial twenty-year period following the introduction of the Open-Door Policy in 1978 featured a flurry of legislative activities designed, at least in theory, to minimize the wide-ranging adverse ecological consequences of breakneck development.⁶⁹

Legal scholars have described the products of these initiatives in fine detail. The academic literature contains extensive accounts of national laws and regulations. The survey typically begins with the framework legislation (i.e., the 1989 Environmental Protection Law) and proceeds to shed light on legislative outputs geared toward countering ecological degradation of a

⁶⁷ See Song Ying, The Chinese Environmental Lawmaking Framework, 1 CHINESE J. INT'L L. 225, 226 (2002).

⁶⁸ See id.

⁶⁹ See id; MANAGING THE ENVIRONMENT IN CHINA, supra note 61; Lester Ross & Mitchell A. Silk, Post-Mao China and Environmental Protection: The Effects of Legal and Politico-Economic Reform, 4 UCLA PAC. BASIN L.J. 63, 63-89 (1985); LESTER ROSS, ENVIRONMENTAL POLICY IN CHINA (Ind. Univ. Press 1988) [hereinafter ROSS, ENVIRONMENTAL POLICY IN CHINA]; Lester Ross, The Politics of Environmental Policy in the People's Republic of China, 20 POL'Y STUD. J. 628 (1992); Bryan Bachner, Regulating Pollution in the People's Republic of China: An Analysis of the Enforcement of Environmental Law, 7 COLO. J. INT'L ENVTL. L. & POL'Y 373 (1996) [hereinafter Bachner, Regulating Pollution]; John Copeland Nagle, The Missing Chinese Environmental Law Statutory Interpretation Cases, 5 N.Y.U. ENVTL. L.J. 517 (1996); Bryan Bachner & Wang Xi, Environmental Law, in INTRODUCTION TO CHINESE LAW 523 (Wang Chenguang & Zhang Xianchu eds., Sweet & Maxwell Asia 1997) [hereinafter Bachner & Xi, Environmental Law]; Richard Lotspeich & Aimin Chen, Environmental Protection in the People's Republic of China, 6 J. CONTEMP. CHINA 33, 33-59 (1997) Invironmental Protection in the People's Republic of China: The Face of Domestic Law, 156 THE Environmental Regulation in the People's Republic of China: The Face of Domestic Law, 156 THE CHINA Q. 788, 788-808 (1998); Lester Ross, China: Environmental Protection, Domestic Policy Trends, Patterns of Participation in Regimes and Compliance with International Norms, 156 THE CHINA Q. 809, 809–35 (1998); Feng Lin, Law on Environmental Protection, in CHINESE LAW 557, 557–90 (Wang Guiguo & John Mo eds., Kluwer Law Int'l 1999) [hereinafter Lin, Environmental Protection]; XIAOYING MA & LEONARD ORTOLANO, ENVIRONMENTAL REGULATION IN CHINA: INSTITUTIONS, ENFORCEMENT, AND COMPLIANCE (Rowman & Littlefield Publishers, Inc. 2000); William P. Alford & Benjamin L. Liebman, Clean Air, Clear Processes? The Struggle over Air Pollution Law in the People's Republic of China, 52 HASTINGS L.J. 703, 703–48 (2001); IMPLEMENTING INTERNATIONAL ENVIRONMENTAL LAW IN GERMANY AND CHINA (Tao Zhenghua & Rüdiger Wolfrum eds., Kluwer Law Int'l 2001); Xi Wang, *China, in* ENVIRONMENTAL LAW AND ENFORCEMENT IN THE ASIA-PACIFIC RIM 95 (Terri Mottershead ed., Sweet & Maxwell Asia 2002) [hreeinafter Wang, *China*]; Eric W. Orts, *Environmental Law with Chinese Characteristics*, 11 WM. & MARY BILL RTS. J. 545, 545–67 (2003); Richard J. Ferris Jr. & Hongjun Zhang, *Reaching Out to the* Rule of Law: China's Continuing Efforts to Develop an Effective Environmental Law Regime, 11 WM. & MARY BILL RTS. J. 569, 569–602 (2003); Stefanie Beyer, Environmental Law and Policy in the People's Republic of China, 5 CHINESE J. INT'L L. 185, 185–211 (2006); Alex Wang, The Role of Law in Environmental Protection in China: Recent Developments, 8 VT. J. ENVTL. L. 195, 195–223 (2007) [hereinafter Wang, Role of Law].

specific nature (e.g., air pollution prevention and control law, noise pollution prevention and control law, solid waste pollution prevention and control law, water pollution prevention and control law, natural resources conservation law, and criminal law). A depiction of policies broadly reflecting legislative intent often follows (e.g., prevention first approach, treble simultaneity principle, cleaner production concept, land planning rules, environmental liability tenets, and environmental management).⁷

In light of the proliferation of legislative and regulatory measures, as well as the opaqueness of the entire structure and its fluidity, it is also common to describe the hierarchy of pertinent legal norms. The constitution, which contains several ecologically-centered provisions, is placed at the apex of the system. The relationship between international law and municipal law is somewhat ambiguous in the Chinese context, but the former is generally addressed next. Article 46 of the 1989 Environmental Protection Act may be invoked for this purpose because it stipulates that "if an international treaty regarding environmental protection concluded or acceded to by the People's Republic of China contains provisions differing from those contained in the laws of the People's Republic of China, the provisions of the international treaty shall apply, unless the provisions are those to which the People's Republic of China has announced reservations."⁷¹

In a unitary state, national laws are superior to local laws. Chinese practices are consistent with this pattern, even though provincial governments enjoy some room for maneuvering on the ecological front, subject to the conditions that local standard setting is more stringent than that of the central authorities and that appropriate bottom-up reporting procedures are followed. Moreover, not all national laws are equal in status. The pecking order, beyond the constitution, is as follows: laws adopted by the Standing Committee of the National People's Congress; administrative laws embraced by the State Council, typically as regulations; and administrative instruments introduced by ministries, commissions, administrative bodies or agencies. The scope may vary, and its breadth is not necessarily a function of the level of the source in the hierarchy.⁷²

Another dimension of the ecological governance structure outlined in legal writings on the subject is its institutional foundation. The organizational framework described includes: the National People's Congress ("NPC"), the highest arm of the State whose members meet briefly once a year and have the collective authority to enact all basic laws

⁷⁰ See MANAGING THE ENVIRONMENT IN CHINA, supra note 61; Bachner & Xi, Environmental Law, supra note 69. See also Nagle, supra note 69; Lin, Environmental Protection, supra note 69; Palmer, supra note 69; MA & ORTOLANO, supra note 69, at 13–32; Alford & Liebman, supra note 69; Ying, supra note 67; Wang, China, supra note 69; Ferris & Zhang, supra note 69; Beyer, supra note 69; Wang, Role of Law, supra note 69. ¹¹ Ying, supra note 67, at 228.

⁷² See id. at 228–29. See also Bachner & Xi, Environmental Law, supra note 69; Nagle, supra note 69; Palmer, supra note 69; Lin, Environmental Protection, supra note 69; MA & ORTOLANO, supra note 69, at 13-76; Alford & Liebman, supra note 69; Wang, China, supra note 69; Ferris & Zhang, supra note 69; Beyer, supra note 69.

and to make amendments to the constitution; its Standing Committee, whose members meet on a bimonthly basis and have the power to pass laws other than those in the domain of the NPC, as well as to interpret the constitution and basic laws; the State Council, the principal executive organ which has the authority to enact administrative regulations pursuant to constitutional and national law; its ministries/commissions/departments which are competent to issue administrative rules; the Environment and Natural Resources Protection Commission ("ENRPC"), which develops general environmental strategies and guidelines and coordinates environmental protection efforts under the auspices of the State Council; and the State Environment Protection Administration ("SEPA"), an administrative arm of the NPC which formulates specific environmental policies, issues regulations, sets standards, provides guidelines, conducts countrywide supervisory activities, and exercises nationwide control.⁷³

The descriptive scrutiny undertaken by legal scholars extends beyond the institutional core crucial to the performance of the ecological preservation function at the national level. The core encompasses central government organs such as the Ministries of Agriculture, Energy, Forestry, and Water Resources, which have the authority to issue key environmental regulations. The powers and activities of the local people's congresses and their standing committees, which are competent to adopt local regulations consistent with superior legislation and regulations, and local governments, which have the authority to introduce local administrative rules, are also outlined. The Environmental Protection Bureaus ("EPB"), which operate at the subnational level, are funded by local government and carry, subject to appropriate constraints, responsibilities in areas under their jurisdiction for all facets of ecological management, including legislative, regulatory, organizational, and supervisory; these entities are also accorded considerable attention in this context.⁷⁴

The depiction of institutional contours brings into focus the prevailing mechanisms of dispute resolution as well. The judicial system, from the Supreme People's Court to the local people's courts, including specialpurpose courts, is the principal element of this segment of the picture. Other elements, however, come into play (e.g., People's Mediation Committees), because of the traditional propensity to view judicial intervention as a measure of last resort, partly due to cultural influences reflecting Confucian misgivings about pursuing social harmony by reconciling subjective rights of the persons seeking to defend their own interests and partly for political reasons rooted in official reluctance to encourage individual rights. Insights are also offered into the horizontal

⁷³ See Beyer, supra note 69, at 188–89. See also Bachner & Xi, Environmental Law, supra note 69; Lotspeich & Chen, Environmental Protection, supra note 69; Jahiel, supra note 69; Palmer, supra note 69; Lin, Environmental Protection, supra note 69; MA & ORTOLANO, supra note 69, at 33–53; Alford & Liebman, supra note 69; Ying, supra note 67; Wang, China, supra note 69; Ferris & Zhang, supra note 69.

note 69. ⁷⁴ See MA & ORTOLANO, supra note 69, at 33–76; Beyer, supra note 69, at 189. See also Bachner & Xi, Environmental Law, supra note 69; Lotspeich & Chen, Environmental Protection, supra note 69; Jahiel, supra note 69; Palmer, supra note 69; Lin, Environmental Protection, supra note 69; Alford & Liebman, supra note 69; Ying, supra note 67; Wang, China, supra note 69; Ferris & Zhang, supra note 69.

dimension of court structure and operations (e.g., the organization into special divisions for civil, criminal, administration, and commercial matters). The principles underlying judicial decision making and the characteristics of the sociopolitical milieu that impinge upon it constitute an integral component of such descriptive or explanatory accounts.

