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Abstract

Ecological threats continue to proliferate at a worrisome pace and in many circumstances defy efforts to neutralize them. Mounting concerns about the gap between the scale of biophysical disruption and policy performance have stimulated both academic and engineering-type interest in the effectiveness/consequences of environmental governance regimes. An issue which has not received sufficient attention is the degree to which such regulatory mechanisms are in tune with their socio-institutional setting rather than merely the natural systems which they aim to safeguard. China's experience suggests that this is a question which merits close examination.

Key Words: governance regime, ecological degradation, fit, biophysical habitat, institutional milieu, marketization, fragmented authoritarianism, responsive regulation, tripartism

JEL Classification: F55, K32, Q10, Q38, Q53

THE INSTITUTIONAL FOUNDATIONS OF ENVIRONMENTAL GOVERNANCE REGIMES: THE IMPLICATIONS OF CHINESE PRACTICES

Introduction

The past three decades have witnessed a surge of interest in governance regimes intended to shape, and in certain circumstances capable of shaping, the behaviour of actors in the political arena, both domestic and international. The concept was introduced formally in 1975, when it was defined as “a set of mutual expectations, rules and regulations, plans, organizational energies and financial commitments, which have been accepted by a [relevant] group of [participants in the political process]” (Ruggie, 1975, p. 570).

This initial depiction provided the impetus to an extensive exploration of the idea floated, but as theoretical development and empirical investigation increased in scope and intensified, the need emerged for a broader and more elaborate formula. A definition satisfying these requirements was produced at a subsequent conference focused on examining methodically the analytical characteristics of governance regimes. The conclusion arrived at was that they constitute:

“sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors’ expectations converge in a given... [political domain]. Principles are beliefs of fact, causation and rectitude. Norms are standards of behaviour defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice” (Krasner, 1983, p. 2).

This portrayal revolves around four elements: principles, norms, rules and decision-making procedures. The distinctions may be easier to discern at the conceptual than practical level. The underlying hierarchical configuration

however appears to be fundamentally sound, featuring sequential movement from the general/strategic to the specific/operational components. Despite a certain degree of imprecision, this continues to be the most widely embraced definition of a governance regime, or at least one commonly employed as a starting point in research on the subject, which remains very much in the academic limelight.

Such research typically possesses prescriptive connotations. The primary objective is to identify regime structures and processes that have the potential to enhance social welfare in domestic and international political settings, convert them into smoothly functioning institutional entities and ensure that they are complied with. At times though the work conducted in this area is inspired by predominantly descriptive or explanatory considerations. A recent example is a study of the relationship between governance regimes, corruption and economic growth (Aidt, Dutta and Sena, 2008).

Environmental scholars generally adopt the established notion of a governance regime as outlined in the economics/political science literature (“regimes are social institutions consisting of agreed upon principles, norms, rules, procedures and programs that govern the interactions of actors in specific areas”; Young and Levy, 1999, p. 1). Since their concerns tend to be more concrete in nature, they tend however to gravitate towards the individual elements of the definition, and differentiate between prevailing orders and regimes.

The former are “broad, framework arrangements governing the activities of all (or almost all) the members of [domestic or] international society over a wide range of specific issues” (Young, 1989, p. 13). The latter, “by contrast, are more specialized arrangements that pertain to well-defined activities,

resources, or geographical areas and often involve only some subset of the members of [domestic or] international society” (Young, 1989, p. 13). This distinction is useful, but not essential in many ecological research contexts.

The academic writings on environmental governance regimes, which in the final analysis are prescriptively oriented, have followed a certain pattern that is presented in the next section. It is argued in this paper that this pattern may be augmented by incorporating a perspective grounded in descriptive (as distinct from normative) decision theory (or, more broadly, where appropriate, its organization counterpart). The Chinese ecological policy experience is invoked for that purpose in order to provide the necessary empirical illustrations.

Current Research Orientation

The early work undertaken in this investigative domain was characterized by intellectually adversarial exchanges regarding the viability of the concept of a governance regime. This phase has largely run its course. Some resistance to the idea surfaces occasionally in a mild form, but there is now a consensus that this rather abstract construct is both meaningful and useful (the same applies to the related, yet not one to be employed synonymously, notion of social institutions; Young, 2004).

The research agenda pursued presently is multi-dimensional in nature. It encompasses regime characteristics, regime types/variations, regime formation, regime change and regime effectiveness/consequences (Young, 1982; Young, 1989; Young, 1994; Young, 1997; Vogler, 2000; Young, 2002; Young, King and Schroeder, 2008). The attention accorded to these individual facets of the phenomenon however is not equally divided. The picture

inevitably evolves over time, but the focus has shifted lately to regime effectiveness/consequences (Wettestad, 1999; Young, 1999; Miles *et al.*, 2002; Underdal and Young, 2004).

This is an analytical sphere not lacking in ambiguities. Considerable effort has thus been directed towards reducing them. For example, effectiveness has been traditionally viewed in terms of progress achieved in moving towards specific regime goals. ("The objective of the regime for biological diversity is to prevent losses of biodiversity occurring as side effects or externalities of actions designed to promote economic development and other similar objectives. The natural way to assess the performance of this regime is to evaluate its impact on rates of change in losses of biodiversity at the genetic, species and ecosystem level." Young, 2004, p. 5).

Such a narrow construction however overlooks cross-regime influences, which may be substantial. The point is that regimes may have wider ramifications than implied by their narrowly-defined goals and those may have to be taken into account in evaluating their performance. This has prompted environmental researchers to draw a distinction between simple effectiveness and broader consequences. ("Is the protection of whales an issue in its own right... or is it merely a subset of a broader issue area encompassing human interactions with marine mammals." Young, 2004, p. 6).

This is not just a definitional matter, but one which has an unavoidable practical side. Problems examined through well-adjusted lens often appear to be amenable to a concrete solution within a certain time period. In domains where broader consequences manifest themselves on a large scale, that is seldom the case. Indeed, problems may then require "ongoing efforts and... periodic adjustments in governing arrangements to ensure that they are

properly adapted to changing circumstances” (Young, 2004, p. 6). In such instances, “the operation of regimes gives rise to new insights about the problem at stake or even to new ways of defining or framing the problems in contrast to yielding decisive solutions to the problems as originally framed” (Young, 2004, p. 6).

The distinction between simple effectiveness and broader consequences overlaps with that between internal and external impacts, as well as direct and indirect ones. Internal impacts are mostly confined to the sphere of regime operations, as narrowly conceived. Reverberations possessing greater amplitudes qualify as external. The directness/indirectness of impacts is the function of the length of the causal chain linking the regime to its behavioural ramifications. Direct impacts are connected via a short chain and indirect ones through a long one (Young and Levy, 1999; Young, 2004). Attempts to come to grips with such basic, yet subtle, distinctions are a prominent feature of current research on environmental governance regimes.

Methodological issues – pertaining to the operationalization, measurement and attribution of effectiveness/consequences – also loom large on the present scholarly agenda. They are typically formulated in terms of three questions: (1) What precisely constitutes *the object* to be assessed? (2) Against which *standard* is this object to be assessed? (3) *How* to proceed to compare the object to this standard – or, to express it differently, what kind of measurement operations to perform in order to attribute a certain score of effectiveness to a certain regime? (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

The scope of the object has expanded to include not just the positive/negative effects/consequences associated with regime operations, but also those

realized in the process of establishing/maintaining it. These are organized within a system-type framework in which inputs and outputs (the principles, norms, rules and decision-making procedures resulting from regime formation) are separated from regime outcomes (i.e., shifts in human behaviour) and impacts (i.e., changes in the biophysical environment itself). The latter two are at the heart of the methodological development process (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

Determining an assessment standard entails at least two key steps: establishing the *point of reference* against which actual performance may be compared and embracing a standard *metric of measurement*. Two points of reference have been employed in recent studies focused on environmental governance regimes: a hypothetical state of affairs that would have been observed had the regime not been formed and some ideal/optimal configuration (a rather ambitious, but not unrealistic, aspiration level; Underdal, 2002a, Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

The first of these two approaches equates effectiveness (simple and broad) with the *relative improvement* brought by the regime. The second typically sets the standard higher in that the shift induced may fall short of an agreed upon *ideal/optimum*. The difference is akin in some respects to that between *satisficing* and *maximizing*. These two perspectives are complementary rather than mutually exclusive and they are increasingly blended in empirical inquiries (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

Determining an assessment standard is an analytical exercise which extends beyond generating a reference point against which actual performance could be compared. A *standardized metric of evaluation* needs also to be adopted. The choice is normally between a scale (preferably interval rather than ordinal) geared towards gauging social welfare (usually in terms of economic costs and benefits) and one oriented towards measuring environmental sustainability or some other relevant biophysical concept. Again, considerable emphasis is placed currently on integrating these two viewpoints (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