Changes in the overall picture and its various segments are duly captured in the legal literature. The depictions are thus detailed and up-todate. Indeed, as the inherent tension between the economic and ecological imperatives has intensified, the research output has broadened and increased in frequency. A recent example is a multifaceted and timely survey of policy shifts resulting from the transition from a regulatory system largely based on command and control methods to one primarily relying, at least in terms of the final destination, on market-harnessing techniques. (From a technical perspective, this probably qualifies as a regime change.)⁷⁶ Another recent example is a far-ranging and targeted examination of current developments in the legislative and judicial domains, empirically shedding interesting light on new forms of environmental litigation.⁷⁷

While they are solid, substantial, and up-to-date, traditional-style legal writings on Chinese ecological governance nevertheless rarely focus, in a comprehensive, explicit, and systematic manner, on the implementation phase of the process. By the same token, the issue of the implementability of legislative or regulatory schemes is seldom addressed in earnest. There are, however, notable exceptions to this rule. The illuminating work of Stephanie Beyer stands out in this respect, because she endeavors to determine the extent to which virtually all major legislative or regulatory initiatives are followed in practice, uncharacteristically employing the term implementation for this purpose. Like most legal scholars, however, she implicitly equates policy implementation almost exclusively with top-down enforcement and places greater emphasis on description than explanation.⁷⁸ She is not the only author to look at enforcement from such a restrictive standpoint, but her paper is singled out here because she has approached the matter of implementation in a more deliberate and structured fashion than others in the profession.

The question of implementability is posed far less frequently than that of enforcement, where the problem is one of scope rather than frequency. Again, there are exceptions to the rule, albeit few and far between. A relevant example is an informative paper by Jolene Lin Shuwen outlining

⁷⁵ See Beyer, supra note 69, at 189–91. See also Bachner & Xi, Environmental Law, supra note 69; Nagle, supra note 69; Palmer, supra note 69; Lin, Environmental Protection, supra note 69; Alford & Liebman, supra note 69; Ying, supra note 67; Wang, China, supra note 69; Ferris & Zhang, supra note

^{69.} ⁷⁶ See Jolene Lin Shuwen, Assessing the Dragon's Choice: The Use of Market-Based Instruments in Chinese Environmental Policy, 16 GEO. INT'L ENVTL. L. REV. 617, 617–55 (2004). See also MA & ORTOLANO, supra note 69, at 13–32; Richard D. Morgenstern et al., Emissions Trading to Improve Air Quality in an Industrial City in the People's Republic of China, in CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT, supra note 4, at 150, 150–79.

See Wang, Role of Law, supra note 69.

⁷⁸ See Beyer, supra note 69. See also Bachner, Regulating Pollution, supra note 69; Nagle, supra note 69; Alford & Liebman, supra note 69; Ferris & Zhang, supra note 69.

recently adopted market-harnessing reforms. She borrows analytical concepts from the general ecological governance literature in order to identify potential impediments to progress. A distinction is drawn between developing and developed countries. Developing countries are thought to be more cost-sensitive; suffer from capital scarcity, yet are blessed with abundant, and hence cheap, labor; are less adept at operating and maintaining equipment; are prone to rely on market-distorting mechanisms; and display symptoms of institutional fragility, detracting from the effectiveness of policy formation, enforcement, and monitoring in decentralized settings.

The distinction between developing and developed countries, while not without empirical foundation, is often overplayed in this context. As Richard Lotspeich has amply demonstrated, developed countries also encounter serious difficulties in pursuing policy innovation in the ecological domain, and their experience with market-harnessing reforms has been rather uneven.⁸⁰ One has to embrace finer distinctions than the developing-developed country dichotomy, explore country-specific factors, or factors specific to countries genuinely belonging to the same homogenous category, and probe deeper in an effort to unearth complex and varied influences that extend beyond a modest list of factors based on broad generalizations, however useful as a starting point. For China, the tentative moves in this direction by traditional legal scholars have not really borne sufficient fruit.⁸

Implementation nevertheless features selectively in a number of papers originating from that source. The relevance of Beyer's broad contribution has already been noted and the important works of Bryan Bachner, John C. Nagle, William P. Alford and Benjamin Liebman, and Richard J. Ferris and Hongjun Zhang also merit careful attention.⁸² In addition, the subject is touched upon indirectly-typically not referencing it as implementationand productively in several other papers that fall into that category. Pertinent factual information and analytical insights may be extracted from these writings and eclectically incorporated into an appropriate theoretical scheme. Findings and ideas generated by social scientists, who have explored ecological policy implementation in Chinese settings, both directly and indirectly, may then be used to help widen the focus on the conceptual edifice.

Consistent with the distinct orientation of their profession, traditional legal scholars have displayed considerable interest, whether explicitly or implicitly, in policy characteristics as a key determinant of implementation effectiveness. They have placed particular emphasis on the persistent historical strategic bias in favor of economic growth, to the detriment of ecological preservation. Until the 1992 Rio Earth Summit, this official

 ⁷⁹ See Shuwen, supra note 76, at 635–37, 643–48.
 ⁸⁰ See Richard Lotspeich, Comparative Environmental Policy: Market-Type Instruments in Industrialized Countries, 26 POL'Y STUD. J. 85 (1998).
 ⁸¹ See Shuwen, supra note 76, at 635–37, 643–48.
 ⁸² See Shuwen, supra note 76, at 635–37, 643–48.

⁸² See Beyer, supra note 69; Bachner, Regulating Pollution, supra note 69; Nagle, supra note 69; Alford & Liebman, supra note 69; Ferris & Zhang, supra note 69.

attitude generally manifested itself in the formally expressed principle of coordinated development or the reluctance to unambiguously embrace the notion of sustainable development, which permeated international environmental jurisprudence in the 1980s and after.⁸³

Coordinated development implies that ecological imperatives cannot be considered in an economic vacuum. The primary difference between this developmental model and the one aiming at sustainability lies in the apparent disregard exhibited by the former toward the needs of future generations. Another distinction is that, in contrast to the latter, the developmental model views ecological preservation as a subsector of the overall economic management effort and, by extension, as a specific economic issue rather than a broad social question. Since 1992, sustainable development has supplanted the coordinated variant as an official policy, as evidenced by the State Council's adoption of Agenda 21 for China and its incorporation into long-term national plans. The essence of development strategy, however, has remained largely intact, even though a modest rebalancing of inherently conflicting goals has taken place.⁸

The problems engendered by the policy of uneven growth are compounded by other features of the overall strategic thrust, such as the position, whether legitimate or not, that the burden of ecologically-inspired economic adjustment should largely be shouldered by developed countries and that state sovereignty should serve as the basis for international cooperation on the environmental front. It is a moot point to what degree such policy characteristics impinge on actual decisions and behavior in concrete situations. Social theories diverge in this respect,⁸⁵ an issue that will be addressed later. There appears to be sufficient evidence to suggest that decision rules formulated by top leaders, notwithstanding their somewhat opaque nature, exert palpable influence on administrative behavior in general⁸⁶ and in the ecological domain in particular.⁸⁷

Another policy characteristic portrayed in traditional legal writings as detrimental to effective implementation is the overly ambiguous, nontransparent, provisional, and sermon-like nature of Chinese laws, including those pertaining to the environment. Nagle furnished the following illustration in the mid-1990s: "Consider the Environmental Protection Law, which was designed 'only to outline China's basic policies on environmental matters.' It commands that '[t]he waters of rivers, lakes, seas, and reservoirs must be protected and a good quality of water maintained,' and it requires that '[e]ffective measures . . . be taken to eliminate smoke and dust from all smoke-emitting equipment, industrial kilns and furnaces, motor-driven vehicles, and boats and ships."⁸⁸ This feature prompted him to conclude that "statutes still perform a rhetorical

 ⁸³ See Palmer, supra note 69, at 791.
 ⁸⁴ See id. at 792. See also Nagle, supra note 69; Alford & Liebman, supra note 69; Ferris & Zhang, supra note 69; Beyer, supra note 69. ⁸⁵ See, e.g., HUANG JIANRONG, THE APPLICABILITY OF POLICY-MAKING THEORIES IN POST-MAO

CHINA (Ashgate Publ'g 1999). ⁸⁶ See, e.g., SHIRK, POLITICAL LOGIC, supra note 63, at 116–28.

⁸⁷ See, e.g., Palmer, *supra* note 69, at 792.

⁸⁸ Nagle, *supra* note 69, at 546.

role in China, offering direction to those whose activities implicate the environmental issues described in the statute, but not necessarily anticipating litigation over the application of the statute in particular cases."⁸⁹

The picture has not improved sufficiently over the ensuing decade for Beyer to infer otherwise. Indeed, her observations reinforce those offered at earlier junctures:

Numerous environmental laws suffer from vagueness and put forward general, almost exhortational terms. Even the amended Air Pollution Prevention and Control Law provides, in Article 19, that "enterprises shall give priority to the adoption of clean production techniques" and, according to Article 30, enterprises "shall gradually adopt measures to control nitrogen oxide," while the local governments shall "redouble their efforts in afforestation, grass-planting, urban and rural greening and take effective measures to do well the work [of prevention] . . . and sand control."⁹⁰

Beyer appropriately notes that "[t]his clearly demonstrates the difficulty of evaluating and determining the potential of China's environmental statutes to direct specific behavior."⁹¹

Nagle has also highlighted the indeterminate status of key legislative acts⁹² and the lack of visibility⁹³ as impediments to effective implementation. In regard to poor transparency, he has commented that "[c]hallenging the government's interpretation of such 'secret' legislation presents a formidable challenge to unknowing violators. Moreover, the ability of local authorities to disclose such statutes only when it is convenient for them to do so enables them to attempt enforcement only in clear cases where they are most likely to prevail."⁹⁴

In the same vein, Beyer bemoans the lack of clear definitions in Chinese environmental law and the unavailability of a significant body of authoritative judicial precedents. In her opinion, this heightens the overall sense of ambiguity and disarray. For example, "the Environmental Protection law broadly requires 'all units and individuals [. . .] to protect the environment' and states that local governments are 'responsible for the quality of the environment and shall take measures to improve the environment."⁹⁵ Similarly, "the Environmental Protection law prohibits units from transferring facilities that 'cause severe pollution' and obliges units to 'adopt effective measures to prevent and control pollution that harms the environment."⁹⁶ To make matters worse, statutory provisions

⁹⁶ *Id*.

⁸⁹ *Id.* at 546–47.

⁹⁰ Beyer, *supra* note 69, at 205.

 $^{^{91}}$ Id. at 205–206.

⁹² Nagle, *supra* note 69, at 547 ("The 'provisional' nature of some important Chinese environmental statutes further discourages a series of cases that may define more precisely the applicable commands.").