Operationalizing and gauging factors (the independent variables) that impinge on regime effectiveness (the dependent variable) may pose a greater challenge than coming to grips empirically with outputs/outcomes/impacts. But even on this front substantial progress has been recorded. A distinction has been drawn in the process between malign (e.g., asymmetry, cumulative cleavages and incongruity) and benign (e.g., coordination, cross-cutting cleavages and symmetry/indeterminate distribution) problems (the former impede effectiveness materially, the latter do not), a better understanding has emerged regarding sources of diminished problem-solving capacity (e.g., distribution of power, institutional setting, and energy/skill or epistemic communities/instrumental leadership) and the notion of collaboration has been refined. The relevant concepts have been properly measured rather than merely defined (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

The issue of research design has also been accorded ample attention. Clearly, the effectiveness of environmental governance regimes cannot be assessed adequately in the kind of laboratory settings in which social scientists conduct

selectively their scientific investigations. However, there is potential for undertaking natural or quasi-experiments, thought experiments (i.e., relying on the method of counterfactuals, whereby a flow of events is reconstructed as it would have unfolded in the absence of a regime-related stimulus) and exploring systematically the behavioural pathways via which institutions produce tangible results (outputs/outcomes/impacts). This too is an analytical domain in which significant forward movement has been witnessed (Underdal, 2002a; Underdal, 2002b; Underdal, 2004; Young, 2004; Mitchell, 2008; Underdal, 2008).

The progress experienced in grappling with fundamental conceptual and methodological questions has not been such that the themes pursued have been exhausted. The clarity achieved has nevertheless been sufficient to prompt those involved in this scholarly enterprise to proceed in new directions (without abandoning the old platforms). One interesting line of inquiry has been aimed at gaining insights into the relationship between environmental governance regimes/social institutions and ecosystems, and endeavouring to maximize the fit between the two (Young, 2002; Galaz *et al.*, 2008). This effort has been part of a broader research agenda (Young, 2002; Young, King and Schroeder, 2008) and has reflected a growing realization that “[a]n institutional arrangement that performs perfectly well dealing with one environmental problem may be a dismal failure in solving other problems” (Young, 2002, p. 20).

This is an observation based on robust common sense as well as extensive empirical investigation. Yet, there are gaps in the analytical framework derived therefrom. It is assumed, whether explicitly or implicitly, that in order to be effective, an environmental governance regime must be designed in a manner ensuring a high degree of fit with the relevant ecosystem.

Without disputing this proposition, it is legitimate to argue that the relationship between the regime and the institutional setting in which it is embedded should also be taken into account. We explore this notion further in the following section.

Complementary Theoretical Perspective

The intricate nature of the interaction between environmental governance regimes/social institutions and ecosystems is duly acknowledged by contemporary environmental scholars. This manifests itself in a variety of forms, notably the concept of cross-regime effects/consequences and the notion of interplay, which refers to the dynamic linkages between the different component parts of the socially-contrived and biophysical architecture (Young, 2002; Young, King and Schroeder, 2008). However, perhaps because of the profound ecological concerns which the research strategy pursued presently represents, governance regimes are expected to adapt to the biophysical habitat, but not to the socio-institutional milieu in which they are firmly grounded.

It is instructive to juxtapose in this respect the work of environmental scholars with that of their legal counterparts. The latter have sought to devise effective governance regimes (for controlling corporate and individual crime) by matching them as closely as possible with the socio-institutional/socio-organizational setting in which they are rooted. Descriptive decision theory, or the partly overlapping organizational equivalent, has provided much of the inspiration (in conjunction with microeconomic theory) for this undertaking (Fisse and Braithwaite, 1993).

The first piece of legal research on the subject borrowed substantially from a seminal study of American institutional responses during the Cuban missile crisis (Allison, 1971). Three models of corporate decision making were proposed. Model I, *the rational actor model*, posits that corporations are unitary rational decision makers. Model II, *the organizational process model*, portrays the corporate body as a loose coalition of functional organizational sub-units (e.g., finance and marketing), each of which is responsible for a narrow range of problems, whose resolution is governed by standard operating procedures (SOPs). Model III, *the bureaucratic politics model*, views the corporation as an arena for an ongoing complex bargaining game involving a multiplicity of players who advance their claims through a wide range of formal and informal channels (Kriesberg, 1976).

The three models have different implications for the design of corporate (and individual) criminal sanctions/governance regimes. Model I suggests that sanctions imposed on the decision making unit, the corporate entity, are most appropriate and effective when they relate to the particular values (e.g., prestige, profit and stability) which rational corporate players seek to maximize. Model II implies that liability should be imposed on the individual personnel or a collective corporate vehicle (e.g., safety committee) capable of enacting and overseeing SOPs. Another inference that may be drawn in this context is that legal interventions ought to be geared towards ensuring that corrective action is taken to remedy deficiencies exhibited by SOPs (e.g., the court may appoint a safety expert as a corporate probation officer for this purpose; Kriesberg, 1976).

Model III does not depict organizational players as constrained followers of pre-selected procedures. Rather, it portrays them as advocates who deliberately endeavour to influence corporate decisions. Members of the

organization do not necessarily direct their actions towards established corporate goals, but are often motivated by largely personal considerations (e.g., a desire to secure a promotion). At times, they even embrace the goals of other organizations to whom they owe allegiance (e.g., a trade union). This strongly suggests that liability rules should focus squarely on individuals (Kriesberg, 1976).

Decision/organization theory revolving around structural institutional attributes has also been invoked as a source of inspiration for the design of governance regimes for controlling corporate and individual (but solely in formal institutional settings) crime. A typology has thus been constructed placing organizations in five distinct categories on the basis of their structural characteristics: a *simple structure* (or virtually no structure at all), a *machine bureaucracy* (which attains coordination via standardization of work processes), a *professional bureaucracy* (which obtains coordination through standardization of skills), a *divisionalized form* (which secures coordination by relying on a performance control system) and an *adhocracy* (where the structure is fluid and informal, yet not simple, with a view to encouraging initiative and innovation; Mintzberg, 1979; Fisse and Braithwaite, 1993).

Each of these structural configurations possesses unique features which need to be reflected in the corresponding governance regime for controlling crime. A simple structure is normally dominated by a single chief executive (that may operate in tandem with a handful of other senior managers) who should bear responsibility for illegal action. In a machine bureaucracy/technocracy, the individual technocrats and the techno-structure collectively are the targets for sanctions when legal rules are violated. In a professional bureaucracy, the operating professionals are at the forefront in this respect (e.g., if a hospital patient is subjected to a wrong surgical procedure, the doctor in charge is

usually regarded as the potential culprit). In a divisionalized structure, the locus of responsibility may lie either with the division at fault alone (collectively or certain individuals within it) or in conjunction with corporate headquarters (which may exert strong criminogenic pressures on organizational units). Because of its dynamic and elastic structure, allocating responsibility within an adhocracy poses considerable challenges and requires much ingenuity on the part of those involved (Fisse and Braithwaite, 1993).

The third conceptual vehicle grounded in descriptive decision/organization theory and employed in the quest for a socio-institutionally effective crime control governance regime is the dramaturgical model. It rests on the assumption that players in the organizational arena tend to improvise their performance within the generally rather broad limits set by the scripts their society/institutional milieu makes available to them. This notion “alerts us to the fact that the social actor is both character and agent; his part may be written for him but it cannot be realized without his agency. Once the actor performs, agency and character are fused and become one” (Mangham, 1978, p. 25).

The corollary is that players in the organizational arena are subject to a host of externally-imposed restrictions and yet exercise meaningful discretion in a variety of circumstances: “the social actor is constrained by the script available to him, but in many, if not most, he has the possibility of choice, the potential to create or revise his scripts” (Mangham, 1978, p. 27). The degree to which it is necessary to move down in assigning liability for unlawful conduct (from the corporate producer to the playwright, and from the director to the actor) thus hinges both on the process for generating scripts and on how and where discretion is enjoyed for revising them. The flow of authority within

the organization (bottom-up versus top-down) is often a key factor in this respect:

“Some organisations are so bottom-up that there are no playwrights: the scripts are written in a process of negotiation between actors and directors. In these organisations, if the script is criminogenic and its execution criminal, responsibility lies with both the actor and the director. In top-down organisations, in contrast, scripts are handed down to both directors and actors in immutable form. Here we would want to charge the playwright and the producer.” (Fisse and Braithwaite, 1993, p. 110).