 $^{^{93}}$ *Id.* at 550 ("[M]any statutes are not published. This is especially true of regional and local legislation, which foreign entities often discover only after local authorities claim it has been violated."). 94 *Id.*

⁹⁵ Beyer, *supra* note 69, at 206.

are often not properly converted into workable regulatory mechanisms and standards.9

A combination of socioeconomic dynamism and institutional inertia may prove inimical to implementation effectiveness, in that it produces long lags between policy catalysts, whether opportunities or problems, and policy responses. Such gaps, in turn, result in policy incompleteness and irrelevance. Beyer identifies this as an additional characteristic of the policy apparatus that impedes meaningful execution of strategic intentions. According to her, environmental laws in China, to a considerable degree, mirror socioeconomic realities that prevailed at the onset of the reform era and that have since undergone substantial transformation. They are far from complete and selectively irrelevant in that they have not been fully adjusted to reflect new realities (e.g., the emergence of large-scale private enterprise alongside the state-controlled sector) and institutional obsolescence (e.g., a planned economy which, for all intents and purposes, is a thing of the past).9

Authoritative and coherent statutory interpretation may serve as a powerful antidote to policy opaqueness in certain circumstances. Nagle, however, has decisively demonstrated that this is an elusive goal in that particular case given the segmented and the multilayered nature of the Chinese policy structure. As he has pointed out, "China has developed a nuanced system of 'legislative,' 'judicial,' and 'administrative' statutory interpretation."⁹⁹ The key components of this system—the NPC Standing Committee, the Supreme People's Court, the State Council, the Supreme People's Procuratorate, and lower courts—are loosely connected and do not function in a well-coordinated fashion. Moreover, the quality-or, for that matter, quantity—of their output leaves much to be desired, largely failing to dispel the prevailing policy fog.¹⁰⁰

Even if this were not a serious issue, the policy configuration would not be conducive to effective implementation. The legally sanctioned incentives are for the most part simply too puny to galvanize adversely affected parties into action against violators of environmental statutes. Nagle has furnished two vivid illustrations: "Effluent fees are often smaller than the cost of complying with the statute, and violators can generally recover what fees they do pay in order to purchase the equipment required to meet statutory standards in the future. Likewise, some violators of China's endangered species legislation have escaped with fines of less than two dollars."¹⁰¹ Indeed, he has pinpointed a more vexatious feature of the policy structure by stating that "some Chinese environmental statutes have failed to provide for *any* penalties, thus precluding any enforcement of the underlying substantive requirements. The incentives to contest the statute's directives are thus negligible."102

⁹⁷ See id.

⁹⁸ See id.

⁹⁹ Nagle, *supra* note 69, at 525. ¹⁰⁰ See id. at 525–27.

¹⁰¹ *Id.* at 540–41.

 $^{^{102}}$ Id. at 541 (emphasis added).

Besides policy characteristics, traditional legal writings display concern for patterns of policy formation, distinct properties of the implementing organization, responses on the part of groups affected by the programs delivered (or not delivered), and the social milieu in which the government machinery is embedded. In practice, the Communist Party shapes policy in China in a quasi-monopolistic fashion, although this is not necessarily the picture painted in documents originating from official sources. The corollary is that this highly political organ dictates the content and nature of Chinese law. In theory, party officials are subject to generally applicable legal constraints, but the transformation to the rule of law is akin to a work in progress. The Communist Party exerts substantial influence over legal matters in the course of both policy formation and implementation, perhaps to a greater degree in the ecological domain than elsewhere. This deprives the law of a requisite measure of independence and renders strategy execution a rather arbitrary affair.¹⁰³

A feature of the implementing organization that looms especially large in traditional legal writings is the absence of a fully autonomous judiciary in China. The formal independence granted by the constitution to this potentially vital institution is severely tempered by a host of formidable constraints, notably the unshakeable grip of the Communist Party, which manifests itself directly and indirectly through multiple channels. Because of its marginal status, the judiciary is ill-equipped—financially, organizationally, socially, and in terms of professional skill level—to play a meaningful role in policy implementation in the ecological domain and on other fronts. Political preference for alternative modes of dispute resolution, formal and informal, further dilutes its institutional capabilities.¹⁰⁴

An equally salient characteristic of the implementing organization highlighted by traditional legal scholars is its vertical fragmentation. This is not primarily a Pressman and Wildavsky-type issue arising from an overly long organizational chain, although that is a dimension of the problem which cannot be entirely overlooked in such a geographically diverse and vast country. Rather, the focus in this context is on the limited impact of strategic signals emanating from the national center on administrative behavior at the local periphery, or, to express it differently, the inability or unwillingness of the center to enforce or implement its ecological agenda through crucial local channels. This is a serious impediment to an effective execution of any such blueprint, because ground-level officials or streetlevel bureaucrats ultimately dictate the pattern of day-to-day policy realities. Beyer captures the essence of the phenomenon:

Generally, the success or failure of laws depends on how effectively they are enforced, especially at the local level. However, local governments are often major shareholders of polluting enterprises creating an inherent conflict of interest. Nevertheless, the laws presume that environmental protection bureaus representing a part of local governments will

¹⁰³ See id. at 529–31.

¹⁰⁴ See id. at 531–36, 550–51; Beyer, *supra* note 69, at 189–91.

successfully co-ordinate with the national body, SEPA. In theory, the People's Republic of China operates a unitary national state where legislation and directives emanate from central Beijing to which subnational units of governments must adhere. In practice, however, this high degree of administrative cohesion does not exist. The laws fail to anticipate the possibility that certain government interests might diverge sharply from those of the environment department and create a major obstacle to strict enforcement of both national and local environmental legislation.¹⁰⁵

And she further elaborates:

In reality, sub-national administrative departments rather tend to look to the people's governments at their own level than to central authorities since their funding and enforcement powers rely on local district authorities. The fact that local governments very often sponsor or own industries themselves and consider environmental regulations to be incompatible with economic growth makes it difficult for environmental protection bureaus to enforce their policy. Although the State Environmental Protection Agency has formal authority over lower-level agencies, this national agency does not have much leverage in ensuring that national regulations and standards are enforced at the local level. It is common practice that environmental issues are treated more as a matter of policy rather than law and personal relations are often decisive. Fees and fines are rarely determined authoritatively; instead, they are often negotiated and fall far below the cost of damage that the harmful activity has caused, as well as below expenses for pollution control facilities.¹⁰⁶

Interestingly, such and previously identified features of the implementing organization (e.g., the absence of meaningful judicial autonomy) combine with policy characteristics to form an institutional configuration that acts as a powerful barrier to effective strategy execution:

The money derived from fees . . . [is] made available to the polluters in the form of grants and credits nominally for investments in control facilities; however, no adequate supervisory mechanism exists. This undercuts any incentive for firms to invest in preventive measures. Moreover, enterprises appear to view these fees as entitlements for their unlawful acting, whether or not they have improved their pollution control equipment or intend to do so. Also, the local influence on courts is considerable and not limited to financial matters. Besides the fact that court-operating expenses are funded by local district authorities, local citizens also join the judge as 'people's assessors' in hearings and local party officials generally have a significant impact on the jurisprudence and career advancements.¹⁰⁷

Two additional features of the implementing organization briefly addressed in traditional legal writings are the inadequacies of the principal environmental protection arm of the state and its overly loose integration

¹⁰⁵ Beyer, *supra* note 69, at 207.

¹⁰⁶ *Id. See also* Bachner, *Regulating Pollution, supra* note 69; Nagle, *supra* note 69; Orts, *supra* note 69;

Ferris & Zhang, *supra* note 69; Shuwen, *supra* note 76. ¹⁰⁷ Beyer, *supra* note 69, at 207–08. *See also* Nagle, *supra* note 69.

into the overall policy framework. SEPA is portrayed in broadly similar terms to the judiciary, namely as a relatively toothless entity lacking the necessary financial, human, informational, political, social, and technological resources to fulfill its strategic mission. The organization's structural weaknesses lead to a heavy dependence on locally-based operators who are subject to strong ground-level influences and are thus unlikely to follow the central line in most circumstances. By the same token, while it is not entirely isolated in the institutional sense of the term, SEPA's activities are deemed to be not sufficiently coordinated with those of other relevant state organs, a factor which detracts from its ability to effectively implement its burgeoning agenda.¹⁰⁸

Responses on the part of groups affected by the programs delivered (or not delivered) and the special milieu in which the government machinery is embedded are merely touched upon by traditional legal scholars examining the Chinese ecological governance architecture. Their primary professional focus understandably is on the substantial institutional hurdles to private enforcement of environmental statutes and public participation in policy formation (including access to pertinent information). The conclusion that one is inclined to draw in light of the insights offered is that the official channels for private and civil society-type input are largely blocked, but that they are gradually and selectively being opened. The long-suppressed grassroots community, however, cannot take full advantage of the modest opportunities that present themselves because of attitudinal constraints¹⁰⁹ and paucity of resources, or underdeveloped institutional infrastructure (e.g., limited supply of lawyers with relevant expertise). Again, this impedes the execution of a progressively more enlightened ecological blueprint.¹¹⁰

The above survey demonstrates that policy implementation features prominently, albeit often indirectly, in the traditional legal literature devoted to Chinese environmental management. Significant gaps nevertheless remain and the picture that emerges is consequently incomplete. There is also an inevitable tendency, perhaps partly reflecting the fact that subdisciplines such as law and economics as well as law and society are at rudimentary stages of evolution in China, to gravitate toward the formal side and principally engage in descriptive analysis, coupled with standard legal evaluation. Explanatory accounts are also offered, but they are less common and, more importantly, not grounded in theoretical constructs capable of materially illuminating ecological strategy. Some of

¹⁰⁸ See Beyer, supra note 69, at 208. See also Nagle, supra note 69; Ferris & Zhang, supra note 69.

¹⁰⁹ China's political culture may legitimately be described as parochial or subject, rather than participant, in that its citizens are either conducting their lives outside the public sphere or are conscious of government action or inaction but enjoy virtually no outlet for expressing their opinions. *See generally* GABRIEL A. ALMOND & SIDNEY VERBA, THE CIVIC CULTURE: POLITICAL ATTITUDES AND DEMOCRACY IN FIVE NATIONS (Princeton Univ. Press 1963).

¹¹⁰ See Nagle, supra note 69, at 539–40; Ferris & Zhang, supra note 69, at 596–98; Beyer, supra note 69, at 208–09. See also Yok-shiu F. Lee, Public Environmental Consciousness in China: Early Empirical Evidence, in CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT, supra note 4, at 35–65; ENVIRONMENTAL AWARENESS IN DEVELOPING COUNTRIES: THE CASES OF CHINA AND THAILAND 46–168 (Sigeki Nisihira, Reeitsu Kojima, Hideo Okamoto, & Shigeaki Fujisaki eds., Inst. of Developing Econ. 1997).

the existing gaps may be closed and missing analytical components found by venturing into the social science domain, where similar issues are explored—though not always directly—from different perspectives and with the help of different conceptual tools.

IV. COMPLEMENTARY INSIGHTS

Besides legal scholars and practitioners, researchers and analysts associated with other academic disciplines and professions have displayed considerable and growing interest in execution problems encountered in the environmental sphere in China. While economists and political scientists have been particularly active on this front, there has been a steady stream of contributions from across the social sciences. Some of the work undertaken in this area has been devoted explicitly to implementation in the specific sense of the term, albeit from a broad standpoint, and some has addressed key aspects thereof under a somewhat different guise. (Expressions such as compliance and enforcement have often been employed in this context, but the scope of the studies conducted has been wider than they would imply.) Perhaps even more than legal writers, social scientists have also been able to shed light on the subject indirectly while dissecting issues not necessarily pertaining to ecological governance.