The three theoretical perspectives highlighted in this section may be expanded further, adjusted in light of institutional realities and synthesized. Indeed, two legal researchers have made substantial headway on that front (Fisse and Braithwaite, 1993). Our objective however is not to present the scholarly work in this specific domain in a detailed fashion, but to bring into focus the importance of achieving a satisfactory fit between governance regimes, environmental and others, and their socio-institutional surroundings. Having completed that task, we now turn to Chinese ecological management for partial (qualitative) empirical validation and as a platform for additional reflections.

Implications for China’s Environmental Governance Regime

Surprisingly, given the prominence accorded to economic and political priorities, descriptive decision/organization theory has long featured in the study of Chinese ecological management, albeit in an intermittent and selective manner. Initially, attention was directed systematically towards the implementation (as distinct from formulation) side of the picture. Three contrasting decision models, embraced at various junctures by policy makers in China, were proposed: the bureaucratic-authoritative, campaign-

exhortation and market-exchange types (Ross, 1984; Ross, 1988).

Subsequently, administrative decentralization was incorporated into the cluster (Wu, 2005; Mushkat, 2008; Mushkat, 2009).

Bureaucratic-authoritative implementation is characterized by a high degree of centralization, is comprehensive in scope, is spearheaded by the ruling party, involves obedience to authoritative commands and is underpinned by a system of State/collectively-focused property rights. Execution of decisions via campaign-exhortation is a centralized, uneven, ruling party-driven, normatively-inspired (but coercion is also resorted to in order to secure compliance) and collectively-oriented (verging on self-abnegation) affair. Implementation based on market exchange follows a decentralized, comprehensive and materially-incentivized pattern which, by definition, relegates the ruling party to the policy periphery and derives its vitality from the private ownership of resources (Ross, 1984; Ross, 1988).

Administrative decentralization should not be equated with marketization. Power has often been transferred from the political centre in Beijing to the provinces (and other sub-national units) without any genuine economic reform. Even the empowerment of State-owned enterprises (SOEs) does not amount to economic decentralization if market channels are not restored and allowed to function freely. It has been argued that market-exchange is the most effective governance mechanism for implementing environmental policy in China and that the alternative configurations should be abandoned (Ross, 1984; Ross, 1988; Wu, 2005; Mushkat, 2008; Mushkat, 2009).

If the legal insights outlined earlier are relevant, this assertion may not be valid at all historical junctures, or at least may have to be supplemented by additional observations founded on broader socio-institutional analysis. The

point is that the market-exchange model of strategy execution, even in circumstances where market failure is adequately addressed, may not always be entirely in tune with the organizational realities that ultimately determine the direction and pace of policy action. To the extent that this is the case, the design of governance regimes, in the environmental domain and on other fronts, may entail either deviations from a theoretically compelling blueprint or complementary measures intended to reinforce it (Elkin, 1986; Stoker, 1989).

A thorough appreciation of the dynamics of public decision making is a precondition for offering credible generalizations regarding the correspondence between governance regimes and their socio-institutional underpinnings. During the initial phases of the Maoist era, *the totalitarianism model* was the principal intellectual source of such appreciation (Barnett, 1964; Huang, 1999; Heggelund, 2004). It ascribed enormous power to the paramount leader and saw the Communist Party's ubiquitous presence (supported by an extensive network of cells, a strict code of obedience and a rigid organizational hierarchy) as "symptomatic of a 'totalitarian' authority tightly controlling every aspect of Chinese society" (Christiansen and Rai, 1996, p. 3).

The prevalence of policy conflicts and their intensity throughout this period, but particularly from the mid-1950s onwards, cast doubt on the accuracy of this one-dimensional portrayal. Consequently, *the two-line struggle* and *the class struggle perspective* gained currency following the tumultuous experiences of the late 1950s and the 1960s (notably, the Great Leap Forward and the Cultural Revolution). The dramatic rise in the political temperature and subsequent adjustments/manifestations of moderation were viewed as the product of an ongoing tension between a strategic thrust geared towards mass mobilization (proletarian-revolutionary line) and bureaucratic politics

(bourgeois-reactionary line; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

The post-Mao era has witnessed an even more pronounced shift from uniformity to diversity. *The factionalism and elite conflict model* and its *clientalist* counterpart have brought into greater focus the centrifugal forces fuelling disagreements among high-ranking decision makers and their followers. These constructs have also incorporated non-ideological elements into the fragile policy equation, mostly in the form of intensely personal patron-client networks (such networks are sustained by ties of mutual obligation between leaders and their supporters; Nathan, 1973; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

The interest groups model has stretched the notion of diversity further. The collective entities whose preponderance in the political arena and the strategic leverage they enjoy it highlights are aggregates “of persons who possess certain common characteristics and share certain attitudes on public issues, and who adopt certain positions on these issues and make definite claims on those in authority” (Christiansen and Rai, 1996, p. 13). Socialist societies are not immune to interest groups politics and China has proved a fertile ground for researchers favourably disposed towards this idea, which was initially perceived as somewhat unconventional (Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

The culturalist model enhances the understanding of the traditional foundations upon which patron-client networks in China rest. The underlying assumption is that “in various ways the historical events and structures of thought in the past determine the present” (Christiansen and Rai, 1996, p. 21). Traditional cultural values play a prominent role in shaping

institutional forms and behavioural propensities. In the Chinese context, this means that personal relations (*guanxi*) are a more crucial determinant of decision outcomes than issue-specific considerations (Pye, 1968; Pye, 1985; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

The *bureaucratic construct* embodies the features of Model III developed by scholars who dissected policy responses during the Cuban missile crisis. It is based on the premise that diversity pervades not merely the corridors of political power in China, but is also a quintessentially bureaucratic phenomenon. Actors in this institutional domain bargain vigorously and this is a multi-directional process which takes place at all levels of the bureaucratic pyramid and, again, is not necessarily driven by issue-specific factors (Lampton, 1987a; Lampton, 1987b; Lieberthal and Oksenberg, 1988; Lieberthal and Lampton, 1992; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

Politico-bureaucratic diversity in China is believed to be so widespread that the constructs (particularly the bureaucratic variant) endeavouring to capture it have metamorphosed into *the fragmented authoritarianism model*. The latter reflects the disjointness, incoherence, inconsistency and segmentation that characterize the institutional *modus operandi*, organizational structure and public decision making in the country. Several influences account for this pattern, cultural traditions being merely one of them (Lampton, 1987a; Lampton, 1987b; Lieberthal and Oksenberg, 1988; Lieberthal and Lampton, 1992; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

Perhaps the most prominent source of institutional fragmentation is the deep hierarchical divide between the *political centre* (*zhongyang*) and the *locale/geographical periphery* (*difang*). This phenomenon is attributable to far-

reaching (possibly excessive) administrative decentralization, fusion of commercial and political interests at the sub-national level (resulting in capture of the latter by the former and incentive incompatibility between central and local government) and the sheer size of the country (Lampton, 1987a; Lampton, 1987b; Lieberthal and Lampton, 1992; Sinkule and Ortolano, 1995; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004). Distance from Beijing tends to aggravate the problem, a situation best exemplified by an expression commonly encountered in the southern province of Guangdong (“the heavens are high and the emperor is far away” / *tian gao huangdi yuan*; Sinkule and Ortolano, 1995, p. 13).

Another factor contributing significantly to institutional fragmentation is the so-called *system* (*xitong*), or the exceptionally loose amalgam of virtually self-contained vertical functional hierarchies that stretches uncomfortably from Beijing to the local units. Each central government organ has its own *xitong* and the cooperation between these organizational arms is minimal. A particularly thorny issue that arises in this context is the vague relationship between the vertical functional hierarchies (*line/tiaotiao*) and the horizontal governing bodies (*piece/kuaikuai*). It is not clear who is supposed to serve whom, which undermines organizational coordination (Lampton, 1987a; Lampton, 1987b; Lieberthal and Lampton, 1992; Sinkule and Ortolano, 1995; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

This coincides with a pattern of *overlapping authority* (*too many mothers-in-law*) which renders decisive institutional action a distinctly challenging proposition. A provincial government department is thus typically subordinate to both the provincial government itself and a relevant central ministry. A subtle distinction between *leadership relations* (*lingdao guanxi*) and *business/professional relations* (*yewu guanxi*) is expected to govern the flow of

authority in a parallel fashion, but it is fundamentally unworkable and highly confusing (Lampton, 1987a; Lampton, 1987b; Lieberthal and Lampton, 1992; Sinkule and Ortolano, 1995; Christiansen and Rai, 1996; Huang, 1999; Heggelund, 2004).