Interdisciplinary academic or professional experimentation, let alone cooperation, is generally uncommon among Sinologists and virtually unknown among mainland-based Chinese scholars and practitioners. Moreover, as indicated, the law and economics and law and society perspectives do not meaningfully feature at this stage in the examination of the legal system in China, both outside and within the country. The corollary is that explorations pursued by social scientists are seldom focused, whether directly or indirectly, on the legal dimensions of execution as such. Rather, their concern typically is with multilevel central, provincial, and local—policy implementation. The empirical observations they offer are nevertheless of general relevance and may effectively be relied upon in drawing inferences about the execution of environmental strategy through predominantly legal channels.

Ex ante, social scientists exhibit awareness of the bottom-up forces impinging on implementation effectiveness and acknowledge the importance of micro-level inquiries designed to capture the essence of organizational influences originating in the lowest rungs of the elongated bureaucratic pyramid. Ex post, however, this analytical posture is not adequately reflected in their empirical work. To some extent, they share the top-down predispositions of their traditional legal counterparts and do not present an entirely balanced picture, or one that may qualify as comprehensive. These limitations of their studies are presumably the product of constraints encountered in conducting street-level research in Chinese sociopolitical settings. Their prevalence notwithstanding, the insights generated are valuable in that they complement, in terms of conceptual scope and theoretical grounding, those provided by scholars employing traditional legal tools.

Social science investigations have so far been principally directed at policy characteristics affecting execution success and distinctive features of the implementing organization that are pertinent in this respect. Two books should be singled out in that context for making a seminal contribution in the field and laying a solid foundation for research centered on the execution of ecological strategy. The first, by Lester Ross, surveys a broad range of environmental policy issues in China from a sophisticated behavioral perspective and places a heavy emphasis on implementation dynamics and effectiveness.¹¹¹ The second, a collection of empiricallybased and theoretically-driven sector-specific accounts edited by David M. Lampton, constitutes a multifaceted introduction to implementation across the Chinese policy spectrum. It devotes several chapters to the working of the ecological governance architecture.¹¹²

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Ross has shifted the discussion of policy characteristics in a direction consistent with that of the evolving logic of economic reform in China. Specifically, he has identified three implementation modes—or, alternatively, regimes—in the country: the bureaucratic-authoritative approach, the campaign-exhortation approach, and the market-exchange approach. These modes significantly differ in terms of key operational and structural criteria, such as comprehensiveness, centralization of authority, role of the Communist Party, role of administrative departments or governmental bureaucracy, incentives for compliance, and distribution of property rights along a communal continuum.¹

The bureaucratic-authoritative approach is marked by a high degree of comprehensiveness, centralization, party and bureaucratic involvement in strategy management, reliance on diktats to induce compliance, and state ownership of resources. Chinese-style campaigns fall into three categories-economic, ideological, and struggle-and can be either selective or comprehensive in their scope. They tend to be highly centralized undertakings, are spearheaded by the party with limited bureaucratic input, resort to a mixture of normative incentives and coercion to insure compliance, and require self-abnegation on the part of the populace.¹¹⁴

The market-exchange approach is fundamentally different in nature in that it essentially favors the allocation of value through a bottom-up institutional mechanism geared toward an exchange of benefits between self-interested parties propelled in an autonomous fashion. Such parties are guided by price signals which, when they accurately reflect resource scarcity, allow markets to smoothly attain dynamic equilibrium. Within this institutional framework, there is virtually no need for direct contact between the parties involved and no elaborate supervision of transactions is required. Given that markets are all-pervasive, this execution mode can be very comprehensive. It also is a highly decentralized construct and one that

¹¹¹ See Ross, ENVIRONMENTAL POLICY IN CHINA, supra note 69.

¹¹² See POLICY IMPLEMENTATION IN POST-MAO CHINA (David M. Lampton ed., Univ. of Cal. Press 1987). ¹¹³ See Ross, ENVIRONMENTAL POLICY IN CHINA, supra note 69, at 10. ¹¹⁴ See id. at 11–20.

largely bypasses the party and, to a considerable extent, even the governmental bureaucracy. It also seeks to secure compliance via material incentives and appeals to self-interest, and features the disaggregation of property rights to private entities such as households and corporate enterprises.

Ross views market-anchored regulation as substantially superior to those incorporating elements of the bureaucratic-authoritative approach and the campaign-exhortation variant. He considers the heavy reliance on a combination of the latter two organizational vehicles as a major factor in the persistent execution failures in the ecological domain in China. This assessment is rooted in microeconomic theory and is empirically validated. On the theoretical side, concepts such as excessive transaction costs, illdefined property rights, incentive incompatibility, and bureaucratic selfinterest, are invoked in order to highlight the inherent flaws of the bureaucratic-authoritative and campaign-exhortation implementation modes. Empirical validation is achieved through a series of case studies that lend support to the overall thesis and its components.¹¹⁶

This tripartite typology is not just analytically illuminating but also strategically meaningful because of the effective coupling of environmental management and economic steering within a rigorous conceptual framework underpinned by theoretical principles that loom large on the reform agenda in transitional settings. Since the book was published in 1988, the Ross typology does not fully reflect reform-era realities. The missing ingredient is a fourth implementation mode which has to a large extent, albeit not entirely, supplanted the bureaucratic-authoritative approach, yet not necessarily its campaign-exhortation counterpart, in the ecological sphere as the post-1978 transition has broadened and deepened.

The ingredient in question is portrayed in the economic literature as administrative decentralization. This is an institutional configuration that Mao found ideologically and politically attractive at various junctures. Mao embraced administrative decentralization when the economic costs of central planning escalated and whenever he considered it convenient to curtail the powers of the central government bureaucracy. Besides the purely opportunistic considerations, the appeal of administrative decentralization in such a context lies in the fact that it involves the transfer of authority from higher rungs-overburdened and inertia-driven-to lower rungs—light-footed and flexible—of the organizational pyramid without marketization of the economy.¹¹⁷

Administrative decentralization, both in its pre- and post-reform incarnations, has been painstakingly and realistically assessed by Chinese economists since the mid-1980s. They have concluded that it is essential to draw a distinction between economic decentralization and its administrative counterpart, which has invariably produced chaotic conditions in China and has proved to be a most ineffective policy

¹¹⁵ See id. at 20–23.

¹¹⁶ See generally id. at 1–175. ¹¹⁷ See generally id.

management tool. Indeed, they have noted that it is inferior to the bureaucratic-authoritative implementation mode in socialist settings because it undermines central coordination, exacerbates institutional fragmentation, and fosters local protectionism. By contrast, properly executed economic decentralization materially enhances system wide coordination, drastically lowers transaction costs, significantly reduces distortions stemming from incentive incompatibility, and substantially narrows opportunities for rent seeking.¹¹⁸

As the reform era has unfolded, the Chinese ecological governance architecture has increasingly assumed a form akin to administrative decentralization rather than the bureaucratic-authoritative model. Power has markedly shifted from the center to the periphery, even more so in practice than in theory. This has prompted some astute observers to suggest that decentralization has generated extensive benefits in some areas but not in others. "The same dynamic that produced such success in the economic sphere . . . has also wreaked havoc on China's natural environment."¹¹⁹ In fact, the progress recorded is almost exclusively due to economic decentralization and the failure experienced is largely the result of administrative decentralization-two distinct approaches to institutional reform. A degree of caution should be exercised in this context, because, as Lotspeich has amply demonstrated, market-based regulation is by no means a panacea.¹²⁰ At best, it constitutes a necessary, but insufficient, condition for effective policy implementation in the ecological domain.

Ross has pinpointed another characteristic of the strategic posture adopted by government decisionmakers, which impedes a smooth execution of the line embraced, namely, lack of time consistency. Policy swings manifest themselves across the strategy spectrum in China, although their frequency and amplitude may have diminished over the years. Environmental policy evolution has been marked by a typically low degree of stability, as well as coherence. Ross has resorted to game theory in order to explore the implications of this pattern. The classical prisoner's dilemma game has been chosen for that purpose because it provides poignant insights into the dynamics of interparty conflict and cooperation in situations where communication constraints-broadly defined-hinder mutually beneficial coordination. The identities of the parties may vary, but it is convenient to focus on policymakers versus the population at large and/or policy implementers.¹²¹

The challenge confronting institutional architects in such situations is to manipulate the relevant elements in such a way as to maximize the scope for cooperation, or turning the game into one featuring reciprocity and conditional assurance, rather than mistrust and defection. Time consistency, or steady movement along a well-defined and transparent strategic path,

¹¹⁸ See id. at 54–57.

 ¹⁹ ECONOMY, supra note 4, at 62. See also Abigail R. Jahiel, The Contradictory Impact of Reform on Environmental Protection in China, 149 THE CHINA Q. 81, 81–103 (1997).
 ¹²⁰ Lotspeich, supra note 80. See also MA & ORTOLANO, supra note 69, at 97–114; Shuwen, supra note

^{76. &}lt;sup>121</sup> See Ross, Environmental Policy in China, supra note 69, at 177–87.

may contribute to a favorable—from a public interest perspective resolution of the prisoner's dilemma, although it is not the sole factor in this complex equation. A realistic, and hence adequate, incentive structure, like that underpinning the market-exchange implementation mode, is also regarded as crucial. If this is the case, Chinese policy has followed a distinctly unproductive course. As Ross has observed, with respect to the population at large:

Of critical importance to China is the modern historical legacy of policy instability or cycling in which the pendulum swings rapidly from left to right and back again. That creates great apprehension among the people, who fear that falling out of step with the higher leadership will expose them to denunciation, particularly in leftist periods. Even after the post-Mao shift in economic policies toward market methods, many Chinese continued to fear a policy reversal. It is not change per se that is the issue but rather a 'communist wind' restoring collective ownership at the expense of individual incentives. The 'communist wind' can be interpreted as a defection on the part of the regime vis-à-vis the populace and is bound to induce defection on the latter's part as well. The problem is serious in all sectors of the economy, but it is critical in long-lead time production processes such as forestry, where capital is immobile for years and years. Fear of a policy shift discourages investment in forestry, exacerbating soil erosion and the shortage of wood products.¹²²

And as Ross has further suggested, with respect to policy implementers:

The significance of policy stability has much wider import, however. Throughout society, lower-level officials have tended to qualify their commitment to regime policies out of concern for future policy reversals. They have learned that no policy course is permanent and that newly dominant factions target the most prominent proponents of discredited policies for punishment. Officials therefore learn to be cautious in order to minimize the risks they face. Unfortunately, the resulting tepidity hampers implementation. Performance tends to be slow and half-hearted. With regard to pollution control, regulated industries are emboldened to delay compliance with regulations, while the regulators themselves are reluctant to publicize the dangers posed by pollution lest powerful enemies be aroused.¹²³

The Lampton collection of theoretically-unified case studies encompasses a wide range of problematic phenomena encountered in the process of strategy execution, in general, and ecological management, in particular. Two dimensions of the picture stand out, however, and are accorded particularly close attention: policy incoherence—a policy characteristic—and its consequences; and horizontal and vertical fragmentation of the government machinery—a distinctive feature of the implementing organization—and its implications. Traditional legal scholars generally equate incoherence with ambiguities in the laws and stop short of analyzing its behavioral ramifications. Lampton and his research collaborators have extended the concept further and have placed it in a

 $^{^{122}}_{123}$ *Id.* at 184. $^{123}_{123}$ *Id.* at 185.

broader institutional context, thereby considerably enhancing its theoretical and practical relevance.