All those symptoms of institutional fragmentation manifest themselves acutely in the environmental domain because ecological preservation has been regarded traditionally as subservient to material welfare and has been approached in an haphazard fashion (Sinkule and Ortolano, 1995; Breslin, 1996; Jahiel, 1998; Ma and Ortolano, 2000; Murray and Cook, 2002; Economy, 2004; Elvin, 2004; Heggelund, 2004; Day, 2005; Carter and Mole, 2007; Mushkat, 2008; Mushkat 2009). This is also a policy realm where adverse cultural influences come strongly into play and impede strategy implementation. Environmental researchers have highlighted the relevance of concerns about losing face, penchant for ambiguity, preference for informal conflict resolution mechanisms (mediation and conciliation) rather than adjudication and, most tellingly, extensive reliance on *guanxi*/social connections (Ma and Ortolano, 2000).

The corollary is that the chasm between strategic aspirations and institutional performance remains substantial. A similar observation may be made, even more emphatically, with respect to the gap between the former and ecological realities on the ground. Policy management has improved considerably, but it still leaves much to be desired, particularly in terms of implementation effectiveness. Despite wide-ranging efforts to augment the cohesion, professionalism, size and status of the environmental protection apparatus, the process continues to be characterized by a deflection of strategic objectives, dilemmas of administration (i.e., resistance to pressures to control behaviour administratively), dissipation of energies and diversion of resources (Sinkule

and Ortolano, 1995; Breslin, 1996; Jahiel, 1998; Ma and Ortolano, 2000; Murray and Cook, 2002; Economy, 2004; Heggelund, 2004; Day, 2005; Carter and Mole, 2007; Mushkat, 2008; Mushkat, 2009).

Given this backdrop, marketization alone may not prove to be a panacea, at least in the short/medium-term. It is apparent that the malfunctioning of ecological policy-making machinery cannot be confronted in isolation. Rather, it should be faced in the context of comprehensive reform geared towards minimizing manifestations of institutional fragmentation. By the same token, it is essential to enhance further, and meaningfully, the capabilities and position of the environmental protection agency. Its elevation to full ministerial rank in 1998 was a significant step forward, but arguably not a sufficient one in light of the magnitude of the problem. Symptoms of organizational disarray vary inversely with the institutional level. They are relatively modest at the apex of the politico-bureaucratic pyramid and it might thus be desirable to place formally the responsibility for ecological preservation with authorities near the very top of this elaborate structure.

Empowerment must be accompanied by insulation, as effective as realistically possible. Regulatory capture is rampant in the environmental domain. Goal deflection is the upshot, whereby ecological preservation is sacrificed on the altar of commercial interests, whether private or public-private. Last but not least, the grassroots environmental movement in general, and the non-governmental organizations (NGOs) increasingly active in this sphere in particular, should be allowed to develop in an orderly fashion and exercise their voice without being trampled upon. Logic suggests that, when top-down regulation fails, be it due to flawed conception or inadequate implementation, bottom-up pressures need to serve as a countervailing force.

That logic is grounded in the notion of responsive regulation. This idea, in turn, is closely aligned with that of tripartism, which is defined as “a regulatory policy that fosters the participation of [public interest groups] [PIGs] in the regulatory process” (Ayers and Braithwaite, 1992, p. 57). Three procedural strategies are employed to this end. First, PIGs and all their members are granted full access to the information available to the regulator. Second, they are offered a seat at the negotiating table with the regulatee and the regulator when the control parameters are under consideration. Third, they are provided with the same standing to sue or prosecute under regulatory statute as the regulator (Ayers and Braithwaite, 1992). The fine details of this blueprint may elude China for some time to come, but it may seek inspiration from the underlying principles.

Conclusion

The persistent deterioration in ecological conditions, coupled with a growing awareness of the far-reaching ramifications of mounting threats to sustainability, has spawned a substantial and rapidly burgeoning literature on the effectiveness/consequences of environmental governance regimes. The knowledge acquired as a result is valuable both in the theoretical and practical sense of the term. The academic and policy communities have gained a deep insight into the determinants of regime performance, as well as the output/outcome/impact side, and their members are much better equipped than in the past to play the role of regime architects.

One issue carefully addressed in recent years has been that of the fit between the governance regime and the biophysical system which it aims to safeguard. A related question pertains to the match between the former and the socio-institutional milieu which underpins it. The Chinese experience,

contemporary and pre-modern, suggests that this dimension of the picture cannot be overlooked. The linkages extend in at least three directions, rather than two, and this complexity needs arguably to be duly reflected both in pure research and applied work oriented towards the fulfilment of specific environmental goals (see also Gunningham, 2009).

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