Besides mere ambiguities, they have systematically highlighted the pervasive incongruence between the goals of different yet complementary policies and, perhaps even more disconcertingly, the substantial divergence in the objectives pursued in single policy domains.¹²⁴ The ensuing incoherence tends to generate a myriad of unanticipated and unintended consequences, producing a high degree of strategic uncertainty and markedly diminishing incentives for implementers to comply with policy directives. This behavioral pattern can be examined within a game theory framework akin to that employed by Ross.¹²⁵ To compound matters, incoherent strategic signals leave ample scope for bending central policies to serve parochial interests.¹²⁶

Traditional legal writings contain occasional references to the fragmentation of the government machinery in China and the difficulties it apparently poses, but do not shed much light on the subject. Lampton and his research collaborators have delved deeper and have provided a broader picture. Importantly, they have established that the state bureaucracy is divided into vertical, functionally defined segments (*xitong*): agriculture; culture and education; finance and trade; industry; national defense; and political and legal affairs. The specific details of this configuration are not necessarily static, yet the overall contours remain largely intact. Budgetary allocations, human resource decisions-including those pertaining to career development-and information flows are determined by these functionally defined hierarchical subsystems. While there are integrative institutional mechanisms which counter such centrifugal forces, given that most activity takes place within the bureaucratic segments, horizontal coordination, and hence smooth strategy execution, presents a serious challenge.¹²

The fluid authority structure within the bureaucratic segments, whose fragility is augmented by the inadequacies of the systemwide integrative causes further complications by exposing policy mechanisms, implementers to conflicting demands from a host of organizational, loosely-connected superiors: the problem of "too many mothers-in-law" (po po duo). Lampton has illustrated the institutional paralysis that this engenders by showing how the builders of the Gezhouba Dam on the Yangtze River had their project hindered by the Finance Ministry, the Ministry of Agriculture, Animal Husbandry, and Fisheries, Ministry of Communications, Ministry of Machine Building, and the State Planning Commission, to mention just some of the agencies involved.¹²⁸ In light of this experience, Lampton has concluded that "[e]very organization sees

¹²⁴ See David M. Lampton, Water: Challenge to a Fragmented Political System, in POLICY IMPLEMENTATION IN POST-MAO CHINA, *supra* note 112, at 157, 157–89 [hereinafter Lampton, *Vater*]. ¹²⁵ See David M. Lampton, *The Implementation Problem in Post-Mao China, in POLICY* IMPLEMENTATION IN POST-MAO CHINA, *supra* note 112, at 3, 11–14 [hereinafter Lampton, Implementation].

¹²⁶ See Barry Naughton, The Decline of Central Control over Investment in Post-Mao China, in POLICY IMPLEMENTATION IN POST-MAO CHINA, supra note 112, at 51, 51–80.

 ¹²⁷ See Lampton, Implementation, supra note 125, at 14.
 ¹²⁸ See Lampton, Water, supra note 124.

itself enmeshed in a web of interdependency in which there are many who can delay and frustrate and few who can expedite. China is a rococo version of Pressman and Wildavsky's 'complexity of joint action.'"129

Across bureaucratic segments, the conflicting demands reflect, inter alia, persistent tension between the vertical lines of authority (tiao) and the horizontal ones (kuai), which emanate from the territorial government nominally operating at the same level as the functional unit. The former coordinates according to function-such as the environment-whereas the latter coordinates according to the perceived needs and interests of the territorial entity for which it is responsible. Policy implementers in the ecological domain thus typically have at least two potential masters: "the government at each organ's own territorial level of the system and the office in the same functional sphere one level 'up' the territorial hierarchy (e.g., the Hunan Provincial EP[B] is under both the Hunan Provincial Government and NEPA)."¹³⁰

Lampton and his research collaborators have pinpointed another organizational feature which impedes goal-driven institutional cooperation, and hence effective strategy execution, on the environmental front: the substantial influence exerted by the ubiquitous group-like units (danwei). These social entities consist of individuals who are tightly bound together and serve as the building blocks of the bureaucratic segments-ministries, commissions, and similar complex organizations-alluded to above: "For the urbanite at least, the unit is not simply a place where one works, it is the individual's anchor in an otherwise boiling sea, the place where one acquires housing, scarce commodities, retirement benefits, health care, education and, at times, a job for one's children. Most people spend their entire career in the same unit."131

These informal, yet surprisingly powerful, groups tend to be inwardlooking. As a corollary, they generally display a siege mentality and are prone to resist initiatives that might potentially upset their inner equilibrium. Unit members are inclined toward self-reliance and prefer not to engage in joint action with those deemed as outsiders. This also manifests itself in a reluctance to productively share resources with such parties. Group efforts do not reflect a strong commitment to the fulfillment of a policy blueprint. Rather, they are geared toward self-preservation, minimization of risk, and maintenance of a meaningful freedom of action. Consequently, units are commonly referred to as independent kingdoms (duli wangguo), a term of reproach often adopted by frustrated central government officials unable to circumvent the constraints stemming from this cellular institutional pattern.¹

The overall strategic incentive structure, a policy characteristic, is not conducive to the implementation of a constructive ecological agenda

¹²⁹ Lampton, *Implementation*, *supra* note 125, at 15.

 ¹²⁹ Lampton, Implementation, supra note 125, at 15.
 ¹³⁰ Kenneth G. Lieberthal, China's Governing System and Its Impact on Environmental Policy Implementation, CHINA ENV'T SERIES 3, 3 (1997), available at http://www.wilsoncenter.org/topics/pubs/Lieberthal%20article.pdf.
 ¹³¹ Lampton, Implementation, supra note 125, at 14–15.
 ¹³² See id. at 14–17.

through an institutional maze composed of such poorly integrated pockets of internally-directed activity. The overarching regime goal, and one embraced single-mindedly, is to maximize economic growth without unduly disrupting sociopolitical stability. Given the erosion of top-down coordination mechanisms, this goal is pursued via decentralized channels, allowing considerable delegation of decision making power to progressively lower rungs of the organizational pyramid. Officials who deliver results consistent with the prevailing strategic thrust are generally rewarded with a host of tangible and intangible benefits.¹³³

Kenneth G. Lieberthal, a leading Sinologist, has explored the implications of that narrowly-focused incentive structure, particularly at the township level. Townships are small cities whose dynamism has enabled them to absorb a significant portion of the surplus labor that has flown from the countryside to urban areas following the dismantling of rural communes in the early 1980s. Township and village enterprises ("TVEs") have been the most vibrant component of the Chinese economy during much of the reform era, generating positive spillovers that have helped to revitalize other segments of the reform era. While formally defined as collectives, TVEs are creatures of the township government itself. The latter plays a crucial role in key financial, human resource, marketing, and planning decisions. Although the two arms are portrayed as separate, they are in fact closely linked and enjoy a symbiotic relationship.¹³⁴

The corollary is that key officials function as both government administrators and committed entrepreneurs. It also follows that there is vast governmental involvement in all aspects of economic management and that enterprises enjoy few secure property rights that shield them from government intervention. The officials-cum-entrepreneurs share the objectives of their commercial counterparts, which can be best realized through robust economic growth. To the extent that divergences occasionally materialize, a realignment is easy to attain because the two sides are part of the same tight social network (*guanxi*).¹³⁵ 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.¹³⁶

Local corporationism also adversely affects the smooth execution of a focused ecological strategy on a countrywide basis. This is because local corporationism is inherently inimical to cooperation across territorial boundaries, which is essential for achieving palpable progress on the environmental front. In the absence of such cooperation, threats to the biosphere, which have broad geographical manifestations, are not addressed in a satisfactory fashion. Indeed, cooperation often gives way to an unproductive—from a public interest perspective—quest for parochial

¹³³ See Lieberthal, supra note 130, at 4.

¹³⁴ See id.

¹³⁵ See MA & ORTOLANO, *supra* note 69, at 82–85.

¹³⁶ See Lieberthal, supra note 130, at 4.

advantage. For example, "after China imposed water discharge fees for adding pollutants above permissible levels to rivers and streams, there was noticeable movement of offending enterprises to the downstream boundaries in various townships and counties.'

Lieberthal argues that, in such circumstances, the central government may reassert its authority and enforce its blueprint only if three stringent conditions are fulfilled: (1) all key top leaders agree on the issue; (2) all key top leaders are willing to accord the issue a high priority; and (3) the degree of compliance of lower levels is sufficiently transparent and measurable. Meeting these demanding requirements may be a feasible undertaking, as the decisive efforts to curtail population growth illustrate, but it definitely constitutes a formidable challenge, because only a handful of policies fully satisfy all three conditions. Notably, in the environmental domain, most policies "are too complex, long term, and deeply enmeshed in competing economic interests to be effective. They do not provide the kind of clear-cut priority at the top, and measurable performance evaluation at lower levels, required in the above explanation."¹³⁸

Elizabeth Economy, a social scientist at the forefront of monitoring ecological trends in China, has depicted in concrete terms the interaction between central and local players where the latter clearly dominate. In this context, the center is primarily responsible for strategic guidance, drafting laws and regulations, gauging the overall state of the country's natural environment, initiating large-scale campaigns to tackle severe ecological disruptions, and developing policies with international ramifications. SEPA, a crucial central administrative organ, oversees the implementation of national laws at the countrywide level, but actual execution is a predominantly local matter. It follows that the center's principal role consists of the inspections that it performs at local levels. Typically, several central agencies—often SEPA and relevant ministries—assign officials to the inspection teams. Some media participation is increasingly common.¹³⁹

The importance of the SEPA-led inspections should not be overstated, however. They are a blunt instrument whose value is more symbolic than practical. Their limited impact is partly attributable to SEPA's modest capacity to induce change on a significant scale and its grossly inadequate resource base. Yet, this is not the crux of the problem. Bolstering institutional capacity would be a constructive step forward, but, unless undertaken in conjunction with complex political reengineering, it might not be an entirely productive exercise. The challenges encountered primarily stem from the peculiar nature of the Chinese political economy, namely, the acute imbalance between the center and the periphery. To reinforce the point, Economy quotes a senior SEPA official who stated that, "[s]ome local governments refused to cooperate in punishing . . . [noncompliant] factories, which [makes] our work very difficult."¹⁴

¹³⁷ Id. at 6.

¹³⁸ *Id.* ¹³⁹ *See* Elizabeth Economy, *Environmental Enforcement in China, in* CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT, *supra* note 4, at 102, 104–06. ¹⁴⁰ *Id.* at 106.

Administrative decentralization in the form of devolution of authority for environmental protection to local officials was formally enshrined in the 1989 Environmental Responsibility system (huanjing baohu mubiao zerenzhi). This system is modeled on the grain responsibility system, squarely placing the responsibility for the ecological well-being of territorial units in the hands of local officials. The unconventional structure established is supported by a contractual mechanism akin to that underpinning the grain responsibility system. In theory, it allows close coordination between government officials-cum-entrepreneurs and environmental regulators. However, in practice, contracts are often not signed and, even where this procedure is adopted, the entrepreneurial side dominates the regulatory one. This renders central inspections and equivalent local measures ineffective control tools vis-à-vis the businessdriven periphery. Economy examines the potential of environmental lawsuits, which accompany SEPA inspections and local EPB-type performance reviews, from a social science perspective and finds them wanting as a counterweight to periphery-level corporationism. She graphically concludes that "locals call the shots."14

In addition to highlighting policy characteristics and features of the implementing organization detrimental to smooth ecological strategy execution, social scientists have selectively explored the dispositions of front-line staff engaged in service delivery, responses of groups affected by the programs, and the social milieu in which the government machinery is embedded. The empirical work conducted by a research team in Benxi City and the Sanjiang Plain is particularly illuminating in this respect. The data generated reflects growing environmental consciousness among government officials and regulators. This appears to be the product of expanding exposure to progressive ecological norms through domestic and international channels, increasingly broad-based professional development, and utilitarian considerations, all based on the fact that there currently is some potential for maximizing career opportunities in the environmental domain.¹⁴²

At the same time, both government officials and regulators are strongly aware of the paramount status of economic development and the constraints that it imposes on ecological preservation. There is no compelling evidence to suggest that they are prepared to engage in a fine balancing act, let alone to decisively recalibrate priorities in favor of environmental enhancement. The tentative consciousness exhibited by the interviewees from these two categories is promising from a long-term perspective, but its current significance appears to be limited. Moreover, such early indications of ecological caution surface in much more muted form in the purely entrepreneurial sphere where environmental protection typically is regarded as subservient to profit maximization. As one ecologically-oriented industrial manager noted, "'[t]he production

¹⁴¹ Id.

¹⁴² See Liu Yu et al., The Politics and Ethics of Going Green in China: Air Pollution Control in Benxi City and Wetland Preservation in the Sanjiang Plain, in FORGOING ENVIRONMENTALISM 31, 31–101 (Joanne Bauer ed., M.E. Sharpe, Inc. 2006).

equipment of our enterprise is backward, and our scale is not big, either; buying a lot of new environmental equipment will increase our financial burden, driving us into a hopeless situation.¹¹⁴³

Interestingly, the attitudes expressed by local residents, most of whom are either rank-and-file employees or displaced workers, show similar ambivalence. On the one hand, there is a vague concern about marked ecological deterioration, at least to the extent that it impinges on the overall quality of life. Several interviewees refer wistfully to "fishing and bathing in what now are filthy and dried-up rivers."¹⁴⁴ A more pronounced concern exists about the severe health hazards posed by this trend, specifically the "serious illnesses (most often cancer) they have contracted . . . because of pollution-related problems."¹⁴⁵ On the other hand, there are misgivings about the economic costs of environmental protection and the implications it may have for material well-being in general and job security in particular.146

Such micro-level surveys inevitably do not capture the picture in its entirety. As Chinese authoritarianism has shifted from the hard end of the repressive political management continuum toward the soft variant, grassroots responses to top-down government initiatives have become increasingly heterogeneous. Depending on the available opportunities and constraints, when the initiatives are fundamentally rejected, the responses, according to Albert O. Hirschman, may assume the form of a rush for the exit, protest, and a manifestation of loyalty.¹⁴⁷ In present-day China, where unmitigated oppression by the regime has given way to authoritarian pluralism, citizen defection within a Ross-type game theory framework is not confined to subtle active and passive noncompliance. Grassroots protest, both spontaneous and organized, is no longer uncommon. Social scientists have documented the growing prevalence of this phenomenon in the ecological domain and the limitations-from a conservationist perspective-that it is beginning to impose on politico-bureaucratic action.148

Another dimension of the emerging social milieu in which the government machinery is embedded that has attracted the attention of behaviorally-oriented researchers consists of the buds of civil society gradually sprouting across the Chinese political landscape against the backdrop of a progressive softening of authoritarian governance. Four theoretical approaches have been brought to bear on the subject: human agency-focused, which emphasizes the role of elite choices or discretion in

¹⁴³ See id. at 51. See also MA & ORTOLANO, supra note 69, at 143–49.

¹⁴⁴ Liu Yu et al., *supra* note 142, at 54. $^{145}\overline{I}d.$

¹⁴⁶ Id. at 52, noting, "Our governments put so much money toward protecting the environment, but why does nobody take care of our lives? People matter the most. If people are starving, it's meaningless to have a good environment.'' Further, "We have nothing to eat. Who cares about the environment? At the Benxi Steel and Iron Company, so many people are laid off, and given no living expenses." Id. at

 <sup>53.
 &</sup>lt;sup>147</sup> See Albert O. HIRSCHMAN, EXIT, VOICE, AND LOYALTY: RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES (Harvard Univ. Press 1970).
 ¹⁴⁸ See ECONOMY, supra note 4; CHINESE SOCIETY: CHANGE, CONFLICT, AND RESISTANCE (Elizabeth J. Chinese 2000).

Perry & Mark Selden eds., Routledge 2000).

determining the direction and pace of social transformation; state-centered, which stresses reform of the state apparatus as the principal driving force; structural, which regards largely autonomous changes in socioeconomic institutions as the key element in the equation; and global, which views stimuli originating in the international arena as crucial in this context.¹⁴⁹

Social scientists mostly rely on human agency-focused explanations in seeking to account for the development of an embryonic, yet selectively vibrant, civil society in China. Recently, structural factors seem to have come into play, in that the deliberately created, semi-independent institutions are starting to exert a degree of influence of their own. At the same time, the relative weakness of such factors, the superficial tinkering with the state apparatus, and the absence of external pressure for a comprehensive reform of domestic political structures militates against rapid social change. A byproduct of this process is the emergence on a modest scale of bottom-up driven entities that have some impact.¹⁵⁰

These entities display many of the attributes of non-governmental organizations ("NGOs"), although they do not operate as freely as their counterparts in democratic countries. Indeed, relevant NGOs are part of a nascent environmental movement, even if it is neither cohesive nor mass-based. The tactics that they employ are generally mild and seldom confrontational. While it does not qualify as a fully-fledged social movement according to the criterion—ability and willingness to consistently engage in contentious collective action—as proposed by Sidney Tarrow,^{T51} it nevertheless is gaining momentum and establishing itself as a moderately effective force.¹⁵²

NGOs are at the epicenter of the environmental movement. The more limited role played by student groups and the ad hoc, but not negligible,

¹⁴⁹ See Don Chull Shin, On the Third Wave of Democratization: A Synthesis and Evaluation of Recent Theory and Research, 47 WORLD POL. 135, 135–70 (1994).

¹⁵⁰ See IN SEARCH OF CIVIL SOCIETY: MARKET REFORM AND SOCIAL CHANGE IN CONTEMPORARY CHINA (Gordon White, Jude Howell, & Shang Xiaoyuan eds., Clarendon Press 1996); CIVIL SOCIETY IN CHINA (Timothy Brook & B. Michael Frolic eds., M.E. Sharpe, Inc. 1997); Gaye Christoffersen, *Socialist Marketization and East Asian Industrial Structure: Locating Civil Society in China*, in MARKET ECONOMICS & POLITICAL CHANGE: COMPARING CHINA AND MEXICO 95, 95–123 (Juan D. Lindau & Timothy Cheek eds., Rowman & Littlefield Publishers, Inc. 1998); Pitman B. Potter, *Economic and Legal Reform in China: Whither Civil Society and Democratization?, in* MARKET ECONOMICS & POLITICAL CHANGE, *supra*, 159, 159–85; Timothy Cheek, *From Market to Democracy in China: Gaps in the Civil Society Model, in* MARKET ECONOMICS & POLITICAL CHANGE, *supra*, 219, 219–52; CIVIC DISCOURSE, CIVIL SOCIETY, AND CHINESE COMMUNITIES (Randy Kluver & John H. Powers eds., Greenwood Publ'g Group 1909).

¹⁵¹ SIDNEY TARROW, POWER IN MOVEMENT: SOCIAL MOVEMENTS AND CONTENTIONS POLITICS 3 (Cambridge Univ. Press 2d ed. 1998).

¹⁵² See Eric Zusman & Jennifer L. Turner, Beyond the Bureaucracy: Changing China's Policymaking Environment, in CHINA'S ENVIRONMENT AND THE CHALLENGE OF SUSTAINABLE DEVELOPMENT, supra note 4, at 121, 121–49; Neil T. Carter & Arthur P. J. Mol, China and the Environment: Domestic and Transitional Dynamics of a Future Hegemon, 15 ENVTL. POL. 330, 330–44 (2006) [hereinafter Carter & Mol, China and the Environment]; ECONOMY, supra note 4, at 129–75; Han Shi & Lei Zhang, China's Environmental Governance of Rapid Industrialisation, 15 ENVTL. POL. 271, 271–92 (2006); Peter Ho, Greening Without Conflict: Environmentalism, NGOs and Civil Society in China, 32 DEV. & CHANGE 893, 893–921 (2001); Susan Martens, Public Participation with Chinese Characteristics: Citizen Consumers in China's Environmental Management, 15 ENVTL. POL. 211, 211–30 (2006); Arthur P. J. Mol & Neil T. Carter, China's Environmental Governance in Transition, 15 ENVTL. POL. 149, 149–70 (2006) [hereinafter Mol & Carter, Governance in Transition]; Phillip Stalley & Dongning Yang, An Emerging Environmental Movement in China?, 186 THE CHINA Q. 333, 333–56 (2006).

support of the media should be acknowledged as well. NGOs pursue their agenda through multiple channels—domestic and international, countrywide and local, public and private—and in an increasingly sophisticated fashion. As matters stand, the agenda encompasses: protection of nature and biodiversity; subnational containment of ecological hazards; construction of green company images; promotion of sustainable household practices; and participation in international conventions and treaties.¹⁵³ The activities undertaken in the process are congruent with the new spirit of environmental laws and policies. In fact, they probably encapsulate that spirit more cogently and coherently than the laws and policies. Without overstating their impact, it is thus legitimate to regard NGOs as a social element gently steering the evolving ecological agenda toward high-level targets, from the bottom up, in the course of strategy execution.⁷⁵⁴

The emergence of the environmental movement, systematically charted by social scientists, is indicative of a capacity for change, though not necessarily far-reaching in scope. Clearly, the implementation regime has not been static during the reform era. The initial blend of the bureaucraticauthoritative and campaign-exhortation approaches gave way some time in the late 1980s to one combining the latter with a configuration embodying the principles of administrative decentralization. Specifically-tailored mass mobilization exercises remain in vogue, but, at present, the market exchange mode is sharing the limelight with administratively-anchored decentralization. It is reasonable to assume that, in the future, the former will gain ascendancy, which implies that the regime is apparently undergoing or will undergo another major transformation.

Certain government initiatives have considerable ramifications without, in themselves, fundamentally affecting the structure and modus operandi of the entire system. The decision to accord SEPA ministerial status probably falls into this category. It was strategically meaningful but did not amount to a regime shift. This notwithstanding, such steps impinge on the dynamics of the system and cannot be overlooked. The aim should be to gain insight into the evolution of the legal and policy regime, rather than merely its metamorphosis. Moreover, wholesale change is not the exclusive result of big bang-type structural engineering of shock therapy. It may be the product of cumulative adjustments over a long period of time or a series of interconnected decisions, which do not constitute a radical departure from the status quo.

Traditional legal scholars seldom explicitly address the subject. They describe in substantial detail changes in laws and regulations, as well as the underlying institutional setup and operations. Such surveys also normally feature a standard evaluation of the fine-tuning or overhaul undertaken by the authorities. The legal and policy shifts are virtually never explained, however, in well-founded analytical terms. A distinctly modest exception

¹⁵³ See Stalley & Yang, supra note 152. ¹⁵⁴ See Carter & Mol, China and the Environment, supra note 152; ECONOMY, supra note 4, at 129–75; Shi & Zhang, supra note 152; Ho, supra note 152; Martens, supra note 152; Mol & Carter, Governance in Transition, supra note 152; Stalley & Yang, supra note 152; Zusman & Turner, supra note 152.

to the rule is the attempt, though largely unsuccessful, by Shuwen to account for the decision to embrace the market-exchange approach to strategy execution. She acknowledges that other factors may be at work,¹⁵⁵ but essentially portrays ecological policymaking as a rational exercise geared toward fulfilling the public interest (e.g., "Convinced that China would benefit from [economic incentive policies,] . . . the regulatory authorities implemented [them] "¹⁵⁶ Also, "Chinese policymakers were quick to stress that improving the planning process was fundamental to environmental protection").15

The notion that government officials act methodically and are driven by a strong sense of community well-being has long been challenged in the social science literature. It has been demonstrated that they are bound by inertia,¹⁵⁸ can be propelled by a mixture of inertia and quasi-rational influences within a mixed-scanning framework,¹⁵⁹ and even operate in such an arbitrary manner that their behavior may be likened to the accumulation of rubbish in a garbage can.¹⁶⁰ The corollary is that, at best, the courses followed in the public domain possess satisfying rather than optimal attributes.¹⁶¹ This is inconsistent with the assumptions underlying the rational decision making model but does not diverge from the descriptive accounts found in traditional legal writings that focus on the ecological scene in China.

Social scientists have also questioned whether government officials single-mindedly pursue the public interest or whether the common view that government officials are both omniscient and benevolent is accurate. The despotic benevolent model presupposes that government is wellinformed and knows better than individual consumers what is best for them and that it invariably makes decisions on behalf of its citizens aimed at promoting their best interests. Social scientists have highlighted the relevance of the Leviathan model of the public sector. According to this model, the government expands in a "monster"-like fashion because it is believed to consist of utility-maximizing, self-serving politicians, civil servants, professional organizations, and other pressure groups, outside as well as within the public sector. It promotes its own, rather than community-wide, interests and there are few effective constraints on its parochial actions.¹⁶² If such construction is even partially valid, it behooves researchers endeavoring to provide insights into the evolution of the

¹⁵⁵ See Shuwen, supra note 76, at 631.

¹⁵⁶ *Id.* at 619. ¹⁵⁷ *Id.* at 631.

¹⁵⁸ See BRAYBROOKE & LINDBLOM, STRATEGY OF DECISION, *supra* note 40; Charles E. Lindblom, *The* Science of "Muddling Through," 19 PUB. ADMIN. REV. 79, 79–88 (1959). ¹⁵⁹ See Amitai Etzioni, Mixed-Scanning: A "Third" Approach to Decision-Making, 27 PUB. ADMIN.

REV. 385, 385–92 (1967). ¹⁶⁰ JAMES G. MARCH & JOHAN P. OLSEN, AMBIGUITY AND CHOICE IN ORGANIZATIONS

⁽Universitetsforlaget 1976). ¹⁶¹ HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN

ADMINISTRATIVE ORGANIZATIONS (4th ed., The Free Press 1997) (1945). ¹⁶² See STEPHEN J. BAILEY, LOCAL GOVERNMENT ECONOMICS 13–16 (Macmillan Press Ltd. 1999);

STEPHEN J. BAILEY, PUBLIC SECTOR ECONOMICS 100-05 (Macmillan Press Ltd. 1995); STEPHEN J. BAILEY, STRATEGIC PUBLIC FINANCE 73-77 (Palgrave Macmillan 2003).

Chinese environmental regime to adopt a broader perspective than observed in the traditional legal literature.

Ross was the first social scientist to respond to the challenge in his pioneering book on policy formation and implementation in this fuzzy domain. A significant portion of the book is devoted to agenda setting within a developmental framework. The basic assumption is that the Communist Party's overarching goal is to broadly maintain its monopoly of power and that it pursues this goal by skewing overall strategy in that direction by: targeting maximum economic growth compatible with sociopolitical stability, keeping the number of formal policy agendas to a minimum to avoid dilution, and closely monitoring their content from above through pivotal internal channels. Internal channels include: the Politburo, in particular its Standing Committee; the Secretariat; and, for military affairs, the Central Military Commission.¹⁶³

Since the beginning of the reform era, the institutional control mechanisms have functioned as collegial bodies with decisions normally not made until consensus has crystallized. Agenda setting tends to be a lengthy exercise, featuring complex maneuvers designed to garner support for competing positions and build viable coalitions. Factional quest for advantage is at the heart of the policy formation process. In certain circumstances, intergroup conflict may escalate to a point whereby key players seek ways to remove their opponents from the strategic arena, rather than merely prevail over them. The pressure never subsides altogether because factional alignments are fluid and group structures and objectives are in a state of flux.¹⁰

The general perception is that traditional-style factionalism is a thing of the past. It has undoubtedly simmered down and lost its sharp ideological edge. The conservative-right dichotomy has become mostly irrelevant. Be that as it may, Susan Shirk, a prominent Sinologist, does not consign it to oblivion. She argues that the top echelons of the party now go to considerable lengths to prevent the splits from turning public but shows that they continue to play a key role in agenda setting. In the absence of a strong paramount leader, achieving elite consensus in the face of intricate factional maneuvering poses an even greater problem than in the past. It imparts a snail-like quality to policy formation, thereby materially impeding much-needed organizational innovation.¹⁶

Factionalism has strategic repercussions beyond the narrow confines of the top decision making bodies. Officials operating at lower levels are commonly mobilized by senior leaders in order to solidify their support base. Senior leaders employ a variety of institutional tools for this purpose. Vertical coalition building provides lower officials with the opportunity to further their interests at the apex of the political pyramid, particularly with respect to issues that transcend organizational boundaries and require interagency coordination. This inevitably dampens policy dynamism and

¹⁶³ ROSS, ENVIRONMENTAL POLICY IN CHINA, *supra* note 69, at 188–91.

¹⁶⁴ See id. ¹⁶⁵ See Shirk, FRAGILE SUPERPOWER, supra note 64, at 39-40, 46-48, 51-54.

renders material departures from the strategic status quo rather challenging. "[O]nce an issue acquires an agenda status, different constituencies will acquire a vested interest in maintaining its priority, making difficult the leadership's attempts to reshape it."¹⁶⁶

The factional power model employed by Ross is a useful antidote to the rational analytical construct traditionally relied upon in dissecting policy formation and implementation. In their landmark studies, focusing specifically on the energy sector but crossing into related domains such as the environment, Kenneth Lieberthal and Michel C. Oksenberg assert that neither perspective accords sufficient attention to forces in the bureaucratic arena, where public strategies are often formulated as well as executed. They suggest an alternative model reflecting this not-readily-apparent pattern. They proceed, however, to highlight, consistent with the picture portrayed here, the marked degree of fragmentation plaguing the entire Chinese institutional system, including its bureaucratic component. "Authoritarian fragmentation" substantially detracts from the flexibility of agenda setting, a conclusion similar to that offered by Ross.¹⁶⁷

The corollary is that environmental regime evolution in China is, on the whole, a distinctly slow affair. Abrupt pendulum swings in pace should not be equated with fundamental realignments. According to Ross, severe ecological disruptions, or systematic perturbations, tend to trigger the fundamental realignments. Given the rigidity of the underlying structure, a policy window needs to open to pave the way for a meaningful reorientation, and it normally involves a "crisis, a sudden and unanticipated event that creates a sense of urgency among decision makers."¹⁶⁸ Writing more recently, Economy paints a similar picture.¹⁶⁹ This phenomenon has been observed elsewhere and has prompted a leading member of the Austrian school of economics to put forth a ratchet theory of government, predicated on the assumption that inertia is seen in the public sphere in typical circumstances, but that marked acceleration is witnessed in the wake of a shock to the system.¹⁷⁰

Since environmental protection is not a primary regime goal and the strategic management framework lacks cohesion, the quality of agenda setting leaves something to be desired. However, there is evidence of a methodical search for policy answers to ecological challenges, along a satisfying, if not optimal path. Ross has noted, however, in light of his empirical findings, that the process at times "resembles the garbage-can model of organizational choice in which problems, solutions, and careers chase each other in a random fashion."¹⁷¹ This reinforces the bias toward

 ¹⁶⁶ ROSS, ENVIRONMENTAL POLICY IN CHINA, supra note 69, at 191.
 ¹⁶⁷ See KENNETH G. LIEBERTHAL, Introduction: the "Fragmented Authoritarianism" Model and Its Limitations, in BUREAUCRACY, POLITICS, AND DECISION MAKING IN POST-MAO CHINA 1–30 (Kenneth Authoritarianism) G. Lieberthal & David M. Lampton eds., Univ. of Cal. Press 1992); KENNETH G. LIEBERTHAL & MICHEL OKSENBERG, POLICY MAKING IN CHINA: LEADERS, STRUCTURES, AND PROCESSES 3–31 (Princeton Univ. Press 1990) [hereinafter LIEBERTHAL & OKSENBERG, POLICY MAKING IN CHINA].

¹⁶⁹ See ECONOMY, supra note 4, at 1–9. ¹⁷⁰ See ROBERT HIGGS, CRISIS AND LEVIATHAN: CRITICAL EPISODES IN THE GROWTH OF AMERICAN GOVERNMENT (Oxford Univ. Press 1987). ¹⁷¹ ROSS, ENVIRONMENTAL POLICY IN CHINA, *supra* note 69, at 191 (citation omitted).

path dependence, or marginal departures from the strategic status quo, because decisionmakers are compelled to devote more resources to firefighting than innovative system design. Operating in a predominantly backward-looking mode, decisionmakers are heavily engaged in corrective action and ill-equipped to undertake a productive overhaul of implementation structures.

In this complex institutional milieu, significantly shifting the agenda in a constructive direction-indeed, toward any major target-is a mammoth task, the success of which largely hinges on the determination and skills of a handful of well-positioned individuals, as distinct from robust organizational systems. In their research on the energy sector, Lieberthal and Oksenberg have identified a small number of policy entrepreneurs who played a pivotal role in moving large-scale projects forward in the face of formidable constraints.¹⁷² Economy discerns a similar pattern in the environmental domain. She highlights the crucial contribution of a single senior official, Qu Geping, who has relentlessly but adroitly promoted ecological conservation as a high-priority national goal.¹⁷³ The efforts of such individuals are invaluable, but, without an effective institutional façade, are powerless to sustain an orderly regime adaptation.

There is growing evidence of strategic responses to environmental degradation that are the product of organizational learning rather than merely substantial disruptions. This encouraging trend has been carefully documented by Economy and other social scientists.¹⁷⁴ Nevertheless, it may not be sufficiently large nor may it be proactive in nature to counter the influences impeding productively dynamic agenda setting. The learning is not exclusively through internal channels because China is increasingly seeking inspiration from external sources.¹⁷⁵ There is a risk involved, in that the experience of other countries may not prove entirely relevant in this case, at least in the present circumstances.¹⁷⁶ The risk is modest and it can be creatively controlled.¹⁷⁷ More noteworthy is the fact that relatively little external pressure is exerted on this emerging regional and international power to mend its ecologically problematic ways. That is another element in a delicate equation not conducive to a smooth evolution of the implementation regime.

¹⁷² LIEBERTHAL & OKSENBERG, POLICY MAKING IN CHINA, *supra* note 167, at 169.

 ¹⁷³ See ECONOMY, supra note 4, at 96–97.
 ¹⁷⁴ See id. at 91–256; Zusman & Turner, supra note 152; Carter & Mol, China and the Environment, supra note 152; Shi & Zhang, supra note 152; Carlos Wing-Hung Lo & Shui-Yan Tang, Institutional Reform, Economic Changes, and Local Environmental Management in China: The Case of Guangdong Province, 15 ENVTL. POL. 190, 190–210 (2006); Mol & Carter, Governance in Transition, supra note 152;

^{152.} ¹⁷⁵ See ECONOMY, supra note 4, at 221–56; Zusman & Turner, supra note 152; Mol & Carter, Governance in Transition, supra note 152.

See MA & ORTOLANO, supra note 69, at 97–114; Shuwen, supra note 76.

¹⁷⁷ See, e.g., MIKAEL SANDBERG, GREEN POST-COMMUNISM?: ENVIRONMENTAL AID, POLISH INNOVATION AND EVOLUTIONARY POLITICAL ECONOMICS (Routledge 1999).

V. CONCLUSION

The Chinese economy continues to scale new peaks without encountering major setbacks along the way. A handful of skeptical observers stubbornly argue that the day of reckoning has been postponed, rather than avoided, but the available evidence does not strongly support this controversial proposition. On the other hand, environmental conditions in the country remain highly unsatisfactory and show no palpable signs of improvement. Indeed, progress on the economic front seems to display an inverse relationship with that in the ecological domain. The issue has received substantial academic and professional attention, at home and abroad, not least from legal experts.

These professionals have employed their clinical skills in an effort to furnish detailed descriptions of the anatomy of the environmental governance system in China, diagnose its numerous ills, and provide credible prognostic direction. Ample insights have been generated in the process and it would be inappropriate to imply that they compose a single theme. However, flawed execution is widely considered as the principal factor responsible for persistent ecological malfunctioning. Somehow, a potentially viable strategic blueprint dissolves in the process of undergoing a conversion into concrete actions. Although it may be an overstatement to portray Chinese environmental laws as good in absolute terms, they are so significantly superior to ground-level performance that there is justification for the assessment that a combination of "good environmental laws and poor environmental performance . . . is pervasive throughout China."¹⁷⁸

Social scientists have followed a similar path and have produced similar diagnostic observations. They have, however, extended their analytical horizon to encompass the physiology of the system. They have also endeavored to establish a solid theoretical foundation for the exploration of Chinese ecological realities. The work that they have undertaken has been almost exclusively top-down in nature. However, there is a need to conduct research from a bottom-up perspective, on a larger scale and more rigorously than in the past. This conceptual bias notwithstanding, the findings and generalizations emanating from social science sources effectively complement those originating from traditional legal sources and should arguably be integrated with the latter, with a view to placing them on a firmer explanatory and practical footing.

It is apparent that the symptoms highlighted in the traditional legal literature are the tip of a larger policy iceberg. The rhetoric of sustainability may have gradually superseded that of coordinated development, but this is scarcely reflected in concrete government action and specific program outcomes. Overall strategic priorities continue to mirror objectives closely aligned with the Communist Party's desire to essentially maintain the political status quo. Key operators at all levels of the institutional pyramid tend to exhibit behavioral patterns akin to those encapsulated by the

¹⁷⁸ Lieberthal, *supra* note 130, at 5.

Leviathan model of the public sector. Ecological preservation is not firmly embedded in their utility function.

The opaqueness and indeterminacy of environmental laws is not an isolated phenomenon. Supporting policies also lack coherence and clear evolutionary focus. They are not properly geared toward incentivizing implementers and service recipients. Professional decisions are heavily politicized. The situation resembles the proverbial prisoner's dilemma, culminating in low trust and widespread defection. The underlying organizational structures are feeble and in a state of disarray. The quality of strategic management is hardly satisfactory, at times invoking comparisons to random processes witnessed in the course of garbage collection. Skewed priorities, coupled with problems inherent in balancing economic and political imperatives in a complex transitional setting, are at the heart of this distinctly poor performance, but other related influences merit equally close attention.

The horizontal and vertical fissures cursorily outlined by traditional legal scholars have deep institutional roots. Factional politics may no longer approximate a zero-sum game, where the winners take all, yet it remains an intensely intricate affair. Authoritarian fragmentation, overlaid with cellular pockets of organizational activity, renders strategy execution a highly challenging undertaking. Perhaps most importantly, local corporationism seriously undermines the transmission of authoritative signals from the bureaucratic center to the periphery. Finally, an illconceived implementation mechanism, embodying principles of administrative decentralization—the product of mechanical spillovers from the economic arena—acts as a source of powerful bottom-up pressures, which are difficult to contain.

There are pros and cons to incorporating several factors into an explanatory framework. On the one hand, analytical insights are gained. On the other hand, the picture observed becomes blurred. For this reason, it has been suggested that, as the diagnostic and prognostic examination of execution effectiveness progresses, the focus should be directed at two pivotal variables: intention and capacity. Regarding the latter, few writers in any academic discipline dispute the argument that China is inadequately equipped to confront severe threats to the biosphere under the current regime and pursue regime enhancement. With respect to the former, views diverge. Edith B. Weiss and Harold K. Jacobson, two prominent international lawyers, express skepticism, while Terri Mottershead, a well-known legal consultant and researcher, holds a more favorable opinion.¹⁷⁹

¹⁷⁹ See Jonathan Schwartz, The Impact of State Capacity on Enforcement of Environmental Policies: The Case of China, 12 J. ENV'T & DEV. 50, 50–81 (2003).

The Intention-Capacity Nexus¹⁸⁰

Category "A" Countries	Category "B" Countries
High Intention; Low Capacity	High Intention; Low Capacity
Category "C" Countries	Category "D" Countries

The position taken in this paper coincides with that of Weiss and Jacobson, despite the more up-to-date assessment provided by Mottershead. The reluctance to abandon earlier misgivings is not merely based on an extensive survey of both the traditional legal and social science literature. It also reflects the assumption that intention is a relative concept and one not entirely independent of capacity. If an evaluation is undertaken relative to prevailing realities, rather than strategic rhetoric, and not fully operational initiatives, reservations may legitimately be put forth in relation to policy intention. By the same token, to the extent that capacity is amenable to manipulation, at least at the margin, its low level may be partly attributed to insufficiently strong intention.

Capacity constraints are formidable and yet need not be seen as virtually insurmountable. Their prevalence implies that solutions to persistent execution problems must be sought outside the public sector, which is hamstrung by conflicting demands and rests on fragile foundations. The market exchange approach to implementation is preferable to the alternatives in the Chinese context, although it should not be embraced mechanically. The semi-autonomous civil society is another vital channel through which a constructive ecological agenda may be selectively promoted. At the same time, the state in China has demonstrated a capacity to occasionally address complex challenges in a decisive fashion.¹⁸¹ In the environmental domain, there is considerable potential for a shift of authority from the periphery to the center (e.g., SEPA status and resources could be significantly bolstered). Given the historical propensity of the Chinese state to operate in an arbitrary manner and resort to oppressive tactics, the notion of recentralization may conjure up less than

¹⁸⁰ See Harold K. Jacobson & Edith Brown Weiss, Assessing the Record and Designing Strategies to Engage Countries, in ENGAGING COUNTRIES: STRENGTHENING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL ACCORDS 511, 539 (Edith Brown Weiss & Harold K. Jacobson eds., The MIT Press 1998); Terri Mottershead, Conclusion, in ENVIRONMENTAL LAW AND ENFORCEMENT IN THE ASIA-PACIFIC RIM, supra note 69, at 608.

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 ¹⁸¹ See, e.g., Jonathan Schwartz & R. Gregory Evans, Causes of Effective Policy Implementation: China's Public Health Response to SARS, 16 J. CONTEMP. CHINA 195, 195–213 (2007); Shaoguang Wang, Regulating Death at Coalmines: Changing Mode of Governance in China, 15 J. CONTEMP. CHINA 1, 1–30 (2006); Tim Wright, State Capacity in Contemporary China: 'Closing the Pits and Reducing Coal Production', 16 J. CONTEMP. CHINA 173, 173–94 (2007).

palatable images but, if carried out in a measured way against the backdrop of growing political moderation, it could serve as an antidote to the forces of fragmentation that undermine smooth strategy execution.¹⁸²

¹⁸² See also ECONOMY, supra note 4, at 91–128, 257–74; Elizabeth Economy, Environmental Governance: The Emerging Economic Dimension, 15 ENVTL. POL. 171, 171–89 (2006).